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# Plant Inventory No. 175

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Washington, D.C., July 1969

SEP 8



CURRENT SERIAL RECORDS

## PLANT MATERIAL INTRODUCED JANUARY 1 TO DECEMBER 31, 1967 (NOS. 317904 TO 324307)

### CONTENTS

	Page
Inventory .....	3
Index of common and scientific names .....	248

This inventory, No. 175, lists the plant material (Nos. 317904 to 324307) received by the New Crops Research Branch, Crops Research Division, Agricultural Research Service, during the period from January 1 to December 31, 1967. The inventory is a historical record of plant material introduced for Department and other specialists and is not to be considered as a list of plant material for distribution.

The species names used are those under which the plant material was received. These have been corrected only for spelling, authorities, and obvious synonymy. Questions related to the names published in the inventory and obvious errors should be directed to the author. If misidentification is apparent, please submit an herbarium specimen with flowers and fruit for reidentification.

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USDA, National Agricultural Library  
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## INVENTORY

### 317904. SACCHARUM (hybrid) Gramineae. Sugarcane.

From Brazil. Cuttings presented by Escola Superior de Agricultura 'Luiz de Queiroz', Piracicaba, Sao Paulo. Received Sept. 19, 1966. Numbered Jan. 6, 1967.

CB 36-14.

### 317905 and 317906.

From Australia. Seeds presented by Division of Plant Industry, Commonwealth Scientific and Industrial Research Organization, Canberra. Numbered Jan. 6, 1967.

317905. VICIA DISPERMA DC. Leguminosae.

C.P.I. 1074.

317906. VICIA PANNONICA Crantz

C.P.I. 22901.

### 317907. CLEMATIS VITICELLA L. Ranunculaceae. Italian clematis.

From Great Britain. Plants presented by Fisk's Clematis Nursery, Westleton, Saxmundham, Suffolk. Numbered Jan. 6, 1967.

'Venosa violaceae'.

### 317908 to 317918.

From the United States. Seeds grown at College of Tropical Agriculture, University of Hawaii, Honolulu, Hawaii. Original sources as indicated. Numbered Jan. 6, 1967.

317908 to 317913. LEUCAENA LEUCOCEPHALA (Lam.) de Wit Leguminosae. Leadtree.

317908. UH 83. Pulu Sankit Island, Indonesia. Shrub to 10 feet, free seeding.

317909. UH 84. Near Lautoka, Fiji. Common shrub to 8 feet, free seeding.

317910. UH 85. 'Lopa'. Experiment Farm 15 miles from Pago Pago, Samoa. Widely distributed; free-seeding shrub.

317911. UH 86. Near Papeete, Tahiti. Free-seeding shrub, common below 1,000 feet elevation.

317912. UH 91. Twenty miles south of Calabozo, Venezuela.

317913. UH 92. Near Belem, Brazil.

317914. LEUCAENA TRICHODES (Jacq.) Benth.

UH 90. Large leaves similar to *L. lanceolata*.  $2n=52$ .

317915. LEUCAENA sp.

UH 93. Asanite Bay, Guam. Small seeded, low-growing type, resembles *L. leucocephala*.

317916. LEUCAENA sp.

UH 103. Synthetic derived from  $F_2$  of P.I. 286223. *L. pulverulenta*  $\times$  *L. leucocephala* (P.I. 288000). Chromosome number of synthetic range from 60 to 90.

$F_1$  hybrid  $2n=80$ .

## 317908 to 317918—Continued

317917. *LEUCAENA* sp.

UH 107. Cacao plantation at N'Kolbisson about 8 km. west of Yaounde, Cameroun. Elevation 600 meters. Tall shade plant to 6 meters, very small seed.

317918. *LEUCAENA* sp.UH 108. Melen, about 3 km. southwest of Yaounde, Cameroun. Plant to 4 meters; pods 5 cm; seeds resemble *L. leucocephala*.

## 317919 to 318400.

From Israel. Seeds presented by the Faculty of Agriculture, The Hebrew University, Jerusalem, under Public Law 480 Project A10-CR-20. Numbered Jan. 9, 1967.

317919 to 317959. *AVENA BARBATA* Brot. Gramineae. Slender oats.

Antipatris, central coastal plain.

317919. 7-215-2-31.

317920. 7-215-2-35.

317921. 7-215-2-37.

Haruvit.

317922. 7-278-11-31.

Maravi'im.

317923. 7-320-7-37.

317924. 7-320-7-39.

317925. 7-320-7-40.

Migdal Afeq, Judean foothills.

317926. 7-217-3-31.

317927. 7-217-3-32.

317928. 7-217-3-34.

Nahariyya, coast of Galilee.

317929. 7-24-3-31.

317933. 7-24-3-36.

317930. 7-24-3-32.

317934. 7-24-8-34.

317931. 7-24-3-33.

317935. 7-24-8-37.

317932. 7-24-3-34.

Sede Zevi, northern Negev.

317936. 7-378-3-33.

317939. 7-378-3-36.

317937. 7-378-3-34.

317940. 7-378-3-38.

317938. 7-378-3-35.

Shave Zion, coast of Galilee.

317941. 7-37-1-31.

317944. 7-37-1-34.

317942. 7-37-1-32.

317945. 7-37-1-35.

317943. 7-37-1-33.

317946. 7-37-1-36.

Tal Shahar, Judean foothills.

317947. 7-261-4-32.

Yishi, Judean foothills.

317948. 7-281-7-31.

317950. 7-281-7-33.

317949. 7-281-7-32.

317951. 7-281-7-36.



**317919 to 318400—Continued**

**317919 to 317959—Continued**

317952.	7-281-7-37.	317956.	7-281-10-34.
317953.	7-281-10-31.	317957.	7-281-10-35.
317954.	7-281-10-32.	317958.	7-281-10-36.
317955.	7-281-10-33.	317959.	7-281-10-39.

**317960 to 318400. AVENA STERILIS L.**

**Animated oats.**

Ammiqam, plateau of Menashe.

317960.	6-1677-1.	317965.	6-1676-22.
317961.	6-1676-2.	317966.	6-1676-23.
317962.	6-1676-4.	317967.	6-1676-25.
317963.	6-1676-5.	317968.	6-1676-26.
317964.	6-1676-21.		

Ashqelon, southern coastal plain.

317969. 6-1-1524-1.

Barqay, Samaritan foothills.

317970.	6-2136-1.	317973.	6-2136-6.
317971.	6-2136-2.	317974.	6-2140-4.
317972.	6-2136-3.		

Bat Shelomi, plateau of Menashe.

317975.	6-2133-1.	317979.	6-2133-7.
317976.	6-2133-3.	317980.	6-2133-9.
317977.	6-2133-4.	317981.	6-2133-10.
317978.	6-2133-5.		

Beerotayim, central coastal plain.

317982.	6-272-4-1-21-1.	317987.	6-1730-1.
317983.	6-272-4-1-21-6.	317988.	6-1723-21.
317984.	6-272-4-36.	317989.	6-1723-23.
317985.	6-272-4-40.	317990.	D204-21.
317986.	6-938-1.	317991.	D204-23.

Bet Leham Hagelilit, lower Galilee.

317992.	6-112-1-4-7.	317996.	6-112-1-52.
317993.	6-112-1-5-1.	317997.	6-112-1-53.
317994.	6-112-1-15-6.	317998.	6-112-1-54.
317995.	6-112-1-51.	317999.	6-112-1-55.

Bet Nehemya, Judean foothills.

318000. 6-1942-1.

Binyamina, coast of Carmel.

318001. 6-1667-21.

318002. 6-2137-1.

Carmel Neshet, Mount Carmel.

318003.	D136-6-9.	318005.	D136-35-8.
318004.	D136-33-9.	318006.	D143-23-8.

**317919 to 318400—Continued****317960 to 318400—Continued**

- |                                  |                    |
|----------------------------------|--------------------|
| 318007. D136-6-8.                | 318013. D136-22-6. |
| 318008. D136-11-7.               | 318014. D136-24-1. |
| 318009. D136-22-2.               | 318015. D136-31-1. |
| 318010. D136-22-5.               | 318016. D136-31-2. |
| 318011. D136-33-6.               | 318017. D136-33-1. |
| 318012. D136-11-1.               | 318018. D136-33-2. |
| Damon, Mount Carmel.             |                    |
| 318019. 6-1717-2.                |                    |
| 318020. 6-1717-3.                |                    |
| Eilaboon, lower Galilee.         |                    |
| 318021. D40-4-8.                 | 318030. D40-22-6.  |
| 318022. D40-4-9.                 | 318031. D40-22-9.  |
| 318023. D40-4-10.                | 318032. D40-22-10. |
| 318024. D40-13-10.               | 318033. D40-31-6.  |
| 318025. D40-13-12.               | 318034. D40-32-10. |
| 318026. D40-13-13.               | 318935. D40-33-9.  |
| 318027. D40-15-19.               | 318036. D40-35-8.  |
| 318028. D40-21-7.                | 318037. 6-2122-3.  |
| 318029. D40-21-9.                |                    |
| Elyaqim, plateau of Menashe.     |                    |
| 318038. 6-1735-1.                |                    |
| Emunim, southern coastal plain.  |                    |
| 318039. 6-1463-21.               |                    |
| En Dor, eastern lower Galilee.   |                    |
| 318040. D143-6-6.                | 318042. D143-23-7. |
| 318041. D143-23-6.               | 318043. D143-32-8. |
| En HaShofet, plateau of Menashe. |                    |
| 318044. 6-1014-12.               | 318058. 6-1763-20. |
| 318045. 6-1015-11.               | 318059. 6-1763-21. |
| 318046. 6-1018-13.               | 318060. 6-1764-2.  |
| 318047. 6-1019-2.                | 318061. 6-1764-3.  |
| 318048. 6-1022-11.               | 318062. 6-1766-2.  |
| 318049. 6-1023-11.               | 318063. 6-1767-1.  |
| 318050. 6-1024-13.               | 318064. 6-1767-2.  |
| 318051. 6-1026-11.               | 318065. 6-1767-3.  |
| 318052. 6-1026-13.               | 318066. 6-1768-1.  |
| 318053. 6-1028-16.               | 318067. 6-1772-13. |
| 318054. 6-1762-6.                | 318068. 6-1772-15. |
| 318055. 6-1762-7.                | 318069. 6-1773-14. |
| 318056. 6-1762-8.                | 318070. 6-1773-18. |
| 318057. 6-1763-18.               | 318071. 6-1843-1.  |

## 317919 to 318400—Continued

## 317960 to 318400—Continued

318072.	6-1843-3.	318082.	6-1852-1.
318073.	6-1844-3.	318083.	6-1852-2.
318074.	6-1845-19.	318084.	6-1852-12.
318075.	6-1845-20.	318085.	6-1854-2.
318076.	6-1845-21.	318086.	6-1854-3.
318077.	6-1847-2.	318087.	6-1856-11.
318078.	6-1847-3.	318088.	6-1864-1.
318079.	6-1847-12.	318089.	6-1869-1.
318080.	6-1850-11.	318090.	6-1869-2.
318081.	6-1850-16.		
Even Yizhaq, plateau of Menashe.			
318091.	6-1737-1.	318094.	6-1744-1.
318092.	6-1737-3.	318095.	6-1744-3.
318093.	6-1738-1.		
Ginnosar, Sea of Galilee.			
318096.	6-89-3-37.	318098.	6-89-3-42.
318097.	6-89-3-38.	318099.	6-89-3-43.
Giv'at Hamore, eastern lower Galilee.			
318100.	6-1159-1.		
Giv'at Hayyim, central coastal plain.			
318101.	6-257-1-4-1.	318117.	6-257-1-37.
318102.	6-257-1-6-8.	318118.	6-257-1-39.
318103.	6-257-1-14-1.	318119.	6-257-17-22-7.
318104.	6-257-1-21-1.	318120.	6-1718-1.
318105.	6-257-1-21-2.	318121.	6-1718-2.
318106.	6-257-1-21-7.	318122.	6-1718-3.
318107.	6-257-1-21-8.	318123.	6-1718-4.
318108.	6-257-1-23-6.	318124.	6-1718-6.
318109.	6-257-1-23-8.	318125.	6-1718-23.
318110.	6-257-1-31-1.	318126.	6-1718-24.
318111.	6-257-1-32-1.	318127.	6-1718-27.
318112.	6-257-1-31-7.	318128.	6-1718-29.
318113.	6-257-1-32-2.	318129.	6-1718-30.
318114.	6-257-1-34-1.	318130.	6-1718-31.
318115.	6-257-1-35-6.	318131.	6-1718-34.
318116.	6-257-1-36.		
Hadera, central coastal plain.			
318132.	D11(70)-20-1.	318135.	6-1683-23.
318133.	6-1683-1.	318136.	6-1683-24.
318134.	6-1683-21.	318137.	6-1683-25.

**317919 to 318400—Continued****317960 to 318400—Continued**

HaHoterium, coast of Carmel.

318138.	6-105-5-1-1.	318161.	6-105-5-5-8.
318139.	6-105-5-1-2.	318162.	6-105-5-5-9.
318140.	6-105-5-1-7.	318163.	6-105-5-6-1.
318141.	6-105-5-1-9.	318164.	6-105-5-6-2.
318142.	6-105-5-2-1.	318165.	6-105-5-6-6.
318143.	6-105-5-2-3.	318166.	6-105-5-11-7.
318144.	6-105-5-2-7.	318167.	6-105-5-13-6.
318145.	6-105-5-3-1.	318168.	6-105-5-13-9.
318146.	6-105-5-3-2.	318169.	6-105-5-15-1.
318147.	6-105-5-3-3.	318170.	6-105-5-15-6.
318148.	6-105-5-4-1.	318171.	6-105-5-15-7.
318149.	6-105-5-4-8.	318172.	6-105-5-17-8.
318150.	6-105-5-4-21-7.	318173.	6-105-5-17-10.
318151.	6-105-5-4a-21-9.	318174.	6-105-5-21-1.
318152.	6-105-5-4a-25-1.	318175.	6-105-5-24-1.
318153.	6-105-5-4-25-6.	318176.	6-105-5-34-6.
318154.	6-105-5-4-25-7.	318177.	6-105-5-35-8.
318155.	6-105-5-4-25-8.	318178.	6-105-5-35-9.
318156.	6-105-5-4-25-9.	318179.	6-105-5-23-7.
318157.	6-105-5-5-1.	318180.	6-105-5-23-8.
318158.	6-105-5-5-2.	318181.	6-105-5-50.
318159.	6-105-5-5-3.	318182.	6-1691-1.
318160.	6-105-5-5-7.		

Haifa, Haifa Bay.

318183.	6-1694-1.	318185.	6-1922-22.
318184.	6-1694-3.	318186.	6-1922-23.

Hazav, southern coastal plain.

318187. 6-1469-21.

Holot Yavne, central coastal plain.

318188.	D40-41.	318198.	6-313-5-3-7.
318189.	D40-42.	318199.	6-313-5-3-8.
318190.	D40-43.	318200.	6-313-5-3-32-6.
318191.	D40-44.	318201.	6-313-5-7-6.
318192.	D40-45.	318202.	6-313-5-7-7.
318193.	D40-47.	318203.	6-313-5-23-8.
318194.	D136-22-3.	318204.	6-313-5-38.
318195.	6-257-1-32-3.	318205.	6-313-5-39.
318196.	6-313-5-2-6.	318206.	6-313-5-40.
318197.	6-313-5-2-7.	318207.	6-313-5-3-6.

**317919 to 318400—Continued****317960 to 318400—Continued**

I'billin, lower Galilee.

318208.	6-82-5-1-8.	318220.	6-82-5-6-1.
318209.	6-82-5-1-9.	318221.	6-82-5-6-2.
318210.	6-82-5-2-1.	318222.	6-82-5-7-1.
318211.	6-82-5-2-2.	318223.	6-82-5-7-8.
318212.	6-82-5-2-3.	318224.	6-82-5-7-9.
318213.	6-82-5-2-6.	318225.	6-82-5-15-1.
318214.	6-82-5-3-1.	318226.	6-82-5-15-2.
318215.	6-82-5-3-6.	318227.	6-82-5-15-3.
318216.	6-82-5-3-7.	318228.	6-82-5-15-8.
318217.	6-82-5-4-1.	318229.	6-82-5-22-1.
318218.	6-82-5-5-6.	318230.	6-82-5-22-3.
318219.	6-82-5-5-9.	318231.	6-82-5-23-1.

Kafir Qasim, Samaritan foothills.

318232. 6-1917-23.

318233. 6-1917-24.

Kefar Alta, Haifa Bay.

318234. 6-93-2-2-21-1. 318239. 6-1789-22.

318235. 6-93-3-31. 318240. 6-1789-23.

318236. 6-93-3-32. 318241. 6-1789-24.

318237. 6-93-4-45. 318242. 6-1789-25.

318238. 6-93-4-47.

Kefar Bialik, Haifa Bay.

318243. 6-1753-1.

318244. 6-1753-2.

Kefar Gallim, coast of Carmel.

318245. 6-1703-1. 318249. 6-1703-27.

318246. 6-1703-23. 318250. 6-1703-28.

318247. 6-1703-24. 318251. 6-1703-30.

318248. 6-1703-25.

Kefar Hanasi, Korazim.

318252. 6-52-2-31-1.

Kefar Hasidim, Haifa Bay.

318253. D65-21.

318254. D65-25.

Kefar Pines, central coastal plain.

318255. 6-1635-1. 318260. 6-1635-23.

318256. 6-1635-2. 318261. 6-1635-24.

318257. 6-1635-3. 318262. 6-1635-25.

318258. 6-1635-21. 318263. 6-1635-27.

318259. 6-1635-22. 318264. 6-1635-28.

**317919 to 318400—Continued****317960 to 318400—Continued**

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|---|---------------------|
| 318265. 6-1635-30.                      | 318267. 6-1635-33.  |
| 318266. 6-1635-32.                      |                     |
| Kerem Maharal, Mount Carmel.            |                     |
| 318268. 6-153-4-1-8.                    | 318272. 6-153-4-40. |
| 318269. 6-153-4-11.                     | 318273. 6-1698-2.   |
| 318270. 6-153-4-37.                     | 318274. 6-1698-3.   |
| 318271. 6-153-4-39.                     |                     |
| Kefar Yehezqiel, valley of Esdraelon.   |                     |
| 318275. 6-1172-1.                       |                     |
| Ma'alot, upper Galilee                  |                     |
| 318276. 6-2026-21.                      |                     |
| Megadim, coast of Carmel.               |                     |
| 318277. 6-1692-22.                      |                     |
| Megiddo, valley of Esdraelon.           |                     |
| 318278. 6-1873-21.                      | 318282. 6-1873-26.  |
| 318279. 6-1873-22.                      | 318283. 6-1873-27.  |
| 318280. 6-1873-23.                      | 318284. 6-1873-28.  |
| 318281. 6-1873-25.                      | 318285. 6-2131-3.   |
| Midrakh Oz, valley of Esdraelon.        |                     |
| 318286. 6-216-2-24-1.                   | 318289. 6-216-2-41. |
| 318287. 6-216-2-33-1.                   | 318290. 6-216-2-42. |
| 318288. 6-216-2-33-2.                   |                     |
| Midreshet Rupin, central coastal plain. |                     |
| 318291. 6-1576-1.                       |                     |
| 318292. 6-1576-2.                       |                     |
| Miqwe Yisrael, central coastal plain.   |                     |
| 318293. 6-1629-1.                       |                     |
| Muzzuva, upper Galilee.                 |                     |
| 318294. D167-25.                        |                     |
| Nahshon, Judean foothills.              |                     |
| 318295. 6-1131-1.                       |                     |
| Nesher, Haifa Bay                       |                     |
| 318296. 6-110-1-36.                     |                     |
| 318297. 6-110-1-37.                     |                     |
| 318298. 6-110-1-38.                     |                     |
| Neveh Ya'ar, lower Galilee.             |                     |
| 318299. 6-2124-1.                       |                     |
| 318300. 6-2126-1.                       |                     |
| Nordiyya, central coastal plain.        |                     |
| 318301. 6-1835-1.                       | 318304. 6-1836-1.   |
| 318302. 6-1835-2.                       | 318305. 6-1836-2.   |
| 318303. 6-1835-3.                       |                     |

**317919 to 318400—Continued**

**317960 to 318400—Continued**

N.Tut, plateau of Menashe.

318306.	6-1795-1.	318327.	6-1833-25.
318307.	6-1797-4.	318328.	6-1833-26.
318308.	6-1797-5.	318329.	6-1833-29.
318309.	6-1797-6.	318330.	6-1833-30.
318310.	6-1797-15.	318331.	6-1833-31.
318311.	6-1800-1.	318332.	6-1833-32.
318312.	6-1800-2.	318333.	6-1837-1.
318313.	6-1801-1.	318334.	6-1837-14.
318314.	6-1802-1.	318335.	6-1837-15.
318315.	6-1802-2.	318336.	6-1837-17.
318316.	6-1833-1.	318337.	6-1838-6.
318317.	6-1833-2.	318338.	6-1838-7.
318318.	6-1833-3.	318339.	6-1838-8.
318319.	6-1833-4.	318340.	6-1838-10.
318320.	6-1833-9.	318341.	6-1838-11.
318321.	6-1833-10.	318342.	6-1838-12.
318322.	6-1833-11.	318343.	6-1839-1.
318323.	6-1833-13.	318344.	6-1839-17.
318324.	6-1833-15.	318345.	6-1839-19.
318325.	6-1833-21.	318346.	6-1841-19.
318326.	6-1833-23.		

Pardes-Hana, central coastal plain.

318347. 6-2141-1.

318348. 6-2144-1.

Qiryat Tiv'on, lower Galilee.

318349. 6-2085-1.

Regavim, plateau of Menashe.

318350. 6-1666-21.

Sedot Yam, central coastal plain.

318351. 6-1915-21.

318352. 6-1915-22.

318353. 6-1915-23.

Sha'ar HaAliyya, coast of Carmel.

318354.	6-90-3-2-1.	318362.	6-90-3-5-9.
318355.	6-90-3-2-2.	318363.	6-90-3-6-3.
318356.	6-90-3-2-3.	318364.	6-90-3-6-6.
318357.	6-90-3-2-4.	318365.	6-90-3-6-7.
318358.	6-90-3-4-7.	318366.	6-90-3-6-9.
318359.	6-90-3-5-2.	318367.	6-90-3-7-3.
318360.	6-90-3-5-3.	318368.	6-90-3-17-1.
318361.	6-90-3-5-6.	318369.	6-90-3a-17-1.

**317919 to 318400—Continued****317960 to 318400—Continued**

Sharsheret, northern Negev.

318370. 6-1070-1.

Shefar'am, lower Galilee.

318371. 6-94-3-7-6.

318372. 6-94-3-7-7.

318373. 6-105-5-1-6.

Shefer, upper Galilee.

318374. 6-1541-9.

318377. 6-1542-7.

318375. 6-1541-10.

318378. 6-1542-8.

318376. 6-1542-6.

Tal Shahar, Judean foothills.

318379. 6-336-3-9-6.

318380. 6-336-3-24-1.

318381. 6-336-3-24-2.

Tel Yoqne'am, Mount Carmel.

318382. 6-167-5-22-1.

318389. 6-167-5-40.

318383. 6-167-5-22-6.

318390. 6-167-5-46.

318384. 6-167-5-24-8.

318391. 6-168-1-22-6.

318385. 6-167-5-26-1.

318392. 6-168-1-36.

318386. 6-167-5-26-6.

318393. 6-2132-1.

318387. 6-167-5-37.

318394. 6-2132-3.

318388. 6-167-5-38.

318395. 6-2132-4.

Tirat Carmel, coast of Carmel.

318396. 6-1696-1.

318398. 6-1696-3.

318397. 6-1696-2.

318399. 6-1696-22.

Zikhron Ya'acov, Mount Carmel.

318400. 6-939-11.

**318401 to 318404. ARMORACIA LAPATHIFOLIA Gilib. Cruciferae.  
Horseradish.**

From Germany. Roots presented by the Max-Planck-Institut, Koln-Vogelsang. Received Jan. 9, 1967.

318401. 'Baiersdorfer'.

318403. 'Laufener'.

318402. 'Hamburger'.

318404. 'Spreewalder'.

**318405 and 318406. ACTINIDIA LATIFOLIA (Gardn. & Champ.)  
Merr. Dilleniaceae.**

From France. Cuttings presented by the Service des Cultures du Museum National d'Histoire Naturelle, Paris. Received Jan. 9, 1967.

318405. Female.

318406. Male.



**318407 and 318408. PYRUS CALLERYANA Decne. Rosaceae. Callery pear.**

From Japan. Seeds collected by Muneo Iizuka, Agricultural Research Station, Ministry of Agriculture and Forestry, Hiratsuka, Kanagawa. Received Jan. 10, 1967.

318407. Tree No. 1.

318408. Tree No. 2.

**318409 and 318410. MALUS SYLVESTRIS Mill. Rosaceae. Apple.**

From Italy. Budsticks presented by the Instituto di Coltivazioni Arboree, Torino. Received Jan. 10, 1967.

318409. 'Goldjon'.

318410. No. 32C (Golden × Commercio).

**318411 to 318414.**

From Poland. Cuttings and seeds presented by the Research Institute of Pomology Skierniewice. Received Jan. 17, 1967.

318411. PYRACANTHA sp. Rosaceae. 318413. PYRACANTHA sp.

A. (Cuttings).

A. (Seeds).

318412. PYRACANTHA sp.

318414. PYRACANTHA sp.

B. (Cuttings).

B. (Seeds).

**318415 to 318433. CUCURBITA MAXIMA Duchesne Cucurbitaceae. Squash.**

From the United States. Seeds presented by A. E. Hutchins, Department of Horticultural Science, University of Minnesota, St. Paul. Numbered Jan. 17, 1967.

318415. No. A-706. Inbred selection No. 1.63, Bush × Greengold. Vigorous, medium maturing, bush. Fruits many, oblate 5 to 6 by 6 to 8 inches, orange or salmon; 3.75 pounds; flesh  $\frac{3}{4}$  to  $1\frac{1}{2}$  inches, orange.

318416. No. A-707. Inbred selection F<sub>11</sub>, Minnesota No. 2.63, Bush × Greengold. Vigorous, medium maturing, bush. Fruits many, oblate  $4\frac{1}{2}$  to  $5\frac{1}{2}$  by  $6\frac{1}{2}$  to 8 inches, orange or salmon; 4.75 pounds; flesh 1 to  $1\frac{1}{2}$  inches, orange.

318417. No. A-708. Inbred selection F<sub>11</sub>, Minnesota No. 3.63, Bush × Greengold. Vigorous, medium maturing, bush. Fruits many, oblate 5 to  $6\frac{1}{2}$  by  $7\frac{3}{4}$  inches, orange or salmon; 4.20 pounds; flesh  $\frac{3}{4}$  to  $1\frac{1}{2}$  inches, orange.

318418. No. A-709. Inbred selection F<sub>11</sub>, No. 4.63, Bush × Greengold. Vigorous, medium maturity, bush. Fruit oblate 4 by 7 to 9 inches, dark green with light stripes; 3.20 pounds; flesh  $\frac{1}{2}$  to  $1\frac{1}{4}$  inches, orange.

318419. No. A-710. Inbred selection F<sub>11</sub>, No. 5.63, Bush × Greengold. Vigorous, medium maturing, bush. Fruits 6 by  $7\frac{1}{2}$  to  $8\frac{1}{4}$  inches, orange or salmon; 3.21 pounds; flesh 1 to 2 inches, orange.

318420. No. A-711. Inbred selection F<sub>11</sub>, No. 6.63, Bush × Greengold. Vigorous, medium maturing, bush. Fruits many, oblate 5 to  $5\frac{1}{2}$  by  $7\frac{1}{2}$  to 9 inches, orange or salmon; 4.82 pounds; flesh 1 to  $1\frac{1}{2}$  inches, orange.

318421. No. A-712. Inbred line F<sub>11</sub>, No. 7.63, Bush × Greengold. Vigorous, medium maturing, bush. Fruits many, oblate  $4\frac{1}{2}$  by  $6\frac{1}{2}$  to 8 inches, dark green; 3.56 pounds; flesh 1 inch, bright orange.

318422. No. A-713. Inbred line selection F<sub>11</sub>, No. 8.63, Bush × Greengold. Vigorous, medium maturity, bush. Fruits many, 6 to 7 by 7 to 8 inches, orange or salmon; 3.55 pounds; flesh 1 to  $1\frac{1}{2}$  inches, orange.

## 318415 to 318433—Continued

318423. No. A-714. Inbred selection F<sub>10</sub>, No. 9.63, Bush × Greengold. Vigorous, medium maturing, bush. Fruits many, oblate 4 to 4½ by 7½ to 8 inches, orange or salmon; 3.72 pounds; flesh ¾ to 1½ inches, yellow.
318424. No. A-715. Inbred selection F<sub>11</sub>, No. 10.63, Bush × Greengold. Vigorous, medium maturing, bush. Fruits many, oblate 5 to 6 by 7 to 8 inches, orange or salmon; 3.57 pounds; flesh 1 to 2 inches, light orange.
318425. No. A-716. Inbred selection F<sub>10</sub>, No. 11.63, Bush × Greengold. Vigorous, medium maturing, bush. Fruits many, oblate 5 by 7 to 8 inches, orange or salmon; 4.75 pounds; flesh 1 to 2 inches, light orange.
318426. No. A-717. Inbred selection F<sub>11</sub>, No. 12.63, Bush × Greengold. Vigorous, medium maturity, bush. Fruits many, oblate 5 by 7 to 8 inches, copper; 4.90 pounds; flesh 1 to 2 inches, orange.
318427. No. A-718. Inbred selection F<sub>11</sub>, No. 13.63, Bush × Greengold. Vigorous, medium maturity, bush. Fruits many, oblate 4 to 5 by 6 to 7¾ inches, copper; 4.47 pounds; flesh 1½ inches, orange.
318428. No. A-719. Male sterile A; Golden Delicious type. Segregates (approximately) 1 normal to 1 male sterile. Vigorous, medium maturing, vining. Fruits many, globose or ovate, 7 to 13 by 9 to 10 inches tapered toward blossom end, orange; 9.4 pounds; flesh 1¼ to 2¼ inches, orange.
318429. No. A-720. Male sterile B. Segregates (approximately) 1 normal to 1 male sterile. Vigorous, medium maturity, semibush. Fruits oblate 7 to 9 by 8 to 12 inches, orange-red; 10 pounds; flesh 1¼ to 2¼ inches, orange.
318430. No. A-721. Male sterile C. Buttercup type. Segregates (approximately) 1 normal to 1 male sterile. Vigorous, medium maturity, medium-sized vines. Fruits many, oblate turbinate 4¼ by 6 to 9 inches, dark green; 4.5 pounds; flesh ¾ to 1¼ inches, orange.
318431. No. A-722. Male sterile D. Kitchenette type. Segregates (approximately) 1 normal to 1 male sterile. Vigorous, medium-sized vine. Fruits many, Green Hubbard shaped, 6 to 8 by 7 to 9 inches, dark green with medium green markings; 4.2 pounds; flesh 1 to 2 inches, light orange.
318432. No. A-723. Male sterile E. Kitchenette type. Segregates 1 normal to 1 male sterile. Large, vigorous, semibush. Fruits obovate, 6½ to 8 by 7 to 9 inches, dark green, medium maturity; flesh ¾ to 1½, light orange.
318433. No. A-724. Male sterile F. Segregates (approximately) 1 normal to 1 male sterile. Vigorous, bush type. Fruits many, oblate, 3 to 4 by 6 to 7 inches, dark green, medium maturity; 2.8 pounds; flesh 1 to 1¼ inches, light orange.

## 318434. PISUM SATIVUM L. Leguminosae.

Pea.

From the United States. Seeds held at Regional Plant Introduction Station, Ames, Iowa. Original seed obtained from England by Inter-State Nurseries, Hamburg, Iowa. Received Jan. 17, 1967.

No. A-446. 'Sutton's Chieftain'. Plant of medium maturity and vigor. Vine to 30 inches long. Flowers white, single, moderate pod set; peas wrinkled, medium large, green or a few yellow.

## 318435 and 318436. COLEUS BLUMEI var. VERSCHAFFELTII Lem. Labiatae.

From the United States. Seeds presented by Joseph W. Westbrook, Omaha, Tex. Received Jan. 18, 1967.

318435. No. 1. F<sub>25</sub> from seed X-ray irradiated at 100 R.

318436. No. 2. F<sub>20</sub> from seed X-ray irradiated at 100 R.

**318437 to 318445.**

From Great Britain. Tubers presented by J. G. Hawkes, University of Birmingham, Birmingham, England. Numbered Jan. 18, 1967.

**318437 and 318438.** SOLANUM BRACHISTOTRICHUM (Bitter) Rydb. Solanaceae.

318437. BST H.281—Line 1.

318438. BST H.284—Line 3.

**318439.** SOLANUM CALVESCENS Bitt.

CLV H.653—Line 4.

**318440 and 318441.** SOLANUM OPLOCENSE Hawkes

318440. OPL C.P.C. 2116.

318441. OPL H.650.

**318442 to 318444.** SOLANUM SAMBUCINUM Rydb.

318442. SMB H273/2.

318443. SMB H.275/1.

318444. SMBH.277—Line 1.

**318445.** SOLANUM VALLIS-MEXICAE Juz.

VLL H.407—Line 4.

**318446.** PYRUS COMMUNIS L. Rosaceae. **Common pear.**

From Hong Kong. Seeds collected by L. C. Cochran, Crops Research Division, Plant Industry Station, Beltsville, Maryland. Received Jan. 18, 1967.

Seeds extracted from fruit purchased in market, supposedly imported from interior China. Fruit shaped like 'Comice' but with acuminate neck. Medium number grit cells near core (ref. 'Keiffer'), flavor bland.

**318447.** ARBUTUS UNEDO L. Ericaceae. **Strawberry tree.**

From Great Britan. Plants purchased from Hillier and Sons, Winchester, England. Numbered Jan. 18, 1966.

'Rubra'.

**318448 to 318462.** SACCHARUM (hybrid) Gramineae. **Sugarcane.**

From the Dominican Republic. Cuttings presented by the Central Romana Corp., La Romana. Received Jan. 20, 1967.

318448. C.R. 6443. 318456. C.R. 64126.

318449. C.R. 6461. 318457. C.R. 64182.

318450. C.R. 6467. 318458. C.R. 64209.

318451. C.R. 6468. 318459. C.R. 64215.

318452. C.R. 6488. 318460. C.R. 64217.

318453. C.R. 64101. 318461. C.R. 64223.

318454. C.R. 64110. 318462. C.R. 64225.

318455. C.R. 64117.

**318463.** CORYLUS AVELLANA L. Betulaceae. **Filbert.**

From Turkey. Scions presented by the Ministry of Agriculture, Giresun Filbert Research Institute, Giresun. Received Jan. 10, 1967.

'Tombul'.

**318464. GINKGO BILOBA L. Ginkgoaceae. Maidenhair-tree.**

From France. Scions presented by the Services Techniques des Parcs et Jardins, Paris. Received Jan. 20, 1967.

'Pendula'.

**318465 to 318472.**

From Brazil. Seeds presented by Division of Plant Introduction, Instituto Agronomico, Campinas, Sao Paulo. Received Jan. 23, 1967.

318465. *ARACHIS HYPOGAEA* L. Leguminosae.

'Ameudoin'.

318466. *CALOPOGONIUM MUCUNOIDES* Desv. Leguminosae.

'Calopogonio'.

318467. *DIOCLEA LASIOCARPA* Mart. ex Benth. Leguminosae.

'Feijao Bravo do Ceara'.

318468. *HELIANTHUS ANNUS* L. Compositae.

Sunflower.

'Girassol'.

318469. *PHASEOLUS ANGULARIS* (Willd.) W. F. Wight Leguminosae.

Adzuki bean.

'Feijao Adzuki'.

318470. *PHASEOLUS CALCARATUS* Roxb.

Rice bean.

'Feijao Arroz'.

318471. *RICINUS COMMUNIS* L. Euphorbiaceae.

Castorbean.

'Mamona'.

318472. *SESAMUM INDICUM* L. Pedaliaceae.

Sesame.

'Gergelin'.

**318473 to 318490.**

From Israel. Seeds presented by J. Katznelson, Regional Experiment Station Neve-Ya'ar, P.O. Haifa. Original sources are indicated. Numbered Jan. 23, 1967.

318473 to 318476. *TRIFOLIUM FRAGIFERUM* L. Leguminosae.

Strawberry clover.

318473. NYT 422. Beit Keshet, Israel.

318474. NYT 425. Na'aman, Israel.

318475. NYT 431. Skopje, Yugoslavia.

318476. NYT 436. Rhodos, Greece.

318477. *TRIFOLIUM PHYSODES* Stev. ex Bieb.

NYT 701. Metzovo, Greece.

318478 to 318480. *TRIFOLIUM PRATENSE* L.

Red clover.

318478. NYT 719. Klisura, Yugoslavia.

318479. NYT 723. Metzovo, Greece.

318480. NYT 724. Skopje, Yugoslavia.

318481 to 318488. *TRIFOLIUM REPENS* L.

Whiteclover.

318481. NYT 754. Pendelikon, Greece.

318482. NYT 758. Klisura, Yugoslavia.

318483. NYT 761. Ptolemais, Greece.

318484. NYT 763. Yannina, Greece.

**318473 to 318490—Continued****318481 to 318488—Continued**

318485. NYT 764. Kozani-Florina, Greece.  
 318486. NYT 765. Skopje-Kumanovo, Yugoslavia.  
 318487. NYT 766. Vranje-Leskovac, Yugoslavia.  
 318488. NYT 767. Vranje, Yugoslavia.

**318489. TRIFOLIUM sp.**

NYT 565. Hercegnovi, Yugoslavia.

**318490. TRIFOLIUM sp.**

NYT 713. Maraton-Thebai, Greece.

**318491 to 318493. SORGHUM BICOLOR (L.) Moench Gramineae.****Kafircorn.**

From Hungary. Seeds presented by Z. Barabas, Agricultural Research Institute, Hungarian Academy of Sciences, Martonvasar, through National Institute of Agrobotany, Taposzele. Received Jan. 23, 1967.

318491. ms6. Male sterile, microanther (mth-2513).  
 318492. pgy. Polygynocious heterozygote (pg-2323-4).  
 318493. pgy. Polygynocious heterozygote (pg-2323-7).

**318494 to 318496.**

From Great Britain. Seeds presented by Frank P. Knight, Royal Horticultural Society Gardens, Wisley, Ripley, Surrey. Received Jan. 23, 1967.

318494. ROSA ECAE Aitch. Rosaceae. **Eca rose.**  
 P.F. 8302.  
 318495. ROSA PERSICA Michx. **Persian rose.**  
 P.F. 8845.  
 318496. ROSA sp.  
 P.F. 8816. Large pink, 4 to 6 feet high.

**318497 to 318505.**

From France. Scions presented by J. P. Nitsch, Phytotron, 91, Gif-sur-Yvette. Numbered Jan. 24, 1967.

318497. CARALLUMA NEWBROWNII A. Berger Asclepiadaceae.  
 318498. HOODIA BARKLYI Dyer Asclepiadaceae.  
 318499. HOODIA BURKEI N. E. Brown  
 318500. HUERNIA ZEBRINA N. E. Brown Asclepiadaceae.  
 318501. MUCUNA GIGANTEA (Willd.) DC. Leguminosae.  
 318502. PECTINARIA SAXATILIS N. E. Br. Asclepiadaceae.  
 318503. SOLANUM MAMMOSUM Linn. Solanaceae.  
 318504. STAPELIA PARVIPUNCTATA (N. E. Br.) ex K. Schum Asclepiadaceae.  
 318505. STREPTOCARPUS NOBILIS C. B. Clarke Gesneraceae.

**318506 and 318507.**

From Ghana. Seeds presented by United States Agency for International Development Agricultural Mission to Ghana, Accra. Received Jan. 24, 1967.

**318506 and 318507—Continued**

**318506.** *ALLIUM CEPA* L. Liliaceae. **Onion.**

'Bawku'. Origin unknown. Common in northern Ghana for many years. Only variety known to flower, seed, produce desirable market product in Ghana.

**318507.** *LYCOPERSICON ESCULENTUM* Mill. Solanaceae. **Tomato.**

'Improved Zuarubgu'. Origin unknown. Consistently productive during all seasons throughout Ghana. Superior to most American varieties in Ghana.

**318508 and 308509.**

From Greece. Seeds collected by George Sklivanos, Chios and forwarded through Agricultural Attache, Athens. Received Jan. 24, 1967.

**318508.** *MELILOTUS SEGETALIS* (Brot.) Seringe Leguminosae. **Sweetclover.**

Native, uncultivated legume.

**318509.** *SECURIGERA SECURIDACA* (L.) Deg. & Doerfl. Leguminosae.

Native, uncultivated legume.

**318510.** *RICINUS COMMUNIS* L. Euphorbiaceae. **Castorbean.**

From Thailand. Seeds presented by Richard S. Mann, Center for Uplift of Hill Tribes, P.O. Box 29, Chiangmai. Received Jan. 24, 1967.

Wild, uncultivated.

**318511.** *TRITICUM AESTIVUM* L. Gramineae. **Wheat.**

From Israel. Seeds presented by Volcani Institute of Agricultural Research, Plant Introduction Service, Rehovot. Received Jan. 24, 1967.

Florence × Aurore 8193.

**318512 to 318592.**

From Korea. Plant material collected by E. G. Corbett and R. W. Lighty, agricultural explorers, Crops Research Division, United States Department of Agriculture, Beltsville, Md. For U.S.D.A.-Longwood Gardens Cooperative Program. Numbered Jan. 26, 1967.

**318512.** *ACER TAKESIMENSE* Nakai Aceraceae.

Col. No. K-44. Mt. Songin Bong, Ullung-do. Elevation 970 meters. Deciduous tree to 10 meters high. Diameter at breast height is about 50 cm. Seedlings.

**318513.** *ACERIPHYLLUM ROSSII* Engl. Saxifragaceae.

Col. No. K-62. Dry streambed at base of Mt. Sorak, Kangwon-do. Low-growing perennial with thick rhizome. Leaves palmately 5 to 9 lobed at ends of rhizomes. Plants.

**318514.** *ADENOPHORA* sp. Campanulaceae.

Col. No. K-267. On rock cliff along road near Muu Ju. Herbaceous perennial to 1 meter high. Flowers in a graceful raceme, blue. Plants.

**318515.** *ALLIUM THUNBERGII* G. Don Liliaceae.

Col. No. K-305. Along streambed on trail to Paek Tam Sa, Mt. Sorak. Bulbous perennial. Flowers in umbel, purple. Plants.

**318516.** *ARUNCUS AETHUSIFOLIUS* (Lév.) Nakai Rosaceae.

Col. No. K-11. In open, wind-swept fields near top of Mt. Halla, Cheju Island. Elevation 1,900 meters. Herbaceous perennial with finely divided leaves. Flowers whitish. Plants.

## 318512 to 318592—Continued

318517. *ASARUM MACULATUM* Nakai Aristolochiaceae.

Col. No. K-428. In shady moist area along trail up Mt. Halla, Cheju Island. Elevation 750 meters. Fleshy rooted herbaceous perennial. Leaves cordate, mottled. Plants.

318518. *ASTER SPATHULIFOLIUS* Maxim. Compositae.

Col. No. K-53. North coast of Ullung-do, growing on cliff face in open. Elevation 30.5 meters above sea. Herbaceous perennial with fleshy leaves forming rosette. Flowers blue, in heads. Plants.

318519. *CALAMAGROSTIS ARUNDINACEA* var. *BRACHYTRICHA* (Steud.) Hack. Gramineae.

Col. No. K-262. Along trail on Mt. Tok-yu, Ko Chun. Perennial grass to 1 meter high. Flower heads ornamental. Plants.

318520. *CAMPANULA TAKESIMANA* Nakai Campanulaceae.

Col. No. K-55. Above To Dong, Ullung-do. Growing in open areas. Elevation 244 meters. Herbaceous perennial. Leaves roundish. Flowers bell shaped, whitish to magenta. Plants.

318521. *CAREX FUSANENSIS* Ohwi Cyperaceae.

Col. No. K-288. Garden of Professor Tehang Bok Lee, Suwon. Originally from Chunchun, Kangwon-do. Leaves long linear, dark green. Clump forming. Plants.

318522. *CARYOPTERIS INCANA* (Thunb.) Miquel Verbenaceae.

Common bluebeard.

Col. No. K-463. On sea coast 20 km. east of Cheju City. Subfruticose plant. Flowers blue. Plants.

318523. *CHLORANTHUS JAPONICUS* Siebold Chloranthaceae.

Col. No. K-304. In moist shady area along trail to Paek Tam Sa, Mt. Sorak. Herbaceous perennial. Leaves four lobed. Plants.

318524. *CHRYSANTHEMUM SIBIRICUM* Turcz. Compositae.

Col. No. K-299. In open rocky area on Mt. Sokni, Chunchong Pukto. Elevation 610 meters. Herbaceous perennial. Flowers large, white. Plant.

318525. *CHRYSANTHEMUM ZAWADSKII* Herbich

Col. No. K-77. On Taek Wal Yong Mountain, Kangwon-do, growing on open slope; steep, sandy soil. Elevation 800 meters. Low perennial. Leaves finely divided. Inflorescence capitate to 2½ inches across. Lavender pink. Plants.

318526. *CONVALLARIA KEISKEI* Miq. Liliaceae.

Lily-of-the-valley.

Col. No. K-86. Along on Mt. Odai, Kangwon-do, growing in moist, sandy soil in shade. Elevation 823 meters. Rhizomatous herbaceous perennial to ½ meter high. Leaves elliptic, 2 per stem. Plants.

318527. *CYPRIPEDIUM JAPONICUM* Thunb. Orchidaceae.

Col. No. K-527. Tokyo, Japan. Purchased in seed and fruit store. Herbaceous perennial. Plants.

318528. *EUONYMUS FORTUNEI* var. *RADICANS* (Miq.) Rehd. Celastraceae.

Wintercreeper.

Col. No. K-31. Jeu-Dong, Ullung-do at base of pine tree along trail. Elevation 183 meters. Round-leaved, climbing, woody evergreen vine. Cuttings.

318529. *EUONYMUS JAPONICA* Thunb.

Col. No. K-236. Chong Ju. Growing in hotel garden. Evergreen shrub 2½ meters high. Leaves shiny green. Cuttings.

## 318512 to 318592—Continued

- 318530 and 318531. *FORSYTHIA VIRIDISSIMA* var. *KOREANA* Rehd. Oleaceae.  
 318530. Col. No. K-177. Near college campus, Suwon. Vigorous deciduous shrub to 2 meters high. Branches arching. Flowers yellow. Cuttings.  
 318531. Col. No. K-218. Hedge on campus of Agriculture College, Seoul National University, Suwon. Deciduous shrub to 2 meters high. Branches arching. Roots readily at tip. Cuttings.
- 318532 and 318533. *FORSYTHIA OVATA* Nakai  
 318532. Col. No. K-60. Along trail in sun at edge of woods at base of Mt. Sorak, Kangwon-do. Deciduous shrub to 1½ meters high. Cuttings.  
 318533. Col. No. K-61. Along trail near streambed at base of Mt. Sorak, Kangwon-do. Deciduous shrub to 1½ meters high. Leaves more round, smaller, darker green than P.I. 318532. Cuttings.
318534. *GENTIANA SCABRA* var. *BUERGERI* (Miq.) Maxim. Gentianaceae.  
 Col. No. K-491. Mt. Kwan Ak, An Yang. Growing in grass along trail. Herbaceous perennial. Flowers blue. Plants.
- 318535 and 318536. *GENTIANA UCHIYAMAI* Nakai  
 318535. Col. No. K-102. In swampy area near Taek Wal Yong Experiment Station, Kangwon-do. Elevation 883 meters. Herbaceous perennial. Leaves linear. Flowers axillary, not open when collected. Plant.  
 318536. Col. No. K-142. In area of low shrubs along trail on Mt. Chiri, Cholla Nam-do. Elevation 1,494 meters. Herbaceous perennial. Leaves linear. Flowers axillary, blue. Plants.
318537. *GENTIANA* sp.  
 Col. No. K-441. In open alpine meadow, Mt. Halla, Cheju Island. Elevation 427 meters. Low herbaceous perennial. Flowers blue. Plants.
- 318538 and 318539. *GERBERA* (hybrid) Compositae.  
 318538. Col. No. K-524. 'Cleopatra'. Kurume, Japan. Collected at Kurume Branch Horticultural Experiment Station. Herbaceous perennial. Flowers brightest red in field—anemone flowered. Plant.  
 318539. Col. No. K-525. 'Haru-no-izumi'. Kurume, Japan. Collected at Kurume Branch Horticultural Experiment Station. Herbaceous perennial. Flower color metallic rose. Plants.
318540. *HEDERA RHOMBEA* (Miq.) Bean Araliaceae.  
 Col. No. K-21. On road to Cheju, Cheju Island, 16 km. from Sogwipo, on edge of woods. Elevation 495 meters. Trailing evergreen vine. Runners.
318541. *HELONIOSIS ORIENTALIS* (Thunb.) C. Tanaka Liliaceae.  
 Col. No. K-302. Along trail to Paek Tam Sa, Mt. Sorak. Growing in moist bank. Crown forming perennial. Leaves linear. Plants.
- 318542 to 318544. *HEPATICA ASIATICA* Nakai Ranunculaceae.  
 318542. Col. No. K-25. On road to Cheju Island, 20 km. from Sogwipo, in dark moist woods. Elevation 610 meters. Low herbaceous perennial. Leaves tripartite, mottled with silver. Plants.  
 318543. Col. No. K-83. Along trail on Mt. Odai, Kangwon-do. Usually in moist shade, sandy soil. Elevation 762 meters. Low herbaceous perennial. Leaves three lobed. Plants.  
 318544. Col. No. K-205. Moist sandy soil in deep shade of mixed deciduous forest, Kwang Nung, Kyunggi-do. Dwarf herbaceous perennial. Leaves three lobed. Small crown. Crowns.



## 318512 to 318592—Continued

318545. *HOSTA ALBOMARGINATA* (Hook.) Ohwi Liliaceae.

Col. No. K-193. Forest Experiment Station, Kwang Nung, Kyunggi Province. In moist semishade. Herbaceous perennial. Leaves lanceolate. Plants.

318546. *HOSTA LONGIPES* (Fr. & Sav.) L. H. Bailey

Col. No. K-26. On road to Cheju, Cheju Island, 24 km. from Sogwipo. In moist woods usually in open areas. Elevation 640 meters. Herbaceous perennial. Flower stalks to 2 feet. Leaves oblong lanceolate. Flowers lavender purple. Plants.

318547. *HOSTA* sp.

Col. No. K-214. Garden at residence of Professor Tchang Bok Lee, Suwon. Herbaceous perennial to 1 meter high. Flowers large, white. Garden form. Plants.

318548. *HYDRANGEA SERRATA* (Thunb.) DC. Saxifragaceae.

Col. No. K-28. Growing on banks along road in full sun 18 km. from Cheju, Cheju, Island. Elevation 610 meters. Deciduous shrub to 4 feet high. Leaves acuminate, serrate. Flowers blue (both sterile and fertile). Cuttings.

318549. *ILEX CRENATA* f. *MICROPHYLLA* Rehd. Aquifoliaceae.

Col. No. K-13. On south slope of Mt. Halla, Cheju Island, in moist, open, rocky field. Elevation 1,200 meters. Small leaved, evergreen, dwarf shrub with small white flowers. Male plant. Plants.

318550. *IRIS ENSATA* var. *SPONTANEA* (Makino) Nakai Iridaceae.

Col. No. K-12. On south slope of Mt. Halla, Cheju Island, in wet, open field growing with and among rhododendron species. Elevation 1,400 meters. Strap-leaved herbaceous perennial with thick root stocks. Flowers in several shades of purple. Plants.

318551. *IRIS RUTHENICA* Ker

Col. No. K-187. Open grassy fields with stony soil, Kwang Kyo. Leaves long, straplike. Roots wiry. Flowers short, reportedly purple. Plants.

318552. *IRIS SANGUINEA* Donn

Col. No. K-172. Moist pine woods near grave of Korean king, Suwon. Herbaceous perennial. Not seen in flower. Plants.

318553. *IRIS SANGUINEA* Donn

Col. No. K-204. Moist sandy soil in deep shade under mixed deciduous forest. Kwang Nung, Kyunggi-do. Strap-leaved perennial to 7 dm. high. Roots wiry. Flower reportedly yellow. Plant.

318554. *IRIS* sp.

Col. No. K-182. Campus of College, Suwon. Strap-leaved perennial to 1 meter high. Forms large clump. Very floriferous. Said to be yellow flowered. Plants.

318555. *IRIS* sp.

Col. No. K-268. In moist area long trail up Mt. Tok-yu, Ko Chun. Herbaceous perennial. Leaves straplike, to 1 meter long. Plants.

318556. *IRIS* sp.

Col. No. K-273. In moist area near road to Mt. Tok-yu, Ko Chun. Herbaceous perennial with straplike leaves to 1 meter high. Plants.

318557. *IRIS* sp.

Col. No. K-472. Suwon. Growing along edge of rice paddy. Dwarf, lance-leaved, herbaceous perennial. Plants.

## 318512 to 318592—Continued

318558. *JUNIPERUS CHINENSIS* var. *SARGENTII* Henry Pinaceae.  
Sargent juniper.

Col. No. K-9. Open, wind swept east slope at top of Mt. Halla, Cheju Island, with *Empetrum* and grasses. Elevation 1,950 meters. Very low needleleaf evergreen. Prostrate with little evidence of winter damage. Cuttings.

318559 and 318560. *LILIUM AMABILE* Palibin Liliaceae.

318559. Col. No. K-125. Growing in open, high shade with grasses on Chung Ke Mountain, Suwon. Elevation 150 meters. Bulbous perennial. Leaves linear. Not seen in flower. Bulb.

318560. Col. No. K-160. Near No Go Dan, Mt. Shiri, Cholla Nam-do. Elevation 1,300 meters. Typical type. Bulbs.

318561 and 318562. *LILIUM MIQUELIANUM* Makino

318561. Col. No. K-139. In shade along trail up Mt. Chiri, Cholla Nam-do. Elevation 1,433 meters. Whorled leaf, bulbous perennial. Stem rooting; scales jointed. Bulbs.

318562. Col. No. K-161. Near No Go Dan, Mt. Chiri, Cholla Nam-do, growing with *Lespedeza* and *Sasamorpha*. Elevation 396 meters. Bulbous perennial to 1½ meters. Whorl of leaves at about 1 meter. Stem rooting; jointed scales. Six flowers in a double "umbel." Bulb.

318563. *LILIUM* sp.

Col. No. K-93. On temple grounds, Mt. Odai, Kangwon-do, growing in *Abies* forest. Elevation 700 meters. Bulbous perennial, scales jointed. Stem rooting. Leaves in a single whorl.

318564. *LILIUM* sp.

Col. No. K-111. In dense woods along trail on Mt. Baek Yang, Cholla Nam-do. Elevation 183 meters. Bulbous perennial to 8 dm. Leaves in whorl with one leaf below main whorl; scales jointed. Not seen in flower. Bulb.

318565. *LILIUM* sp.

Col. No. K-123. On drier slope of Chung Ke Mountain, Suwon. Growing in dense shade. Elevation 200 meters. Whorled leaf lily. No stem roots. Scales not jointed. Plants.

318566. *LILIUM* sp.

Col. No. K-234. In moist woods near Pok Chu Sa Temple, Mt. Sokni. Whorled leaf bulbous perennial. Bulb scales jointed. Stems rooting. Bulbs.

318567. *LIRIOPE GRAMINIFOLIA* (L.) Baker Liliaceae.

Col. No. K-110. In moist woods along trail on Mt. Baek Yang, Cholla Nam-do. Elevation 183 meters. Herbaceous perennial. Leaves grasslike. Flowers in a spike, purple. Roots produce small tubers. Plants.

318568. *LIPRIOPE SPICATA* Lour.

Col. No. K-173. Moist pine woods near grave of Korean king, Suwon. Herbaceous perennial. About 20 cm. high. Not seen in flower. Plants.

318569. *LYCORIS KOREANA* Nakai Amaryllidaceae.

Col. No. K-120. Along trail on Mt. Baek Yang, Cholla Nam-do, growing in rocky soil in shade. Elevation 427 meters. Bulbous perennial. Flower scape to ½ meter. Flowers 4 in umbel—orange, small. Bulbs.

318570. *MAIANTHEMUM DILATATUM* (Wood) A. Nels. & Macbr. Liliaceae.

Col. No. K-46. On Mt. Songin-Bong, Ullung-do, in dense woods. Elevation 900 meters. Herbaceous perennial with short, thin rhizome. Two shield-shaped leaves on each plant. Plants.

## 318512 to 318592—Continued

318571. *MELANDRIUM* sp. Caryophyllaceae.

Col. No. K-99. On grounds of Taek Wal Yong Experiment Station, Kangwon-do. Growing in full sun. Elevation 915 meters. Rosette type perennial. Leaves dark red purple. Not seen in flower. Plant.

318572. *MISCANTHUS SINENSIS* Anderss. Gramineae.

Col. No. K-272. In open areas along trail on Mt. Tok-yu, Ko Chun. Perennial grass to 2 meters high. Flower spike red purple. Plants.

318573. *PARNASSIA ALPICOLA* Makino Saxifragaceae.

Col. No. K-446. In alpine meadow, Mt. Halla, Cheju Island. Elevation 1,500 meters. Herbaceous perennial. Flowers white. Leaves cordate. Plants.

318574. *POLYGONATUM LASIANTHUM* Maxim. Liliaceae.

Col. No. K-140. In dense shade along trail on Mt. Chiri, Cholla Nam-do. Elevation 1,403 meters. Herbaceous perennial with fleshy roots. Petioles purple. Plants.

318575. *PYROLA JAPONICA* Klenze ex Alef. Pyrolaceae.

Col. No. K-243. Woods near Pokchu Sa Temple, Mt. Sokni. Evergreen perennial. Leaves elliptic, veins whitish. Flowers small. Plants.

318576. *RHODODENDRON YEDOENSE* var. *POUKHANENSE* Nakai Ericaceae.

Col. No. K-8. Northwest slope Mt. Halla, Cheju Island. Open slopes usually with *R. mucronulatum*. Elevation 1,600 meters. Plants low dense, twiggy. Leaves obovate ciliate, deciduous. Not seen in flower. Cuttings.

318577. *RODGERSIA PODOPHYLLA* Gray Saxifragaceae.

Col. No. K-108. On road from Taek Wal Yong to Jin Boo, Kangwon-do. Growing on steep slope. Elevation 700 meters. Thick rooted perennial. One large leaf from each tip of rhizome. Not seen in flower. Plants.

318578. *ROSA WICHURAIANA* Crep. Rosaceae.

Col. No. K-27. In open fields near road about 20 km. from Cheju, Cheju Island. Elevation 640 meters. Trailing woody plant. Leaves pinnate, 7 to 9 leaflets. Stems green. Flowers white, single in clusters. Cuttings.

318579. *SALIX GRACILIGLANS* Nakai Salicaceae.

Col. No. K-196. Forest near Forest Experiment Station, Kwang Nung, Kyunggi-do. Along streambed. Deciduous shrub to 2 meters high. Leaves glaucous beneath. Cuttings.

318580. *SALIX KOREENSIS* Anders. in DC.

Col. No. K-282. Inchon. Growing on sea coast. Weeping willow to 15 meters high. Leaves linear. Cuttings.

318581. *SANGUISORBA HAKUSANENSIS* Makino Rosaceae.

Col. No. K-167. No Go Dan, Mt. Chiri, Cholla Nam-do. In alpine meadow. Elevation 1,433 meters. Herbaceous perennial. Leaves pinnately compound. Flowers spicate in shades of red. Plants and seedlings.

318582. *SCILLA CHINENSIS* Benth. Liliaceae.

Col. No. K-76. On beach south of Yangyang, Kangwon-do. In moist area, common. Bulbous perennial. Flowers in a spike, purplish. Apparently wide spread. Bulbs.

318583. *SEDUM* sp. Crassulaceae.

Col. No. K-54. On north coast of Ullung-do, growing on open cliff face. Elevation 152 meters. Clump-forming herbaceous plant. Leaves short, roundish, fleshy. Flowers yellow. Plants.

## 318512 to 318592—Continued

318584. *SELAGINELLA INVOLVENS* (Sw.) Spring Selaginellaceae.

Col. No. K-117. On Mt. Baek Yang, Cholla Nam-do. Growing on open cliff faces. Elevation 488 meters. Flat-leaved evergreen. Roots very fibrous. Comparable to our "Resurrection plant." Plants.

318585. *SPIRAEA SALICIFOLIA* L. Rosaceae. Willowleaf spirea.

Col. No. K-85. On grounds of Buddhist Temple, Mt. Odai, Kangwon-do. Growing in open. Elevation 945 meters. Deciduous shrub to 1½ meters high. Leaves lanceolate. Flowers in a terminal panicle, pink. Cuttings.

318586. *SPIRANTHES SINENSIS* (Pers.) Ames. Orchidaceae.

Col. No. K-1. 'Ta Rai Nan Cho'. On north slope of Mt. Halla, Cheju Island. Open, marshy, field. Elevation 600 meters. Small, terrestrial, white-flowered orchid. Roots fleshy. Plants.

318587. *SYRINGA AMURENSIS* Rupr. Oleaceae. Manchurian lilac.

Col. No. K-88. Along trail on Mt. Odai, Kangwon-do. In semishade. Elevation 854 meters. Deciduous shrub to 1 meter high. Possibly a dwarf form of the species. Plant.

318588. *THALICTRUM ACTAEIFOLIUM* Sieb. & Zucc. Ranunculaceae.

Col. No. K-109. Along trail on Mt. Baek Yang, Cholla Nam-do. Growing in rocky soil in shade. Elevation 305 meters. Herbaceous perennial. Leaves twice compound, leaflets in threes. To 1 meter high. Flowers lilac to purple. Plants.

318589. *THALICTRUM UCHIYAMAI* Nakai

Col. No. K-100. In swampy area near Taek Wal Yong Experiment Station, Kangwon-do. Elevation 883 meters. Tall herbaceous perennial. Flowers in terminal panicle; blue purple. Leaves divided. Plants.

318590. *TRIFOLIUM LUPINASTER* L. Leguminosae.

Col. No. K-7. Northwest slope Mt. Halla, Cheju Island. Open, moist slopes. Elevation 1,500 meters. Herbaceous perennial, repent, crown branching. Flowers purple, 8 in umbel. Leaves digitately five compound. Crowns.

318591. *VALERIANA DAGELETIANA* Nakai ex Maekawa Valerianaceae.

Col. No. K-4. Northwest slope Mt. Halla, Cheju Island. Open, moist slopes. Elevation 1,450 meters. Herbaceous perennial, to 8 dm. high. Leaves pinnately compound. Flowers lilac, in flat-topped corymb. Plants.

318592. *VIOLA CHAEROPHYLLOIDES* (Regel) Makino Violaceae.

Col. No. K-122. On steep, shady, moist slope of Chung Ke Mountain, Suwon. Elevation 200 meters. Herbaceous perennial to 2 dm. high. Leaves tripartite, basal lobes split. Stemless. Not seen in flower. Plants.

318593. *SOLANUM TUBEROSUM* L. Solanaceae. Potato.

From Spain. Tubers presented by D. Antonio Garcia Orad, Vitoria. Received Jan. 30, 1967.

'Irish Cobbler'. Virus "X" free.

318594 and 318595.

From England. Plants purchased from Hillier and Sons, Winchester. Received Jan. 30, 1967.

318594. *ACER ARGUTUM* Maxim. Aceraceae. Maple.

318595. *CELTIS SINENSIS* Pers. Ulmaceae.

318596 to 318599.

From the Netherlands. Seeds presented by H. Sleumer, Rijksherbarium, Nonnensteeg, Leiden. Received Feb. 1, 1967.

**318596 to 318599—Continued**

**318596.** RHODODENDRON CULMINICOLUM F. Muell. Ericaceae.

Obtained from Lae Botanical Garden.

**318597.** RHODODENDRON GAULTHERIIFOLIUM J. J. Smith

NGF 24818.

**318598 and 318599.** RHODODENDRON YELLIOTTII Warb.

**318598.** Obtained from Lae Botanical Garden.

**318599.** NGF 24877.

**318600.** HELIANTHUS ANNUS L. Compositae. **Sunflower.**

From the Union of Soviet Socialist Republics. Seeds presented by the Agricultural Attache, American Embassy, Moscow to Cargill Seeds, Inc., Minneapolis, Minnesota. Received Jan. 11, 1967. Numbered Feb. 1, 1967.

'Peredovic'. Reported to be an improved selection from the older standard variety of the same name.

**318601 to 318606.**

From Switzerland. Seeds presented by S. V. Badoux, Stations Federales d'Essais Agricoles, Domaine du Chateau de Changins, Lausanne. Received Feb. 1, 1967.

**318601.** ONOBYCHIS TRANSCAUCASICA Grossh. Leguminosae.

East European population, multiplied in isolated plot.

**318602 to 318606.** ONOBYCHIS VICIFOLIA Scop. **Sainfoin.**

**318602.** 'Premier'. Swiss local population of common type persistent in this country.

**318603.** 'Perly'. Improved (mass selection), Swiss local population of 'giant' type.

**318604.** 'Pologne'. Polish population.

**318605.** Cross 8/165. Cross Swiss local  $\times$  *O. transcaucasica*. Open pollinated multiplied.

**318606.** Cross 9/165. Cross Swiss local  $\times$  *O. transcaucasica*. Open pollinated multiplied.

**318607 to 318623.**

From India. Seeds presented by the Director, Sugarcane Breeding Institute, Coimbatore. Received Feb. 1, 1967.

**318607 to 318613.** ERIANTHUS ELEPHANTINUS Hook. f. Gramineae.

**318607.** S.E.S. 192.

**318611.** S.E.S. 283.

**318608.** S.E.S. 193.

**318612.** S.E.S. 305.

**318609.** S.E.S. 265.

**318613.** S.E.S. 361.

**318610.** S.E.S. 273.

**318614 and 318615.** ERIANTHUS MUNJA (Roxb.) Jeswiet

**318614.** S.E.S. 292.

**318615.** Unnumbered.

**318616.** ERIANTHUS RAVENNAE (L.) Beauv.

E. M. Karnal.

**318617 to 318623.** SACCHARUM (hybrid) Gramineae. **Sugarcane.**

**318617.** C.P. 48-103  $\times$  I.A. 1231.

**318618.** C.P. 52-68  $\times$  I.A. 1145.

**318607 to 318623—Continued****318617 to 318623—Continued**

318619. C.P. 52-68 × I.A. 1190.

318620. C.P. 52-68 × I.A. 1219.

318621. C.P. 52-68 × I.A. 1231.

318622. I.A. 880 × C.P. 52-68.

318623. I.A. 1060 × C.P. 52-68.

**318624 to 318626. VACCINIUM VITIS-IDAEA L. Ericaceae.**

From the Netherlands. Cuttings presented by the Instituut voor Veredeling van Tuinbouwgewassen, Wageningen. Received Feb. 6, 1967.

318624. No. 1.

318625. No. 2.

318626. No. 3.

**318627 to 318630. PUNICA GRANATUM L. Punicaceae.****Pomegranate.**

From Iran. Cuttings presented by Walter J. Kaiser, United States Agency for International Development, Teheran. Received Feb. 6, 1967. Collected near the town of Saveh.

318627. 'Alak'. Pericarp thin, red; plup red, juicy, sour. Early maturing in August and September.

318628. 'Malas'. Pericarp thin, red; pulp dark red, juicy, sour. Large, late variety maturing in September and October. Preferred by growers in the Saveh area and grown most widely.

318629. 'Shirin'. Pericarp thin, white; pulp white, juicy, sweet. Early maturing in August and September.

318630. 'Tabestani'. Pericarp thin, red; pulp white and not juicy. Early maturing in August and September.

**318631. LIGUSTRUM VULGARE L. Oleaceae. European privet.**

From Germany. Plants presented by W. Kordes & Son, Holstein. Received Feb. 7, 1967.

**318632. CHAMAECYPARIS OBTUSA f. SANDERI (Sander) Rehd. Pinaceae.**

From England. Scions collected by J. W. Archer, Doone Valley, Wrecclesham, Faraham. Received Nov. 10, 1966. Numbered Feb. 6, 1967.

**318633. LIRIODENDRON CHINENSE (Hemsl.) Sargent Magnoliaceae.**

From England. Cuttings presented by the Royal Botanic Gardens, Kew, Richmond, Surrey. Received Feb. 14, 1967.

1908 H.K.

**318634 to 318636. SACCHARUM (hybrid) Gramineae.****Sugarcane.**

From Barbados. Cuttings presented by the West Indies Central Sugar Cane Breeding Station, Groves, St. George. Received Feb. 14, 1967.

318634. B 5789.

318635. B 5840.

318636. B 6130.

**318637 to 318641.**

From Korea. Seeds received through PL 480 Project A13-CR-1, New Crops Research Branch, Crops Research Division, Beltsville, Maryland. All collected October 1966 in vicinity of Suwon, Kyunggido Province. Numbered Feb. 14, 1967.

318637. *LESPEDEZA BICOLOR* Turcz. Leguminosae.

'Ssari'.

318638. *LESPEDEZA DAURICA* (Laxm.) Schindler

'Ho-bisoori'.

318639. *LESPEDEZA* × *DIVARICATA* (Nakai) T. B. Lee

'Tchung-bisoori'.

318640. *LESPEDEZA INSCHANICA* (Maxim.) Schindl.

'Dang-bisoor'.

318641. *LESPEDEZA TOMENTOSA* (Thunb.) Sieb. ex Maxim.

'Gae-ssari'.

**318642 to 318644. ORYZA SATIVA L. Gramineae. Rice.**

From Japan. Seeds presented by National Institute of Agricultural Sciences, Division of Genetics, Hiratsuka, Kanagawa. Numbered Feb. 14, 1967.

318642. 'Chugoku 31'.

318643. 'Hoyoku'.

318644. 'Reimei'.

**318645 and 318646. ORYZA SATIVA L. Gramineae. Rice.**

From Guyana. Seeds presented by M. S. Pawar, Food and Agriculture Organization Rice Geneticist, Central Agricultural Station, Mon Repos, East Coast, Demerara. Numbered Feb. 14, 1967.

318645. B.G. 60/44.

318646. B.G. 60/47.

**318647 to 318651.**

From Israel. Seeds presented by Daniel Zohary, Department of Botany, The Hebrew University of Jerusalem. Numbered Feb. 14, 1967.

318647. *AEGILOPS LONGISSIMA* Schweinf. & Muschl. Gramineae.

Goatgrass.

No. 6012. Origin Negev, Israel.

318648. *AEGILOPS SPELTOIDES* Tausch

Goatgrass.

No. 6001. Origin Mt. Carmel, Israel.

318649. *HORDEUM BULBOSUM* L. Gramineae.

Bulbous barley.

Twenty-five km. north of Yannina, Greece. Diploid type ( $2n=14$ ).

318650. *SECALE ANCESTRALE* Zhuk. Gramineae.

Aidin, near Izmir, Turkey. Brittle type close to *cereale*.

318651. *SECALE MONTANUM* Guss.

Mountain rye.

Eighty km. southeast of Bolu, Turkey on Ankara-Instanbul road.

**318652. ILEX AQUIFOLIUM L. Aquifoliaceae. English holly.**

From Norway. Seeds presented by Oddvin Reisaeter, Noregs Landbrukshogskule, Institutt for Dendrologi og Planteskuledrift, Vollebekk. Numbered Feb. 14, 1967.

Collected in Olve, in Hordaland.

**318653. CUCUMIS MELO L. Cucurbitaceae. Muskmelon.**

From the United States. Seeds presented by R. T. Correa, Texas Agricultural Substation No. 15, Weslaco, Tex. Numbered Feb. 14, 1967.

'Big River Bush'. Dwarf-internode type.

**318654 and 318655.**

From Korea. Seeds presented by Tchang Bok Lee, College of Agriculture, Seoul National University, Suwon. Numbered Feb. 14, 1967.

318654. *BETULA CHINENSIS* Maxim. Betulaceae.

Origin Kwang-Nung.

318655. *PICEA KOYAMAI* Shiras. Pinaceae.

Origin Kwang-Nung.

**318656 to 318658.**

From Japan. Seeds presented by Masaaki Kunishige, Kurume Branch, Horticultural Research Station, Miimachi, Kurume. Numbered Feb. 15, 1967.

318656. *RHODODENDRON RETICULATUM* D. Don ex G. Don Ericaceae.

318657. *RHODODENDRON JAPONICUM* (Gray) Schneid. Japanese azalea.

Will segregate some *R. japonicum* f. *flavum*.

318658. *RHODODENDRON KIUSIANUM* Makino

**318659. GAZANIA PINNATA Less. Compositae.**

From the Republic of South Africa. Seeds presented by Bloem-Erf Wildflower Nurseries, Stellenbosch, Cape Province. Numbered Feb. 15, 1967.

Red flowering.

**318660 to 318668.**

From India. Seeds presented by Lloyd Botanic Garden, Darjeeling, West Bengal. Numbered Feb. 15, 1967.

318660. *ILEX INSIGNIS* Hook. f. Aquifoliaceae.

Holly.

318661. *ILEX WIGHTIANA* Wall. ex Wight

318662. *MAGNOLIA CAMPBELLII* Hook. f. & Thoms. Magnoliaceae.

Pink.

318663. *MICHELIA CATHCARTII* Hook. f. & Thoms. Magnoliaceae.

318664. *MICHELIA EXCELSA* Blume

318665. *MICHELIA LANUGINOSA* Wall.

318666. *VIBURNUM CORIACEUM* Blume Caprifoliaceae.

318667. *VIBURNUM ERUBESCENS* Wall. ex DC.

318668. *VIBURNUM STELLULATUM* Wall. ex DC.

**318669. ENTOLASIA IMBRICATA Stapf Gramineae.**

From Kenya. Seeds presented by J. G. Boonman, The National Agricultural Research Station, Kitale. Numbered Feb. 17, 1967.

No. K 6076.

**318670 and 318671. TRITICUM AESTIVUM L. Gramineae.**

From Pakistan. Seeds presented by Department of Entomology, West Pakistan Agricultural University, Lyallpur. Numbered Feb. 17, 1967.

318670. 'Indus 66'. Mexican origin.

318671. 'Mexi-Pak'. Mexican origin; white.



**318672 and 318673.**

From Brazil. Vegetative stocks presented August 31, 1965 by Instituto Agronomico do Estado de Sao Paulo, Campinas. Plants propagated by Oilseeds and Industrial Crops Research Branch, Beltsville, Maryland. Numbered Feb. 20, 1967.

**318672.** *ARACHIS GLABRATA* Benth. Leguminosae.

V. 355.

**318673.** *ARACHIS VILLOSA* var. *CORRENTINA* Burkart

V. 359.

**318674 and 318675.** *FRAGARIA* (hybrid). Rosaceae.

From England. Plants presented by the John Innes Institute, Bayfordsbury, Merton, Hertfordshire. Received Feb. 20, 1967.

**318674.** 'Cambridge Favourite'.

**318675.** 'Merton Herald'.

**318676.** *GOSSYPIUM HIRSUTUM* L. Malvaceae. **Upland cotton.**

From Kenya. Seeds presented by J. S. Breckell, Anderson, Clayton & Hunt (Cotton Brokers) Ltd., Nairobi. Numbered Feb. 20, 1967.

Strict middling grade, irregular staple.

**318677.** *BETA VULGARIS* L. Chenopodiaceae. **Sugar beet.**

From England. Seeds presented by National Institute of Agricultural Botany, Huntingdon Road, Cambridge. Numbered Feb. 20, 1967.

'Maris Vanguard'.

**318678 to 318683.**

From Italy. Scions presented by the Instituto di Coltivazioni Arboree dell'Universita di Torino, Torino. Received Feb. 20, 1967.

**318678 to 318682.** *CORYLUS AVELLANA* L. Betulaceae. **Filbert.**

**318678.** 'Du Bearn'.

**318681.** 'Payrone'.

**318679.** 'Northamptonshire'.

**318682.** 'San Giovanni'.

**318680.** 'Palla grossa'.

**318683.** *MALUS SYLVESTRIS* Mill. Rosaceae.

**Apple.**

(Golden Delicious × Jonathan).

**318684.** *VITIS LONGII* var. *MICROSPERMA* (Munson) Bailey Vitaceae.

From France. Cuttings presented by the Ecole Nationale Supérieure, Agronomique De Montpellier, Montpellier. Received Feb. 20, 1967.

**318685.** *PHASEOLUS ATROPURPUREUS* DC. Leguminosae.

From Australia. Seeds presented by the Arthur Yates & Co., Ltd., Sydney. Numbered Feb. 20, 1967.

'Siratro'.

**318686 to 318690.**

From the Philippines. Seeds collected by D. E. Weibull, Agronomy Department, Oklahoma State University, Stillwater, Okla. Numbered Feb. 20, 1967.

**318686.** *CASSIA ALATA* L. Leguminosae.

**Ringworm cassia.**

'Acapulca'. Makilala, Cotabato. December 1966.

## 318686 to 318690—Continued

318687. *SORGHUM BICOLOR* (L.) Moench Gramineae. **Kafircorn.**  
 'Bucacao'. Near Tarlac. Native Philippine sorghum; 9 feet tall, glumes awned, involute and nearly covering seed. Open drooping panicle, seed light or white, waxy. November 1966.

318688. *SORGHUM* sp.

Canlubang Sugar Estate, Canlubang, Laguna. Plant 8 feet tall, long lanceolate leaves, saw edges; yellow midrib, open panicle, awnless; small seeds. December 1966.

318689. *SORGHUM* sp.

Aroman Experiment Station, Bolakan, Cotabato. Closely resembles P. I. 318688.

318690. *ZEA MAYS* L. Gramineae. **Corn.**

'Moco Bogo'. Local variety from Bureau of Plant Industry Economic Garden, Los Banos, Laguna. Originally from Cotabato. Small ears, conical shaped; kernels flinty. January 1967.

318691 to 318703. *PHASEOLUS VULGARIS* L. Leguminosae.**Common bean.**

From Mexico. Seeds collected in 1966 by H. S. Gentry, agricultural explorer, Crops Research Division, Plant Industry Station, Beltsville, Maryland. Numbered Feb. 21, 1967.

318691. Col. No. 22042. 'Frijol'. Twenty-one miles southeast of Ciudad Durango along Route 45 by water-marked cliffs. Elevation 6,000 feet. Grassland; fertile clay soil with talus rocks. Vigorous annual vines, trailing. Calyx and flowers green at base; petals pink; pods slender, pale green or green brindled purple, slightly succulent, abundant locally. Seed small, yellow; November 2.

318692. Col. No. 22153. Ten miles south of Uruapan, Michoacan along road to Apatzingan; rocky, brushy, moist canyon. Elevation 4,400 feet. Vine running up on shrubs; perennial with long racemes of small pods; wings reddish lavender, banner purple in bud. Fruits pendulent. Seed very small, dark gray to brown, mottled; December 1-15, 1966.

318693. Col. No. 22180. Two miles northeast of La Garrita, about 10 miles east of Tamazula, Jalisco. On moist brushy slope above cane fields. Elevation 4,200 feet. Slender vines climbing on leafy shrubs; pods small, green, hanging amid welter of foliage. Abundant west of town. Seed very small, brown to gray mottled; December 1-5, 1966.

318694. Col. No. 22187. Three miles west of San Marcos on lower slope of Volcan de Colima, Jalisco. On volcanic ash and lava, fine silty soil. Elevation 4,600 feet. Thinly scattered on burned area. Small annual vines climbing on shrubs. Flowers lavender. Seed very small, brownish gray, mottled; December 1-15, 1966.

318695. Col. No. 22189. Canyon in southwest footslope of Volcan de Colima, two miles north of Cofradia de Suchistlan, Colima. Elevation 4,500 feet. Perennial vine; old stem light gray; pods unusually small, green. Flowers pink, large. Common. Seeds very small, dark brown and cinnamon; December 15-30.

318696. Col. No. 22199. Six miles south of Tecalitlan, Jalisco, along road to Colima. Rocky igneous slope with secondary brushy vegetation. Elevation 4,000 feet. Short-lived perennial vines on shrubs; pods small, brindled with red or purplish. Seeds very small, gray mottled with dark stripe; December.

318697. Col. No. 22202. Three miles south of Ciudad Guzman, Jalisco, along road to Colima. Weathered lava with *Ipomoea* trees, *Hyptis* and other shrubs. Elevation 5,000 feet. Perennial vines on shrubbery. Pods small. Seed very small, gray mottled; November 23.

## 318691 to 318703—Continued

318698. Col. No. 22234. 'Frijolillo'. Three miles southeast of Tetitlan, Nayarit on edge of lava beds. Elevation 2,700 feet. Perennial vine; pods to 10 cm. long, large, brindled. Seeds small, light gray; November 24-30.

318699. Col. No. 22241. Lagunilla, nine km. east of Santa Maria del Oro, Nayarit. On straight road to lake. Elevation 2,500 feet. Perennial vines climbing on *Acacia*, *Jatropha curcas*, *Celtis iguanea*, etc. Pods to 4 inches long, brindled, plain; seeds small, shiny, gray to brown, mottled; November 26.

318700. Col. No. 22260. 'Frijol de coyote'. Cirimicuaro, 10 miles east of Uruapan, Michoacan. Lava field with secondary vegetation. Elevation 4,300 feet. Vines small, pods small. Abundant. Not eaten locally. Seeds very small, grayish brown.

318701. Col. No. 22266. La Garrita, Jalisco. Elevation 4,000 feet. Single vine twined on *Acacia farnesiana*, no leaves. Seeds lavender, speckled, larger than others in these collections, in large, modernlike pod. December 4. Rare, one plant only.

318702. Col. No. 22274. Eleven miles northwest of Ixtlan del Rio, Nayarit. Edge of lava field. Elevation 3,350 feet. Small dry vines; pods mature, dry, pale yellow; on *Verbesina* and *Hyptis* shrubs. Seeds small, gray, mottled.

318703. Col. No. 22277. Three and one-half miles east of Copala along road to Durango, Sinaloa. Shaded slope with secondary vegetation. Elevation 3,200 feet. Small dry vines; pods dry; seeds small, variable gray, December 7.

## 318704. ORBIGNYA BARBOSIANA Burret Palmae. Babassu nut.

From Guatemala. Seeds presented by T. T. Miller, McCormick and Company, Baltimore, Maryland. Numbered Feb. 21, 1967.

Grown in Coban region.

## 318705 to 318709.

From the Union of Soviet Socialist Republics. Seeds presented by the All-Union Institute of Plant Industry, Leningrad. Numbered Feb. 21, 1967.

318705. *BETULA ERMANNII* Champ. Betulaceae.

Arkhangelsk region.

318706. *BETULA HUMILIS* Schrank

Voronezh region.

318707. *BETULA MIDDENDORFFII* Trautv. & Mey. in Middend.

Voronezh region.

318708. *JUGLANS REGIA* L. Juglandaceae.

Persian walnut.

Village of Strade; L'vov region. From tree 28-30 years old, growing in sandy loam. Height 12 meters, diameter about 35 centimeters; never damaged by low temperatures.

318709. *PINUS ELDARICA* Medw. Pinaceae.

Pine.

Baku region.

## 318710 to 318714.

From the Union of Soviet Socialist Republics. Seeds presented by the All-Union Institute of Plant Industry, Leningrad. Collected in 1966 by Department of Dendrology, Botanical Garden, Ukrainian Academy of Sciences, Kiev. Numbered Feb. 21, 1967.

318710. *BETULA DAVURICA* Pall. Betulaceae.

Dahurian birch.

**318710 to 318714—Continued**

318711. *BETULA ERMANNII* Champ.  
 318712. *BETULA HUMILIS* Schrank  
 318713. *BETULA PLATYPHYLLA* Sukatchev Asian white birch.  
 318714. *BETULA SCHMIDTII* Regel Schmidts birch.

**318715 and 318716. COFFEA ARABICA L. Rubiaceae. Arabian coffee.**

From Ethiopia. Seedlings presented by V. Nastasi, Technical Director, Department of Agriculture, Asmara, Eritrea. Received October, 1966. Numbered Feb. 21, 1967.

318715. 'Ennarea'. Faghena Experiment Station.  
 318716. 'Moka'. Faghena Experiment Station.

**318717 to 318727. HIBISCUS CANNABINUS L. Malvaceae. Kenaf.**

From France. Seeds presented by M. Arnoux, Institut National des Plantes Recherches Agronomique, Montpellier (Herault). Received through F. D. Wilson, Texas A. & M. University, College Station, Texas. Numbered Feb. 23, 1967.

Originally from Iran.

318717. Florida No. A65-622. Iran 1. Bulk sample.  
 318718. Florida No. A65-623. Iran 2, plant 1.  
 318719. Florida No. A65-624. Iran 2, plant 3.  
 318720. Florida No. A65-625. Iran 2. Bulk sample.  
 318721. Florida No. A65-626. Iran 3. Bulk sample.  
 318722. Florida No. A65-627. Iran 4. Bulk sample.  
 318723. Florida No. A65-656. Iran local.

Originally from the Soviet Union.

318724. Florida No. A65-657. Caucasus No. 235.  
 318725. Florida No. A65-658. Caucasus No. 237.  
 318726. Florida No. A65-659. Krasnodar No. 428.  
 318727. Florida No. A65-660. Caucasus No. 432.

**318728. ZEA MAYS L. Gramineae. Corn.**

From Brazil. Seeds presented by Escola Superior de Agricultura, Piracicaba. Numbered Feb. 23, 1967.

'Doce de Cuba'.

**318729 to 318744. ARACHIS HYPOGAEA L. Leguminosae.**

From the Republic of South Africa. Seeds presented by J.P.F. Sellschop, College of Agriculture, Potchefstroom. Numbered Feb. 23, 1967.

- |                   |                         |
|-------------------|-------------------------|
| 318729. 44 G 346. | 318737. P 4865.         |
| 318730. 51 G 510. | 318738. P 4990.         |
| 318731. 64 G 195. | 318739. P 5195.         |
| 318732. 64 G 202. | 318740. E63/84/65/63.   |
| 318733. 64 G 204. | 318741. Sel. 5.         |
| 318734. 64 G 208. | 318742. Mutjan.         |
| 318735. 64 G 280. | 318743. Namash.         |
| 318736. P 4166.   | 318744. Nelson Spanish. |

**318745. MALUS SYLVESTRIS Mill. Rosaceae. Apple.**

From England. Scions presented by the National Fruit Trials, Faversham, Kent. Received Feb. 24, 1967.

'Holstein'.

**318746. THUAREA INVOLUTA (G. Forst.) R. Br. ex Roem. & Schult. Gramineae.**

From New Caledonia. Stolons presented by the South Pacific Commission, Noumea. Received Feb. 27, 1967.

Collected by Dr. Schmid, Centre ORSTOM, Noumea.

**318747. CHLORIS GAYANA Kunth Gramineae. Rhodesgrass.**

From Uganda. Seeds presented by Serere Experiment Station, Department of Agriculture, Soroti. Numbered Feb. 28, 1967.

'Teso'. Collected in general vicinity of the Research Station. Elevation 3,700 feet.

**318748. CYTISUS NIGRICANS L. Leguminosae. Spike broomcorn.**

From Germany. Seeds presented by Hess. Lehr-Und Forschungsanstalt fur Wein, Obst-Und Gartenbau, 6222 Geisenheim (Rheingau). Numbered Feb. 28, 1967.

**318749 to 318755.**

From the Philippines. Seeds collected January 1967, by D. E. Weibul, Agronomy Department, Oklahoma State University, Stillwater, Okla. Numbered Feb. 28, 1967.

**318749. COIX LACRYMA-GOBI L. Gramineae. Jobs-tears.**  
University of Philippines, College of Agriculture, Los Banos, Laguna.

**318750. ELEUSINE CORACANA (L.) Gaertn. Gramineae. Ragi.**  
Bureau of Plant Industry Economic Garden, Los Banos, Laguna.

**318751. PANICUM MILIACEUM L. Gramineae. Proso millet.**  
Bureau of Plant Industry Economic Garden, Los Banos, Laguna.

**318752. SETARIA ITALICA (L.) Beauv. Gramineae. Foxtail millet.**  
Bureau of Plant Industry Economic Garden, Los Banos, Laguna.  
Glutinous.

**318753 and 318754. SORGHUM BICOLOR (L.) Moench Gramineae. Kafircorn.**

**318753.** Anao, Tarlac. Outcross in Feterita. Sienna glume, light red seed awns.

**318754.** 'Feterita'. Anao, Tarlac.

**318755. SORGHUM sp.**

One half km. inside guard gate of Hacienda Luisita, Tarlac, Tarlac.

**318756 and 318757. NICOTIANA TABACUM L. Solanaceae. Tobacco.**

From Colombia. Seeds collected by Gilberto Varela L., Colombian Tobacco Institute and presented through the Office of the Agricultural Attache, American Embassy, Bogota. Numbered Feb. 28, 1967.

**318756.** 'Costillo Habano'. Espinal, Tolima Department. March 1966.

**318757.** 'Costello Negro'. Flandes, Tolima Department. February 1966.

**318758 to 318794. SACCHARUM (hybrid) Gramineae. Sugarcane.**

From India. Cuttings presented by the Director, Sugarcane Breeding Institute, Coimbatore. Received Feb. 28, 1967.

318758. Desi Pounda	318777. I.A. 1303.
318759. Co. L. 29.	318778. I.A. 1344.
318760. Co. 607.	318779. I.A. 1352.
318761. Co. 785.	318780. I.A. 1368.
318762. Co. 807.	318781. I.A. 1390.
318763. Co. 970.	318782. I.A. 1425.
318764. Co. 975.	318783. I.A. 1479.
318765. Co. 1148.	318784. I.A. 1481.
318766. Co. 1287.	318785. I.A. 1499.
318767. Co. 1295.	318786. I.A. 1517.
318768. Co. 1296.	318787. I.A. 1523.
318769. Co. 6602.	318788. SES 183.
318770. Co. 6604.	318789. SES 184B.
318771. Co. 62174.	318790. SES 199B.
318772. I.A. 133.	318791. SES 248.
318773. I.A. 145.	318792. SES 323.
318774. I.A. 996.	318793. SES 366.
318775. I.A. 1046.	318794. SES 373. (Rooted).
318776. I.A. 1141.	

**318795 to 318799.**

From Sweden. Scions presented by the Agricultural College of Sweden, Alnarp. Received Mar. 3, 1967.

318795 to 318797. PRUNUS AVIUM L. Rosaceae.	Sweet cherry.
318795. 'Drogsperyd'.	
318796. 'Erienne'.	
318797. 'Orelund'.	
318798 and 318799. PRUNUS DOMESTICA L.	Common plum.
318798. 'Mallard'.	
318799. 'Tuna'.	

**318800 to 318821.**

From Ghana. Seeds presented by Botany Department, University of Ghana, Legon. Numbered Mar. 3, 1967.

318800. CANNA INDICA L. Cannaceae.	
318801. CASSIA MIMOSOIDES L. Leguminosae.	
318802. CASSIA OCCIDENTALIS L.	
318803. CENTROSEMA PUBESCENS Benth. Leguminosae.	
318804. COIX LACRYMA-JOBI L. Gramineae.	Jobs-tears.
318805. CROTALARIA GOREENSIS Guill. & Perr. Leguminosae.	
318806. DESMODIUM VELUTINUM (Willd.) DC. Leguminosae.	
318807. HELIOTROPIUM INDICUM L. Boragineae.	

**318800 to 318821—Continued**

318808. *INDIGOFERA ARRECTA* Hochst. Leguminosae.  
 318809. *IXORA COCCINEA* L. Rubiaceae.  
 318810. *IXORA DUFFII* T. Moore.  
 318811. *MUSSAENDA ERYTHROPHYLLA* Schum. & Thonn. Rubiaceae.  
 318812. *PANICUM MAXIMUM* Jacq. Gramineae. **Guineagrass.**  
 318813. *SESBANIA GRANDIFLORA* (L.) Poir. Leguminosae.  
 318814. *TEPHROSIA ELEGANS* Schum. Leguminosae.  
 318815. *TEPHROSIA PURPUREA* (L.) Pers.  
 318816. *TEPHROSIA PURPUREA* (L.) Pers.  
 318817. *TEPHROSIA NOCTIFLORA* Bojer  
 318818. *VERNONIA CINEREA* Less Compositae.  
 318819. *VERNONIA COLORATA* Drake  
 318820 and 318821. *VIGNA SINENSIS* (Torner) Savi Leguminosae.  
     318820. No. 1.  
     318821. No. 2.

**318822 to 318832.**

From Mexico. Seeds collected October–November 1966 by H. S. Gentry, agricultural explorer, Crops Research Division, Plant Industry Station, Beltsville, Md. Numbered Mar. 3, 1967.

- 318822 to 318824. *CUCURBITA MOSCHATA* Duchesne ex Poir Cucurbitaceae.  
**Cushaw.**  
 318822. Col. No. 22011. 'Chichicoyote'. Short-tree forest near Arroyo de Turass, Rio Mayo, Sonora. Elevation 2,000 feet. Pepsos with enlarged peduncle hanging along trail.  
 318823. Col. No. 22123. 'Semilla guayeca'. Market in Aguascalientes, Aguascalientes. Seed small with wide, erose, yellow margin.  
 318824. Col. No. 22255. 'Calabasa'. Market in Uruapan, Michoacan. Elevation 4,800 feet. Large indigenous pepo.  
 318825. *CUCURBITA* cf. *MOSCHATA* Duchesne ex Poir. **Cushaw.**  
 Col. No. 22182. La Garrita, 10 miles east of Tamazula, Jalisco. Elevation 4,000 feet. Vine, climbing on shrubs and trees; dark green, white-spotted, oblong pepsos.  
 318826 to 318830. *CUCURBITA PEPO* L. **Pumpkin.**  
 318826. Col. No. 22068. Tonachi, 20 miles north of Huachoehic, Chihuahua. Elevation 6,500 feet. Cultivated by Tarahumara Indians.  
 318827. Col. No. 22073. Caborachi, 15 miles east of Huachoehic, Chihuahua. Along road, in pines on volcanics. Elevation 7,500 feet. Cultivated by Tarahumara Indians.  
 318828. Col. No. 22101. 'Calabaza'. Market in Zacatecas, Zacatecas. Elevation 7,000 feet. Local type.  
 318829. Col. No. 22122. 'Semilla de agua'. Market in Aguascalientes, Aguascalientes. Elevation 6,000 feet. Edible.  
 318830. Col. No. 22256. 'Calabasa'. Market in Uruapan, Michoacan. Elevation 4,800 feet. Used as summer squash when young and tender. Resembles zucchini.  
 318831. *CUCURBITA* sp.  
 Col. No. 22302. La Garrita, 10 miles east of Tamazula, Jalisco. Large vine running in small tree. Pepo depressed globose.

**318822 to 318832—Continued**

318832. *CUCURBITA* sp.

Col. No. 22298. 'Chichicayota'. Nine miles north of Movas, Sonora. Vine growing on trees.

318833. *CRAMBE CORDIFOLIA* Stev. Cruciferae.

From Czechoslovakia. Seeds presented in 1958 by Botanic Garden, Komen-sheko University, Bratislava. Numbered Mar. 6, 1967.

318834. *PINUS STROBUS* f. *PROSTRATA* (Beiss.) Fern. & Weath. Pinaceae.

From England. Grafts presented by the Director, Royal Botanic Gardens, Kew, Richmond, Surrey. Received Mar. 7, 1967.

318835 to 318839. *PYRUS COMMUNIS* L. Rosaceae.

**Common pear.**

From Poland. Scions presented by Research Institute of Pomology, Skier-niewice. Received Jan. 24, 1967. Numbered Mar. 6, 1967.

318835. 'Angko-li'.

318836. 'Beurre Zimniaya Michurina'.

318837. 'Gliva Ukrainskaya'.

318838. 'Menie'.

318839. 'Sorbus-Pyrus'.

318840. *PHALARIS COERULESCENS* Desf. Gramineae.

From the United States. Seeds collected by J. McWilliams, Plant Materials Technician, Soil Conservation Service, Big Flats, New York. Numbered Mar. 6, 1967.

Originally from Algeria.

318841 and 318842. *ORYZA SATIVA* L. Gramineae.

**Rice.**

From India. Seeds presented by the Indian Agricultural Research Institute, Division of Plant Introduction, New Delhi. Numbered Mar. 6, 1967.

318841. PTB-10. Mutant. Hyderabad.

318842. TR-1. Hyderabad.

318843 to 318861. *IPOMOEA BATATAS* (L.) Lam. Convolvulaceae.  
**Sweetpotato.**

From New Zealand. Cuttings presented by Department of Scientific and Industrial Research, Otago, to J. C. Miller, Louisiana State University, Baton Rouge, La. Received Nov. 14, 1966. Numbered Mar. 6, 1967.

Original sources as indicated.

318843. N. Z. 27 (M 7). Hong Kong.

318844. N. Z. 112. (103 PH). 'Gohan'. Hapo, Ifugao, Philippines.

318845. N.Z. 151 (141 PH). 'Pattaki'. Bayyu, Bontoc, Philippines.

318846. N. Z. 196 (613). Dili, Timor.

318847. N. Z. 395 (716). Vila, New Hebrides.

318848. N. Z. 404 (726). 'Kumala Belep'. Chabwen, New Caledonia.

318849. N. Z. 551 (843). 'Rapa'. Ua-Huga, Marquesas Islands.

318850. N. Z. 562 (856). 'Poro tehia'. Va Pau, Marquesas Islands.

318851. N. Z. 563 (857). 'Hou'. Va-Pau, Marquesas Islands.



**318843 to 318861—Continued**

318852. N. Z. 606 (CH 1). Chicama V., Peru.  
 318853. N. Z. 609 (CH 6). 'Pierma de Viuda'. Chicama V., Peru.  
 318854. N. Z. 636 (HU 6). Huacho, Peru.  
 318855. N. Z. 642 (LI 1). Lima, Peru.  
 318856. N. Z. 643 (LI 3). Lima, Peru.  
 318857. N. Z. 647 (LM 2). 'Chanqueta'. Lima, Peru.  
 318858. N. Z. 654 (07). Tingo Maria, Peru.  
 318859. N. Z. 657 (J 2). Julian, Callejon de Huaylas, Peru.  
 318860. N. Z. 672 (DM 2). Felidia, Colombia.  
 318861. N. Z. 673. (FI 2). Felidia, Colombia.

**318862. PRUNUS DOMESTICA L. Rosaceae. Common plum.**

From the Union of Soviet Socialist Republics. Budwood presented by the All-Union Institute of Plant Industry, Leningrad. Received Feb. 20, 1967. Numbered Mar. 6, 1967.

'Michurin's Persicovaya'

**318863. ERAGROSTIS PAPPOSA (Duf. ex R. & S.) Steud. Gramineae. Lovegrass.**

From the United States. Seeds collected by S. H. Fuchs, Plant Materials Technician, Soil Conservation Service, Albuquerque, N. Mex. Numbered Mar. 6, 1967.

Originally from Tunisia.

**318864. MELICA CILIATA L. Gramineae. Melic.**

From the United States. Seeds collected December 1964, by J. McWilliams, Plant Materials Technician, Soil Conservation Service, Big Flats, N.Y. Numbered Mar. 6, 1967.

Originally from Algeria.

**318865. VIBURNUM INCARNUM Graebn. Caprifoliaceae.**

From Peru. Cuttings collected April 1966 by A. C. Macurdy, Cranbury, New Jersey. Numbered Mar. 6, 1967.

Along road from Huanuco to Panao, 19.5 km. from intersection of main road Huanuco to Tingo Maria. Elevation 2,300 to 2,500 meters. Plants scarce; shrub to 2 meters; flowers white.

**318866 to 318870. PYRUS COMMUNIS L. Rosaceae. Common pear.**

From Italy. Scions presented by Centro di Studio Miglioramento Piante da Frutto, Firenze. Received Feb. 8, 1967. Numbered Mar. 6, 1967.

318866. 'Andre Desportes'. 318869. 'Morettini 113'.  
 318867. 'Leopardo Morettini'. 318870. 'Spadoncini'.  
 318868. 'Morettini 64'.

**318871 to 318884.**

From Japan. Cuttings and scions presented by the Horticultural Research Station, Ministry of Agriculture and Forestry, Hiratsuka, Kanagawa. Received Mar. 7, 1967.

- 318871 to 318873. PYRUS CALLERYANA Decne. Rosaceae. Callery pear.  
 318871. 'Inunashi'.

**318871 to 318884—Continued****318871 to 318873—Continued**

318872. 'Mamenashi-6'.

318873. 'Mamenashi-7'.

318874. *PYRUS USSURAIENSIS* var. *HONDOENSIS* (Kik. & Nak.) Rehder  
'Aonashi'.318875 to 318878. *VITIS THUNBERGII* Sieb. & Zucc. Vitaceae.

318875. 'Ebizuru V1-6'. Male. 318878. 'Ebizuru V10-10'.

318876. 'Ebizuru V17-7'. Female Female.

318877. 'Ebizuru V10-9'. Male.

318879. *VITIS* sp.

'Igawa-200'.

318880. *VITIS* sp.

'Igawa-205'.

318881. *VITIS* sp.

'Igawa-210'.

318882. *VITIS* sp.

'Igawa-250'.

318883. *VITIS* sp.

'Tachikawa No. 1'.

318884. *VITIS* sp.

'Tachikawa No. 3'.

**318885. FRAGARIA (hybrid). Rosaceae.**From the Netherlands. Plants presented by the Institute of Horticultural  
Plant Breeding, Wageningen. Received Mar. 8, 1967.

'Elista'.

**318886. ALLIUM CEPA L. Liliaceae.****Onion.**From the United States. Seeds grown in 1960 and presented by E. W. Davis,  
Crops Research Division, Plant Industry Station, Beltsville, Md. Num-  
bered Mar. 9, 1967.Selection from P.I. 249899 collected 1958, Lisbon, Portugal. Light pink  
bulb; segregates for dark anther color (Marker gene).**318887 to 318896. TRIFOLIUM PRATENSE L. Leguminosae.****Red clover.**From Hungary. Seeds presented by the National Institute of Agrobotany,  
Tapioszele. Land races based on localities where discovered, grown and  
collected. Numbered Mar. 9, 1967.

318887. No. 7315/66. 'Bakonyi'. Drought resistant; extensively grown.

318888. No. 7317/67. 'Cigandi'. Very leafy; not drought resistant. Be-  
longs to type group 'Bodrogkozi'.318889. No. 7313/66. 'Godorhazai'. Favorable ratio of leaves to stems.  
One to two days later flowing than other early types.

318890. No. 7319/66. 'Kondorfai'. Similar to P.I. 318889.

318891. No. 7314/66. 'Lokuti'. Early type, prostrate; excellent propor-  
tion of leaves to stems.

**318887 to 318896—Continued**

318892. No. 7311/67. 'Pocsaji'. Drought resistant. Belongs to type group 'Szatmari'.
318893. No. 7312/66. 'Szentgyogyvolgyi'. Similar to P.I. 318889.
318894. No. 7320/66. 'Taplanszentkereszt'. Improved variety bred from several land races belong to type group 'Orsegi'.
318895. No. 7318/66. 'Vasmegyei'. From Vas County, bordering on Burgenland of Austria. Similar to type group 'Orsegi'.
318896. No. 7316/66. 'Veleméri'. Similar to P.I. 318889.

**318897 to 318916.**

From Ethiopia. Seeds collected December 1966 by C. E. Smith, New Crops Research Branch, Plant Industry Station, Beltsville, Maryland. Numbered Mar. 9, 1967.

- 318897 and 318898. *ELEUSINE CORACANA* (L.) Gaertn. Gramineae. Ragi.
318897. Col. No. 4535. Market in Adiugn. Mixed with grasses, especially *Setaria*.
318898. Col. No. 4551. 'Dagusa'. Market in Addis Ababa.
- 318899 to 318903. *ERAGROSTIS TEF* (Zuccagni) Trotter Gramineae. Teff.
318899. Col. No. 4542. Market in Asmara. White teff mixed with red teff. Also mixed with *Panicum*, other grasses and *Amaranthus*.
318900. Col. No. 4543. Market in Asmara. Red teff. Mixed with *Panicum* and other grasses.
318901. Col. 4549. Market in Addis Ababa. White teff mixed with red. Also mixed with other grasses, especially *Panicum*, *Amaranthus* and weeds.
318902. Col. No. 4550. Market in Addis Ababa. Red teff. Mixed with other grasses.
318903. Col. No. 4553. 'Manjna'. Market in Addis Ababa. White teff. Mixed with other grasses, especially *Panicum* and *Setaria*; also *Amaranthus* and *Plantago*.
318904. *PENNISETUM SPICATUM* (L.) Willd. Gramineae. Pearl millet.
- Col. No. 4541. Market in Asmara. Mixed with *Sorghum bicolor*.
- 318905 to 318916. *SORGHUM BICOLOR* (L.) Moench Gramineae. Kafir-corn.
318905. Col. No. 4533. Market in Adiugri.
318906. Col. No. 4534. Market in Adiugri.
318907. Col. No. 4537. Market in Asmara. Mixed.
318908. Col. No. 4538. Market in Asmara.
318909. Col. No. 4539. Market in Asmara.
318910. Col. No. 4540. Market in Asmara.
318911. Col. No. 4546. 'Mashila'. Market in Addis Ababa.
- Mixture.
318912. Col. No. 4547. 'Zangada'. Market in Addis Ababa.
318913. Col. No. 4548. 'Zangada'. Market in Addis Ababa.
- Mixture.
318914. Col. No. 4554. 'Marshila'. Market in Addis Ababa.
- Yellow. Sorghum mixture along with *Lolium*, *Secale* and *Hordeum*.
318915. Col. No. 4556. 'Misinga'. Market in Denaba on road between Addis Ababa and Jimma.
318916. Col. No. 4562. 'Misinga'. Market in Kumbi. Mixture.

**318917. VITIS sp. Vitaceae.**

From Venezuela. Cuttings presented by George Gibbs, Barquisimeto. Received Mar. 10, 1967.

Wild type.

**318918 to 318921.**

From France. Rooted plants presented by G. Odier, Le Temple-Sur-Lot. Received Mar. 10, 1967.

318918 and 318919. *PRUNUS AVIUM* L. Rosaceae. Sweet cherry.

318918. 'Guigne du Lot'.

318919. 'Loustau Bigarreau'.

318920 and 318921. *PRUNUS DOMESTICA* L. Common plum.

318920. 'Coufignal'. Prune type.

318921. 'Reine Claude Larroche'.

**318922 to 319147.**

From Spain. Seeds presented by the Institute Forestal de Investigaciones y Experiencias, Madrid, via the United States Embassy, Rome, Italy. Public Law 480 Project E-25-FS-1. Numbered Mar. 13, 1967.

318922. *AGROPYRON CRISTATUM* (L.) Gaertn. Gramineae. Crested wheatgrass.

B-176. Fraga, Huesca. 1964.

318923. *AGROPYRON INTERMEDIUM* (Host) Beauv. Intermediate wheatgrass.

B-13. Zaragoza. 1962. (See also *A. glaucum*, P.I. 302828).

318924 to 318933. *AGROSTIS CASTELLANA* Boiss. & Reut. Gramineae. Bentgrass.

318924. A-76. Puebla de la Reina, Badajoz. June 1963.

318925. A-208. Aldeaquemada, Jaén. July 1963.

318926. B-113. Viver de la Sierra, Zaragoza. August 1963.

318927. B-129. Ciudad Real. 1963.

318928. C-57. Candeleda, Avila. July 1962.

318929. E-59. Almodovar del Campo, Ciudad Real. July 1962.

318930. F-123. Los Navalmorales, Toledo. July 1962. Mixed several other species. (See also *A. alba*, P.I. 287740).

318931. F-124. Torrecilla de la Jara, Toledo. July 1962. (See also *A. alba*, P.I. 287741).

318932. F-137. Salcedo, Zaragoza. April 1965. (See also *A. sp.*, P.I. 289644).

318933. F-252. Grimaldo, Cáceres. June 1963.

318934. *AGROSTIS* sp.

F-251. Sos del Rey Catolico, Zaragoza. 1963. (See also *A. alba*, P.I. 302902).

318935. *ALOPECURUS GENICULATUS* L. Gramineae. Water foxtail.

E-87. Fuencaliente, Ciudad Real. June 1962. (See also *A. pratensis*, P.I. 302832, and *A. myosuroides*, P.I. 289647).

318936. *ALOPECURUS PRATENSIS* L. Meadow foxtail.

E-68. Miquelurra, Ciudad Real. June 1963. (See also *A. arundinaceus*, P.I. 289646).

## 318922 to 319147—Continued

318937. ANTHYLLIS VULNERARIA L. Leguminosae. **Kidneyvetch.**  
C-142. Campillo de Altbuey, Cuenca. June 1963.
318938. APHYLLANHES MONSPELIENSIS L. Liliaceae.  
F-681. Campillo de Altbuey, Cuenca. 1964.
318939. ARGYROLOBIUM LINNAEANUM Walp. Leguminosae.  
F-501. (F-550). Campillo de Altbuey, Cuenca. 1964.
- 318940 to 318943. ARRHENATHERUM ELATIUS (L.) Presl. Gramineae.  
**Tall oatgrass.**
318940. A-320. Sos del Rey Catolico, Zaragoza. 1963.
318941. B-58. León. 1962.
318942. D-55. Caravaca, Murcia. June 1962.
318943. E-17. Buenavista de la Valdavia, Palencia. September 1962.
- 318944 to 318946. ASTRAGALUS CYMBAECARPUS Brot. Leguminosae.
318944. A-82. Puebla de la Reina, Badajoz. 1963.
318945. G-82. Grimaldos, Cáceres. July 1965.
318946. M-142. Alburquerque, Badajoz. July 1964. (See also *A. bourgaeanus*, P.I. 289649).
318947. ASTRAGALUS HAMOSUS L.  
A-310. Cuenca. 1964.
318948. ASTRAGALUS INCANUS L.  
C-148. Campillo de Altbuey, Cuenca. June 1963. (See also *A. sp.*, P.I. 302858).
318949. ASTRAGALUS MACRORRHIZUS Cav.  
A-340. Santiago de la Espada, Jaén. July 1963.
- 318950 to 318956. AVENA BROMOIDES Gouan Gramineae.
318950. A-168. Ruidera, Ciudad Real. 1963.
318951. B-57. Campillo de Altbuey, Cuenca. July 1962.
318952. B-178. Olmeda del Rey, Cuenca. 1964.
318953. D-95. Aina, Albacete. June 1965.
318954. F-110. Montalban, Teruel. 1965.
318955. G-24. (A-251). Urda, Toledo. July 1962.
318956. H-2. Campillo de Altbuey, Cuenca. July 1962.
318957. HELICTOTRICHON SULCATUM (Gay) Henr. Gramineae.  
B-40. Medinasidonia, Cádiz. June 1962.
- 318958 to 318961. BRACHYPODIUM PHOENICOIDES (L.) Roem. & Schult. Gramineae.
318958. A-125. Sos del Rey Catolico, Zaragoza. 1962.
318959. A-218. Sos del Rey Catolico, Zaragoza. 1963.
318960. G-7. Torrecilla de la Jara, Toledo. July 1962. (See also *B. sylvaticum*, P.I. 287787).
318961. G-30. Los Yeneses, Toledo. July 1962.
318962. BRACHYPODIUM SYLVATICUM (Huds.) Beauv.  
F-88. Candeleda, Ávila. July 1962.

## 318922 to 319147—Continued

318963. *CORONILLA MINIMA* L. Leguminosae.  
 A-294. Moratilla de los Meleros, Guadalajara. June 1964.
- 318964 and 318965. *CYNODON DACTYLON* (L.) Pers. Gramineae. **Bermudagrass.**  
 318964. C-237. Urda, Toledo. 1963.  
 318965. C-284. Garrovilla, Cáceres. June 1963.
- 318966 to 318979. *DACTYLIS GLOMERATA* L. Gramineae. **Orchardgrass.**  
 318966. A-47. Viver de la Sierra, Zaragoza. 1963.  
 318967. A-163. Cazorla, Jaén. 1963. Contaminant with weed seeds.  
 318968. A-199. Ocana, Toledo. July 1964.  
 318969. A-227. Burgos. 1963.  
 318970. A-339. Villatoya, Albacete. 1963.  
 318971. B-49. (A-23). Torrecilla de la Jara, Toledo. June 1963.  
 318972. B-174. Olmeda del Rey, Cuenca. 1964.  
 318973. B-185. Campillo de Altobuey, Cuenca. June 1963.  
 318974. C-134. Barbate de Franco, Cádiz. June 1963.  
 318975. C-143. Fuentelespino de Haro, Cuenca. June 1963.  
 318976. C-252. Navas del Moro, Cordoba. 1963.  
 318977. C-286. Cuenca. 1963.  
 318978. F-276. Cuenca. 1963.  
 318979. F-299. Fuentelespino de Haro, Cuenca. 1963.
- 318980 to 318984. *FESTUCA AMPLA* Hack. Gramineae. **Fescue.**  
 318980. A-136. Sos del Rey Catolico, Zaragoza. 1962. (See also *F. rubra*, P.I. 302895).  
 318981. B-52. Cea, León. September 1962.  
 318982. C-67. Torreledones, Madrid. July 1962. (See also *F. ovina*, P.I. 289652).  
 318983. D-59. Fuencaliente, Ciudad Real. July 1962. (See also *F. rubra*, P.I. 289653).  
 318984. D-74. Almodovar del Campo, Ciudad Real. July 1962.
- 318985 to 318988. *FESTUCA ARUNDINACEA* Schreb. **Tall fescue.**  
 318985. B-96. Tijola, Almería. 1963.  
 318986. B-170. Ciudad Real. June 1963.  
 318987. D-72. (A-173). Ruidera, Ciudad Real. June 1962. (See also *F. elatior*, P.I. 287821 and *F. rubra*, P.I. 302894).  
 318988. F-378. Moratilla de los Meleros, Guadalajara. June 1964.
- 318989 and 318990. *FESTUCA OVINA* L. **Sheep fescue.**  
 318989. B-59. Calatayud, Zaragoza. July 1962.  
 318990. H-5. Burgos. 1962.
318991. *FESTUCA PRATENSIS* Huds. **Meadow fescue.**  
 T-20. El Bercial, Badajoz. 1962.
- 318992 and 318993. *FESTUCA RUBRA* L. **Red fescue.**  
 318992. A-123. Sos del Rey Catolico, Zaragoza. 1962.  
 318993. B-53. Cea, León. September 1962.

## 318922 to 319147—Continued

318994. *HEDYSARUM CORONARIUM* L. Leguminosae. **Sulla.**  
C-144. Algeciras, Cádiz. June 1963.
- 318995 and 318996. *HIPPOCREPIS COMMUTATA* Pau Leguminosae.  
318995. C-77. (C-136). Fuentelespino de Haro, Cuenca. July 1962.  
(See also *H. sp.*, P.I. 289657).  
318996. G-67. Moratilla de los Meleros, Guadalajara. July 1962.  
(See also *H. multisiliquosa*, P.I. 287838).
318997. *HIPPOCREPIS GLAUCA* Ten.  
M-73. Ruidera, Ciudad Real. June 1962. (See also *H. comosa*, P.I. 287835).
318998. *HIPPOCREPIS MULTISILIQUOSA* L.  
C-194. Armuna, Almería. July 1963.
- 318999 and 319000. *HIPPOCREPIS SALZMANNII* Boiss. & Reut.  
318999. C-63. (A-215). Puerto de Santa Maria, Cádiz. June 1963.  
(See also *H. multisiliquosa*, P.I. 287837).  
319000. D-42. Rota, Cádiz. June 1963. (See also *H. multisiliquosa*, P.I. 302906).
319001. *HIPPOCREPIS SCABRA* DC.  
C-196. Tijola, Almería. July 1963.
319002. *DESCHAMPSIA REUTERI* Pilg. Gramineae.  
F-75. Los Barrios, Cádiz.
319003. *HORDEUM BULBOSUM* L. Gramineae. **Bulbous barley.**  
D-60. Vejer de la Frontera, Cádiz. June 1963.
- 319004 to 319011. *KOELERIA CAUDATA* (Link) Steud. Gramineae.  
319004. A-72. (A-71). Castrocalbon, León. July 1962. (See also *K. cristata*, P.I. 302912 for (A-71).  
319005. A-75. Castrocalbon, León. July 1962. (See also *K. sp.*, P.I. 302918).  
319006. A-131. Cea, León. September 1962.  
319007. D-45. Herradon Canada, Ávila. July 1962.  
319008. E-16. Cea, León. September 1962.  
319009. E-42. Castrocalbon, León. July 1962.  
319010. E-96. Santiago de la Espada, Ján. July 1963.  
319011. F-191. Castrocalbon, Le n. July 1962.
- 319012 to 319016. *KOELERIA VALLESIANA* (Honck.) Bertol. in Roem. & Schult.  
319012. A-271. Olmeda del Rey, Cuenca. June 1963.  
319013. A-328. Villatoya, Albacete. 1963.  
319014. C-223. Cuenca. 1963.  
319015. E-92. Caravaca, Murcia. July 1962.  
319016. F-319. Moratilla de los Meleros, Guadalajara. June 1964.
319017. *LOLIUM PERENNE* L. Gramineae. **Perennial ryegrass.**  
F-65. Algeciras, Cádiz. July 1962. (See also *L. multiflorum*, P.I. 287847).

## 318922 to 319147—Continued

319018. *LOLIUM RIGIDUM* Gaud. Wimmera ryegrass.  
A-161. Barbate, Cádiz. June 1963.
- 319019 and 319020. *LOTUS ARENARIUS* Brot. Leguminosae.  
319019. C-22. Tarifa, Cádiz. June 1962. (See also *L. creticus*, P.I. 287858).  
319020. C-165. Barbate de Franco, Cádiz. June 1963.
319021. *LOTUS* sp.  
G-8. La Ercina, León. August 1963. (See also *L. corniculatus* P.I. 302922).
319022. *LOTUS* sp.  
G-19. Litos, Zanora. June 1962.
319023. *LOTUS* sp.  
G-29. Tabora, Zamora. June 1962.
319024. *LOTUS* sp.  
F-92. Candeleda, Ávila. July 1962.
319025. *LOTUS* sp.  
F-221. Campillo de Altobuey, Cuenca. June 1964.
319026. *MEDICAGO LUPULINA* L. Leguminosae. Black medic.  
M-92. Molinicos, Albacete. July 1962.
- 319027 and 319028. *MEDICAGO ORBICULARIS* (L.) All. Buttonclover medic.  
319027. A-49. (F-317). Puebla de la Reina, Badajoz. June 1963.  
319028. F-321. (A-286). Campillo de Altobuey, Cuenca. July 1964.
- 319029 to 319038. *MEDICAGO POLYMORPHA* var. *VULGARIS* (Benth.) Shinnars California burclover.  
319029. C-187. Campo Macias, Cáceres. June 1963.  
319030. C-216. Jaén. July 1963.  
319031. C-220. Moratilla de los Meleros, Guadalajara. July 1963.  
319032. C-243. Urda, Toledo. July 1963.  
319033. F-695. Manchita, Badajoz. June 1963.  
319034. G-76. Villatoya, Albacete. July 1962. (See also *M. minima*, P.I. 287867).  
319035. M-2. Madrid. July 1962.  
319036. M-71. Miquelturna, Ciudad Real. July 1964. (See also *M. tribuloides*, P.I. 289663).  
319037. M-150. Herrera del Duque, Badajoz.  
319038. C-145. Los Navalmorales, Toledo. 1963.
- 319039 to 319042. *MEDICAGO RIGIDULA* Desr. In Lam. Tifton medic.  
319039. C-260. Grimaldos, Cáceres. June 1963.  
319040. F-678. Campillo de Altobuey, Cuenca. 1964.  
319041. G-23. Urda, Toledo. July 1963. (See also *M. turbinata*, P.I. 287892).  
319042. G-71. Riopar, Albacete. June 1965. (See also *M. gerardii*, P.I. 287866).
- 319043 and 319044. *MEDICAGO SATIVA* L. Alfalfa.



## 318922 to 319147—Continued

## 319043 to 319044—Continued

319043. A-216. Banuelos del Rudron, Burgos. September 1963.

319044. A-287. Burgos. September 1964.

319045. *MEDICAGO TRIBULOIDES* Desr.

C-176. Urda, Toledo. 1963.

319046 to 319050. *MEDICAGO TURBINATA* (L.) All.

319046. A-219. Puebla de la Reina, Badajoz. 1964.

319047. A-297. Ciudad Real. June 1963.

319048. B-93. Cordoba. 1963.

319049. D-87. Puebla de la Reina, Badajoz. July 1962.

(See also *M. polymorpha*, P.I. 287883).

319050. F-279. Ciudad Real. 1963.

319051. *MEDICAGO* sp.

C-195. Armuna, Almería. July 1963.

319052. *MELILOTUS SULCATA* Desf. Leguminosae. Sweetclover.

G-63. Moratilla de los Meleros, Guadalajara. (See also *M. sp.*, P.I. 289668).

319053 and 319054. *ONOBRYCHIS ERIOPHORA* (Pour.) Desv. Leguminosae.

319053. A-343. Urda, Toledo. 1964.

319054. A-23. (C-246). Urda, Toledo. June 1964.

319055 to 319057. *ONOBRYCHIS STENORHIZA* DC.

319055. G-6. Periago, Murcia. June 1962.

319056. G-55. Caravaca, Murcia. June 1962.

319057. M-183. Maria, Almería. June 1962.

319058 to 319062. *ONOBRYCHIS VICHIFOLIA* Scop. Sainfoin.

319058. B-25. Villaescusa de Butron, Burgos. August 1962.

319059. B-175. Ayoluengo, Burgos. August 1963.

319060. B-179. Moradillo de Sedano, Burgos. August 1963.

319061. E-98. Tubilla del Agua, Burgos.

319062. T-14. Burgos. September 1962.

319063 and 319064. *ORNITHOPUS COMPRESSUS* L. Leguminosae.

319063. F-655. Villarta de los Montes, Badajoz. September 1963.

319064. F-670. Badajoz. 1964.

319065. *ORYZOPSIS MILIACEA* (L.) Benth. & Hook. ex Aschers & Schweinf. Gramineae. Smilgrass.

F-296. Puebla de la Reina, Badajoz. 1964.

319066 to 319074. *PHALARIS AQUATICA* L. Gramineae. Large canarygrass.

319066. C-118. Córdoba. 1963.

319067. C-137. Cáceres. 1963.

319068. C-153. Herrera del Duque, Badajoz. July 1963.

319069. C-200. Sos del Rey Catolico, Zaragoza. 1962.

319070. C-242. Almodobar del Campo, Ciudad Real. June 1963.

319071. C-279. Villatoya, Albacete. 1963.

## 318922 to 319147—Continued

## 319066 to 319074—Continued

319072. F-157. (C-200). Sos del Rey Catolico, Zaragoza. 1962.
319073. F-302. Olivenza, Badajoz. 1963.
319074. T-17. Burgos. October 1962; December 1962.
319075. PHALARIS COERULESCENS Desf.  
D-84. Campanario, Badajoz. July 1962. (See also *P. sp.*, P.I. 289670).
- 319076 to 319078. PHLEUM NODOSUM L. Gramineae.
319076. F-24. Cea, León. September 1962.
319077. F-174. Cea, León. September 1962.
319078. M-216. Urda, Toledo. October 1965.
- 319079 and 319080. PHLEUM PRATENSE L. Common timothy.
319079. F-488. Burgos. August 1964.
319080. T-2. Burgos. September 1962.
319081. POA BULBOSA L. Gramineae. Bulbous bluegrass.  
A-327. Aguas Viejas, Badajoz. 1964.
- 319082 and 319083. PSORALEA BITUMINOSA L. Leguminosae. Scurf-pea.
319082. C-95. Caravaca, Murcia. July 1962.
319083. E-30. Totana, Murcia. July 1962.
- 319084 and 319085. POTERIUM SANGUISORBA L. Rosaceae.
319084. B-16. Burgos. August 1962. (See also *S. minor*, P.I. 302957).
319085. D-38. Buenavista de Valdavia, Palencia. 1962.
- 319086 to 319093. SANGUISORBA MAGNOLII (Spach) Rothm. & Silva Rosa-  
cea.
319086. A-159. Urda, Toledo. 1964.
319087. A-262. Campillo de Altobuey, Cuenca. 1964.
319088. B-92. Torrecilla de la Jara, Toledo. June 1962.
319089. B-177. Campillo de Altobuey, Cuenca. 1963.
319090. C-203. Cazorra, Jáen. 1963.
319091. E-67. (B-155). Fuentelespino de Haro, Cuenca. July 1963.  
(See also *S. minor*, P.I. 287927).
319092. F-291. Campillo de Altobuey, Cuenca. June 1963. (See also  
*S. minor*, P.I. 302959).
319093. G-14. (F-282). Los Navalmorales, Toledo. July 1962. (See  
also *S. minor*, P.I. 287929).
- 319094 to 319102. SANGUISORBA MURICATA (Spach) Focke
319094. A-30. Moros, Zaragoza. July 1963. (See also *S. minor*, P.I.  
287923).
319095. A-140. Sos del Rey Catolico, Zaragoza. 1962. (See also *S.  
minor*, P.I. 302955).
319096. A-326. Zaragoza. August 1963. (See also *S. minor*, P.I.  
302956).
319097. C-212. Navas del Moro, Córdoba. 1963.
319098. D-20. Puebla de Don Rodrigo, Ciudad Real. July 1962. (See  
also *S. minor*, P.I. 287924).

## 318922 to 319147—Continued

## 319094 to 319102—Continued

319099. D-66. Puebla de Don Rodrigo, Ciudad Real. (See also *S. minor*, P.I. 287925).

319100. F-297. Sos del Rey Catolico, Zaragoza. 1963.

319101. F-389. Villatoya, Albacete. 1963.

319102. F-676. (G-25). Jarque, Zaragoza. August 1963.

## 319103 to 319115. SCORPIURUS SUBVILLOSA L. Leguminosae.

Scorpiontail.

319103. A-235. Los Molares, Córdoba. 1964.

319104. A-325. Los Molares, Córdoba. 1964.

319105. A-325. Priego, Córdoba. 1964.

319106. A-335. Priego, Córdoba. 1964.

319107. C-66. Herrera del Duque, Badajoz. June 1962. (See also *S. sulcata*, P.I. 287937).

319108. C-197. Algeciras, Cádiz. June 1963.

319109. C-261. Garrovillas, Cáceres. June 1963.

319110. D-71. Vivero Central del D.F. de Sevilla, Sevilla. 1962.

319111. F-60. Los Molares, Córdoba. October 1962.

319112. F-204. Cazorla, Ján. July 1963.

319113. F-293. Olivenza, Badajoz. 1963.

319114. F-367. Badajoz. 1964.

319115. F-541. Badajoz. 1964.

## 319116 to 319118. SCORPIURUS VERMICULATUS L.

Scorpiontail.

319116. C-288. Los Barrios, Cádiz. June 1963.

319117. F-128. Madinasidonia, Cádiz. June 1962.

319118. F-370. Campo Maciax, Cáceres. 1963.

## 319119 to 319124. STIPA JUNCEA L. Gramineae.

319119. A-214. Fuentelespino de Haro, Cuenca. 1964.

319120. A-254. Campillo de Altobuey, Cuenca. June 1963.

319121. A-277. Campillo de Altobuey, Cuenca. 1964.

319122. D-24. Teruel. 1963.

319123. F-498. Renera, Guadalajara. June 1964.

319124. F-696. Fuentelespino de Haro, Cuenca. June 1963.

## 319125 to 319127. STIPA LAGASCAE Roem. &amp; Schult. Gramineae.

319125. A-276. Urda, Toledo. 1964.

319126. C-245. La Atalaya, Ciudad Real. June 1963.

319127. D-1. Ciudad Real. June 1962. (See also *S. juncea*, P.I. 287941).

## 319128 and 319129. TETRAGONOLOBUS SILIQUOSUS (L.) Roth Leguminosae.

319128. A-209. Moratilla de los Meleros, Guadalajara. June 1964.

319129. C-281. Moratilla de los Meleros, Guadalajara. July 1963.

## 319130. TRIFOLIUM CHERLERI L. Leguminosae.

F-665. (M-146). Herrera del Duque, Badajoz. July 1963.

## 319131. TRIFOLIUM FRAGIFERUM L.

Strawberry clover.

C-236. Ciudad Real. June 1963.

**318922 to 319147—Continued**

- 319132 and 319133. *TRIFOLIUM GLOMERATUM* L. Cluster clover.  
 319132. C-121. Alburquerque, Badajoz. July 1963.  
 319133. C-210. Santa Elena, J  en. June 1963.
319134. *TRIFOLIUM HIRTUM* All. Rose clover.  
 M-191. Navaconcejo, C  ceres. July 1962.
- 319135 and 319136. *TRIFOLIUM PRATENSE* L. Red clover.  
 319135. C-247. Ciudad Real. June 1963.  
 319136. D-18. Escalada, Burgos. August 1962.
- 319137 to 319139. *TRIFOLIUM REPENS* L. Whiteclover.  
 319137. F-464. C  ceres. June 1963.  
 319138. M-173. Herradon Canada,   vila. July 1962.  
 319139. M-210. Almodovar del Camp, Ciudad Real. July 1962.
- 319140 to 319146. *TRIFOLIUM SUBTERRANEUM* L. Subterranean clover.  
 319140. C-206. Puebla de la Reina, Badajoz. June 1963.  
 319141. C-277. Fuencaliente, Ciudad Real. June 1963.  
 319142. D-43. (D-22). Almodovar del Campo, Ciudad Real. July 1963.  
 319143. F-210. Nucleo de la Haba, Badajoz. June 1964.  
 319144. F-252. Alange, Badajoz. June 1964.  
 319145. F-324. Ciudad Real. 1964.  
 319146. F-365. Puebla de la Reina, Badajoz. June 1964.
319147. *TRIFOLIUM* sp.  
 C-138. Caceres. June 1963.

**319148 and 319149. *VITIS VINIFERA* L. Vitaceae. European grape.**

From France. Cuttings presented by the Centre de Recherches Agronomiques du Sud-Ouest, Pont-de-la-Maye (Gironde). Received Mar. 16, 1967.

319148. 'Melon'. Clone 7948.  
 319149. 'Melon'. Clone 7969.

**319150. *ARMORACIA LAPATHIFOLIA* Gilib. Cruciferae. Horseradish.**

From Switzerland. Roots presented by the Station Federale d'Essais Agricoles, Groupe Arboriculture et Horticulture, Pont de la Morge, Suisse. Received Mar. 16, 1967.

**319151. *PUNICA GRANATUM* L. Punicaceae. Pomegranate.**

From Afghanistan. Seeds presented by the Agency for International Development, Kabul. Received Mar. 16, 1967.

'Tashkargar'. Light red skin cover with dark red fruit. Juice very sweet; dark red in color.

**319152 to 319161. *PRUNUS PERSICA* (L.) Batsch Rosaceae. Peach.**

From Canada. Seedling trees presented by the Harrow Research Station, Canada Department of Agriculture, Harrow, Ontario. Received Mar. 17, 1967.

## 319152 to 319161—Continued

319152. Harrow 614. (J. H. Hale' × 'Vedette') o.p. × 'Earlired'. Medium hardy, upright spreading tree. Fruit matures 8 weeks before 'Elberta,' 2¼ to 2½ inches; semicling becoming fully freestone when ripe. Flesh very firm, yellow, good quality. Highly colored with 80 percent blushed red overcolor. Freedom from split pits.
319153. Harrow 612. ('J. H. Hale' × 'Vedette') o.p. × 'Earlired'. Medium hardy, upright spreading tree. Fruit matures 8 weeks before 'Elberta,' 2¼ inches when reasonably thinned; cling to semicling. Flesh medium firm, yellow, good quality. Highly colored with 70 percent blushed red overcolor. Fifteen percent split pits.
319154. Harrow 616. ('J. H. Hale' × 'Vedette') o.p. × 'Earlired'. Medium hardy. Fruit matures 7 weeks before 'Elberta,' 2¼ to 2½ inches; semicling becoming freestone when fully ripe. Flesh extremely firm, good quality, yellow, free of red, nearly free of pubescence. Ninety percent attractive red overcolor. Few split pits.
319155. Harrow 619. ('Redskin' × 'Sunhaven'). Medium hardy. Fruit matures 4 weeks before 'Elberta,' 2¾ to 3 inches; freestone. Flesh firm, good quality and fine texture, yellow, free of red pigment. Fifty percent red blush over yellow ground.
319156. Harrow 6110 ('Redskin' × 'Sunhaven'). Medium hardy, upright tree. Fruit matures 3 weeks before 'Elberta,' 2½ inches; medium quality freestone. Flesh firm, yellow, relatively free of red pigmentation at pit. Seventy percent blushed red yellow ground. Picks quite readily.
319157. Harrow 6111. ('J. H. Hale' × 'Sunhaven'). Productive, upright spreading tree. Fruit matures three weeks before 'Elberta,' 2¾ to 3 inches; good quality freestone. Flesh firm, yellow with slight red at pit. Sixty percent bright red over attractive yellow ground. Picks cleanly.
319158. Harrow 6112. ('Redskin' × 'Sunhaven'). Excellent upright spreading tree. Fruit matures 2 weeks before 'Elberta,' 2½ to 2¾ inches; good quality freestone. Flesh extremely firm, yellow with slight red at pit. Seventy-five percent blushed red overcolor. Promising shipping peach.
319159. Harrow 6113. ('Redskin' × 'Sunhaven'). Productive upright spreading tree. Fruit matures 2 weeks before 'Elberta,' 2¾ to 3½ inches; good quality freestone. Flesh firm, yellow with slight red at pit. Seventy percent blushed red overcolor.
319160. Harrow 6114. ('Redskin' × 'Sunhaven'). Productive upright spreading tree. Fruit matures 2 weeks before 'Elberta,' 2¾ inches; quality outstanding, freestone. Flesh firm, yellow with slight red at pit. Sixty-five percent blushed red overcolor.
319161. Harrow 6115. ('Redskin' × 'Sunhaven'). Fruit matures one week before 'Elberta,' 2¾ to 3 inches; freestone, exceptional quality and performance. Flesh very firm, yellow with slight red at pit. Highly colored for its season with 80 percent attractive red overcolor.

## 319162 to 319164. CAMELLIA JAPONICA L. Theaceae.

## Common camellia.

From Japan. Plant material collected by E. G. Corbett and R. W. Lighty, agricultural explorers, Crops Research Division, United States Department of Agriculture, Beltsville, Maryland.

For U.S.D.A.-Longwood Cooperative Program. Numbered Mar. 20, 1967. Representatives of Higo camellia rare.

319162. Col. No. K-511. 'Yamato Nishiki'. In garden of Nakahara Chyorakuen, Kurume City. Evergreen shrub.

**319162 to 319164—Continued**

319163. Col. No. K-515. 'Showano Hikari'. In garden of Nakahara Chyorakuen, Kurume City. Evergreen shrub.

319164. Col. No. K-520. 'Hino Maru'. Kurume Branch Horticultural Experiment Station, Kurume.

**319165 to 319167.**

From Sudan. Seeds presented by the Cotton Research Corporation, Khartoum North, Khartoum. Numbered Mar. 22, 1967.

319165. *GOSSYPIOIDES BREVILANATUM* (Hochr.) J. B. Hutchinson Malvaceae.

C.B. 3821.

319166. *NOTOXYLINON FLAVIFLORUM* Lewton Malvaceae.

C.B. 3822.

319167. *THESPESIA DANIS* Oliver Malvaceae.

C.B. 3820.

**319168 to 319171.**

From the Union of Soviet Socialist Republics. Seeds presented by the Hortus Socziensis Dendrarium, Soczi, Crimea. Numbered Mar. 22, 1967.

319168. *ILEX AQUIFOLIUM* L. Aquifoliaceae. English holly.

319169. *ILEX COLCHICA* Pojark.

319170. *ILEX CORNUTA* Lindl. & Paxt.

Chinese holly.

319171. *ILEX LATIFOLIA* Thunb.

Lusterleaf holly.

**319172 and 319173.**

From the Union of Soviet Socialist Republics. Seeds presented by the Botanical Garden, Estonian Academy of Sciences, Tallin, through the All-Union Institute of Plant Industry, Leningrad. Numbered Mar. 22, 1967.

319172. *BETULA NANA* L. Betulaceae.

319173. *PICEA ABIES* Karst. Pinaceae.

Norway spruce.

**319174 to 319178. ARACHIS HYPOGAEA L. Leguminosae.**

From Israel. Seeds presented by E. Goldin, Volcani Institute of Agriculture Research, Rehovot. Received Mar. 22, 1967.

319174. X-30 L-4.

319177. X-30 L-25.

319175. X-30 L-7.

319178. X-30 L-33.

319176. X-30 L-15.

**319179. PLATANUS sp. Platanaceae.**

From Turkey. Seeds presented by E. C. Blodgett, Irrigation Experiment Station, Prosser, Washington. Received Mar. 23, 1967.

Collected from a large tree near the home of Attaturk on the outskirts of the city Yalova on the sea of Marmara. The tree believed to be quite resistant to sycamore anthracnose.

**319180 to 319183. SOLANUM TUBEROSUM L. Solanaceae. Potato.**

From the Netherlands. Tubers presented by the Veredelingsbedrijf Cebeco, Hoofddorp. Received Mar. 28, 1967.

319180. 6015-28.

319182. 58129-49.

319181. 6015-29.

319183. 60238-25.

**319184 to 319191. ZEA MAYS L. Gramineae. Corn.**

From Colombia. Seeds presented by the Rockefeller Foundation, Bogota. Received Mar. 28, 1967.

- |                        |                               |
|------------------------|-------------------------------|
| 319184. Diacol V. 551. | 319188. Ecu. 640-8#.          |
| 319185. Ecu. 434-0.    | 319189. Mezcla de autos.      |
| 319186. Ecu. 434-9#    | 319190. Mezcla de sibes.      |
| 319187. Ecu. 624-8#.   | 319191. Roc. V.7-486C-3#b-6#. |

**319192. ORYZA SATIVA L. Gramineae. Rice.**

From Japan. Seeds presented by the National Institute of Agricultural Sciences, Hiratsuka, Kanagawa. Received Mar. 24, 1967.

'Shiokari'. No. 010004.

**319193 and 319194. CASTANEA MOLLISSIMA Blume Fagaceae.**

From Korea. Cuttings presented by the Institute of Forest Genetics. Suwon, Kyonggido. Received Mar. 28, 1967.

319193. 'Kung-Ju'.  
319194. 'Pung Yang'.

**319195 and 319196.**

From Kenya. Seeds presented by J. G. Boonman, National Agricultural Research Station, Kitale. Numbered Mar. 31, 1967.

319195. ECHINOCHLOA HAPLOCLADA Stapf Gramineae.  
K.6416. From Marasabet.  
319196. PENNISETUM SQUAMULATUM Fres. Gramineae.  
K.5455. From Sigor.

**319197. RHODODENDRON YAKUSIMANUM Nakai Ericaceae.**

From Japan. Seeds presented by Kaname Kato, 3-1377 Shibamata, Katsushika-ku, Tokyo. Numbered Mar. 31, 1967.

**319198. SOLANUM TUBEROSUM L. Solanaceae. Potato.**

From the Netherlands. Tubers presented by the Institute for Plant Breeding, Wageningen. Numbered Mar. 31, 1967.

'Mirka'. Reported to be virus free.

**319199 to 319205. VITIS VINIFERA L. Vitaceae. European grape.**

From the United States. Grapevines growing at the Agricultural Experiment Station, University of California, Davis. Numbered Mar. 21, 1967.

Originally from Mendoza, Argentina. October 1964.

319199. 'Criolla Sanjuania'.  
319200. 'Sereza'.  
319201. 'Tempranilla'.  
Originally from Largo do Corpo Santo, Lisbon, Portugal. June 1963.  
319202. 'Bolonio'.  
319203. 'Olvarminto'.  
319204. 'Sercial'.

Originally from the Soviet Union. Collected April 1963.

319205. 'Malta Seedless'. Reported to be only variety grown on the Island of Malta.

**319206. BROMUS INERMIS** Leyss. Gramineae.**Smooth bromegrass.**

From Finland. Seeds presented by the Agricultural Research Institute, Jokiainen. Numbered Mar. 21, 1967.

Jo. 266.

**319207 to 319211.**

From Costa Rica. Seeds collected by Claude Hope, Linda Vista Ltda., Cartago. Numbered Mar. 21, 1967.

**319207. TAGETES FILIFOLIA** Lag. Compositae.

Abundant around Cartago. Low, much-branched annual.

**319208. TAGETES** sp.

Tobosi, Cartago Province. Plant about 50 cm. tall, well branched. Flowers small, ray florets about 5 mm. long.

**319209. TAGETES** sp.

Near Agua Caliente, Cartago Province. Annual about 60 mm. tall.

**319210. TAGETES** sp.

Near Tobosi, Cartago Province.

**319211. TAGETES** sp.

Possible hybrid with cultivated types, or degenerate form of cultivar.

**319212 to 319220.**

From the United Arab Republic. Seeds collected in 1966 by J. C. Miller, Department of Horticulture, Louisiana State University, Baton Rouge, Louisiana. Numbered Mar. 21, 1967.

**319212. CITRULLUS LANATUS** (Thunb.) Mansf. Cucurbitaceae.**Watermelon.**

'Giza 1'. Local variety.

**319213 and 319214. CUCUMIS MELO** L. Cucurbitaceae.**Muskmelon.****319213. 'Kahera 3'.****319214. 'Kahera 6'.****319215. CUCUMIS MELO** var. **FLEXUOSUS** (L.) Naud.

Productive spring, summer and fall.

**319216. CUCUMIS SATIVUS** L.**Cucumber.**

'Balady'.

**319217. CUCUMIS** sp.

Snake cucumber.

**319218. CUCUMIS** sp.

Sweet melon.

**319219. CUCUMIS** sp.**319220. SPINACIA OLERACEA** L. Chenopodiaceae.**Spinach.****319221 to 319234.**

From Sweden. Seeds presented by Universitetes Botaniska Tradgard, Uppsala 1. Origin indicated where known. Numbered Mar. 21, 1967.

**319221. COTONEASTER CINNABARINA** Juzepczuk Rosaceae.

From Kola Peninsula, Murmansk Oblast, U.S.S.R. (Soviet Union).



## 319221 to 319234—Continued

319222. *DORONICUM PLANTAGINEUM* L. Compositae.

France.

319223. *LEONTOPODIUM SOULIEI* Beauverd Compositae.

From Dongbo-la, Sikang Province, Taofu District, China. Elevation 4,200 meters.

319224. *LEONTOPODIUM STOECHAS* Hand.-Mazz.

From Sikang Province, Taofu District, China. Elevation 300 meters.

319225. *SEDUM ALBUM* L. Crassulaceae.

White stonecrop.

Oland Province, Sweden.

319226. *SEDUM ATRATUM* L.

319227. *SEDUM HISPANICUM* L.

319228. *SEDUM POPULIFOLIUM* Pall.

Poplar stonecrop.

319229. *SEDUM ROSEUM* (L.) Scop.

Roseroot stonecrop.

Torne Lappmark Province, Sweden.

319230. *SEDUM RUBENS* L.

319231. *SEDUM STENOPETALUM* Pursh

319232. *SEDUM TELEPHIUM* ssp. *FABARIA* (Koch) Kirschl.

319233. *SEDUM TELEPHIUM* ssp. *TELEPHIUM*

From Denmark. Subspontaneous.

319234. *SEDUM TELEPHIUM* L.

Finland.

319235 to 319239. *CITRULLUS LANATUS* (Thunb.) Mansf. Cucurbitaceae. **Watermelon.**

From Japan. Seeds presented by Muneo Iizuka, Horticultural Research Station, Ministry of Agriculture and Forestry, Hiratsuka, Kanagawa. Numbered Mar. 22, 1967.

319235. No. 1. Fruit nonstriped, flesh yellow, average weight 6 to 8 kilograms.

319236. No. 2. Fruit striped, flesh yellow, average weight 6 to 8 kilograms.

319237. No. 3. Fruit nonstriped, flesh deep yellow, average weight 5 to 6 kilograms.

319238. No. 4. Fruit striped, flesh orange-yellow, average weight 2 to 4 kilograms.

319239. No. 5. Fruit nonstriped, flesh orange-yellow, average weight 2 to 4 kilograms.

319240 to 319271.

From Korea. Plant material collected by E. G. Corbett and R. W. Lighty, agricultural explorers, Crops Research Division, United States Department of Agriculture, Beltsville, Maryland. For U.S.D.A.-Longwood Cooperative Program. Numbered Mar. 27, 1967.

319240. *ARISAEMA AMURENSE* Maxim. Araceae.

Col. No. K-143. In dense shade near trail up Mt. Chiri, Cholla Nam-do. Elevation 1,410 meters. Cormous perennial. Leaves up to 5 lobes. Not seen in flower. Corms.

## 319240 to 319271—Continued

319241. *ARISAEMA AMURENSE* var. *SERRATUM* Nakai

Col. No. K-16. Mt. Halla, Cheju Island; growing in dense woods. Perennial with thickened base. Not seen in flower. Corms.

319242 and 319243. *ARISAEMA HETEROPHYLLUM* Bl.

319242. Col. No. K-95. On grounds of Temple, Mt. Odai, Kangwon-do; growing in *Abies* forest. Elevation 690 meters. Cormous perennial to 1 meter; stem mottled white and purple. Corms.

319243. Col. No. K-200. Moist sandy soil in deep shade of mixed deciduous forest; Kwang Nung, Kyonggi-do. Cormous herbaceous perennial to 1 meter; leaves divided into many segments. Corm.

319244. *ARISAEMA JAPONICUM* Bl.

Col. No. K-119. In moist, rocky, shaded area along trail on Mt. Baek Yang, Cholla Nam-do. Elevation 390 meters. Cormous perennial to one-half meter. Not seen in flower. Corm.

319245 and 319246. *ARISAEMA PENINSULAE* Nakai

319245. Col. No. K-166. At head of Piakok Valley, Mt. Chiri, Cholla Nam-do. Elevation 1,140 meters. Cormous perennial to one-half meter; stem mottled. Corm.

319246. Col. No. K-203. Moist sandy soil; under mixed deciduous forest; Kwang Nung, Kyonggi-do. Cormous perennial to 1 meter; leaves with elliptic leaflets; stem streaked with purple. Corms.

319247. *ARISAEMA RINGENS* (Thunb.) Schott

Col. No. K-24. Twenty km. from Sogwipo on road to Cheju, Cheju Island in dark moist woods. Elevation 600 meters. Herbaceous perennial with thickened stem base; leaves with 3 broad, cordate lobes. Not seen in flower. Corms.

319248 and 319249. *ARISAEMA ROBUSTUM* (Engl.) Nakai

319248. Col. No. K-206. Moist sandy soil along small streambed in mixed deciduous forest; Kwang Nung, Kyonggi-do. Robust, cormous perennial; leaves almost in a whorl; elliptic; stems green to purple. Corms.

319249. Col. No. K-226. Mt. Sokni, Chunchong Pukto; in deep, moist shade. Elevation 450 meters. Cormous perennial; leaves with serrate margins. Corms.

319250. *ARISAEMA* sp.

Col. No. K-257. In moist woods, dense shade along stream on Mt. Tok-yu, Ko Chun. Cormous perennial; leaves in three's. Corms.

319251. *CALANTHE DISCOLOR* Lindl. Orchidaceae.

Col. No. K-22. In moist, dark woods 20 km. from Sogwipo on road to Cheju, Cheju Island. Elevation 600 meters. Terrestrial orchid with broad basal leaves and purple flowers. Plants.

319252. *CAMPTOSORUS SIBIRICUS* Rupr. Aspleniaceae.

Col. No. K-106. On road from Taek Wal Yong to Jin Boo, Kangwon-do; growing on rock. Elevation 690 meters. Very small fern; fronds lanceolate; acuminate rooting at tip. Plants.

319253. *CONIOGRAMME JAPONICA* (Thunb.) Diels Polypodiaceae.

Col. No. K-23. About 20 km. from Sogwipo on road to Cheju, Cheju Island in dark, moist woods. Elevation 600 meters. Fern; fronds single to 0.9 meter, pinnately compound. Plants.

## 319240 to 319271—Continued

319254. *CYPRIPEDIUM MACRANTHUM* Sw. Orchidaceae.

Col. No. K-144. Growing in semishade along trail on Mt. Chiri, Cholla Nam-do. Fleshy rooted orchid. Leaves elliptic; veins prominent. Not seen in flower. Plants.

319255. *DRYOPTERIS VARIA* (L.) O. Kuntze Polypodiaceae.

Col. No. K-239. In moist shady area on Mt. Sokni, Chunchong Pukto. Elevation 540 meters. Fern to one-half meter; fronds mostly bipinnate. Plants.

319256. *DRYOPTERIS* sp.

Col. No. K-145. In dense, moist shade along trail on Mt. Chiri, Cholla Nam-do. Elevation 1,410 meters. Fern to 1 meter, rhizome upright; sori on both sides of midrib; indusium reinform, attached laterally. Plants.

319257. *LEMMAPHYLLUM MICROPHYLLUM* Presl Polypodiaceae.

Col. No. K-466. Growing on *Torreya nucifera*. Plantation 6 km. inland and 25 km. east of Cheju City. Rhizomatous epiphytic fern; fronds dimorphic. Plants.

319258. *LIPARIS* sp. Orchidaceae.

Col. No. K-403. In dense shade on leaf mold, near road west from Kang Nung. Herbaceous perennial. Plants.

319259 and 319260. *SEDUM LEVEILLEANUM* Hamet Crassulaceae.

319259. Col. No. K-15. In open, wind-swept area near top of Mt. Halla, Cheju Island. Very low, fleshy narrow leaved perennial; flowers probably white—not fully open. Plants.

319260. Col. No. K-165. Growing on rocks, above No Go Dan, Mt. Chiri, Cholla Nam-do. Rosette forming succulent; flowers white to very light pink. Plants.

319261. *COELOGLOSSUM VIRIDE* var. *BRACTEATUM* (Willd.) Richt. Orchidaceae.

Col. No. K-107. Growing on steep slope of road from Taek Wal Yong to Jin Boo, Kangwon-do. Elevation 690 meters. Small orchid. Not seen in flower. Plant.

319262. *PINELLIA TERNATA* (Thunb.) Breit. Araceae.

Col. No. K-180. In landscape planting in front of Administration Building, College Campus, Suwon. Cormous perennial to one-half meter high; leaves three lobed. Corms.

319263. *PLEOPELTIS USSURIENSIS* Regel & Macke.

Col. No. K-68. About 850 meters on west side of Park Tal Mountain at east end of Mt. Jorak Range, Kangwon-do. Low fern spreading by rhizomes; growing on *Quercus mongolica*; sori in 2 lines; no indusium. Plants.

319264. *POLYSTICHUM STANDISHI* (Moore) C. Chr. Aspidiaceae.

Col. No. K-40. In densely shaded moist woods along trail on east coast of Ullung-do. Elevation 270 meters. Fern one-half to 1 meter high; fronds three-pinnatifid; no fertile fronds found; creeping lateral rhizome. Rhizomes.

319265. *PYRROSIA HASTATA* (Thunb.) Ching Polypodiaceae.

Col. No. K-113. On exposed cliff, Mt. Baek Yang, Cholla Nam-do. Leather-leaved fern; thick indumentum on underside of entire frond. Plant.

319266. *SEDUM POLYTRICHOIDES* Hemsl. Crassulaceae.

Col. No. K-97. Growing in moss on rocky ledges along trail on Mt. Odai, Kangwon-do. Very low herbaceous perennial. Flowers small, yellow. Plants.

## 319240 to 319271—Continued

319267. *SEDUM ROTUNDIFOLIUM* Lam.

Col. No. K-127. Growing on rocky outcrops in full sun on crest of Chung Ke Mountain, Suwon. Elevation 300 meters. Fleshy leaved perennial; flowers terminal; not open at time of collection. Plants.

319268. *SEDUM SPECTABILE* Bor.

Col. No. K-188. Along rocky wall of streambank, Kwang Kyo, Kyunggi-do. Fleshy leaved perennial to about one-third meter; flowers interminal, flat-topped corymb, deep rose pink. Plants and cuttings.

319269. *SEDUM VIVIPARUM* Maxim.

Col. No. K-91. Growing on rocky ledges in open areas along trail on Mt. Odai, Kangwon-do. Herbaceous perennial with woody rootstalk up to 5 or 6 dm. tall; leaves lance-elliptic; crenate, in groups of 3. Plants.

319270 and 319271. *VIOLA VARIEGATA* Fisch. ex Link Violaceae. Violet.

319270. Col. No. K-114. Growing in rocky soil in shade along trail on Mt. Baek Yang, Cholla Nam-do. Elevation 360 meters. Herbaceous perennial; leaves cordate, blunt, serrate; veins white. Plants.

319271. Col. No. K-154. Sin Won on Mt. Chiri, Cholla Nam-do. Elevation 700 meters. Herbaceous, rosette-forming perennial; leaves cordate; veins white. Not seen in flower. Stoloniferous. Plants.

## 319272 to 319331.

From Korea. Plant material collected by E. G. Corbett and R. W. Lighty, agricultural explorers, Crops Research Division, United States Department of Agriculture, Beltsville, Maryland. For U.S.D.A.-Longwood Cooperative Program. Numbered Mar. 27, 1967.

319272 and 319273. *ABELIOPHYLLUM DISTICHUM* Nakai Oleaceae.

319272. Col. No. K-215. Garden at residence of Professor Tchang Bok Lee, Suwon. Deciduous shrub; leaves opposite; one color form. Not seen in flower. Cuttings.

319273. Col. No. K-216. Garden at residence of Professor Tchang Bok Lee, Suwon. Deciduous shrub; leaves opposite; different color than P.I. 319272. Cuttings.

319274. *ATRACYLIS LYRATA* (Sieb. & Zucc.) Hand.-Mazz. Compositae.

Col. No. K-244. In sandy soil on ridge line, Mt. Sokni, Chunchong Pukto. Elevation 600 meters. Herbaceous perennial to 1 meter high. Leaves alternate, ovate-elliptic. Flowers white. Plants.

319275 to 319280. *BUXUS MICROPHYLLA* var. *KOREANA* Nakai ex Rehder Buxaceae.

319275. Col. No. K-78. Taek Wal Yong Alpine Experiment Station, Kangwan-do. Elevation 850 meters. Dwarf evergreen shrub; leaves small. Cuttings.

319276. Col. No. K-79. Taek Wal Yong Alpine Experiment Station, Kangwan-do. Dwarf evergreen shrub; leaves small. Branching is horizontal. Cuttings.

319277. Col. No. K-80. Taek Wal Yong Alpine Experiment Station, Kangwan-do. Dwarf evergreen shrub. Typical form of plant. Cuttings.

319278. Col. No. K-178. On college campus, Suwon. Dwarf evergreen shrub; about 0.5 meter high. Leaves narrow. Plant very compact, dense. Cuttings.

319279. Col. No. K-179. On college campus, Suwon. Evergreen shrub to 0.75 meter high. Leaves very dark green. Cuttings.

## 319272 to 319331—Continued

## 319275 to 319280—Continued

319280. Col. No. K-289. Cho Kye Sa Temple, Seoul. Very small, narrow-leaved form.

319281 to 319283. *CAMELLIA JAPONICA* L.

319281. Col. No. K-17. On road from Sogwipo to Cheju, Cheju Island, growing at edge of woods. Elevation 480 meters. Evergreen shrub 12 to 15 feet high. Not seen in flower. Cuttings.

319282. Col. No. K-18. On road from Sogwipo to Cheju, Cheju Island, growing at edge of woods. Elevation 480 meters. Evergreen shrub to 10 feet high; fastigiate. Not in flower. Cuttings.

319283. Col. No. K-20. On road from Sogwipo to Cheju, Cheju Island, growing at edge of woods. Elevation 480 meters. Evergreen shrub to 8 feet high; leaves light yellow-green. Not seen in flower. Cuttings.

319284 and 319285. *CAMELLIA SASANQUA* Thunb. *Sasanqua camellia*.

319284. Col. No. K-517. 'Ginrei'. Kurume City, Japan. In Garden of Nakahara Chyorakuen. Called Higo Sasanqua by nurseryman. Cuttings.

319285. Col. No. K-518. 'Onishiki'. Kurume City, Japan. In garden of Nakahara Chyorakuen. Called Higo Sasanqua by nurseryman. Cuttings.

319286. *CARYOPTERIS INCANA* (Thunb.) Miquel Verbenaceae. **Common bluebeard.**

Col. No. K-462. On sea coast 20 km. east of Cheju City. Subfruticose plant. Flowers blue. Cuttings.

319287. *CIMICIFUGA DAHURICA* (Turcz.) Huth Ranunculaceae.

Col. No. K-228. On Mt. Sokni, Chunchong Pukto. In shady, moist ravine. Elevation 600 meters. Herbaceous perennial to 2 meters high. leaves divided. Flowers white. Plants.

319288. *DEUTZIA GLABRATA* Kom. Saxifragaceae.

Col. No. K-237. Along trail up Mt. Sokni, Chunchong Pukto. Elevation 480 meters. Deciduous shrub to 2 meters high. Not seen in flower. Cuttings.

319289. *ELAEAGNUS UMBELLATA* Thunb. *Elaeagnaceae*. **Autumn elaeagnus.**

Col. No. K-261. Along trail on Mt. Tok-Yu, Ko Chun. In dry area. Deciduous shrub to 3 meters high. Shoot tips with leaves silvery on both surfaces. Cuttings.

319290. *EUONYMUS SIEBOLDIANA* Blume *Celastraceae*.

Col. No. K-197. In pine forest near Forest Experiment Station, Kwang Nung, Kyonggi-do. Deciduous shrub to 7 meters high. Leaves lanceolate, about 20 cm. long. Cuttings.

319291. *FONTANESIA PHILLYRAEOIDES* Labill. *Oleaceae*. **Syrian-privet.**

Col. No. K-195. In small arboretum, Forest Experiment Station, Kwang Nung, Kyonggi-do. Deciduous shrub to 2.5 meters high. Branchlets thin and graceful. Fruit winged. Cuttings.

319292. *GENTIANA SCABRA* var. *BUERGERI* (Miq.) Maxim. *Gentianaceae*.

Col. No. K-82. On grounds of Taek Wal Yong Alpine Experiment Station, Kangwon-do. Elevation 850 meters. Fleshy-rooted perennial with short rhizome, 1 to 1½ meters high. Leaves lance-ovate. Not seen in flower. Plants.

## 319272 to 319331—Continued

319293. *HEMEROCALLIS* sp. Liliaceae.

Col. No. K-473. Suwon. At edge of dry pine woods. Perennial; fleshy rooted, strap leaved. Plant.

319294 and 319295. *HOSTA LONGIPES* (Fr. & Sav.) Matsum. Liliaceae.

319294. Col. No. K-138. In shade and sun along trail on Mt. Chiri, Cholla Nam-do. Elevation 1,350 meters. Herbaceous perennial with fleshy roots. Leaves cordate to narrower in some specimens. Plants.

319295. Col. No. K-238. On Mt. Sokni, Chunchong Pukto. Growing in shade on mossy rocks. Elevation 540 meters. Herbaceous perennial to one-half meter high. Not seen in flower. Plants.

319296. *JUNIPERUS CHINENSIS* f. *AUREA* (Young) Beissn. Pinaceae.

Col. No. K-212. Grounds of Forest Experiment Station, An Yang, Kyonggi-do Province. Needleleaf evergreen to 4 meters high. Tips of many branches yellow-white. Cuttings.

319297 and 319298. *LILIUM AMABILE* Palibin Liliaceae.

319297. Col. No. K-159. At No Go Dan, Mt. Chiri, Cholla Nam-do. In open, shrubby growth. Elevation 390 meters. Bulbous perennial to 1 meter high. Leaves linear; 1 cm. across. Bulb.

319298. Col. No. K-242. Mt. Sokni, Chunchong Pukto. In sandy soil. Elevation 600 meters. Bulbous perennial to 6 dm. high. Leaves pubescent, scattered; bulbs elongate. Bulbs.

319299 and 319300. *LILIUM DISTICHUM* Nakai

319299. Col. No. K-329. In shady moist areas along trail up western slope of Mt. Sorak. Between Ose Am and Pong Jeung Am. Elevation 810 meters. Bulbous perennial to 1 meter high. Leaves whorled; stems rooting; scales jointed. Bulb.

319300. Col. No. K-366. Near top of Mt. Sorak. Growing in open on eastern slope. Elevation 1,530 meters. Bulbous perennial. Leaves whorled; stems rooting. Bulb scales jointed. Bulb.

319301 to 319304. *LILIUM HANSONII* Leichtl.

Hanson lily.

319301. Col. No. K-33. Bong Nai Waterfall, Ullung-do. In low shrubby moist area. Elevation 360 meters. Bulbous perennial to 8 dm. Stem roots, scales white; leaves in 2 whorls, to 150 cm., obovate; bulb shallow. In fruit. Bulbs.

319302. Col. No. K-41. Along east coast of Ullung-do, in dense woods. Elevation 330 meters. Similar to P.I. 319301. Bulbs.

319303. Col. No. K-50. On north face of Mt. Songin-Bong, Ullung-do. Growing under *Fagus*. Elevation 970 meters. Similar to P.I. 319301. Bulbs.

319304. Col. No. K-51. On south slope of Mt. Songin-Bong, Ullung-do. Growing among bamboo. Elevation 970 meters. Similar to P.I. 319301. Bulbs.

319305. *LILIUM LEICHTLINII* var. *MAXIMOWICZII* (Regel) Baker

Col. No. K-94. On temple grounds, Mt. Odai, Kangwon-do. Growing on open grassy slope. Elevation 690 meters. Bulbous perennial to 8 dm. high. Stem rooting. Flower orange, spotted brown, to 8 cm. across; bulbs round. Bulbs.

319306 to 319312. *LILIUM MIQUELIANUM* Makino

319306. Col. No. K-66. On Park Tal Mt. east slope of Sorak Range, Kangwon-do. Elevation 900 meters. Whorled leaves, single whorl; stem rooting; bulbs shatter easily, jointed scales up to 3 segments; flower bilaterally symmetrical, 4 upper, 2 lower tepals face outward, metallic, light orange, sparse spots. Bulbs.

## 319272 to 319331—Continued

## 319306 to 319312—Continued

319307. Col. No. 81. On grounds of Taek Wal Yong Alpine Experiment Station, Kangwon-do. Elevation 850 meters. Bulbous perennial, to 9 dm. high; 1 whorl plus leaf below. Stem rooting; scales not jointed; bulbs ovate, to 2.5 cm. long. Leaves lance-elliptic. Whorls about 17 cm. across. Two of 12 plants had stem roots. Bulbs.
319308. Col. No. K-130. In shaded area off trail up to No Go Dan, Mt. Chiri, Cholla Nam-do. Elevation 360 meters. Bulbous perennial. Leaves whorled, whorls 5 to 6 cm. across. Scales not jointed. No stem roots. Bulbs.
319309. Col. No. K-194. Sandy soil in forest of Forest Experiment Station, Kwang Nung, Kyungii-do. Bulbous perennial to 1 meter high. Leaves whorled; scales entire. No stem roots. Bulbs.
319310. Col. No. K-227. Mt. Sokni, Chunchong Pukto, in moist organic soil. Elevation 300 meters. Bulbous perennial to 6 dm. high. Leaves whorled; bulb scales not jointed; no stem roots. Bulbs.
319311. Col. No. K-258. Along trail to Mt. Tok-Yu, Ko Chun. Bulbous perennial. Scales jointed; stems rooting. Bulbs.
319312. Col. No. K-326. In shady, moist areas along trail up Mt. Sork, western slope. Elevation 750 meters. Bulbous perennial. Leaves whorled; scales jointed; stems rooting. Bulbs.
319313. *LILIUM TIGRINUM* var. *FORTUNEI* Hort.  
Col. No. K-36. On face of cliff along trail to Bong Nai Waterfall. Elevation 300 meters. Bulbous perennial to 1.5 meters high. Leaves lanceolate. Flowers orange spotted with black. Bulblets axillary on upper half of stem. Bulblets.
319314. *PHILADELPHUS TENUIFOLIUS* Rupr. Saxifragaceae.  
Col. No. K-115. Steep slope on Mt. Baek Yang, Cholla Nam-do, growing in partial shade. Elevation 420 meters. Deciduous, to 3 meters high. Leaves opposite, ovate-acuminate. Not seen in flower. Cuttings.
319315. *PINUS DENSIFLORA* Sieb. & Zucc. Pinaceae. **Japanese red pine.**  
Col. No. K-232. Mt. Sokni, Chunchong Pukto. Growing in sandy soil on ridge line. Elevation 630 meters. Needleleaf evergreen to 20 meters high. Bark peeling, reddish. Seedlings.
319316. *POLYGONATUM INFLATUM* Koma. Liliaceae.  
Col. No. K-199. Near Forest Experiment Station, Kwang Nung, Kyunggi-do. Moist sandy soil in deep shade in mixed deciduous woods. Herbaceous perennial to  $\frac{3}{4}$  meter high. Leaves elliptic. Stout rhizome; stem hollow. Roots.
319317. *POLYGONATUM INVOLUCRATUM* (Fr. & Sav.) Maxim.  
Col. No. K-201. Kwang Nung, Kyunggi-do. Moist sandy soil in mixed deciduous forest. Herbaceous perennial. Leaves small, elliptic. Single fruit, blue, enclosed in 2 bracts. Slender rhizome. Roots.
319318. *POPULUS MAXIMOWICZII* A. Henry Salicaceae. **Japanese poplar.**  
Col. No. K-90. Trail on Mt. Odai, Kangwon-do. Growing on bank of stream. Elevation 780 meters. Deciduous tree to 12 meters high. Buds elongate, pointed. Bark grayish white. Cuttings.
319319. *RHODODENDRON BRACHYCARPUM* var. *ROSEUM* Koidz. Ericaceae.  
Col. No. K-321. Trail to summit of Mt. Sorak. Growing in shade. Elevation 870 meters. Evergreen shrub to 2 meters high. Leaves lepidote. Plants.

## 319272 to 319331—Continued

## 319320. RHODODENDRON CHRYSANTHUM Pall.

Col. No. K-49. At top of Mt. Songin-Bong, Ullung-do. In partial shade. Elevation 980 meters. Broad-leaved evergreen shrub to 2 meters high. Not seen in flower. Cuttings.

## 319321. RHODODENDRON YEDOENSE var. POUKHANENSE Nakai

Col. No. K-129. On trail from temple to No Go Dan on Mt. Chiri, Cholla Nam-do. Growing in semishade. Elevation 300 meters. Dwarf shrub, possibly from pruning; deciduous. Leaves tend toward linear. Not seen in flower. Cuttings.

## 319322. SALIX CHAENOMELOIDES Kimura Salicaceae.

Col. No. K-280. Along streambed near Ok Chun. Tall deciduous tree to 20 meters high. Leaves elliptic. Stipules large on young branches. Cuttings.

## 319323. SALIX KOREENSIS Anderss.

Col. No. K-207. Along rocky streambank, Kwang Nung, Kyunggi-do. Deciduous tree to 10 meters high. Leaves linear-lanceolate. Cuttings.

## 319324. SAXIFRAGA FORTUNEI (Maxim.) Hook. f. Saxifragaceae.

Col. No. K-146. Growing on rocks in partial shade along trail on Mt. Chiri, Cholla Nam-do. Elevation 1,440 meters. Rosette forming perennial. Flowers in a panicle, white. Zygomorphic. Plants.

## 319325. SEDUM ERUBESCENS var. JAPONICUM (Maxim.) Ohwi Crassulaceae.

Col. No. K-276. On cliff near road from Muu Ju to Ok Chun. Growing in full sun. Fleshy-leaved herb to about 4 dm. when not in flower. Plants.

## 319326. SPIRAEA FRITSCHIANA Schn. Rosaceae.

Col. No. K-72. O Saik, Kangwon-do. Along streambed. Deciduous shrub to 1 meter high, spreading. Inflorescence a flat-topped cyme. Not seen in flower. Cuttings.

## 319327. SPIRAEA PRUNIFOLIA f. SIMPLICIFLORA Nakai

Col. No. K-71. At O Saik, Kangwon-do. Growing in open along stream bed. Elevation 100 meters. Deciduous, to one meter high. Leaves lanceolate, serrate. Not seen in flower. Cuttings.

## 319328. TAXUS CUSPIDATA Sieb. &amp; Zucc. Taxaceae. Japanese yew.

Col. No. K-443. In open alpine meadow, Mt. Halla, Cheju Island. Elevation 1,500 meters. Needleleaf evergreen shrub to 1.5 meters high. Needles flat. Cuttings.

## 319329. VIBURNUM KOREANUM Nakai Caprifoliaceae.

Col. No. K-152. In semishade along trail on Mt. Chiri, Cholla Nam-do. Elevation 1,380 meters. Deciduous shrub to 2 meters high. Fruit red. Cuttings.

## 319330. WEIGELA FLORIDA (Bunge) A. DC. Caprifoliaceae.

Col. No. K-6. Northwest slope, Mt. Halla, Cheju Island. On open slopes with *Rhododendron*. Elevation 1,500 meters. Deciduous shrub; medium size. Flowers red (not seen); twigs reddish. Fruit bottle shaped, red brown, immature. Cuttings.

## 319331. WEIGELA SUBSESSILIS L. H. Bailey

Col. No. K-124. On drier slope of Mt. Chung Ke, Suwon. Growing in medium shade and rocky, sandy, soil. Elevation 200 meters. Deciduous shrub to 1½ meters high. Leaves elliptic, almost sessile. Flowers reportedly yellowish. Cuttings.



**319332 to 319385.**

From Mexico. Seeds collected October-December 1966 by H. S. Gentry, agricultural explorer, Crops Research Division, Plant Industry Station, Beltsville, Maryland. Numbered Mar. 29, 1967.

**319332. AGERATUM sp. Compositae.**

Col. No. 22040. Near Palmito, Durango. Elevation 7,000 feet. Perennial bush; many stems; flowers light purple.

**319333. ANNONA CHERIMOLA Mill. Annonaceae. Cherimoya.**

Col. No. 22179. 'Cherimoya'. Market in Uruapan, Michoacan. Elevation 5,000 feet. Fruits large, dark green, pear shaped. Flavor very sweet.

**319334. BEGONIA sp. Begoniaceae.**

Col. No. 22194. Along road to Manzanilla, Colima, 13 miles southwest of Ciudad Colima road fork. Elevation about 1,400 feet. Ornamental herb; large leaves, red peduncles, white flowers.

**319335. CAJANUS CAJAN (L.) Millsp. Leguminosae. Pigeon-pea.**

Col. No. 22273. In barranca. Atenquisque, at east base of Volcan de Colima, Jalisco. Elevation 3,800 feet. Bush or rapid growing shrub; pods many at ends of branches.

**319336. CANAVALLIA sp. Leguminosae.**

Col. No. 22284. Forty miles northwest of Culiacan along Route 15, Sinaloa. Elevation 600 feet. Perennial vine, large.

**319337. CAPSICUM ANNUM L. Solanaceae. Pimento.**

Col. No. 22259. 'Chile'. Market in Uruapan, but from San Luis de la Paz, Guanajuato. Green pepper drying dark red; said to be mildly hot.

**319338 and 319339. CICER ARIETINUM L. Leguminosae. Chickpea.**

**319338.** Col. No. 22246. 'Garbanza'. Market in Uruapan, but from Morelia. Pale colored.

**319339.** Col. No. 22257. 'Garbanza'. Market in Uruapan, Michoacan. Small, brownish.

**319340. DAHLIA sp. Compositae.**

Col. No. 22198. Along road to Manzanillo, Colima, 13 miles southwest of Ciudad Colima road fork. Elevation 1,400 feet. Herb, 4 to 5 dm. high; stems thick; dried flowers on base branches.

**319341. DESMODIUM GLABRUM DC. Leguminosae.**

Col. No. 21994. Arroyo Gochico above San Bernardo. Herb, 1.5 to 1.8 meters high; stems many, gummy.

**319342. DESMODIUM sp.**

Col. No. 22003. Arroyo Tejas, Sierra Charuco, Sonora. Elevation 4,500 to 5,000 feet. Pine and oak slopes. Perennial herb; stems very fine, diffuse. Infrequent on dry rocky slope.

**319343. DESMODIUM sp.**

Col. No. 22004. Arroyo Tejas, Sierra Charuco, Sonora. Elevation 4,500 to 5,000 feet. Pine and oak slopes. Perennial, 20 to 30 cm. high; stems fine, rooting; spreading, forming ground cover.

**319344. DESMODIUM sp.**

Col. No. 22005. Sierra Charuco, Sonora. Elevation 5,000 feet. Pine and oak slopes in moister canyons. Perennial herb; leaves large; woody stems to 1 meter long.

## 319332 to 319385—Continued

319345. *DESMODIUM* sp.

Col. No. 22010. Arroyo Terrasas Rio Mayo, Sonora. Short-tree forest. Elevation 2,000 feet. Annual herb, to 2 meters high; crowns diffuse inflorescence.

319346. *DESMODIUM* sp.

Col. No. 22013. Arroyo de Tejas, Sierra Charuco. Elevation 4,000 feet. Erect annual to 6 dm. high with single leaf.

319347. *DESMODIUM* sp.

Col. No. 22018. Near Curo Prieto along road from Navajoa to Alamosa. Annual summer herb, 6 to 15 dm. high.

319348. *DESMODIUM* sp.

Col. No. 22033. Six miles west of Palmito, Sinaloa. Elevation 6,200 feet. Pine and oak forests. Volcanics. Procumbent with coarse, long ascending peduncles.

319349. *DESMODIUM* sp.

Col. No. 22046. Seven miles west of Durango City along route 40, Durango. Elevation 6,700 feet. Erect perennial with sticky stems.

319350. *DESMODIUM* sp.

Col. No. 22281. Santa Rita Rancho along road to Palmito. Elevation 5,400 feet. Perennial herb, 4 dm. high; diffusive crown. On road bank.

319351. *DESMODIUM* sp.

Col. No. 22283. East of Copala, Sinaloa, 3.5 miles. Elevation 2,700 feet. Perennial herb; stems 1 meter long.

319352. *GALACTIA STRIATA* (Jacq.) Urban Leguminosae.

Col. No. 22000. Near Arroyo de los Mescales, northeast of San Bernardo, Sonora. Vine, slender stemmed; pods narrow.

319353. *HIBISCUS COULTERI* Harv. Malvaceae.

Col. No. 21995. Arroyo Gochico above San Bernardo, Sonora. Annual or biennial herb; 6 to 9 dm. high. Seeding.

319354. *IPOMOEA PEDICELLARIS* Benth. Convolvulaceae.

Col. No. 22017. 'Mantila de Maria'. Near Navajoa, Sonora. Elevation 200 feet. Vine; climbing over small trees and shrubs along arroyo.

319355. *IPOMOEA* sp.

Col. No. 21996. 'Trompillo'. San Bernardo, Sonora. Elevation 1,000 feet. Sandy soil. Annual vine, climbing on shrubs.

319356. *IPOMOEA* sp.

Col. 21997. 'Trompillo'. San Bernardo, Sonora. Annual vine; common in fields and roadsides; hairy calyx.

319357. *IPOMOEA* sp.

Col. No. 21998. San Bernardo, Sonora. Elevation 1,000 feet. Rocky slope. Small climbing vine in shady woods; uncommon. Flowers not seen; seeds comose.

319358. *IPOMOEA* sp.

Col. No. 21999. San Bernardo, Sonora. Sandy soil. Elevation 1,000 feet. Small vine in shady woods along small arroyo.

319359. *IPOMOEA* sp.

Col. No. 22085. Twenty-one miles southeast of Durango along Route 45, Durango. Elevation 6,000 feet. Annual weedy vine.

## 319332 to 319385—Continued

319360. *IPOMOEA* sp.

Col. No. 22093. Near Mesquital 40 miles south of Ciudad Durango, Durango. Elevation 4,800 feet. Weedy vine on trees along arroyo.

319361. *IPOMOEA* sp.

Col. No. 22232. Plan de Barrancas, Jalisco. Elevation 2,800 feet. Vine, in tangle on volcanic rocks.

319362. *IPOMOEA* sp.

Col. No. 22233. Plan de Barrancas, Jalisco. Elevation 2,800 feet. Vine, with thick pedicels.

319363. *IPOMOEA* sp.

Col. No. 22267. La Garita, Jalisco. Elevation 4,200 feet. Wild vine. Seeds maturing early December.

319364. *IPOMOEA* sp.

Col. No. 22268. La Garita, Jalisco. Elevation 4,200 feet. Climbing vine; fruits with long hairy sepals.

319365. *IPOMOEA* sp.

Col. No. 22269. La Garita, Jalisco. Elevation 4,200 feet. Vine with small maturing capsules.

319366 and 319367. *LENS CULINARIS* Medic. Leguminosae. Lentil.

319366. Col. No. 22247. 'Lentejas'. Market in Uruapan, Michoacan. Elevation 4,800 feet. Cultivated.

319367. Col. No. 22254. 'Lentejas'. Market in Uruapan, but brought from Patzcuaro, Michoacan. Seeds light green.

319368 and 319369. *LYCOPERSICON ESCULENTUM* Mill. Solanaceae.

Tomato.

319368. Col. No. 22152. Eight miles south of Uruapan along road to Apatzingan, Michoacan. Elevation 4,500 feet. On stream bank Annual herb, semiscandent; stems to eight feet long; flowers yellow. Fruits small in broad racemes.

319369. Col. No. 22280. East of Capala, Sinaloa 2.5 miles. Elevation 2,400 feet. Stems long, semiscandent; fruits small.

319370. *MINKELERSIA GALACTIOIDES* Mart. & Gal. Leguminosae.

Col. No. 22036. Six miles west of Palmito, Sinaloa. Annual herb trailing on ground under oaks and pines.

319371. *OPERCULINA* sp. Convolvulaceae.

Col. No. 22016. Thorn forest near Navajoa, Sonora. Elevation 200 feet. Coarse vine.

319372. *PACHYRHIZUS EROSUS* (L.) Urb. Leguminosae. Yam-bean.

Col. No. 22265. 'Jicama'. Jocona, Michoacan. Annual herb, erect; spindle shaped; root eaten raw. Locally cultivated.

319373 to 319376. *PISUM SATIVUM* L. Leguminosae. Pea.

319373. Col. No. 22067. 'Chicharo serrano'. Tonachi, 20 miles north of Huachoic, Chihuahua. Elevation 6,500 feet. Cultivated by Tarahumara Indians.

319374. Col. No. 22074. Caborachi, by road 15 miles east of Huachoic, Chihuahua. Elevation 7,500 feet. Cultivated by Tarahumara Indians.

319375. Col. No. 22231. 'Chicharo'. Market in Ciudad Guzman, Jalisco. Elevation 5,000 feet. Smooth; locally grown.

**319332 to 319385—Continued****319373 to 319376—Continued**

**319376.** Col. No. 22253. 'Chicharo'. Market in Uruapan, but brought from Morelia, Michoacan. Small, round.

**319377.** POINSETTIA sp. Euphorbiaceae.

Col. No. 22028. Two to 4 miles above Capala, Sinaloa. Elevation 3,000 feet. Rank growth in rocky gulches. Shrub; branches long; bracts an intense red.

**319378.** RICINUS COMMUNIS L. Euphorbiaceae. **Castorbean.**

Col. No. 22245. 'Iguerillo'. Along road to Apatzingan, Michoacan, 10 miles south of Uruapan. Elevation 4,400 feet. All perennial, to 3.5 meters high; racemes terminal.

**319379 to 319381.** SESAMUM INDICUM L. Pedaliaceae. **Sesame.**

**319379.** Col. No. 22258. 'Ajonjoli'. Market in Uruapan, but grown near Apatzingan. Seeds small, pale yellowish.

**319380.** Col. No. 22293. 'Ajonjoli'. Alamos, Sonora. Cultivated on sandy soils in foothill region.

**319381.** Col. No. 22294. 'Ajonjoli'. Alamos, Sonora. Elevation 1,200 feet. Seed predominately "white". Locally grown.

**319382.** TECOMA sp. Bignoniaceae.

Col. No. 22088. Along road to Mesquital, 25 miles south of Ciudad Durango, in oak woodland. Elevation 6,650 feet. Shrub to 2 meters high; flowers yellow, showy. On mountain slope subject to winter freezes.

**319383 and 319384.** VIGNA SINENSIS (Torner) Savi Leguminosae.

**319383.** Col. No. 22287. 'Frijol riata'. Cuchubampo, Rio Mayo, Sonora. Elevation 800 to 1,000 feet. Annual bush; pods 7 to 8 inches long, whitish; seeds gray. Local.

**319384.** Col. No. 22288. 'Frijol riata'. Cuchubampo, Rio Mayo, Sonora. Elevation 800 to 1,000 feet. Pods 8 inches long, red; seeds large, red. Local.

**319385.** ZINNIA LINEARIS Benth. Compositae.

Col. No. 22052. Along road to Huachochic, Chihuahua, 72 miles west of Parral in grama grassland. Elevation 6,000 feet. Summer annual with yellow rays.

**319386 to 319393.**

From Pakistan. Seeds presented by E. Nasir, Gordon College, Rawalpindi, under P.L. 480 Project A17-CR-5. Numbered Mar. 30, 1967.

**319386.** ADONIS AESTIVALIS L. Ranunculaceae.

Temperate Europe and Asia. Annual, 3 to 6 dm. high; branched mostly toward top; flowers solitary at ends of branches. Cultivated as an ornamental.

**319387.** CARDAMINE IMPATIENS L. Cruciferae.

Widespread in Europe and North and Central Asia. Annual herb, 2.5 to 6 dm. high; seed retention probably poor. Habitat includes roadsides, forests and fields, usually occurring in shade at 1,000 to 3,400 meters.

**319388.** GASTROCOTYLE HISPIDA Bunge Boraginaceae.

Sandy deserts; Egypt, Israel to Pakistan. Annual, bristly, procumbent; stems numerous, simple or branched; flowers solitary in leaf axils. Often found in cultivated fields.

**319386 to 319393—Continued**

**319389.** *IMPATIENS EDGEWORTHII* Hook. f. Balsaminaceae.

Western temperate Himalaya. Elevation 5,000 feet. Annual, tall, robust, branching; fruits probably explosively dehiscent.

**319390.** *IMPATIENS SULCATA* Wall.

Western temperate Himalaya. Elevation 8,000 feet. Annual herb, to 1 meter or more high; fruits probably explosively dehiscent. Does well near water in rich soil.

**319391.** *JURINEA CARDUIFORMIS* Jaub & Sp. Compositae.

Baluchistan. Elevation 6,000 feet. Caulescent biennial herb with large heads. In dry areas.

**319392.** *LITHOSPERMUM TENUIFLORUM* L. f. Boraginaceae.

Mediterranean region, Western Asia to Egypt and Greece. Annual, 1 to 5 dm. high; branching from base; inflorescence a lax raceme.

**319393.** *PICRIS HIERACIODES* L. Compositae.

Widespread in Old World and an introduced weed in United States occurring from New England to Michigan, south to New Jersey, Pennsylvania and Illinois. Annual or biennial herb; tall, corymbosely branched.

**319394 to 319397.**

From Turkey. Seeds presented by Osman Tosum, Ziraat Fakultesi, Ankara, under P.L. 480 Project A22-CR-1. Numbered Mar. 30, 1967.

**319394.** *JURINEA ANATOLICA* Boiss. Compositae.

Perennial herb, 5 to 7 dm. high.

**319395.** *LITHOSPERMUM ARVENSE* L. Boraginaceae.

Native of Eurasia; introduced as weed in waste places nearly throughout United States. Annual from slender taproot; 3 to 8 dm. high; stems often branched from base thence simple to inflorescence; flowers solitary in axils of crowded upper leaves.

**319396.** *MALVA ALCEA* L. Malvaceae.

Europe; naturalized in eastern United States. Perennial; 1 meter or more high; flowers in terminal and axillary clusters. Cultivated as ornamental.

**319397.** *THALICTRUM LUCIDUM* L. Ranunculaceae.

**Narrowleaf meadowrue.**

Europe. Perennial herb; 1 meter or more high; flowers bisexual, small, numerous, crowded in an ovoid or narrow panicle. Cultivated as ornamental.

**319398 to 319402.**

From Spain. Seeds presented by Instituto Nacional de Investigaciones Agronomicas, Plantas Forrajeras y Pratenses, Madrid, under P.L. 480 Project E25-CR-11. Numbered Mar. 30, 1967.

**319398.** *CENTRANTHUS MACROSIPHON* Boiss. Valerianaceae.

Native to Spain. Annual, compact; 3 to 6 dm. high; flowers in dense terminal clusters. Cultivated as ornamental.

**319399.** *CHAMAEPUCE HISPANICA* DC. Compositae.

Annual or biennial herb, thistlelike.

**319400.** *EUPHORBIA MATRITENSIS* Boiss. Euphorbiaceae.

Annual or perennial herb.

**319398 to 319402—Continued****319401. LAPSANA COMMUNIS L. Compositae.**

Common in British Isles, Europe, North Africa, West and Central Asia; introduced in North America. Annual herb, erect, 2 to 9 dm. high; paniculately branched in upper half, branches ascending; heads 1.5 to 2 cm. diameter, 15 to 20 per plant on slender stalks in a more or less corymbose panicle.

**319402. MALVA PARVIFLORA L. Malvaceae.**

Native of Eurasia. Common weed in waste places in United States. Annual, erect or ascending, branched; 3 to 8 dm. high; flowers axillary, short pedicelled.

**319403 and 319404.**

From Israel. Seeds presented by National and University Institute of Agriculture, Rehovot, under P.L. 480 Project A10-CR-10. Numbered Mar. 30, 1967.

**319403. DAUCUS AUREUS Desf. Umbelliferae.**

Mediterranean region. Annual, 1 to 1.5 m. high; stem somewhat corymbose; umbels many rayed.

**319404. LAGOECIA CUMINOIDES L. Umbelliferae.**

Mediterranean region. Annual herb, erect, 2 to 5 dm. high.

**319405 to 319411.**

From Yugoslavia. Seeds presented by Univerza v Ljubljani, Biotehniška Fakulteta, Ljubljana, Krekov, under P.L. 480 Project E30-CR-2. Numbered Mar. 30, 1967.

**319405. BISCUTELLA LAEVIGATA L. Cruciferae.**

Central and southern Europe, Perennial herb; stems 1 to 5 dm. high; simple or branched; flowers in lax or dense racemes, very variable.

**319406. CALTHA PALUSTRIS L. Ranunculaceae.**

Northern North America, Eurasia. Perennial herb; stem hollow, erect or decumbent; occurring in swamps, wet meadows and woods.

**319407. CHAMAEPUCE AFRA DC. Compositae.**

Greece and Yugoslavia. Biennial herb, thistle-like; stem corymbosely branched; heads large, solitary. In rocky subalpine and alpine regions.

**319408. PICRIS ECHIOIDES L. Compositae.**

Mediterranean region; well established weed in United States in waste places, fields, especially in heavy soil. Perennial herb, erect; branched hispid stems, 5 to 12 dm. long; heads many, usually crowded.

**319409. SYMPHYTUM OFFICINALE L. Boraginaceae.****Comfrey.**

Native of Eurasia; escaped or adventive in waste places in North America. Perennial herb, erect, branching, 5 to 10 dm. high; sparsely to densely hirsute; flowers numerous in dense, drooping scorpioid cymes. Cultivated as ornamental.

**319410. THALICTRUM FLAVUM L. Ranunculaceae.****Yellow meadowrue.**

Europe, including Britain. Perennial herb, to 1 m. high; rootstock stoloniferous; flowers bisexual, small, numerous in erect, rather compact corymbose or pyramidal panicle. Cultivated as ornamental.

**319411. THLASPI PERFOLIATUM L. Cruciferae.**

Widespread in Europe; naturalized in North America. Annual, 1 to 3 dm. high. Weed of arable land and waste places.

**319412. PICRIS JAPONICA** Thunb. Compositae.

From Korea. Seeds presented by Tchang Bok Lee, College of Agriculture, Seoul National University, Suwon, under P.L. 480 Project A13-CR-1. Numbered Mar. 30, 1967.

Biennial, often branched, 3 to 8 dm. high. Considered by some to be a variety of *P. hieracioides*.

**319413. BRASSICA CAMPESTRIS** L. Cruciferae. **Bird rape.**

From India. Seeds presented by J. N. Rai, Botany Department, Lucknow University, Lucknow, under P.L. 480 Project A7-CR-37. Numbered Mar. 30, 1967.

'Sarson'. Prain.

**319414. AMMI COPTICUM** L. Umbelliferae.

From Ethiopia. Seeds collected by R. E. Perdue, Jr., New Crops Research Division, Plant Industry Station, Beltsville, Maryland. Numbered Mar. 30, 1967.

Col. No. 6301. Cultivated in India and Pakistan for seeds. Distributed widely in West Asia, Southern Europe and Northern and Eastern Africa.

Annual herb, medium sized, 3 to 6 dm. high.

**319415. OENOTHERA CLAVAEFORMIS** Torr. & Frem. Onagraceae.

From the United States. Seeds collected by H. S. Gentry, agricultural explorer, Crops Research Division, Plant Industry Station, Beltsville, Maryland. Numbered Mar. 30, 1967.

Col. No. 20589. Desert washes and flats, Southern California, Arizona, Nevada, Sonora and Baja California. Annual with one to several, erect to ascending, mostly unbranched stems from base, 0.5 to 5 dm. high, inflorescence in racemes to 2.5 dm. long.

**319416. AMSINCKIA TESSELLATA** A. Gray Boraginaceae.

From Mexico. Seeds collected by A. S. Barclay, Crops Research Division, Plant Industry Station, Beltsville, Maryland. Numbered Mar. 30, 1967.

Col. No. 2001. Southern California to eastern Washington, Nevada, Arizona, and Lower California. Annual herb, erect, 2 to 6 dm. high; flowers in spikes becoming 5 to 12 cm. long. Dry sandy or gravelly places below 6,000 feet.

**319417. BRASSICA CAMPESTRIS** L. Cruciferae.

From the United States. Seeds presented by Montana State University, Bozeman, Mont. Numbered Mar. 30, 1967.

No. 224.

**319418 to 319422. ZEA MAYS** L. Gramineae. **Corn.**

From Colombia. Seeds presented by the Rockefeller Foundation, Bogota. Numbered Mar. 31, 1967.

319418. Ecu.402-8.

319421. Diacol V.551 x 2072  
(S.D.12)

319419. Ecu.425-10.

319420. Ecu.578-9 x 2072 (S.D.12).

319422. Cun.365 x 2072 (S.D.12).

**319423 to 319436. SOLANUM TUBEROSUM** L. Solanaceae. **Potato.**

From Mexico. Tubers presented by the Rockefeller Foundation, Mexico City. Received Apr. 3, 1967.

319423. 'Alpha'.

319425. 'Atzimba'.

319424. 'Anita'.

319426. 'Bertita'.

**319423 to 319436—Continued**

- |                     |                     |
|---------------------|---------------------|
| 319427. 'Conchita'. | 319432. 'Gabriela'. |
| 319428. 'Dorita'.   | 319433. 'Greta'.    |
| 319429. 'Elenita'.  | 319434. 'Hilda'.    |
| 319430. 'Erendira'. | 319435. 58-ES-37.   |
| 319431. 'Florita'.  | 319436. 61-EA-5.    |

**319437. MALUS SYLVESTRIS Mill. Rosaceae. Apple.**

From India. Scions presented by the Division of Plant Introduction, Indian Agricultural Research Institute, New Delhi. Received April 4, 1967.

'Maharaji'. Origin Srinagar.

**319438 to 319454.**

From Mexico. Seeds collected October-December 1966 by H. S. Gentry, agricultural explorer, Crops Research Division, Plant Industry Station, Beltsville, Maryland. Numbered Apr. 4, 1967.

**319438 to 319446. PHASEOLUS ACUTIFOLIUS A. Gray Leguminosae.**

319438. Col. No. 22001. Arroyo de Terrasas, Rio Mayo, Sonora. Elevation 2,000 feet. Vine small, slender.
319439. Col. No. 22009. Arroyo de Terrasas, Rio Mayo, Sonora. Short-tree forest. Elevation 2,000 feet. Vine, small, dry, leafless; pods dry. October 16.
319440. Col. No. 22026. Rancho Ortaliza near San Bernardo, Rio Mayo, Sonora. Field side. Vine.
319441. Col. No. 22043. Along Route 45 by water-marked rocks, 20 miles northeast of Ciudad Durango. Elevation 6,000 feet. Grama grassland. Annual vine, slender.
319442. Col. No. 22292. San Bernardo, Sonora. Elevation 1,000 feet. North cerro slope. Vine fine stemmed; pods dry.
319443. Col. No. 22295. 'Serowi'. Movas, Sonora. Beans small, white. Cultivated with summer rains.
319444. Col. No. 22300. Sierra west of Tonichi, Sonora. Elevation 1,500 to 2,000 feet. Moist rocky canyon. Vines small, slender, dry.
319445. Col. No. 22020. Microhondus Station east of highway near Sonora border, Sinaloa. Elevation 1,200 feet. Annual ground vine with good set of curved pods; flowers pink. On gravel borders of new road.
319446. Col. No. 22022. Crossroad Cosala and Highway 15, Sinaloa. Elevation 300 feet. Short-tree forest, rocky slope. Perennial climbing vine; stems fine; flowers pink; pods small.
319447. PHASEOLUS sp.  
Col. No. 22086. Along road to Mesquital, 25 miles south of Ciudad Durango. Elevation 6,650 feet. Oak grassland, north slope, gully. Small annual or short-lived perennial herb on ground and in brush; flowers yellow.
319448. PHASEOLUS ADENANTHUS G. Meyer  
Col. No. 22156. Along road to Apatzingan, Michoacan, 13 miles south of Uruapan. Elevation 4,200 feet. Perennial vine on steep grassy slope with oaks; flowers lavender fading yellow; pistil long; pods flat. Locally common.
319449. PHASEOLUS COCCINEUS L. **Scarlet runner bean.**  
Col. No. 22140. 'Patola'. Market in Aguascalientes, Aguascalientes. Elevation 6,000 feet. Beans large, white or variously colored; grown without poles, forming bushy growth with short runners. Uncommon.



**319438 to 319454—Continued**

319450 and 319451. *PHASEOLUS METCALFEI* Woot. & Standl. **Metcalf bean.**

319450. Col. No. 22007. Arroyo Tejas, Sierra Charuco, Sonora. Rocky oak slope. Elevation 4,500 feet. Ground vine, coarse. Sparsely scattered.

319451. Col. No. 22056. Barranca 19 miles by road west of Guachochic, Chihuahua. Elevation 7,500 feet. Perennial ground vine on rocky soil with pine needle litter.

319452 and 319453. *PHASEOLUS STROBILOPHORUS* (B. L. Robins.) Morton

319452. Col. No. 22008. West side of Sierra Charuco, four miles northwest of Algodones, Sonora. Elevation 3,500 feet. Steep rocky talus with lower oaks. Large perennial vine on bushes and trees; stems thick, to 1½ inches diameter at base; leaves small; pods 3 to 5 inches long, large, succulent, green, on long hanging peduncles. Rare.

319453. Col. No. 22021. Microhondas station on cerro east of highway near Sonora border, Sinaloa. Elevation 1,000 feet. Short-tree forest. Large vine on trees and shrubs; perennial from tuberous root 3 to 5 inches diameter. Pods large, round. No flowers.

319454. *RHYNCHOSIA DISCOLOR* Mart. & Gal. **Leguminosae.**

Col. No. 22045. Seven miles west of Durango along Route 40, Durango. Grama Grassland. Elevation 6,700 feet. With oak regrowth. Perennial vine, woody; flowers yellow.

**319455 to 319458. SACCHARUM (hybrid) Gramineae.****Sugarcane.**

From the Dominican Republic. Seeds presented by the Central Romana Corporation, La Romana. Received Apr. 4, 1967.

319455. CR66-231. CB44-105 × Uba Marot.

319456. CR66-457. CL41-223 × Uba Marot.

319457. CR66-460. PR 1000 × CP 52-43.

319458. CR66-280. Q 70 × CP 52-43.

**319459 to 319491.**

From Tanzania. Seeds grown in 1966 and presented by Northern Research Centre Tengeru, Arusha. Numbered Apr. 7, 1967.

319459. *CENCHRUS CILIARIS* L. **Gramineae.**

**Buffelgrass.**

T-359. 'Molopo'.

319460 to 319464. *CHLORIS GAYANA* Kunth **Gramineae.**

**Rhodesgrass.**

319460. T-365. 'Chepararia 026'.

319461. T-8364. 'Mpwapwa F16'.

319462. T-8464. 'Mpwapwa V8'.

319463. T-8564. 'Nzoia H18'.

319464. T-8664. 'Mpwapwa F3'.

319465. *CLITORIA TERNATEA* L. **Leguminosae.**

**Asian pigeonwings.**

T-2363.

319466. *DESMODIUM DISCOLOR* Vogel **Leguminosae.**

T-165.

319467. *DESMODIUM DISTORTUM* (Aubl.) Macbride

T-961.

## 319459 to 319491—Continued

319468. *DESMODIUM INTORTUM* (Mill.) Urb.  
T-353.
319469. *DESMODIUM SANDWICENSE* E. Mey.  
T-1066.
319470. *DESMODIUM UNCINATUM* (Jacq.) DC.  
T-166.
319471. *DESMODIUM* sp.  
T-253.
319472. *DOLICHOS FORMOSUS* Hochst. ex A. Rich. Leguminosae.  
T-255.
319473. *DOLICHOS LABLAB* L. Hyacinth-bean.  
T-966.
- 319474 to 319479. *GLYCINE WIGHTII* (R. Grah. ex Wight & Arn.) Verdcourt  
Leguminosae.
319474. T-664. K51394. Grassland Research Station, Kitale, Kenya.
319475. T-1263. 'Kisongo Masailand'.
319476. T-1363. 'Musa Masailand'.
319477. T-1463. 'Lesiraa Masailand'.
319478. T-1563. 'Aridai Masailand'.
319479. T-2063. 'Moshi'.
319480. *INDIGOFERA SPICATA* Forsk. Leguminosae.  
T-8263.
319481. *INDIGOFERA SUBULATA* Vahl ex Poir.  
T-8163.
319482. *LEUCAENA LEUCOCEPHALA* (Lam.) de Wit Leguminosae. Leadtree.  
T-553.
319483. *LOTONONIS BAINESII* Baker Leguminosae.  
T-2456.
319484. *MELINIS MINUTIFLORA* Beauv. Gramineae. Molassesgrass.  
T-6664.
319485. *PANICUM COLORATUM* L. Gramineae.  
T-666.
319486. *PANICUM MAXIMUM* Jacq. Guineagrass.  
T-6264.
319487. *RHYNCHOSIA MINIMA* (L.) DC. Leguminosae.  
T-1663.
319488. *RHYNCHOSIA SENNAARENSIS* Hochst. ex Schweinf.  
T-1963.
319489. *SETARIA SPHACELATA* (Schum.) Stapf & Hubb. ex M. B. Moss  
Gramineae. Millet.  
T-566. 'Improved Nandi'.

**319459 to 319491—Continued**319490. *STYLOSANTHES GRACILIS* H.B.K. Leguminosae.

T-776.

319491. *TRIFOLIUM RUEPPELIANUM* Fresen. Leguminosae.

T-3863.

**319492 to 319523. ORYZA SATIVA L. Gramineae. Rice.**

From Mexico. Seeds presented by National Institute of Agricultural Research, Department of Agriculture and Livestock, Chapingo. Numbered Apr. 10, 1967.

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|-------------------------------|-----------------------------|
| 319492. Bbt. 50/2 × Gulfrose  | 319508. I.J.32-19-5.        |
| B589A1-3-1-1-2-2C-1C.         | 319509. I.B.T. No. 4.       |
| 319493. Bbt. 50/2 × Gulfrose  | 319510. I.B.T. No. 36.      |
| B589A18-21-2-2-3.             | 319511. V65-S. 53.          |
| 319494. Bbt. 50/2 × Jojutla   | 319512. Mo. V65-S. 87.      |
| 319495. B5111A1-108-1-5-2-1-4 | 319513. Mo. V65-S. 81.      |
| 319496. C24-16-13-3-2-3.      | 319514. Mo. V65-S. 92.      |
| 319497. C24-16-13-5-2-7.      | 319515. Mo. V65-S. 93.      |
| 319498. C26-12-2-2-5-9.       | 319516. Mochis A64.         |
| 319499. Cempoala A66.         | 319517. Morado Criollo.     |
| 319500. Corerepe A67.         | 319518. Morelos 2.          |
| 319501. Costeno A66.          | 319519. Pc.6-2416-Mz-62.    |
| 319502. Cotaxtla A66.         | 319520. Piedras Negras A67. |
| 319503. CP 231 x HO12.        | 319521. Rexoro × Colusa) ×  |
| 319504. CP 231 x SLO 17.      | I.J.30-16 C86-13-16-Cu2-    |
| 319505. Fuerte A64.           | Cu1-FVI-FV5.                |
| 319506. Guasave A64.          | 319522. Rio Blanco A66.     |
| 319507. I.J.30-16.            | 319523. Sinaloa A64.        |

**319524. LENS CULINARIS Medic. Leguminosae. Lentil.**

From Iran. Seeds presented by W. J. Kaiser, United States Department of Agriculture Regional Pulse Improvement Project, Tehran. Numbered Apr. 10, 1967.

From bazaar in Ghazirn, 150 km. west of Tehran.

**319525 to 319533. GLYCINE MAX (L.) Merr. Leguminosae. Soybean.**

From India. Seeds presented by R. Matsuura, United States Department of Agriculture Regional Pulse Improvement Project, New Delhi. Numbered Apr. 10, 1967.

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| 319525. E.C. 132-2. UN 734. From China.          |
| 319526. E.C. 16111. 'Mantichin'. From China.     |
| 319527. E.C. 16119. 'Pin-tin-hwang'. From China. |
| 319528. E.C. 34109. 'Tsinj-juang'.               |
| 319529. E.C. 36895. 'Taitu Kaohsiung 1'.         |
| 319530. E.C. 36896. 'Taitu Kaohsiung 3'.         |
| 319531. E.C. 36897. 'Taitu Kaohsiung 5'.         |

**319525 to 319533—Continued**

319532. E.C. 37053. 'Pin-Din-Kuaw'.

319533. I.C. 193. 'Nanking No. 417'.

**319534 to 319538. GLYCINE MAX (L.) Merr. Leguminosae.****Soybean.**

From Japan. Seeds of Chinese origin collected in 1964 from the China Economy-Trade Exhibition, Chuo-ku, Tokyo. Presented through the American Soybean Association. Numbered Apr. 10, 1967.

319534. 'Hoshu No. 4'.

319537. 'Tono No. 1'.

319535. 'Keisanboku'.

319538. No. 6014.

319536. 'Shika No. 4'.

**319539. ORYZA SATIVA L. Gramineae.****Rice.**

From Thailand. Seeds presented by R. Purnariksha, Sukhunvir, Bangkok. Numbered Apr. 10, 1967.

No data.

**319540. LITCHI CHINENSIS Sonner Sapindaceae.****Lychee.**

From Madagascar. Seeds presented by Luis Marden, National Geographic Society, Washington, D. C. Received Apr. 10, 1967.

From Tananarive.

**319541 to 319547. IPOMOEA BATATAS (L.) Lam. Convolvulaceae.****Sweetpotato.**

From Taiwan. Tubers presented by the Plant Industry Division, Joint Commission on Rural Reconstruction, Taipei. Received Apr. 17, 1967.

319541. C41-5. (Tainung No. 17 × Nancy Hall). Vines moderately large, medium long, stems dark green with purple. Leaves cordate, green with reddish purple base. Roots pear-shaped spindle; skin light brown; flesh deep orange; vitamin A 7,800 I.U./100 grams; quality very good to excellent; dry matter 29 to 31%.

319542. C41-74. (Tainung No. 17 × Nancy Hall). Vines slightly small, long, 1.5 to 2.0 meters; stems light green with purple, hairy. Leaves cordate. Roots light yellow brown; long spindle in shape; flesh orange yellow, quality very good; dry matter 29 to 30%.

319543. Tainung No. 27. (American Yellow Skin × White Holland). Vines small, medium long, slightly hairy; stems yellow green, tinged reddish purple. Leaves three lobed. Roots orange yellow; spindle shaped, small to medium in size, flesh light yellow; quality very good; dry matter 36.6 to 38.8%. Medium maturity; resistant to *Fusarium* and contracted disease (*Sphaceloma batatas* Sawada).

319544. Tainung No. 44. (Foreign variety × Tainung No. 14). Vines moderately large, long, 70 to 100 centimeters; stem reddish purple, smooth. Leaves 3- or 5-lobed. Roots russet brown; pear shaped, short spindle; flesh light yellow; quality very good; dry matter 36.2%.

319545. Tainung No. 57. (Tainung No. 27 × Nancy Hall). Vines short, slightly hairy; stems coarse, internodes short. Leaves 5-lobed, green with light purple base. Roots yellow brown; fusiform shaped, regular; flesh orange yellow; quality excellent; dry matter 30.4 to 37.7%; vitamin A 2,280 I.U./100 grams. Early maturity, wet tolerant; resistant to *Fusarium*.

319546. Tainung No. 17. (Red Meat × Cake Potato). Vines moderately large, long, slightly hairy; stems yellow green. Leaves 3-lobed or entire, green with deep reddish purple base. Roots reddish purple, long spindle shaped, regular; flesh white; dry matter 36.4 to 40.7%; quality very good. Late maturity, wet tolerant.

**319541 to 319547—Continued**

**319547.** Tainung 23. (White Holland  $\times$  Nancy Hall). Vines large, long, 1 to 1.5 meters; stems yellow green. Leaves reniform, petioles yellow green. Roots cream buff, spindle shaped, flesh light orange yellow; quality excellent; high in dry matter 37.5%.

**319548. FRAGARIA (hybrid). Rosaceae.**

From Belgium. Plants presented by the Directeur, Comite de Recherches du Graisier, Grivegne. Received Apr. 21, 1967.

'Souvenir de Charles Machiroux'.

**319549. JUGLANS REGIA L. Juglandaceae. Persian walnut.**

From Pakistan. Seeds presented by the Agricultural Research Council, Karachi. Received Apr. 24, 1967.

Collected from Hunza area, by the Assistant Director of Agriculture, Gilgit. Five thousand feet above sea level.

**319550 to 319690.**

From Mexico. Seeds collected October-November 1966 by H. S. Gentry, agricultural explorer, Crops Research Division, Plant Industry Station, Beltsville, Maryland. Numbered Apr. 24, 1967.

**319550 and 319551. PHASEOLUS ACUTIFOLIUS var. LATIFOLIUS G. F. Freeman**  
Leguminosae. Tepary bean.

**319550.** Col. No. 22079. 'Frijol blanco'. San Juan del Rio, Durango. Elevation 6,000 feet. Small; white. Bush type. October 1966.

**319551.** Col. No. 22207. 'Frijol blanco'. Market in Ciudad Guzman, Jalisco. Elevation 5,000 feet. Small; white. November 1966.

**319552 to 319690. PHASEOLUS VULGARIS L. Leguminosae. Common bean.**  
San Juan del Rio, Durango. Elevation 5,500 feet.

**319552.** Col. No. 22047. 'Frijol jorocho'. Large buff, angular. Cultivated with summer rains.

**319553.** Col. No. 22048. 'Frijol rata y bayo'. Mixture; sample taken as thrashed; dark gray.

**319554.** Col. No. 22051. Temporales del Huajojitan, Chihuahua. Elevation 5,200 feet. Annual, coarse; pinto type.

**319555.** Col. No. 22053. 'Ojo de cabra'. Guachochic, Chihuahua. Elevation 7,500 to 8,000 feet. Bush type; local.

Store in Guachochic, Chihuahua. Elevation 7,500 to 8,000 feet.

**319556.** Col. No. 22054. Mixture. Bush type; local.

**319557.** Col. No. 22055. 'Mantequilla' and 'Ojo de cabra'. Mixture of two varieties. Bush type; local.

By road, 19 miles west of Guachochic, Chihuahua. Elevation 7,500 feet.

**319558.** Col. No. 22057. 'Frijol Prieto'. In barranca. Small, black, Bush type; versatile for food preparation.

**319559.** Col. No. 22058. 'Frijol de verano'. Small, red. Reported planted by Tarahumare Indians.

**319560.** Col. No. 22059. 'Frijol norteno'. Bush type; reportedly grown by local owner for over 30 years. In canyon.

**319561.** Col. No. 22060. 'Frijol japones'. Bush type. Reportedly grown for over 30 years.

**319562.** Col. No. 22061. 'Frijol amarillo de la sierra'. Large, pale yellow. Bush type.

## 319550 to 310690—Continued

## 319552 to 319690—Continued

319563. Col. No. 22062. 'Frijol de estaca'. Large, gray, black brindled. Pole type; local.
319564. Col. No. 22063. Large, yellow. Pole type.  
Tonachi, 20 miles north of Huachochic, Chihuahua. Elevation 6,500 feet.  
Volcanic canyon. Cultivated by Tarahumare Indians.
319565. Col. No. 22064. 'Frijol amarillo'. Thin, yellow.
319566. Col. No. 22065. 'Frijol blanco'.
319567. Col. No. 22066. 'Frijol bayo'.
- Caborachi, by road 15 miles east of Huachochic, Chihuahua. Elevation 7,500 feet. Cultivated by Tarahumare Indians.
319568. Col. No. 22069. 'Muni laname'. (T.) Yellow.
319569. Col. No. 22071. Large, buff. Bush type.
319570. Col. No. 22072. Variegated. Bush type.
319571. Col. No. 22075. Small, red. Bush type.  
Market in Parral, Chihuahua. Elevation 6,500 feet.
319572. Col. No. 22076. 'Frijol mantequilla'. Bush type; local.
319573. Col. No. 22077. 'Frijol mantequilla gorda'. Pinto, bush type.
319574. Col. No. 22078. 'Frijol rata'. Lavender. Bush type; local.
319575. Col. No. 22080. 'Frijol pinto'. Bush type; local. Easily cooked.
319576. Col. No. 22081. 'Frijol mantequilla'. Bush type. Much cultivated in Durango.
319577. Col. No. 22082. 'Frijol coracho'. Large, buff. Bush type; locally common.
319578. Col. No. 22094. 'Frijol mantequilla'. Nombre de Dios, Durango. Elevation about 5,800 feet. Pinto. Bush type. Planted locally with summer rains.  
Sombrete, Zacatecas. Elevation 7,500 feet.
319579. Col. No. 22096. 'Frijol negro'. Small, black. Bush type.
319580. Col. No. 22097. 'Frijol canelo'. Rosy roan. Bush type.  
Grown with summer rains.
319581. Col. No. 22098. 'Frijol garbancillo'. Pale buff. Bush type.  
Grown with summer rains.  
Fresnillo, Zacatecas. Elevation about 6,000 feet.
319582. Col. No. 22099. Pink. Bush type; local.
319583. Col. No. 22100. 'Frijol bayo garbanzo'. High yielding buff. Bush type. Common. Grown with summer rains.  
Market in Zacatecas. Elevation about 7,500 feet.
319584. Col. No. 22102. 'Aluvia'. Small, white. Bush type; local.
319585. Col. No. 22103. 'Frijol garbancillo'. Small, rounded, pale yellow with yellow eye. Bush type.
319586. Col. No. 22104. 'Frijol barqueno'. Thin; dull yellow. Bush type.
319587. Col. No. 22105. 'Frijol ejotero'. Elongate; black and white, mostly black. Snap, pole type.

## 319550 to 310690—Continued

## 319552 to 319690—Continued

319588. Col. No. 22106. 'Frijola'. Large, angular; buff. Bush type. Much grown on central plateau.
319589. Col. No. 22107. 'Frijol negro'. Small; black. Bush type.
319590. Col. No. 22108. 'Frijol canario'. Small; pale yellow. Mixture. Bush type. Not the 'Canario' of Jalisco.
319591. Col. No. 22109. 'Frijol flor de Mayo'. Yellow flushed with pink. Bush type. Not the 'Flor de Mayo' of Aguascalientes and Jalisco.
- Market in Aguascalientes, Aguascalientes. Elevation about 6,000 feet.
319592. Col. No. 22110. 'Frijol garbancillo blanco'. Small, roundish, pale; yellow eye.
319593. Col. No. 22111. 'Frijol grulla'. Tan. Bush type; local.
319594. Col. No. 22112. 'Aluvia mediana'. Medium; white.
319595. Col. No. 22113. 'Frijol japones'. Large, round; bright pink and white.
319596. Col. No. 22114. 'Frijol garbancillo'. Small; pale yellow with yellow and white eye. Bush type.
319597. Col. No. 22115. 'Frijol almendrilla'. Thin, elongate; pale yellow.
319598. Col. No. 22116. 'Frijol garbanza'. Roundish; pale yellow with orange and white eye. Bush type.
319599. Col. No. 22117. 'Frijol rosa de Castilla'. Large; pink and white flushed.
319600. Col. No. 22118. 'Frijol cacahuete'. Narrow, thin; tan with red purple markings; local.
319601. Col. No. 22119. 'Frijol morada de agua'. Mixed shades of purple. Bush type.
319602. Col. No. 22120. 'Frijol chivitas'. Small; gay, red and white. mottled.
319603. Col. No. 22121. 'Frijol higuera'. Pale, pinto. Locally popular.
319604. Col. No. 22124. 'Frijol negro'. Small; black. Bush type.
319605. Col. No. 22125. 'Frijol negro'. Large; black; local.
319606. Col. No. 22126. 'Frijol apetito'. Small; purplish. Bush type.
319607. Col. No. 22127. 'Frijol bayo rata'. Plump; tan to lavender. Common. Bush type.
319608. Col. No. 22128. 'Frijol canelo'. Mottled lavender. Common.
319609. Col. No. 22129. 'Frijol ojo de liebre'. Brindled gray brown. Common in northwest Mexico. Bush type.
319610. Col. No. 22130. 'Aluvia'. Small; white. Bush type.
- Col. No. 22131. 'Barqueno and flor de mayo'. Grown with summer rains. Bush type. Divided into 4 components.
319611. Mixture.
319612. Elongated, tan with dark eye.
319613. Plump. White with brown mottling.
319614. Tan with brown mottling.
319615. Col. No. 22132. 'Frijol rebozero'. Well filled; lavender, slightly mottled. Bush type.

**319550 to 310690—Continued****319552 to 319690—Continued**

319616. Col. No. 22133. 'Frijol apesimo'. Small; lavender. Mixture. Bush type.
319617. Col. No. 22134. 'Frijol garapato'. Tan. Bush type. Grown with summer rains.
319618. Col. No. 22135. 'Frijol flor de mayo'. Lavender with pale mottlings. Bush type.
319619. Col. No. 22136. 'Frijol canario'. Slender; pale yellow. Grown with summer rains.
319620. Col. No. 22137. 'Frijol bayo rosada'. Blocky; yellow. Bush type. Common.
319621. Col. No. 22138. 'Frijol bayo'. Small; shiny, yellow. Bush type. Common.
319622. Col. No. 22139. 'Frijol negro'. Small; black. Bush type. Market in Uruapan, Michoacan. Elevation about 5,000 feet.
319623. Col. No. 22146. 'Frijol amapolo'. Small; variably pinkish.
319624. Col. No. 22147. 'Frijol san morano'. Small, roundish; tan.
319625. Col. No. 22148. 'Frijol Patzcuareno'. Long; pinkish. From Patzcuaro.
319626. Col. No. 22149. 'Frijol cucunita'. Large; pale speckled. From Patzcuaro.
319627. Col. No. 22150. 'Frijol rosita'. Small; dull colored primitive appearance. Cultivated around Zamora, with or without irrigation. Market in Los Reyes, Michoacan. Elevation 4,800 feet.
319628. Col. No. 22157. 'Frijol mexiano bola'. Well-rounded shiny, light buff. Bush type with summer rains; grown locally on poles when irrigated.
319629. Col. No. 22158. 'Frijol rosita'. Brought from Zamora. Small; light tan.
319630. Col. No. 22159. 'Frijol pastilla'. Brought from Zamora. Well rounded; shiny, tan.
319631. Col. No. 22160. 'Frijol apesimo'. Brought from Zamora. Light tan with big red eye.
319632. Col. No. 22161. 'Frijol flor de Mayo'. From Nayarit. Pale, mottled pink.
319633. Col. No. 22162. 'Frijol buen gusto'. From Guadalajara, Jalisco. Light buff. Common.
319634. Col. No. 22163. From Zamora. Light speckled.
319635. Col. No. 22164. From Zamora. Mixture of seed color.
319636. Component of P.I. 319635. Large, light yellow seed.
319637. Component of P.I. 319636. Lavender seed. Market in Uruapan, Michoacan. Elevation about 5,000 feet.
319638. Col. No. 22165. 'Frijol paralena'. From Patzcuaro. Narrow; brown with small white eye. Grown by Tarascan Indians.
319639. Col. No. 22166. 'Frijol marceno'. From Patzcuaro. Small; pole type.
319640. Col. No. 22167. From Patzcuaro. Elongate; brownish. Probably pole type.



**319550 to 310690—Continued****319552 to 319690—Continued**

319641. Col. No. 22168. Roundish; brightly bicolored red and white. Grown locally by Tarascan Indians.
319642. Col. No. 22169. 'Amapolo de camino'. From Urandulo. Light pink.
319643. Col. No. 22170. 'Frijol rancherito'. From Patzcuaro. Mixed colors.
319644. Col. No. 22171. 'Frijol caniro'. From Morelia. Elongate; yellow. Common on Jaliscoan plateau.
319645. Col. No. 22172. From Patzcuaro. Mixed colors.
319646. Col. No. 22173. 'Frijol bayo'. From Patzcuaro. Large, variable size; pale.
319647. Col. No. 22174. 'Frijol morito'. Roundish; bicolored, striped brown. Pole type. Yields well.
319648. Col. No. 22191. 'Frijol bayo'. Cofradia de Suchitlan, Colima. Elevation about 4,000 feet. Volcanics. Small, thin; light. Grown locally.
- Market in Ciudad Guzman, Jalisco. Elevation about 5,000 feet.
319649. Col. No. 22203. 'Frijol azufrado'. Small; pale yellow; viny. Common in highlands.
319650. Col. No. 22204. 'Frijol mesquitillo'. Small; yellowish.
319651. Col. No. 22205. 'Frijol blanco'. Small; white.
319652. Col. No. 22206. 'Frijol blor de Mayo'. Pale, buff, faintly maculated.
319653. Col. No. 22208. 'Frijol garbancillo'. Small, round; pale yellow.
319654. Col. No. 22209. 'Frijol ciceleno'. Semiring stripes. Pale.
319655. Col. No. 22210. 'Frijol perlita'. Small; tan to buff.
319656. Col. No. 22211. 'Frijola'. Large, rounded; greenish buff.
319657. Col. No. 22212. 'Frijol barraleno'. Brown. Grown in heavy soil.
319658. Col. No. 22213. 'Frijol apetito morado'. Uniform, roundish; purplish.
319659. Col. No. 22214. 'Frijol mexicano'. Irregular size; pale.
319660. Col. No. 22215. 'Frijol cacahuete'. Long; pink.
319661. Col. No. 22216. 'Frijol apetito'. Rounded; pink.
319662. Col. No. 22217. 'Frijol sanque de gallina'. Elongate; pale pink.
319663. Col. No. 22218. 'Frijol jabones'. Long; red speckled.
319664. Col. No. 22219. 'Frijol apetito'. Well filled; pale with red-rimmed white eye.
319665. Col. No. 22220. 'Frijol zacaticano'. Speckled or pinto.
319666. Col. No. 22221. 'Frijol leche'. Blocky; nearly white.
319667. Col. No. 22222. 'Frijol negro'. Well rounded; black. Pole type.
319668. Col. No. 22223. 'Frijol mexicano'. Shiny buff.
319669. Col. No. 22224. 'Apetito blanco'. Blocky; light yellowish.
319670. Col. No. 22225. 'Frijol verde'. Large, rounded; pale green.

**319550 to 310690—Continued****319552 to 319690—Continued**

319671. Col. No. 22226. 'Frijol flor de mayo'. Mixed tan and mottled pale pink.
319672. Col. No. 22227. 'Frijol garbancillo'. Small, rounded; yellowish.
319673. Col. No. 22228. 'Frijol rosita'. Small, variable; dun. Rather primitive.
319674. Col. No. 22229. 'Frijol apetita'. Blocky, uniform; light. *Vigna*-like.
319675. Col. No. 22230. 'Frijol garbancillo'. Blocky, rounded; pale yellowish. Common.
- Market in Tepic, Nayarit. Elevation 3,000 feet.
319676. Col. No. 22242. 'Frijol negro'. Black. Reported cultivated about Sacualpan.
319677. Col. No. 22243. 'Frijol bolito'. Round; greenish yellow. Reportedly from San Pedro.
319678. Col. No. 22244. 'Frijol azufrado'. From Santiago. Small yellowish tan.
- Market in Uruapan, Michoacan.
319679. Col. No. 22248. 'Pazuareno frijol'. Cultivated near Patzcuaro. Large, long; buff.
319680. Col. No. 22249. 'Frijol de Ajun'. Grown at Ajun. Apparently vine. Seed small, mixed colors.
319681. Component of P.I. 319680. Seed black.
319682. Component of P.I. 319680. Seed lavender, dark mottlings.
319683. Col. No. 22250. 'Frijol morada bolita'. Grown near Morelia. Round; red.
319684. Col. No. 22251. 'Frijol Higuerrilla'. Well rounded pinto with yellow eye.
319685. Col. No. 22252. 'Frijol cacahuete'. From San Luis de la Paz. Large, long, with red markings.
319686. Col. No. 22285. 'Frijol apetito morado'. Atenquique, Jalisco. Elevation about 3,000 feet. Reddish to tan. Common.
319687. Col. No. 22286. 'Frijol azufrado'. Acaponeta, Tepic. Elevation 200 feet. Small; pale yellow. Common in Nayarit and Sinaloa lowlands.
319688. Col. No. 22296. 'Frijol mantequilla'. Large, pinto. Grown with irrigation.
319689. Col. No. 22297. 'Frijol pinto'. Small, pinto.
319690. Col. No. 22299. Tonichi, Sonora. Pinto; reportedly grown in the sierras.

**319691. CRAMBE ABYSSINICA Hochst. ex R. E. Fries Cruciferae.**

From Canada. Seeds presented by R. K. Downey, Canada Department of Agriculture, Research Branch, Saskatoon, Sask. Received Apr. 26, 1967.

CD 6619. Increased at Morden Experimental Farm in 1964. Originally from Sweden.

**319692 to 319694. BRASSICA CAMPESTRIS var. SARSON Prain Cruciferae.**

From India. Seeds presented by J. N. Rai, Botany Department, Lucknow University, Lucknow, under Public Law 480 project A7-CR-37.

**319692 to 319694—Continued**

319692. In46755.

319693. In46756.

319694. In46760.

**319695. LYCOPERSICON ESCULENTUM Mill. Solanaceae.****Tomato.**

From the United States. Seeds held at the Regional Plant Introduction Station, Geneva, N.Y. Numbered Apr. 27, 1967.

G-14417. 'Ronita'. Originally from France via Canada. Vine, semi-determinant, uniform, vigorous, 26 inches by 43 inches wide; late maturing. Fruit resembles 'Roma'; 5.5 cm. by 4.4 cm. diameter; uniform ripening, uniform dark red. Nematode resistant.

**319696. GLYCINE TOMENTELLA Hayata Leguminosae.**

From Australia. Seeds presented by J. E. Bligh, Anchorfield, Brookstead, Queensland. Numbered Apr. 27, 1967.

Original seed from Australia, April 1959. Increased in greenhouse at University of Illinois, Urbana in 1961 as plant L61g-54A-1.

**319697. GLYCINE TABACINA Benth. Leguminosae.**

From Taiwan. Seeds presented by W. T. Tang, National Taiwan University, Taipei. Numbered Apr. 27, 1967.

Seed taken from a plant specimen originating in Quemoy Island. Reproduced in 1965 at University of Illinois, Urbana.

**319698. PEPONIA VOGELII Hook. f. Cucurbitaceae.**

From Kenya. Seeds collected by C. E. Smith, New Crops Research Branch, Crops Research Division, Beltsville, Maryland.

Numbered Apr. 27, 1967.

Col. No. 4647. Mt. Kilimanjaro. Elevation 6,500 feet.

**319699. ORYZA SATIVA L. Gramineae.****Rice.**

From Saudi-Arabia. Seeds presented by the Chinese Agricultural Mission, Hofuf, Al Hassa. Numbered Apr. 27, 1967.

'Hassawi'. Reported to be salt tolerant. Local type grown in area for 2 centuries.

**319700 to 319704. ORYZA SATIVA L. Gramineae.****Rice.**

From Colombia. Seeds presented by the Centro Nacional de Investigaciones Agropecuarias, Palmira. Numbered Apr. 27, 1967.

319700. ICA 1. T112E-6T-4P-2T-1P.

319701. ICA 2. T145C-1P-4T-1P-1P.

319702. ICA 7. T181E-6P-1T-2P.

319703. ICA 5. T112E-6T-1P-2T-1P.

319704. ICA 10. T112D-7P-5T-1P-2T.

**319705 to 319708.**

From Zambia. Seeds collected by C. E. Smith, New Crops Research Branch, Crops Research Division, Beltsville, Maryland. Numbered Apr. 27, 1967.

319705 to 319707. PHASEOLUS VULGARIS L. Leguminosae. **Common bean.**  
Col. No. 4670. From Abercorn Market.

319705. No. 1. White.

319706. No. 2. Yellow-green, dark eye zone.

**319705 to 319708—Continued****319705 to 319707—Continued**

319707. No. 3. Mixture.

319708. *ZEHNERIA* sp. Cucurbitaceae.

No collection number. From forest area near Ndola. Vine clambering over shrubs; in partial shade.

**319709 to 319711. ARACHIS HYPOGAEA L. Leguminosae.**

From Israel. Seeds presented by the Plant Introduction Service, National and University Institute of Agriculture, Rehovoth. Numbered Apr. 27, 1967.

319709. 1964-1570-2.

319710. 1964-1570-4.

319711. 1964-1572-1.

**319712 and 319713.**

From Rumania. Seeds presented by I.C.C.P.T. Fundulea, Bucuresti. Numbered Apr. 27, 1967.

319712. *MEDICAGO SATIVA* L. Leguminosae. **Alfalfa.**

H.652. Fundulea.

319713. *ONOBRYCHIS VICIFOLIA* Scop. Leguminosae. **Sainfoin.**

I.C.A.6. Turda.

**319714 to 319814. ARACHIS HYPOGAEA L. Leguminosae.**

From Israel. Seeds grown in 1966 and presented by Amram Ashri, Faculty of Agriculture, Hebrew University, Rehovoth. Numbered Apr. 27, 1967.

319714. Line 123.	319736. No. 331-18.
319715. Line 136.	319737. No. 331-19.
319716. 'Pearl White'.	319738. No. 331-20.
319717. 'Virginia Adom'.	319739. No. 331-21.
319718. 'Virginia Beit-Dagan No. 4'.	319740. No. 331-22.
319719. No. 1012.	319741. No. 331-24.
319720. No. 1013.	319742. No. 331-26.
319721. No. 331-1.	319743. No. 331-27.
319722. No. 331-2.	319744. No. 331-28.
319723. No. 331-3.	319745. No. 331-29.
319724. No. 331-4.	319746. No. 331-30.
319725. No. 331-6.	319747. No. 331-31.
319726. No. 331-7.	319748. No. 331-32.
319727. No. 331-8.	319749. No. 331-34.
319728. No. 331-9.	319750. No. 331-35.
319729. No. 331-10.	319751. No. 331-38.
319730. No. 331-11.	319752. No. 331-39.
319731. No. 331-12.	319753. No. 331-45.
319732. No. 331-14.	319754. No. 331-46.
319733. No. 331-15.	319755. No. 1064-26.
319734. No. 331-16.	319756. No. 1065-7.
319735. No. 331-17.	319757. No. 1065-20.

**319714 to 319814—Continued**

319758. No. 1066-5.	319787. No. 1068-6.
319759. No. 1066-7.	319788. No. 1068-7.
319760. No. 1066-9.	319789. No. 1068-8.
319761. No. 1066-11.	319790. No. 1068-9.
319762. No. 1066-12.	319791. No. 1068-10.
319763. No. 1066-13.	319792. No. 1068-11.
319764. No. 1066-16.	319793. No. 1068-14.
319765. No. 1066-17.	319794. No. 1068-15.
319766. No. 1066-18.	319795. No. 1068-16.
319767. No. 1066-19.	319796. No. 1068-17.
319768. No. 1066-20.	319797. No. 1068-19.
319769. No. 1066-22.	319798. No. 1068-20.
319770. No. 1066-27.	319799. No. 1068-21.
319771. No. 1066-29.	319800. No. 1068-22.
319772. No. 1066-30.	319801. No. 1068-23.
319773. No. 1066-31.	319802. No. 1068-24.
319774. No. 1066-32.	319803. No. 1068-25.
319775. No. 1066-34.	319804. No. 1068-28.
319776. No. 1066-35.	319805. No. 1068-30.
319777. No. 1066-36.	319806. No. 1068-31.
319778. No. 1066-37.	319807. No. 1068-32.
319779. No. 1066-38.	319808. No. 1068-33.
319780. No. 1066-39.	319809. No. 1068-34.
319781. No. 1066-40.	319810. No. 1968-35.
319782. No. 1067-7.	319811. No. 1068-36.
319783. No. 1067-35.	319812. No. 1069-36.
319784. No. 1968-1.	319813. No. 1070-9.
319785. No. 1068-2.	319814. No. 1070-34.
319786. No. 1068-5.	

**319815 to 319829.**

From Norway. Seeds presented by the Director, Oslo University Botanic Gardens, Oslo. Code numbers taken from the 1967 Index Seminum of the Garden. Numbered Apr. 27, 1967.

319815. <i>ALOPECURUS ARUNDINACEUS</i> Poir. Gramineae.	<b>Foxtail.</b>
No. 858.	
319816. <i>AMMOPHILA ARENARIA</i> (L.) Link Gramineae.	<b>Beachgrass.</b>
No. 222. Klepp: Revtangen, Rogaland county.	
319817 and 319818. <i>ASTRAGALUS GLYCYPHYLLOS</i> L. Leguminosae.	
319817. No. 86. Baerum: Boroya, Akershus county.	
319818. No. 87. Frogen: Hallangspoller, Akershus county.	
319819. <i>ELYMUS ARENARIUS</i> L. Gramineae.	<b>European dunegrass.</b>
No. 232. Baerum: Boroya, south side, Akershus.	

**319815 to 319829—Continued**

319820. *HEMEROCALLIS DUMORTIERI* Morren Liliaceae. Daylily.  
No. 928.
319821. *HOSTA VENTRICOSA* (Salisb.) Stearn Liliaceae.  
No. 929.
- 319822 and 319823. *LOTUS CORNICULATUS* L. Leguminosae. Birdsfoot trefoil.
319822. No. 90. Lom: Smadalen, hill above Smorliseter. South-facing gabbro rocks, Oppland. Elevation 1,150 meters.
319823. No. 91. Kvinnherad: Rosendal, Hordaland.
319824. *ONOBRYCHIS VICIFOLIA* Scop. Leguminosae. Sainfoin.  
No. 607.
319825. *PHALARIS ARUNDINACEA* L. Gramineae. Reed canarygrass.  
No. 239. Baerum: Boroya, Akershus.
319826. *SYRINGA AMURENSIS* Rupr. Oleaceae. Manchurian lilac.  
No. 634.
319827. *SYRINGA REFLEXA* C. Schneid. Oleaceae. Nodding lilac.  
No. 635.
319828. *TRIFOLIUM FRAGIFERUM* L. Leguminosae. Strawberry clover.  
No. 609.
319829. *TRIFOLIUM LUPINASTER* L. Leguminosae.  
No. 611.

**319830 to 319838. *PONCIRUS TRIFOLIATA* (L.) Raf. Rutaceae. Hardy orange.**

From Australia. Seeds presented by the Division of Horticulture, New South Wales Department of Agriculture, New South Wales. Grown at the Horticultural Research Station, Narara, New South Wales. Received June 2, 1967.

Small-flowered strain.	Large-flowered strain.
319830. Sel. 10.	319835. Sel. 178.
319831. Sel. 22.	319836. Sel. 179.
319832. Sel. 23.	319837. Sel. 191.
319833. Sel. 48.	Tetraploid strain.
319834. Sel. 180.	319838. Sel. 67.

**319839 to 319841. *FRAGARIA* (hybrid). Rosaceae.**

From the Union of Soviet Socialist Republics. Plants presented by the Institute of Plant Industry, Leningrad. Received June 5, 1967.

319839. 'Cernobrivka'. ('Premier' × 'Indijskaja'). Developed at Majkop Experiment Station. Plants medium tall, compact, leafy, vigorous; fruits large, conical, dark red, glossy; flesh firm, dark red; flavor good; early, winter hardy, relatively drought resistant, productive.
319840. 'Festival'naja'. ('Obil'naja' × 'Premier'). Developed at Pavlovsk Experiment Station. Plants tall, leafy, slightly spreading; fruits very large, oblong, bright red, glossy; flesh rosy, rather firm, high yielding; winter hardy, middle early.
319841. 'Vnuchka'. Developed at the Horticultural Research Institute of the non-chernozem soil zone, Moscow. Early ripening.

**319842. PYRACANTHA COCCINEA Roemer Rosaceae. Scarlet firethorn.**

From New Zealand. Plants presented by R. E. Harrison and Company, 374 Albert Street, Palmerston North. Received June 5, 1967.

'Magnifica'.

**319843 to 319846. LEUCAENA LEUCOCEPHALA (Lam.) de Wit Leguminosae. Leadtree.**

From Venezuela. Seeds presented by G. P. Gibbs, Apartado 393, Barquisimeto. Received April 28, 1967.

From local sites; arid area. Elevation 500 meters.

319843. 'El Salvador'.

319845. 'Singapur'.

319844. 'Peruvian'.

319846. 'Venezuelano'.

**319847. MALUS SYLVESTRIS Mill. Rosaceae. Apple.**

From Australia. Scions presented by the Victorian Plant Research Institute, Burnley, Victoria. Received May 1, 1967.

'Granny Smith'.

**319848 and 319849. SOLANUM TUBEROSUM L. Solanaceae. Potato.**

From Japan. Tubers presented by the Hokkaido National Agricultural Experiment Station, Potato Breeding Center, Shimamatsu, Eniwa, Hokkaido. Received May 2, 1967.

319848. 'Hokkai No. 45'.

319849. 'Hokkaiaka'.

**319850 and 319851. FRAGARIA (hybrid). Rosaceae.**

From Germany. Plants presented by Reinhold Hummel, Stuttgart-Weilimdorf Kostlinstr. Received May 4, 1967.

319850. 'Hummi-Gehro'.

319851. 'Hummi-Grande'.

**319852. PRUNUS AVIUM L. Rosaceae. Sweet cherry.**

From Canada. Scions presented by the Research Station, Canada Department of Agriculture, Summerland. Received May 8, 1967.

2C-27-19.

**319853. TRITICUM AESTIVUM L. Gramineae.**

From the Union of Soviet Socialist Republics. Seeds presented by Lazar Volin, East European Branch, Foreign Agricultural Service, Washington, D.C. Numbered May 8, 1967.

Collected in 1964 south of Moscow.

**319854 and 319855.**

From Thailand. Seeds presented by Richard Keirstead, Baptist Mission, Chiangmai. Received May 8, 1967.

319854. SOLANUM sp. Solanaceae.

Collected near Kang Haw village, Nan Province. Elevation 4,200 feet. Resembles wild eggplant; reported edible.

319855. SOLANUM sp.

Collected near Huai Khu village, Chiang Rai Province. Elevation 3,400 feet. Resembles wild eggplant.

**319856 and 319857. TRITICUM AESTIVUM L. Gramineae.**

From Chile. Seeds presented by Estacion Experimental "La Platina", Instituto de Investigaciones Agropecuarias, Santiago. Received May 8, 1967.

319856. 'Bafo'. Spring type.

319857. 'Raco'. Spring type.

**319858 to 319860. DAUCUS CAROTA L. Umbelliferae. Carrot.**

From Japan. Seeds presented by Takii and Company, Ltd., Kyoto. Received May 8, 1967.

319858. 'Early Scarlet Wonder'. Matures 1 week earlier than Takii's Scarlet Wonder.

319859. 'Heian Long Scarlet Wonder'. Improved type, longer than Takii's Scarlet Wonder and matures about 1 week later.

319860. 'Takii's Scarlet Wonder'. Typical variety of this type still produced in sizable quantity.

**319861 and 319862. PHASEOLUS VULGARIS L. Leguminosae. Common bean.**

From Canada. Seeds presented by G. A. Kemp, Canada Department of Agriculture, Research Station, Lethbridge, Alberta. Received May 8, 1967.

319861. 'Princess of Artois'. Pod flat, wide; seed white, large, flat.

319862. 'Green seed-coat'. Seed medium size, straight, plump; seed coat pale green, cream, or white. Mature pod remains green upon drying.

**319863 to 319869.**

From Turkey. Seeds collected in 1965 by J. R. Harlan, Department of Agronomy, Oklahoma State University, Stillwater, Oklahoma. Numbered May 8, 1967.

319863 to 319867. HORDEUM VULGARE L. Gramineae. **Barley.**  
Exact origin of the samples unknown.

319863. No. 1.

319864. No. 2.

319865. No. 3a. White seed.

319866. No. 3b. Black seed.

319867. No. 3c.

319868 and 319869. TRITICUM DICOCCUM Schrank Gramineae. **Emmer.**  
Exact origin of the samples unknown.

319868. No. 1.

319869. No. 2.

**319870 to 319872. PHASEOLUS VULGARIS L. Leguminosae. Common bean.**

From the United States. Seeds held at the Regional Plant Introduction Station, Geneva, N.Y. Numbered May 8, 1967.

Bred by A. B. Strand, Dandridge, Tennessee. Received 1962.

319870. Col. No. 62-469. G-11916. 'Wade' × P.I. 117232. Bush, to 12 inches high; medium uniformity and vigor. Leaf small, medium green; 47 days to bloom. Flowers purple. Medium set. Harvested August 22, 1966. Pod 11.5 by 1.3 cm., flat, straight to curved, green. Seeds long oval, plump, reddish brown to dark brown; segregating, very stringy, susceptible to root rot; slight susceptibility to anthracnose and bacterial blight races BV1 and BV2.



**319870 to 319872—Continued**

**319871.** Col. No. 62-470. G-11917. 'Wade' × P.I. 117232. Bush, to 13 inches high; medium uniformity and vigor. Leaf medium, medium to dark green; 47 days to bloom. Flowers white. Medium set. Harvested August 16, 1966. Pod 10.5 by 1.1 cm., flat, straight, green. Seeds very plump oval, glassy brown to dark brown with much seed coat splitting; segregating, stringless, susceptible to root rot; slight susceptibility to anthracnose and bacterial blight races BV1 and BV2.

**319872.** Col. No. 62-471. G-11918. 'Wade' × P.I. 117232. Bush, to 15 inches high; uniformity vigorous. Leaf medium to large, medium to dark green; 47 days to bloom. Flowers white. Heavy set. Harvested August 16, 1966. Pod 12.7 by 1.1 cm., round, straight, green. Seeds plump oval, white with light to dark brown around hilum; segregating, stringless. Virus tolerant.

**319873 to 319892. SOLANUM TUBEROSUM L. Solanaceae. Potato.**

From New Zealand. Tubers presented by the Crop Research Division, Christchurch. Received May 9, 1967.

Grown at the Crop Research Division Breeding Plots, Darfield, Canterbury.

<b>319873.</b> 166.02.	<b>319883.</b> 300.022.
<b>319874.</b> 188.0124.	<b>319884.</b> 320.09.
<b>319875.</b> 192.020.	<b>319885.</b> 320.027.
<b>319876.</b> 255.02.	<b>319886.</b> 323.06.
<b>319877.</b> 257.01.	<b>319887.</b> 323.012.
<b>319878.</b> 257.02.	<b>319888.</b> 323.013.
<b>319879.</b> 275.02.	<b>319889.</b> 323.038.
<b>319880.</b> 275.04.	<b>319890.</b> 323.050.
<b>319881.</b> 276.010.	<b>319891.</b> 323.052.
<b>319882.</b> 276.012.	<b>319892.</b> 325.013.

**319893 to 319895. LYCOPERSICON ESCULENTUM Mill. Solanaceae. Tomato.**

From Australia. Seeds presented by Division of Plant Industry, Commonwealth Scientific and Industrial Research Organization, Canberra. Received May 9, 1967.

**319893.** 'Burwood Wonder'.

**319894.** 'Tatinter'.

**319895.** 'Victorian Dwarf No. 1'.

**319896 to 319902. VICIA FABA L. Leguminosae. Broadbean.**

From the Union of Soviet Socialist Republics. Seeds presented by the All-Union Institute of Plant Industry, Leningrad. Received May 9, 1967.

**319896.** No. K-1469. Local type from Daghestan. Seed medium small, round, black.

**319897.** No. K-1586. 'Fioletovyj Czyzowskich'. Polish origin. Seed small, pea size; black.

**319898.** No. K-1592. 'Hertz Fuya'. German origin. Seed medium size, brown.

**319899.** No. K-1617. 'Ausra'. Lithuanian origin. Seed medium small, brown. May be old seed or partially immature.

**319900.** No. K-1619. 'Khorostodskie'. From the Ukraine. Seed small, round.

## 319896 to 319902—Continued

319901. No. K-1820. 'Khmelnichkie'. From the Ukraine. Seed small, round, purplish black.  
 319902. No. K-1838. 'Prausmitzer Pferdebohne'. German origin. Seed medium small, olive brown.

## 319903 to 320033.

From Great Britain. Plants purchased from Sunningdale Nurseries, Windlesham, Surrey. Numbered May 9, 1967.

319903. RHODODENDRON LINEARIFOLIUM var. MACROSEPALUM (Maxim.) Makino Ericaceae.  
 319904. RHODODENDRON MUCRONATUM var. RIPENSE (Makino) Wils.  
 319905. RHODODENDRON PULCHRUM var. TEBOTAN (Katomsu) Rehd. ex Stevens  
 319906. RHODODENDRON YEDOENSE Maxim.  
 319907 and 319908. RHODODENDRON YEDOENSE var. POUKHANENSE Nakai  
 319907. No description.  
 319908. Pink.  
 319909 to 320033. RHODODENDRON (hybrid).  
 319909. 'Addy Wery'. Kurume clone; 'Flame' × 'Malvatica'.  
 319910. 'Agamujin'. Kurume clone.  
 319911. 'Aioi'. Kurume clone.  
 319912. 'Album'. Kurume clone; form of *R. obtusum*.  
 319913. 'Amoenum'. *R. ciliatum* × *R. dauricum*.  
 319914. 'Amoenum coccinea'. Branch sport of *R. obtusum* var. *R. amoenum*.  
 319915. 'Anny'. Kaempferi clone; *R. kaempferi* × 'Malvatica'.  
 319916. 'Ariake'. Wada clone; *R. kaempferi* × *R. simsii* var. *R. eriocarpum*.  
 319917. 'Asahiryn'. Kurume clone.  
 319918. 'Atalanta'. Kaempferi clone; *R. kaempferi* × 'Malvatica'.  
 319919. 'Aya-kammuri'. Kurume clone.  
 319920. 'Jukachi-ko'. Kurume clone.  
 319921. 'Ozora'. Kurume clone.  
 319922. 'Azuma-kagami'. Kurume clone.  
 319923. 'Balsamineaeflora'. Macrantha clone.  
 319924. 'Banzai'. Kurume clone.  
 319925. 'Benegiri'. Kurume clone.  
 319926. 'Bengal Fire'. Oldhami clone; *R. kaempferi* × 'Oldhami'.  
 319927. 'Benifude'. Kurume clone.  
 319928. 'Bijinsui'. Kurume clone.  
 319929. 'Bulstrode'. Mucronatum clone.  
 319930. 'Bungo-nishiki'. Wada clone; *R. indicum* × *R. kaempferi*.  
 319931. 'Caldwellii'. Amoenum clone; *R. obtusum* var. *R. amoenum* × 'Magnifica'.  
 319932. 'Carminata Splendens'. Amoenum clone.

## 319903 to 320033—Continued

## 319909 to 320033—Continued

319933. 'Cheniston'. Amoenum clone.  
 319934. 'Chichibu'. Wada clone.  
 319935. 'Chiyo No Akebono'. Kurume clone.  
 319936. 'Crispiflora'. Macrantha clone.  
 319937. 'Crispiflora Kokinahita'. Macrantha clone.  
 319938. 'Crispiflora Mauve'. Macrantha clone.  
 319939. 'Crispiflora Orange'. Macrantha clone.  
 319940. 'Crispiflora Pink'. Macrantha clone.  
 319941. 'Crispiflora Pink Beauty'. Macrantha clone.  
 319942. 'Eddy'. Oldhami clone; *R. kaempferi* × *R. oldhamii*.  
 319943. 'Fude-tsuka'. Kurume clone.  
 319944. 'Fude-tsukasa'. Kurume clone.  
 319945. 'Gosho zakura'. Kurume clone.  
 319946. 'Greeting'. Glenn Dale clone.  
 319947. 'Gumpo'. Satsuki clone; *R. indicum* var. *R. eriocarpum*.  
 319948. 'Had-ho-sato'. Kurume clone.  
 319949. 'Hana-asobi'. Kurume clone.  
 319950. 'Harumiji'. Kurume clone.  
 319951. 'Haru-no-akegono'. Kurume clone.  
 319952. 'Haru-no-kyokii'. Kurume clone.  
 319953. 'Hatsugiri'. Kurume clone.  
 319954. 'Heiwa'. Satsuki clone.  
 319955. 'Hikkasen'. Kurume clone.  
 319956. 'Hinodegiri'. Kurume clone.  
 319957. 'Hinode-no-taka'. Kurume clone.  
 319958. 'Hinomayo'. Kurume clone.  
 319959. 'Hino-tsukasa'. Satsuki clone; *R. indicum* × Kurume.  
 319960. 'Hoo'. Kurume clone.  
 319961. 'Itten'. (Maihime). Kurume clone.  
 319962. 'Ima-shojo'. Kurume clone.  
 319963. 'Ima-zuma'. Kurume clone.  
 319964. 'Isochidari'. Wada grex; *R. kaempferi* + *R. simsii* var. *R. eriocarpum*.  
 319965. 'Ivette'. Kaempferi clone.  
 319966. 'Iwato-kagami'. Kurume clone.  
 319967. 'Izumigawa'. Kurume clone.  
 319968. 'Jeanette'. Kaempferi clone.  
 319969. 'John Cairns'. Kaempferi clone.  
 319970. 'Juliana'. Kaempferi clone.  
 319971. 'Kasumi-gaseki'. Kurume clone.  
 319972. 'Kathleen'. Kaempferi clone.

## 319903 to 320033—Continued

## 319909 to 320033—Continued

319973. 'Katsura-no-Hana'. Kurume clone.  
 319974. 'Keinohana'. Kurume clone.  
 319975. 'Kimigayo'. Kurume clone.  
 319976. 'Kirin'. Kurume clone.  
 319977. 'Kiusianum'. Kurume clone.  
 319978. 'Kiusianum No. 1'. Kurume clone.  
 319979. 'Kiusianum No. 2'. Kurume clone.  
 319980. 'Kiusianum No. 12'. Kurume clone.  
 319981. 'Kiusianum Mauve'. Kurume clone.  
 319982. 'Kogasane'. Kurume clone.  
 319983. 'Kokinran'. Kurume clone.  
 319984. 'Koran-yuki'. Kurume clone.  
 319985. 'Kumoidori'. Kurume clone.  
 319986. 'La France'. Amoenum clone.  
 319987. 'Leo'. *R. kaempferi* × *R. oldhamii*.  
 319988. 'Louise'. Exbury clone.  
 319989. 'Louise Gable'. Gable clone; *R. indicum* × (*R. kaempferi* × *R. poukhanense*).  
 319990. 'Machojakiu'. Kurume clone.  
 319991. 'Mackrojaka'. Kurume clone.  
 319992. 'Mikado'. Kaempferi form.  
 319993. 'Naomi'. Oldhami clone; *R. kaempferi* × *R. oldhamii*.  
 319994. 'Noordtiana'. Mucronatum clone.  
 319995. 'Oberon'. Kaempferi clone.  
 319996. 'Orange Beauty'.  
 319997. 'Otome'. Kurume clone.  
 319998. 'Ouchiyama'. Kurume clone.  
 319999. 'Palestrina'. Vuykiana clone; 'J. C. van Tol' × *R. kaempferi*.  
 320000. 'Pink Treasure'. Kaempferi clone.  
 320001. 'Pippa'. Oldhami clone; *R. kaempferi* × *R. oldhamii*.  
 320002. 'P. W. Hardyzer'. Vuykiana clone.  
 320003. 'Queen Wilhelmina'. Vuykiana clone.  
 320004. 'Rankyoken'. Kurume clone.  
 320005. 'Rasho-mon'. Kurume clone.  
 320006. 'Robin Hood'. Grex; *R. calophytum* × *R. sutchuenense*.  
 320007. 'Rosebud'. Gable clone.  
 320008. 'Schubert'. Vuykiana clone; *Kaempferi* hybrid × 'J. C. van Tol'.  
 320009. 'Senju'. Kurume clone.  
 320010. 'Senka'. Kurume clone.  
 320011. 'Shikishima'. Kurume clone.  
 320012. 'Shinimiagagino'. Kurume clone.

**319903 to 320033—Continued****319909 to 320033—Continued**

320013. 'Shinsagino Kagasane'. Kurume clone.  
 320014. 'Shin-seikai'. Kurume clone.  
 320015. 'Shintoki-no-hagasane'. Kurume clone.  
 320016. 'Shino Nome'. Kurume clone.  
 320017. 'Shin-utena'. Kurume clone.  
 320018. 'Soroï'.  
 320019. 'Souvenir'. Glenn Dale clone; *R. indicum* × 'Momozono'.  
 320020. 'Sui-yohi'. Kurume clone.  
 320021. 'Susugonoito'. Kurume clone.  
 320022. 'Tonkonatsu'. Kurume clone.  
 320023. 'Toun'. Kurume clone.  
 320024. 'Ukamuse'. Kurume clone.  
 320025. 'Usugukarii'. Kurume clone.  
 320026. 'Verdi'. Indian clone.  
 320027. 'Willy'. Kaempferi clone.  
 320028. 'Yachiyo'. Wada clone; *R. indicum* var. *R. eriocarpum* × *R. kaempferi*.  
 320029. 'Yezo-nishiki'. Kurume clone.  
 320030. 'Yoro'. Kurume clone.  
 320031. 'Yoshi-mi-gatake'. Kurume clone.  
 320032. 'Yo-zakura'. Satsuki clone.  
 320033. 'Yugiri'. Satsuki clone.

**320034. ARMORACIA LAPATHIFOLIA Gilib. Cruciferae.****Horseradish.**

From Czechoslovakia. Roots presented by the Research Institute for Plant Production, Praha 6, Ruzyně. Received May 9, 1967.

'Spreewald'.

**320035 to 320044. SOLANUM TUBEROSUM L. Solanaceae. Potato.**

From Iceland. Tubers presented by Einar F. Liggeirnur, Stangerholt 30, Reyhjavik. Received May 9, 1967.

Frost resistant selections.

320035. EIS-3. 'Evindur' × 'Olafsrundur'.  
 320036. EIS-3-62B. 'Olafsrundur' × Russ. Sel. 62.  
 320037. EIS-12. Russ. Sel. 62 × Red Isl.  
 320038. EIS-20. Russ. Sel. × 'Olafsrundur IV'.  
 320039. EIS-40. 'Olafsrundur' × Russ. Sel.  
 320040. EIS-100. 'Olafsrundur' × 'Evindur'.  
 320041. EIS-Ham. 'Eyvindur' × ?  
 320042. EIS-Russ. 'Olafsrundur' × 'Ham'.  
 320043. EIS-H-30 (Haploid?). Selection of EIS-H-34.  
 320044. EIS-H-34 (Haploid?). 'Ham' × EIS-40.

**320045 to 320050.**

From Kenya. Seeds presented by the National Agricultural Research Station, Kitale. Numbered May 10, 1967.

**320045.** CHLORIS GAYANA Kunth Gramineae. **Rhodesgrass.**  
K. 53728. Usenge.

**320046.** MELINIS MINUTIFLORA Beauv. Gramineae. **Molassesgrass.**  
K. 5425. Mboomi hills.

**320047.** PANICUM MAXIMUM Jacq. Gramineae. **Guineagrass.**  
K. 6237. 'Embu Creeping'.

**320048 and 320049.** PUERARIA MONTANA (Lour.) Merr. Leguminosae.

**320048.** K. 51393. Small seed; flowers uniformly violet colored.

**320049.** K. 51394. Eldoret. Seed larger than P.I. 320048. Flowers predominately violet colored varying to slightly bluish; standards often with greyish-violet spot.

**320050.** TRIFOLIUM SEMIPILOSUM Fresen. Leguminosae. **Kenya clover.**  
K. 5154. Kabete.

**320051.** SOLANUM TUBEROSUM L. Solanaceae. **Potato.**

From Iceland. Tubers presented by Einar F. Liggeirnur, Stangerholt 30, Reyhjavik. Received May 9, 1967.

EIS-Ant. Parents are B-4557-2 × Antenema (a German variety). Resistant to golden nematodes under Icelandic conditions.

**320052.** CUCUMIS ANGURIA L. Cucurbitaceae. **West Indian gherkin.**

From the United States. Seeds held at the Regional Plant Introduction Station, Geneva, N. Y. Numbered May 10, 1967.

Annual; vine; 160 inches high by 36 inches wide. Flowers yellow. Fruit light green turning bright yellow when mature. Fruits ovate, 2½ by 1¾ inches, spiny with recurved small spines at apex of larger spine.

**320053.** BALLYA ZEBRINA (Chiov.) Brenan Commelinaceae.

From Republic of South Africa. Seeds collected by E. C. Smith, Jr., Crops Research Division, Plant Industry Station, Beltsville, Maryland. Numbered May 10, 1967.

Col. No. 4752. Tongoland, Natal. Mar. 1967.

**320054 to 320059.**

From Pakistan. Seeds presented by Rafiq Ahmad, Assistant Groundnut Botanist, Rawalpindi. Numbered May 10, 1967.

**320054 to 320058.** ARACHIS HYPOGAEA L. Leguminosae.

**320054.** A 1-2. Erect.

**320055.** B-4. Erect.

**320056.** S.S. 18-1. Semispreading.

**320057.** No. 45. Spreading.

**320058.** No. 334. Spreading.

**320059.** ARACHIS HYPOGAEA f. NAMBYQUARAE (Hoehne) F. J. Herm.  
HR.

**320060.** FRAGARIA (hybrid). Rosaceae.

From Germany. Plants presented by Sengana GmbH. & Company, Hamburg-Volksdorf. Received May 10, 1967.

'Markee'.

**320061 to 320076. ZEA MAYS L. Gramineae. Corn.**

From Brazil. Seeds presented by the Department de Fitotecnia, Universidade Rural do Brazil, Rio de Janeiro. Received May 10, 1967.

Seed lots represent genetic stocks containing genes for resistance to *Puccinia sorghi* in Brazil.

320061. 11/67.	320069. 127/67.
320062. 40/67.	320070. 139/67.
320063. 85/67.	320071. 143/67.
320064. 86/67.	320072. 156/67.
320065. 93/67.	320073. 162/67.
320066. 105/67.	320074. 222/59-la.
320067. 107/67.	320075. 669/62-3c.
320068. 126/67.	320076. 709/59-la.

**320077 and 320078.**

From Poland. Plants and cuttings presented by Research Institute of Pomology, Skierniewice. Received May 11, 1967.

320077. *BUXUS SEMPERVIRENS* L. Buxaceae. Common box. (Cuttings)  
 320078. *ZIZYPHUS JUJUBA* Mill. Rhamnaceae. Jujube.  
 'Ta-yan-tsao'. (Plants)

**320079 to 320081.**

From Thailand. Budsticks presented by Veerapol Niyomthai, Kasetsart University, Bangkok. Received May 11, 1967.

320079. *CITRUS MEDICA* L. Rutaceae. Citron.  
 320080. *CITRUS* sp.  
 'Tee-jian'.  
 320081. *CITRUS* sp.  
 'Som-keo-wan'.

**320082. VERNONIA sp. Compositae.**

From Kenya. Seeds collected by C. E. Smith, Jr., Crops Research Division, Plant Industry Station, Beltsville, Maryland. Received May 15, 1967.

Col. No. 4678. Near Currey's Post north of Pietermaritzburg. To 4 meters high. Fair seed retention.

**320083 to 320096.**

From Ethiopia. Seeds collected December 1966 by C. E. Smith, Jr., New Crops Research Branch, Plant Industry Station, Beltsville, Maryland. Received May 15, 1967.

- 320083 to 320088. *VERNONIA ABYSSINICA* Sch. Bip. Compositae. Ironweed.
320083. Col. No. 4531. Eritrea, village of Scichity, on road to Adiugri. Elevation 7,700 feet.
320084. Col. No. 4532. Ah Deboroa, 32 km. from Asmara.
320085. Col. No. 4536. Nefasit, 20 km. below Asmara on Massaua road. Elevation 6,000 feet.
320086. Col. No. 4544. Nine km. from Asmara on Decamere road.
320087. Col. No. 4545. Fifteen km. from Asmara on Decamere road. Elevation 7,200 feet.

**320083 to 320096—Continued****320088 to 320088—Continued**

320088. Col. No. 4552. Donated by Atto Debresiene. Collected near Asmara.

**320089. VERNONIA sp.**

Col. No. 4558. Ten km. from Jimma along Bonga road. Elevation 5,200 feet.

**320090. VERNONIA sp.**

Col. No. 4559. Near Borie close to Beleta Forest on Bonga road.

**320091. VERNONIA sp.**

Col. No. 4560. Near Agaro.

**320092. VERNONIA sp.**

Col. No. 4561. Near Asendabo about 280 km. from Addis.

**320093. VERNONIA sp.**

Col. No. 4563. Ghibie Valley, on Addis-Jimma road at Kilometer 178. Elevation 4,200 feet.

**320094. VERNONIA sp.**

Col. No. 4564. Abaro area, 10 km. from Sheshemene.

**320095. VERNONIA sp.**

Col. No. 4565. Abaro area, 12 km. from Sheshemene. Elevation 5,000 feet.

**320096. VERNONIA sp.**

Col. No. 4566. On Sheshemene road, 160 km. from Addis. Elevation 5,400 feet.

**320097 to 320111. TRITICUM AESTIVUM L. Gramineae.**

From Kenya. Seeds presented by the Plant Breeding Station, Njoro, through N. F. Jensen, Cornell University, Ithaca, N. Y. Numbered May 18, 1967.

320097. 'Barrigon Bagio'.	320105. 'P. Waiker Munro'.
320098. 'Chile 1.B.'.	320106. RFN.
320099. 'Goblet'.	320107. 'Rushmore × Supresa'.
320100. 'Lahota'.	320108. 'Santa Elena'.
320101. 'La Prevision'.	320109. 'Sonora 64 A'.
320102. 'Mexico 120'.	320110. 'Toluka 50'.
320103. 'Nadadores'.	320111. II-8582.
320104. 'Pitcher'.	

**320112 to 320128. TRITICUM AESTIVUM L. Gramineae.**

From Ethiopia. Seeds collected in 1964 by E. L. Smith, United States Agency for International Development, Debra Zeit. Increased 1965 at Mesa, Arizona. Numbered May 18, 1967.

320112. ELS-1.	320119. ELS-8.
320113. ELS-2.	320120. ELS-9.
320114. ELS-3.	320121. ELS-10.
320115. ELS-4.	320122. ELS-11.
320116. ELS-5.	320123. ELS-12.
320117. ELS-6.	320124. ELS-13.
320118. ELS-7.	320125. ELS-14.



**320112 to 320128—Continued**

320126. ELS-15.

320128. ELS-17.

320127. ELS-16.

**320129 to 320145. TRITICUM AESTIVUM L. Gramineae.**

From Portugal. Seeds received through the Dekalb Agricultural Association, Inc., Dekalb, Illinois. True origin unknown. Increased 1966 at Mesa, Arizona. Numbered May 18, 1967.

320129. WS-5.

320138. WS-24.

320130. WS-6.

320139. WS-30.

320131. WS-9.

320140. WS-32.

320132. WS-12.

320141. WS-33.

320133. WS-13.

320142. WS-34.

320134. WS-14.

320143. WS-36.

320135. WS-16.

320144. WS-38.

320136. WS-20.

320145. WS-39.

320137. WS-23.

**320146 to 320153.**

From Zambia. Seeds collected by C. E. Smith, Jr., Crops Research Division, Plant Industry Station, Beltsville, Maryland. Numbered May 18, 1967.

320146. *VERNONIA ARMERIOIDES* O. Hoffm. Compositae.

Col. No. 4661. Near Kitwe.

320147. *VERNONIA SHIRENSIS* Oliver & Hiern

Col. No. 4674. Livingstone.

320148. *VERNONIA* sp.

Col. No. 4660. Kitwe.

320149. *VERNONIA* sp.

Col. No. 4665. Kitwe.

320150. *VERNONIA* sp.Col. No. 4666. Near Albercorn in *Brachystegia* woodland.320151. *VERNONIA* sp.

Col. No. 4667. Albercorn.

320152. *VERNONIA* sp.

Col. No. 4672. Near Albercorn.

320153. *VERNONIA* sp.

Col. No. 4673. Near Albercorn.

**320154. PENNISETUM TYPHOIDES (Burm. f.) Stapf & C. E. Hubbard Gramineae.**

From the Republic of South Africa. Seeds presented by Pioneer Seed Company, Greytown, Natal. Numbered May 18, 1967.

Selection widely grown for silage in Natal.

**320155 to 320183. LINUM USITATISSIMUM L. Linaceae.****Common flax.**

From the Netherlands. Seeds presented by Stichting Voor Plantenveredeling, 166 Lawickse Allee, Wageningen. Numbered May 18, 1967.

**320155 to 320183—Continued**

320155. No. 1.	320170. No. 16.
320156. No. 2.	320171. No. 17.
320157. No. 3.	320172. No. 18.
320158. No. 4.	320173. No. 19.
320159. No. 5.	320174. No. 20.
320160. No. 6.	320175. No. 21.
320161. No. 7.	320176. No. 22.
320162. No. 8.	320177. No. 23.
320163. No. 9.	320178. No. 24.
320164. No. 10.	320179. No. 25.
320165. No. 11.	320180. No. 26.
320166. No. 12.	320181. No. 27.
320167. No. 13.	320182. No. 28.
320168. No. 14.	320183. No. 29.
320169. No. 15.	

**320184. TRITICUM AESTIVUM L. Gramineae.**

From Yugoslavia. Seeds presented by Clyde Keaton, Agricultural Attache, American Embassy, Belgrade. Numbered May 19, 1967.

'Hybrid 013'. Cross and selection made by A. Djokic, Faculty of Agriculture, Belgrade-Zemun. Homozygous line No. 28/17 selected in F<sub>1</sub> generation from 'Bulgaria No. 958' × 'Etoile de Choisy'.

**320185 to 320188. TRITICUM AESTIVUM L. Gramineae.**

From Italy. Seeds presented by Instituto di Allevamento Vegetale per la Cerealicoltura, Via di Corticella 133, Bologna. Numbered May 19, 1967.

320185. I. Bo. 295v.	320187. I. Bo. 643/468.
320186. I. Bo. 468w.	320188. I. Bo. 2294/488.

**320189 to 320195. TRITICUM AESTIVUM L. Gramineae.**

From Turkey. Seeds presented by the Director, Plant Breeding Station, Eskisehir, through K. L. Lebsock, North Dakota State University, Fargo, North Dakota. Numbered May 19, 1967.

320189. No. 101. 253/39. Akbasak. Ankara.
320190. No. 185-1. Fata selection. Eskisehir.
320191. No. 255. 414/44. Ankara.
320192. No. 1018. Capraz bugday. Manisa.
320193. No. 1149. Ziraat Kakultesi 5084. Kenya.
320194. No. 1718. Kose Melez.
320195. No. 1726. Kilcikli kizilca.

**320196. HORDEUM BULBOSUM L. Gramineae. Bulbous barley.**

From Israel. Seeds presented by D. Zohary, Department of Botany, Hebrew University, Jerusalem. Numbered May 19, 1967.

Originally collected 1963 approximately 15 km. southwest of Jerusalem. Local tetraploid  $2n=28$ .

**320197. IPOMOEA BATATAS (L.) Lam. Convolvulaceae. Sweetpotato.**

From Spain. Roots and cuttings presented by Rafael Rivas Guidet, Nerja, Malaga. Numbered May 29, 1967.

'Finas'. "Commercial variety used for candying. Virus infected when received."

**320198. LYCOPERSICON ESCULENTUM Mill. Solanaceae. Tomato.**

From Canary Islands. Seeds presented by Agricultural Attache, Embassy of Spain, Washington, D. C. Numbered May 29, 1967.

'Especial'. Long life cycle; resistant to salt in irrigation water.

**320199 to 320203. HORDEUM VULGARE L. Gramineae. Barley.**

From Ethiopia. Seeds collected by E. L. Smith, United States Agency for International Development, Debre Zeit. Numbered May 19, 1967.

Collected in Addis Ababa Market. 1965.

**320199.** 3362-A. Covered seed, white.

**320200.** 3362-B. Covered seed, gray.

**320201.** 3362-C. Naked, white.

**320202.** 3362-D. Naked, blue.

**320203.** 3362-E. Covered seed, purplish gray glumes.

**320204 to 320208. AVENA SATIVA L. Gramineae. Common oats.**

From Ethiopia. Seeds collected in 1964 by E. L. Smith, United States Agency for International Development, Debre Zeit. Numbered May 19, 1967.

**320204.** No. 1.

**320207.** No. 4.

**320205.** No. 2.

**320208.** No. 5. Black seed.

**320206.** No. 3.

**320209 to 320243. HORDEUM VULGARE L. Gramineae. Barley.**

From Australia. Seeds presented by the Department of Agriculture, Perth, Western Australia, through P. B. Price, South Dakota State University, Brookings, South Dakota. Numbered May 19, 1967.

**320209.** 'Anabee'.

**320224.** C.P.I. 28385.

**320210.** 'Athenias'. P 8568.

**320225.** C.P.I. 28386.

**320211.** 'Boreham Warrior'.

**320226.** C.P.I. 28387.

**320212.** C.P.I. 11081.

**320227.** 'Early Challenger'.

**320213.** C.P.I. 28360.

**320228.** 'Maris Baldric'.

**320214.** C.P.I. 28361.

**320229.** 'Kihai Hadaka'.

**320215.** C.P.I. 28362.

**320230.** M. 92.

**320216.** C.P.I. 28363.

**320231.** M. 96.

**320217.** C.P.I. 28364.

**320232.** M. 99.

**320218.** C.P.I. 28367.

**320233.** M. 103.

**320219.** C.P.I. 28369.

**320234.** 'Mesterhazi 210'.

**320220.** C.P.I. 28378.

**320235.** 'Nizzanit'.

**320221.** C.P.I. 28379.

**320236.** 'Noyep'.

**320222.** C.P.I. 28383.

**320237.** N.P. 103.

**320223.** C.P.I. 28384.

**320238.** N.P. 104.

**320209 to 320243—Continued**

- |                       |                                  |
|-----------------------|----------------------------------|
| 320239. 'Orge Saida'. | 320242. 'Resibee'.               |
| 320240. 'Perbetei'.   | 320243. Selection BSS-22. Cyprus |
| 320241. 'Prior'.      |                                  |

**320244 to 320249.**

From India. Seeds originally collected 112 miles southeast of Poona in 1964 by P. F. Knowles, University of California, Davis, California and held by Cereal Crops Research Branch, Plant Industry Station, Beltsville, Maryland. Numbered May 19, 1967.

Component samples originating from P.I. 307167.

**320244. TRITICUM sp. Gramineae.**

No. 1. White grains.

**320245. TRITICUM sp.**

No. 2. White grains.

**320246. TRITICUM sp.**

No. 3. White grains.

**320247. TRITICUM sp.**

No. 4. Red grains.

**320248. TRITICUM sp.**

No. 5. Red grains.

**320249. TRITICUM sp.**

No. 6. Red grains.

**320250 to 320256. TRITICUM (hybrid). Gramineae.**

From Spain. Seeds presented by J. R. Lacadena, Estacion Experimental de Aula Dei, Zaragoza. Numbered May 22, 1967.

320250. Triticale. C.I. 13398 (wheat) × 'Gator' (rye).

320251. Triticale. 'Stewart' (wheat) × 'Gator' (rye).

320252. *T. dicoccum* × *T. timopheevi*.

320253. *T. persicum* × *T. dicoccum*.

320254. *T. persicum* × *T. monococcum*.

320255. W63-64-401-2.

320256. W63-64-401-3.

**320257. SOLANUM BERTHAULTII Hawkes Solanaceae.**

From Bolivia. Seed collected by G. E. Easton, Irrigation Experiment Station, Washington State University, Prosser, Washington. Numbered May 22, 1967.

Col. No. Alan 5. Original seed lot obtained in 1961 from Segundo Alandia, Servicio Agricola Interamericano, Division de Investigaciones, La Paz. Received March 1964.

**320258 to 320264.**

From Peru. Seeds collected by J. G. Hawkes, Department of Botany, University of Birmingham, England. Received May 1965. Numbered May 22, 1967.

320258. SOLANUM JALCAE Ochoa Solanaceae.

Hawkes No. 2417.

**320258 to 320264—Continued****320259.** SOLANUM MARINASENSE Vargas

Hawkes No. 2474.

**320260 and 320261.** SOLANUM MEDIANS Bitt.

320260. Hawkes No. 2464.

320261. Hawkes No. 2489.

**320262.** SOLANUM RAPHANIFOLIUM Cardenas & Hawkes

Hawkes No. 2471b.

**320263 and 320264.** SOLANUM SPARSIPILUM (Bitter) Juz. & Buk.

320263. Hawkes No. 2479.

320264. Hawkes No. 2480.

**320265.** SOLANUM BRACHISTOTRICHUM (Bitter) Rydb. Solanaceae.

From Mexico. Seeds received December 1965 from J. G. Hawkes, Department of Botany, University of Birmingham, England. Numbered May 22, 1967.

Hawkes No. 1234. (H. 278). Chihuahua State, Majalca, 40 miles northwest of Chihuahua. Aug. 14, 1958. Altitude 2,150 meters. Dry rocky hillsides, partial shade of *Juniperus monosperma* and *Pinus cembroides*. Flowers and mother tubers.  $2n=24$ .**320266 to 320268.**

From Uruguay. Seeds received December 1965 from J. G. Hawkes, Department of Botany, University of Birmingham, England. Numbered May 23, 1967.

**320266 and 320267.** SOLANUM COMMERSONII Dunal ex Poir. Solanaceae.**320266.** Hawkes No. 702. (H. 180). Dept. San Jose, near Rio Santa Lucia and Puente La Barra, pajonal. Autodromo Nacional, 21.5 kilometers from Montevideo. March 20, 1958. Altitude sea level. Amongst coarse grass and other herbage in damp sandy places. Flowers purple outside. Mother tubers; no berries.**320267.** Hawkes No. 706. (H. 183). Dept. Colonia, La Estanzuela, just outside the plant breeding station. March 23, 1958. Altitude 50 meters. Rough grass on edge of maize field by stream. Tussocks of *Paspalum quadrifarium*. Flowers, berries, and tubers.**320268.** SOLANUM COMMERSONII f. MALMEANUM (Britt.) Corr.

Hawkes No. 725. (H. 196). Dept. Salta, San Antonio, Escuela Experimental de Agronomia. April 16, 1958. Collectors: J. A. Reyes, and Comm. A. Montoro Guarchi. In dark brown, humus-rich soil. Flowers white.

**320269.** SOLANUM COMMERSONII f. MALMEANUM (Bitt.) Corr. Solanaceae.

From Brazil. Seeds received December 1965 from J. G. Hawkes, Department of Botany, University of Birmingham, England. Numbered May 23, 1967.

(H. 569). Dept. Rio Grande do Sul, Ijuí. Seed collected July 23, 1959. Mota da Coata (s.n.). Flowering abundant, fruiting good.

**320270.** SOLANUM FERNANDEZIANUM Phil. Solanaceae.

From Chile. Seeds received December 1965 from J. G. Hawkes, Department of Botany, University of Birmingham, England. Numbered May 23, 1967.

**320270—Continued**

(H. 170). Collected in 1956 by Professor Skottsberg (s.n.) in the Isles of Juan Fernandez. Seeds received September 2, 1957, from plants grown in Stockholm Garden.

**320271. SOLANUM KURTZIANUM** Bitter & Wittm. ex Engl. Solanaceae.

From Argentina. Seeds received December 1965 from J. G. Hawkes, Department of Botany, University of Birmingham, England. Numbered May 23, 1967.

(H. 613). Province Catamarca, Dept. Santa Rosa. Alijilan (latitude 28°10'S., longitude 65°30'W.). Casa del Dique. Collector Ing. Agr. Juan O. Reche (s.n.). April 1960. Very abundant. Seeds received 1961, via J. P. Hjerting.

**320272 to 320339.**

From Argentina. Seeds received from J. G. Hawkes, Department of Botany, University of Birmingham, England, September 1966. Collected by J. G. Hawkes, J. P. Hjerting, and K. Rahn from December 1965 to April 1966. Numbered May 23, 1967.

**320272 to 320278. SOLANUM ACAULE** Bitter. Solanaceae.

**320272.** Hawkes No. 2482. Province Tucuman, Dept. Tafi, near infernillo, Quebrada Honda, 83 kilometers on road from Tafi del Valle to Cafayate, above La Casita. Altitude 3,000–3,270 meters. Feb. 15, 1966. Growing in short grass. No flowers. Flat rosettes; berries.

**320273.** Hawkes No. 3717. Province Salta, Dept. Chicoana, road from Escoipe to Cachi, 15 kilometers above Escoipe, Cuesta del Obispo. Altitude 2,950 meters. Mar. 5, 1966. In very short grazed grassland, in a damp flush.

**320274.** Hawkes No. 3740. Province Salta, Dept. Chicoana, road from Escoipe to Cachi, Cuesta del Obispo, 21.4 kilometers above Escoipe. Altitude 3,200 meters. Mar. 6, 1966. In grass by roadside.

**320275.** Hawkes No. 3813. Province Jujuy, Dept. Yavi, Rincon de Cajas to Santa Victoria road, 2.8 kilometers above Rincon de Cajas. Altitude 4,125 meters. Mar. 12, 1966. In and around a stone corral; very rich soil. Flowers blue-violet, no visible articulation.

**320276.** Hawkes No. 3814. Province Salta, Dept. Santa Victoria, road from Yavi to Santa Victoria at 5.2 kilometers east of Abra de Lizoite, bottom of a valley. Altitude 4,400 meters. Mar. 12, 1966. In stones by road and amongst short grass. Flat rosettes; also in a corral. Some plants with enlarged terminal leaflets on older leaves; berries yellow when ripe.

**320277.** Hawkes No. 3872. Province Salta, Dept. Santa Victoria, above Rodeopampa, 13 kilometers from Santa Victoria on road to La Quiaca. Altitude 3,200 meters. Mar. 15, 1966. By roadside and on road itself. Berries. Puna formation.

**320278.** Hawkes No. 3904. Province Jujuy, Dept. Humahuaca, between Iturbe and Tres Cruces, at 1,316 kilometers on railway. Altitude 3,580 meters. Mar. 16, 1966. Edge of irrigation channel; between railway line and river. Abundant by channel; many fruits.

**320279 and 320280. SOLANUM ACUALE** var. *AEMULANS* (Britt. & Wittm.) Corr.

**320279.** Hawkes No. 3396. Province La Rioja, Dept. Famatina, just above La Encrucijada, in a small valley. Altitude 3,250 to 3,300 meters. Feb. 5, 1966. Dry shaly slopes under protection of *Adesmia*, *Senecio*, etc. Some plants with fruits.

## 320272 to 320339—Continued

## 320279 and 320280—Continued

320280. Hawkes No. 3407. Province La Rioja, Dept. Famatina, Sierra Famatina, valley of Rio Amarillo above La Encrucijada. Altitude 3,250 to 3,350 meters. Feb. 5, 1966. Dry stony and sandy hillsides; occasionally on flat ground where cattle have stood.

## 320281 to 320294. SOLANUM CHACOENSE Bitter

320281. Hawkes No. 3158. Province San Luis, Dept. La Capital, road from San Luis to Trapiche, Quebrada de Los Condores, in a side valley on west side of road. Altitude 850 meters. Jan. 7, 1966. On south facing slope in partial shade of trees in pockets of rich soil among stones.

320282. Hawkes No. 3164. Province San Luis, Dept. La Capital, road from San Luis to Trapiche, above El Dique, 22 kilometers from San Luis in northeast direction. Altitude 900 meters. Jan. 7, 1966. Weed of maize field, rare. Flowers stellate, white. Three or 4 plants in corner of field.

320283. Hawkes No. 3194. Province San Luis, Dept. Chacabuco, road from Villa del Carmen to Merlo, one kilometer along a side road to west, to Estanzuela. Altitude 900 meters. Jan. 9, 1966. In tussocks of *Cortaderia* and other grasses in a palm grove by stream. Apparently natural vegetation. Plants to 50 centimeters, with buds and berries.

320284. Hawkes No. 3196. Province San Luis, Dept. Chacabuco, between Larca and Merlo, 3.8 kilometers south of San Miquel, east of Balcarce. Altitude 1,000 meters. January 9, 1966. By side of road among grass and herbs, and in bushy places behind and among shrubs and trees; also, as a weed in cultivated field. Flowers white, varying from stellate to rotate-pentagonal.

320285. Hawkes No. 3198. Province Cordoba, Dept. San Javier, 7 kilometers from Route 148, 4.3 kilometers east of La Paz. Altitude 650 meters. Jan. 10, 1966. In half-monte, half-chaco scrub, probably Espinal; with *Prosopis*, *Larrea*, *Schinus*, *quebracho*, etc., under shade of trees and shrubs in rich soil, apparently forming part of natural vegetation.

320286. Hawkes No. 3297. Province Cordoba, Dept. Punilla, near Capilla del Monte, Sierra Chica, path up Cerro Uritorco. Altitude 1,100 meters. Jan. 23, 1966. Flowers white, stellate.

320287. Hawkes No. 3305. Province Cordoba, Dept. Punilla, road from La Falda to Cosquin, 13 kilometers north of Cosquin, Valle Hermoso. Altitude 850 meters. Jan. 24, 1966. In a maize field and among grass just outside. Tall plants to 1 meter in maize field. Flowers substellate to pentagonal.

320288. Hawkes No. 3327. Province Cordoba, Dept. Cruz del Eje, road from Tanti to Salsacate, Rio Guasta, Sierra Grande. Altitude 1,700 meters. Jan. 24, 1966. In field border near river; much eaten by beetles.

320289. Hawkes No. 3432. Province Tucuman, Dept. Tafi, road from Tapia to Siambon, Raco, about 24 km., "Huerta La Raquefia". Altitude 1,150 meters. Feb. 12, 1966. Weed of field and by hedge. Some plants to 80 centimeters; no rosettes; other short and rosetted. Stem wings crisped. Calyx glabrous. Berries few, globular, green.

320290. Hawkes No. 3629. Province Salta, Dept. Guachipas, Route 9 from Ruiz de Los Llanos to Pampa Grande at 41.6 kilometers. Altitude 1,100 meters. Mar. 2, 1966. By side of road. Very large plant, 1 meter tall; dark green leaf. One berry, more or less oval.

## 320272 to 320339—Continued

## 320281 to 320294—Continued

320291. Hawkes No. 3633. Province Salta, Dept. Guachipas, Route 9 from Ruiz de Los Llanos to Pampa Grande at 69.5 kilometers. Altitude 1,650 meters. On roadside bank. Plants to 10 cm. tall; no rosettes; stem wings broad; calyx pubescent; flowers white, stellate. No style setae.
320292. Hawkes No. 3700. Province Salta, Dept. Chicoana, 28.8 kilometers from Carril and 4 kilometers above Mal Paso. Altitude 1,700 m. Mar. 5, 1966. Growing on roadside with *S. microdontum* ssp. *gigantophyllum* (Hawkes No. 3699). Two sets of berries, A and B.
320293. Hawkes No. 3706. Province Salta, Dept. Chicoana, road from Carril to Cuesta del Obispo, Pie de la Cuesta, 7.1 kilometers above Escoipe. Altitude 2,400 meters. Mar. 5, 1966. Among scrub, *Adesmia*, etc. Some glands; warty spots on some berries.
320294. Hawkes No. 4039. Province Buenos Aires, Castelar, Centro Nacional de Investigaciones Agropecuarias de I.N.T.A. Altitude about 20 meters. Dec. 9, 1965. In a fallow field, abundant colony of plants in flower. No tubers.

## 320295. SOLANUM INFUNDIBULIFORME Phil.

Hawkes No. 3906. Province Jujuy, Dept. Humahuaca, between Iturbe and Tres Cruces, by railway at 1,313.5 kilometers. Altitude 3,550 meters. Mar. 16, 1966. Dry shaly banks above railway. No flowers. Mature berries frequent; berries purplish brown with whitish spots.

## 320296 and 320297. SOLANUM KURTZIANUM Bitter &amp; Wittm. ex Engl.

320296. Hawkes No. 4003. Province La Rioja, Dept. Chilecito, 23 kilometers from Chilecito on road to Guanchin Viejo. Finca of Domingo Rivero. Altitude 1,800 meters. Mar. 26, 1966. Field between ditch and road.
320297. Hawkes No. 4006. Province La Rioja, Dept. Chilecito, Guanchin Viejo, Finca of Horacio Alcayaga. Altitude 1,800 meters. Mar. 26, 1966. Same place from where *S. spegazzinii* × *S. kurtzianum* (P.I. 320335) was collected, but berries taken from plants in shade of trees.

## 320298 to 320301. SOLANUM LEPTOPHYES Bitter

320298. Hawkes No. 3425. Province La Rioja, Dept. Famatina, Sierra Famatina, path from Los Corrales to La Encrucijada, Los Caracoles. Altitude 2,650 meters. Feb. 5, 1966. Dry stony banks by side of path in full sun. Plants varying in size. Flowers white to pale purple, probably according to dryness of soil.
320299. Hawkes No. 3518. Province Catamarca, Dept. Andalgalá, Route 63, between Santa María and Andalgalá, Ingenio Arenala. Altitude 2,800 meters. Feb. 17, 1966. In streambed in sand (dry) under *Baccharis* and *Salix babylonica* and also in fully sun. Plants from 5 to 70 centimeters according to position, hairs various; flowers almost white in sun plants, purple with darker central streak in shade plants; stunted plants *spg* type, other *fmt* type. Fruits white spotted and warty in most plants, intermediate-sized ones with fine puberulence (= *S. puberulo-fructum*), but some not; never when young or nearly mature.
320300. Hawkes No. 3524. Province Catamarca, Dept. Belén, road from Puerta de Belén (San José) to Pozo de Piedra, 15.5 kilometers along road. Altitude 1,900 meters. Feb. 18, 1966. In a cultivated field of maize and beans; dry sandy soil. Bushy plants in open; leaflet edges smooth; flowers mauve.



## 320272 to 320339—Continued

## 320298 to 320301—Continued

320301. Hawkes No. 3995. Province La Rioja, Dept. Famatina, Sierra Famatina—at base, Los Corrales. Altitude 1,950 meters. Mar. 25, 1966. Amongst tall *Eupatorium* plants (2 meters tall) in damp place by river (crossing fields from lane by house). Plants to 1 meter tall, in partial shade. No flowers; berries.

## 320302 and 320303. SOLANUM MEGISTACROLOBUM Bitt.

320302. Hawkes No. 3727. Province Salta, Dept. Chicoana, road from Escoipe to Cachi, Cuesta del Obispo, 21.4 kilometers above Escoipe. Altitude 3,200 meters. Mar. 5, 1966. In grass by roadside.

320303. Hawkes No. 3829. Province Salta, Dept. Santa Victoria, road from Yavi to Santa Victoria at 16 to 16.7 km. from Santa Victoria. Altitude 3,450 to 3,500 meters. Mar. 13, 1966. Wet puna; by road among herbs and stones. Flowers deep rich purple; berries globular, slightly white spotted.

## 320304 to 320310. SOLANUM MICRODONTUM Bitter

320304. Hawkes No. 3777. Province Jujuy, Dept. Tumbaya, Volcan, western slopes of cordillera on east side of Quebrada Grande, path from Loma de Tambo to Abra Grande de Volcan. Altitude 3,080 meters. Mar. 9, 1966. Among bushes on a flat mesada where cattle have stood. Rich soil. Flowers and fruits.

320305. Hawkes No. 3781. Province Jujuy, Dept. Tumbaya, Volcan, western facing slopes on east side of Quebrada Grande, path from Volcan to Abra Grande de Volcan. Altitude 2,960 meters. Mar. 9, 1966. In large cattle enclosure and among shrubs around it. Mixed with *S. vernei* (P.I. 320333) and *S. microdontum* × *S. vernei* ssp. (P.I. 320338). Fruits.

320306. Hawkes No. 3830. Province Salta, Dept. Santa Victoria, road from La Quiaca to Santa Victoria, 7.2 km. from Santa Victoria, between La Huerta and Rodeopampa. Altitude 2,830 meters. Mar. 13, 1966. Amongst bushes by side of road. Stem in largest plants to 10 mm. diameter, wings straight, to 2.5 mm. flowers white; berries.

320307. Hawkes No. 3863. Province Salta, Dept. Santa Victoria, between La Huerta and Rodeopampa, 7 km. from Santa Victoria on the road to La Quiaca. Altitude 2,725 m. Mar. 15, 1966. Below road, among bushes and stones. Stems branched; calyx and pedicels dark in some plants; flowers white; long styles; many berries.

320308. Hawkes No. 3866. Province Salta, Dept. Santa Victoria, between La Huerta and Rodeopampa, 8.1 km. from Santa Victoria on the road to La Quiaca. Altitude 2,850 m. Mar. 15, 1966. By roadside; one plant; one berry.

320309. Hawkes No. 3868. Province Salta, Dept. Santa Victoria, between La Huerta and Rodeopampa, 9.3 km. from Santa Victoria, just below Rodeopampa. Altitude 2,950 m. Mar. 15, 1966. Among bushes at point where river crosses road. Similar to (P.I. 320307).

320310. Hawkes No. 3871. Province Salta, Dept. Santa Victoria, just below Rodeopampa, 9.3 km. from Santa Victoria on road to La Quiaca. Altitude 2,950 m. Mar. 15, 1966. By road. Plants very tall; leaves simple; flowers white.

## 320311 to 320321. SOLANUM SIMPLICIFOLIUM var. TRIMEROPHYLLUM

Bitt. ex Brucher & Ross

## 320272 to 320339—Continued

## 320311 to 320321—Continued

320311. Hawkes No. 3464. Province Tucuman, Dept. Famaila, road to Tafi del Valle at 36 km. from Acheral. Altitude 1,350 m. Feb. 14, 1966. Among bushes and stones by roadside in rain forest. Plants to 1.75 m.; stem to 1.5 cm. diameter, with large purple wings to 5 mm. wide; crisped. Some fruits. Very abundant. Flowers white. Stem dark purple.
320312. Hawkes No. 3473. Province Tucuman, Dept. Tafi, road to Tafi del Valle, at 44 km. from Acheral, Durazos Blancos. Altitude 1,730 meters. Feb. 14, 1966. Among bushes and herbs by road in rain forest zone.
320313. Hawkes No. 3663. Province Salta, Dept. Guachipas, Estancia Pampa Grande, Cerro Cristal. Altitude 2,600 m. Mar. 3, 1966. Pajonales, open grassland. Flowers white. Some immature berries.
320314. Hawkes No. 3681. Province Salta, Dept. Guachipas, 20.3 kilometers from Pampa Grande (kilometer 1,480). Altitude 1,920 m. Mar. 4, 1966. Among stones and bushes by road, growing with *S. chacoense*. No setae; berries.
320315. Hawkes No. 3683. Province Salta, Dept. Guachipas, 21.2 kilometers from Pampa Grande on road to Salta. Ojo de Agua. Altitude 1,950 m. Mar. 4, 1966. Among bushes by road, *S. chacoense* nearby. Flowers; berries.
320316. Hawkes No. 3690. Province Salta, Dept. Capital, Quebrada de San Lorenzo. Altitude 1,500 m. Mar. 4, 1966. Under shade of *Phoebe porphyria*, *Alnus*, etc. Rain forest; very rich damp soil. Leaves simple, with cell burst, indicating too much rain; plants frequent but not well developed in general. Very few flowers.
320317. Hawkes No. 3699. Province Salta, Dept. Chicoana, 23.8 km. from Carril and 4 km. above Mal Paso. Altitude 1,700 m. Mar. 5, 1966. Growing on roadside scree with *S. chacoense* (Hawkes No. 3700).
320318. Hawkes No. 3710. Province Salta, Dept. Chicoana, road from Carril to Cachi, Cuesta del Obispo, 9.8 km. above Escoipe. Altitude 2,550 m. Mar. 5, 1966. Among bushes by side of road.
320319. Hawkes No. 3753. Province Jujuy, Dept. Capital, Termas de Reyes, side quebrada above hotel. Altitude 1,750 to 1,850 m. Mar. 7, 1966. In scrub and among bushes and stones in bottom of quebrada. Damp humiferous soil.
320320. Hawkes No. 3919. Province Salta, Dept. Guachipas, Estancia Pampa Grande, path to Cerro Cristal. Altitude 2,300 m. Mar. 20, 1966. By path, in *Alnus jorullensis* woods.
320321. Hawkes No. 4001. Province La Rioja, Dept. Chilecito, 23 km. from Chilecito on road to Guanchin Viejo. Finca of Domingo Rivero. Altitude 1,800 m. Mar. 26, 1966. Place where collections made previously (Hawkes No. 3357), near irrigation ditch, but other side; not previously collected.

## 320322. SOLANUM OPLOCENSE Hawkes

Hawkes No. 3907. Province Jujuy, Dept. Humahuaca, between Iturbe and Tres Cruces, by railway at 1,313 to 1,313.5 kilometers. Altitude 3,530 to 3,550 m. On banks of rock and stones by railway; some plants with *S. undundibuliforme* (Hawkes No. 3906) at 1313.5 km.; others among bushes and in stony banks near railway at 1,313 km.

## 320323 to 320325. SOLANUM SANCTAE-ROSAE Hawkes

320323. Hawkes No. 3488. Province Tucuman, Dept. Tafi, near Infiernillo, Quebrada Honda, above kilometer 83 on road from Tafi del Valle to Cafayate, above La Casita. Altitude 3,550 m. Feb. 15, 1966.

## 320272 to 320339—Continued

## 320323 to 320325—Continued

Place where horses and cattle shelter, under a very large rock; very rich soil. Berries.

320324. Hawkes No. 3496. Province Tucuman, Dept. Tafi, near Infernillo, Quebrada Honda, above kilometer 83 on road from Tafi del Valle to Cafayate, above La Casita. Altitude 3,200 m. Feb. 15, 1966. Growing in short grass.

320325. Hawkes No. 3939. Province Salta, Dept. Guachipas, Estancia Pampa Grande, western mountain range between Cerro Cristal and Cerro Pargua, on a ridge, northfacing slope; dry soil. Mar. 20, 1966. Altitude 2,650 to 2,670 m. Ripe berries. Some plants still green, one with faded purple flower.

## 320326. SOLANUM TUBEROSUM L.

Potato.

Hawkes No. 4051.

## 320327 and 320328. SOLANUM VENTURII Hawkes

320327. Hawkes No. 3741. Province Salta, Dept. Chicoana, road from Escoipe to Cachi, Cuesta del Obispo, 15.6 km. from Piedra Molina, 11 km. from Escoipe. Mar. 6, 1966. Altitude 2,700 m. In a scree below the road, partial shade of bushes. Larger plants (contrast P.I. 320328), near a plant of *S. microdontum*. Plants to 60 cm. Flowers clear white. Abundant flowers and fruits.

320328. Hawkes No. 3742. Province Salta, Dept. Chicoana, road from Escoipe to Cachi, Cuesta del Obispo, 15.6 km. from Piedra Molina, 11 km. from Escoipe. Mar. 6, 1966. Altitude 2,700 m. Growing close to P.I. 320327. Same habitat. Smaller plants, further from the plant of *S. microdontum*. Abundant flowers and fruits. Flowers clear white.

## 320329 to 320332. SOLANUM VERNEI Bitter &amp; Wittm. ex Engl.

320329. Hawkes No. 3504. Province Tucuman, Dept. Tafi, near Infernillo, below kilometer 83 on road from Tafi del Valle to Cafayate, in a quebrada of an affluent of Rio Infernillo. Altitude 2,900 m. Feb. 15, 1966. Shaded valley, surrounded by shrubs, in rich soil, humid. Plant to 1.65 m. high; others quite short, according to habitat. Rich purple flowers; many berries. Very common.

320330. Hawkes No. 3505. Province Tucuman, Dept. Tafi, near Infernillo, lower down on road than (P.I. 320329) from Tafi del Valle to Cafayate. Altitude 2,850 m. Dry mesada on side of quebrada. Full sun, in open. No flowers; some fruits; plants wilting.

320331. Hawkes No. 3538. Province Catamarca, Dept. Andalgalá, east slope of Nevados de Aconquija, Estancia "Yunca Suma", Casa de Piedra to Los Quenoales. Altitude 2,270 meters. Feb. 20, 1966. Growing in bushes by path, together with *S. microdontum*, in shade. *Alnus* woods. No flowers.

320332. Hawkes No. 3542. Province Catamarca, Dept. Andalgalá, east slope of Nevados de Aconquija, Estancia "Yunca Suma", Los Quenoales. Altitude 2,450 m. February 20, 1966. Bushy slope in half shade of *Alnus*, etc. No flowers. Plants to 1.5 m. Many berries.

## 320333. SOLANUM VERNEI Bitt. &amp; Wittm. ex Engl.

Hawkes No. 3780. Province Jujuy, Dept. Tumbaya, Volcan, western facing slopes on east side of Quebrada Grande, path from Volcan to Abra Grande Volcan. Altitude 2,960 m. Mar. 9, 1966. In a large cattle enclosure and among shrubs around it. Mixed with *S. microdontum* (P.I. 320305) and close to *S. microdontum* × *S. vernei* ssp. *ballsii* (P.I. 320338). Tall plants with fruits.

## 320272 to 320339—Continued

## 320334 to 320339. SOLANUM (hybrids).

320334. Hawkes No. 3356. (*S. spagazzinii* × *S. kurtzianum*). Province La Rioja, Dept. Chilecito, Guanchin Viejo to El Bordo. Altitude 1,800 m. Jan. 31, 1966. In a grassy shrubby enclosure by road, extremely common. Flowers purple and white. *S. kurtzianum* (P.I. 320297) from same place.
320335. Hawkes No. 3363. (*S. microdontum* ssp. *gigantophyllum* × *S. kurtzianum*). Province La Rioja, Dept. Chilecito, Guanchin Viejo, just above the river crossing. Altitude 1,800 m. Jan. 31, 1966. In grass and among bushes by road. No flowers; buds very like those of *S. rechei*, also leaves.
320336. Hawkes No. 3364. (*S. microdontum* ssp. *gigantophyllum* × *S. kurtzianum*). Province La Rioja, Dept. Chilecito, Guanchin Viejo, in a disused field by the road in full sun. Altitude 1,800 m. Jan. 31, 1966. Flowers white, stamens sterile (but berries collected later).
320337. Hawkes No. 3697. (*S. chacoense* × *S. microdontum* ssp. *gigantophyllum*). Province Salta, Dept. Chicoana, 26.2 km. from Carril and 1.4 km. above Mal Paso. Altitude 1,650-1,700 m. Mar. 5, 1966. Roadside banks and in woods under trees. All types of segregates. No pure ssp. *gigantophyllum* nearby.
320338. Hawkes No. 3782. (*S. microdontum* × *S. vernei* ssp. *ballsii*). Province Jujuy, Dept. Tumbaya, Volcan, western facing slopes on east side of Quebrada Grande, path from Volcan to Abra Grande de Volcan. Altitude 2,960 meters. Mar. 9, 1966. In a large cattle enclosure and among shrubs around it. Mixed with *S. microdontum* (P.I. 320305) and *S. vernei* (P.I. 320333). Plants with some lateral leaflets, white flowers tinted with pale purple, and some fruits.
320339. Hawkes No. 4007. (*S. microdontum* × *S. kurtzianum*). Province La Rioja, Dept. Chilecito, road from Chilecito to Mina de Oro, finca "El Trapiche", belonging to Sr. Antonio Vedia, above Las Talas, about 10 km. from Chilecito. Altitude about 1,500 m. Mar. 26, 1966. By an irrigation channel in rich damp soil among shrubs. Some plants 2 m. high; some with mottle virus. Flowers white; stamens loose; a few berries.

## 320340 to 320344.

From Germany. Seeds received February 1966 from H. Ross, Max-Planck Institut für Züchtungsforschung, 5 Köln-Vogelsang. Numbered May 23, 1967.

## 320340 and 320341. SOLANUM GOURLAYI Hawkes. Solanaceae.

320340. EBS 2288. Collected 1963 by Teddy Monasterios, Cerro de Oruro, Bolivia, 4,100 meters.
320341. EBS 2382. Collected Mar. 22, 1964 by Ana Maria Krueger, Paxana, Bolivia, 3,800 to 4,000 meters.
320342. SOLANUM POLYADENIUM Greenm.  
EBS 2627. Collected Aug. 4, 1965. Cerro Punguato near Morelia, Mexico.
320343. SOLANUM STOLONIFERUM Schlecht. & Bouche  
Collected Aug. 3, 1965. Cerro Punguato near Morelia, Mexico. (With possible introgressions from *S. polytrichon*).
320344. SOLANUM VERRUCOSUM Schlecht.  
EBS 2632. Collected Aug. 6, 1965 on road from Patzcuaro to Opopeo, Mexico. 2,700 meters.

**320345 to 320394.**

From Colombia. Seeds from the Coleccion Central Colombiana de Papa (CCC), received May 1966, from Nelson Estrada Ramos, Instituto Colombiano Agropecuario "Tibaitata", Bogota. Numbered May 23, 1967.

**320345. SOLANUM ANDREANUM** Baker Solanaceae.

Hawkes No. 2546.

**320346. SOLANUM COLOMBIANUM** Dunal

Hawkes No. 2544.

**320347 to 320394. SOLANUM PHUREJA** Juz. & Buk.

**320347. CCC 1115. Chaucha amarilla.**

**320348. CCC 1149. Amarilla.**

**320349. CCC 1150.**

**320350. CCC 1152. Amarilla.**

**320351. CCC 1210. Chaucha blanca.**

**320352. CCC 1211. Chaucha rosada.**

**320353. CCC 1215. Pina.**

**320354. CCC 1217. Chaucha negra.**

**320355. CCC 1219. Chaucha colorada.**

**320356. CCC 1223. Reina.**

**320357. CCC 1227. Pina.**

**320358. CCC 1229. Chaucha blanca.**

**320359. CCC 1231. Calavera.**

**320360. CCC 1232. Chaucha uzul.**

**320361. CCC 1235.**

**320362. CCC 1236. Chaucha.**

**320363. CCC 1237. Chaucha.**

**320364. CCC 1340. Roja.**

**320365. CCC 1343.**

**320366. CCC 1344. Yema de huevo.**

**320367. CCC 1346. Criolla amarilla.**

**320368. CCC 1351. Pan de Dios.**

**320369. CCC 1354. Gigante.**

**320370. CCC 1357. (Dodds 60).**

**320371. CCC 1360. (Dodds 63).**

**320372. CCC 1361. (Dodds 64).**

**320373. CCC 1364. (Dodds 67).**

**320374. CCC 1365. (Dodds 70).**

**320375. CCC 1369. (Dodds 76).**

**320376. CCC 1371. (Dodds 85).**

**320377. CCC 1374. (Dodds 90).**

**320378. CCC 1376. (Dodds 93).**

**320379. CCC 1378. (Dodds 99).**

**320380. CCC 1379. (Dodds 101).**

**320345 to 320394—Continued****320347 to 320394—Continued**

320381. CCC 1380. (Dodds 106).  
 320382. CCC 1381. (Dodds 107).  
 320383. CCC 1382. (Dodds 108).  
 320384. CCC 1383. (Dodds 109).  
 320385. CCC 1384. (Dodds 114).  
 320386. CCC 1387. (Dodds 118).  
 320387. CCC 1389. (Dodds 123).  
 320388. CCC 1390. (Dodds 125).  
 320389. CCC 1400. (Dodds 77).  
 320390. CCC 1409. (Dodds 103).  
 320391. CCC 1410. (Dodds 105).  
 320392. CCC 1411. (Dodds 112).  
 320393. CCC 1412. (Dodds 115).  
 320394. CCC 1413. (Dodds 119).

**320395. RHODODENDRON PULCHRUM var. MAXWELLII (Millais) Rhed. ex Stevens Ericaceae.**

From Great Britain. Plants purchased from Sunningdale Nurseries, Windlesham, Surrey. Numbered May 29, 1967.

**320396 to 320409.**

From Korea. Plants collected by E. G. Corbett and R. W. Lighty, agricultural explorers, Crops Research Division, United States Department of Agriculture, Beltsville, Maryland. For U.S.D.A.-Longwood Cooperative Program. Numbered May 29, 1967.

**320396. ATHYRIUM GRAMMITOIDES (Presl) Milde Aspidiaceae.**

Col. No. K-92. On rocky ledges along trail on Mt. Odai, Kangwon-do. Elevation 780 meters. Low fern; fronds once pinnate; sori long; indusium attached laterally.

**320397. ATHYRIUM JAPONICUM (Thunb.) Copel.**

Col. No. K-260. Along trail on Mt. Tok-Yu, Ko Chun. Fronds once pinnate; sori alternate along vein.

**320398 and 320399. ATHYRIUM YOKOSCENSE (Fr. & Sav.) Christ**

320398. Col. No. K-84. On rock ledges in sandy soil along trail on Mt. Odai, Kangwon-do. Elevation 780 meters. Twice pinnate fronds; center of pinnules usually gray green; produces offsets from crown; indusium attached laterally, reniform.

320399. Col. No. K-147. In shade along trail on Mt. Chiri, Cholla Namdo. Elevation 1,410 meters. Fern to 0.5 meter; fronds bipinnate; sori not seen.

**320400. CONIOGRAMME FRAXINEA (Don) Diels var. INTERMEDIA (Hieron.) C. Chr. Polypodiaceae.**

Col. No. K-306. Along trail to Paek Tam Sa, Mt. Sorak. Fern to 6 to 8 dm. tall; fronds 1 to 2 pinnate; pinnate broad and long; sori linear.

**320401. SEDUM ERUBESCENS var. JAPONICUM (Maxim.) Ohwi Crassulaceae.**

Col. No. K-362. Growing on rocks on eastern slope of Mt. Sorak, Kangwon-do. Elevation 1,470 meters. Fleshy-leaved, rosette-forming plant; flowers white.

**320396 to 320409—Continued**

**320402.** *DAVALLIA MARIESII* Moore Davalliaceae.

Col. No. K-162. Growing on large *Carpinus* tree in Piakok Valley, Mt. Chiri, Cholla Nam-do. Elevation 750 meters. Rhizomatous fern; fronds tripinnate; sori linear.

**320403.** *OSMUNDA ASIATICA* (Fern). Ohwi Osmundaceae.

Col. No. K-324. In shade areas along trail up Mt. Sorak. Elevation 870 meters. Perennial fern; rootstock heavy; fronds robust; 1 to 2 pinnate.

**320404.** *OSMUNDA JAPONICA* Thunb.

Col. No. K-431. In dense shade along trail up Mt. Halla, Cheju Island. Elevation 850 meters. Fern to 0.75 meters.

**320405 and 320406.** *POLYSTICHUM TRIPTERON* (Kunze) Presl Aspidiaceae.

**320405.** Col. No. K-89. Along trail (usually in moist rocky soil in shade) on Mt. Odai, Kangwon-do. Fern to 0.5 meter; frond once pinnate, except for 1 pair of branches at base of frond.

**320406.** Col. No. K-230. In shady, moist ravine, growing on mossy rocks, Mt. Sokni, Chungchong Pukto. Fern to 0.5 meter; fronds branched at base.

**320407.** *PYRROSIA LINEARIFOLIA* (Hook.) Ching Polypodiaceae.

Col. No. K-241. Growing on rocks in open on Mt. Sokni. Elevation 600 meters. Fronds linear, velvety.

**320408.** *TRICHOMANES* sp. Hymenophyllaceae.

Col. No. K-240. On mossy rocks along stream, Mt. Sokni, Chungchong Pukto. Elevation 300 meters. Very small, filmy fern.

**320409.** *WOODSIA POLYSTICHOIDES* var. *NUDIUSCULA* Hook. Aspidiaceae.

Col. No. K-298. Along edge of stream on trail to Paek Tam Sa, Mt. Sorak. Elevation 300 meters. Dwarf fern to 2 dm.; fronds 1 pinnate; sori marginal, round.

**320410 to 320445. AVENA STERILIS L. Gramineae.**

**Animated oats.**

From Israel. Seeds presented by the Faculty of Agriculture, The Hebrew University, Jerusalem, under Public Law 480 Project A10-CR-20. Numbered May 31, 1967.

Selected in Israel for stem rust resistance.

<b>320410.</b> 6-174-5-2a-103.	<b>320423.</b> 6-1744-113-405.
<b>320411.</b> 6-174-5-2a-202.	<b>320424.</b> 6-1744-116-408.
<b>320412.</b> 6-174-5-2a-203.	<b>320425.</b> 6-1744-117-402.
<b>320413.</b> 6-174-5-5a-203.	<b>320426.</b> 6-2129-417.
<b>320414.</b> 6-174-306.	<b>320427.</b> 6-76-4-2-103-307.
<b>320415.</b> 6-1099-126a-301.	<b>320428.</b> 6-688-3-101-401.
<b>320416.</b> 6-1253-104-303.	<b>320429.</b> 6-688-3-101-404.
<b>320417.</b> 6-1253-104-304.	<b>320430.</b> 6-688-3-101-407.
<b>320418.</b> 6-1744-102-302.	<b>320431.</b> 6-688-3-101-408.
<b>320419.</b> 6-2130-302.	<b>320432.</b> 6-688-3-101-416.
<b>320420.</b> 6-2130-318.	<b>320433.</b> 6-688-103-401.
<b>320421.</b> 6-1277-118-402.	<b>320434.</b> 6-688-103-402.
<b>320422.</b> 6-1277-119-401.	<b>320435.</b> 6-1197-112-407.

**320410 to 320445—Continued**

320436. 6-1253-103-304.	320441. 6-2240-301.
320437. 6-1588-101-301.	320442. 6-2190-401.
320438. 6-1588-101-302.	320443. 6-688-111-301.
320439. 6-1730-104-303.	320444. 6-688-111-313.
320440. 6-1730-104-304.	320445. 6-1588-101-303.

**320446 to 320455. IPOMOEA BATATAS (L.) Lam. Convolvulaceae.  
Sweetpotato.**

From New Zealand. Cuttings presented by the Vegetable Station, Crops Research Division, Department of Scientific and Industrial Research, Otara, Auckland. Received June 2, 1967.

320446. No. 46.	320451. No. 600.
320447. No. 99.	320452. No. 616.
320448. No. 153.	320453. No. 646.
320449. No. 452.	320454. No. 675.
320450. No. 579.	320455. No. 694.

**320456 to 320462. HUMULUS LUPULUS L. Moraceae.  
Common hop.**

From the Union of Soviet Socialist Republics. Cuttings presented by the Institute of Plant Industry, Leningrad. Received June 5, 1967.

320456. 'Cepeopska'.	320460. No. 26-9.
320457. No. 5-36.	320461. No. 29-38.
320458. No. 6-9.	320462. No. 30-6.
320459. No. 15-24.	

**320463 to 320465. HUMULUS LUPULUS L. Moraceae.  
Common hop.**

From the Union of Soviet Socialist Republics. Cuttings presented by the Institute of Plant Industry, Leningrad. Received June 6, 1967.

Moscow region.

320463. 'Serebrianka'.
320464. Clone 16.
320465. Clone 18.

**320466. PISTACHIA ATLANTICA Desf. Anacardiaceae.  
Mount Atlas pistachio.**

From the Republic of South Africa. Seeds presented by L. Du Preez, Johannesburg. Received June 6, 1967.

**320467. LACTUCA SATIVA L. Compositae. Lettuce.**

From Czechoslovakia. Seeds presented by Research Institute for Plant Production, Prague. Numbered June 7, 1967.

'Smaragd'. (Kambot II). 'Stupicky kamenac' × 'Bettner'.

Suitable for cold forcing frames and unheated forcing houses. Resistant to *Botrytis cinerea* rot. Early, 93 days.

**320468 to 320470. LYCOPERSICON ESCULENTUM Mill. Solanaceae.  
Tomato.**



**320468 to 320470—Continued**

From Republic of South Africa. Seeds presented by Plant Introduction Officer, Department of Agricultural Technical Services, Pretoria. Numbered June 8, 1967.

320468. DL/67/248. Compound inflorescence.  
 320469. DL/67/249. Dwarf compound inflorescence.  
 320470. DL/67/250. HRI 1331-1-1.

**320471. CYDISTA DIVERSIFOLIA (H.B.K.) Miers Bignoniaceae.**

From El Salvador. Seeds presented by C. L. Horn, Agricultural Administrator, United States Department of Agriculture-Agency for International Development, Technical Assistance Agreement, San Salvador. Numbered June 8, 1967.

Vine to 25 feet high, flowers purplish pink. Nearly constant bloom with heavy monthly flushes.

**320472 to 320492.**

From Sweden. Seeds presented by Fajer Fajersson, Plant Breeding Institution, Weibullsholm, Landskrona. Code numbers represent Weibull's designation. Numbered June 8, 1967.

- 320472 and 320473. *AVENA SATIVA* L. Gramineae. **Common oats.**  
 320472. No. 12539. 'Bambu I'.  
 320473. No. 13313. 'Trio'.  
 320474 to 320478. *HORDEUM VULGARE* L. Gramineae. **Barley.**  
 320474. No. 305/27. 'Puke I'.  
 320475. No. 4132. 'Balder'.  
 320476. No. 4445. 'Stallar'.  
 320477. No. 4744. 'Herta'.  
 320478. No. 5006. 'Stallar II'.

**320479 to 320492. TRITICUM AESTIVUM L. Gramineae.**

Spring wheat.

- |                              |                            |
|------------------------------|----------------------------|
| 320479. No. 3086. 'Karn I'.  | 320482. No. 4138. 'Atson'. |
| 320480. No. 3428. 'Pondus'.  | 320483. No. 9703. 'Atle'.  |
| 320481. No. 3911. 'Karn II'. |                            |

Winter wheat.

- |                              |                              |
|------------------------------|------------------------------|
| 320484. No. 2650. 'Ergo'.    | 320489. No. 11783. 'Trond'.  |
| 320485. No. 5897. 'Aros'.    | 320490. No. 12910. 'Norre'.  |
| 320486. No. 10752. 'Banco'.  | 320491. No. 14410. 'Starke'. |
| 320487. No. 10847. 'Virtus'. | 320492. No. 14433. 'Thor'.   |
| 320488. No. 11746. 'Ertus'.  |                              |

**320493 to 320499. IPOMOEA BATATAS (L.) Lam. Convolvulaceae. Sweetpotato.**

From Japan. Tubers and cuttings presented by the American Embassy, Tokyo. Received June 7, 1967.

From Kyushu Agricultural Experiment Station, Kumamoto.

320493. 'Ariake'. High starch content.  
 320494. 'Kotobuki'. Table type.  
 320495. 'Kuri-Murasaki'. Table type.

**320493 to 320499—Continued**

320496. 'Kyushu No. 27'. Table type.  
 320497. 'Naka-Murasaki'. Table type.  
 320498. 'Norin No. 1'. (Cuttings only).  
 320499. 'Norin No. 10'. Nematode resistant.

**320500 to 320512. SOLANUM MELONGENA L. Solanaceae.****Eggplant.**

From Canada. Seeds presented by John Wiebe, Horticultural Research Institute of Ontario, Vineland Station, Ontario. Received June 8, 1967.

Breeding lines with sources of field resistance to verticillium wilt originating from crosses between Black Beauty and introduced stocks.

320500. No. 8. Parentage includes P.I. 286101. High resistance, fruit oblong, color good.  
 320501. No. 24. Parentage includes P.I. 120796. High resistance.  
 320502. No. 25. Parentage includes P.I. 120796. Moderate resistance.  
 320503. No. 26. Parentage includes P.I. 120796. Moderate resistance.  
 320504. No. 28. Parentage includes P.I. 120796. High resistance.  
 320505. No. 29. Parentage includes P.I. 120796. High resistance. Plant very vigorous, fruit striped.  
 320506. No. 30. Parentage includes P.I. 143409. Moderate resistance, plant short, fruit striped.  
 320507. No. 32. Parentage includes P.I. 143409. Moderate resistance, plant short, fruit oblong.  
 320508. No. 33. Parentage includes P.I. 143409. Moderate resistance, plant tall, fruit long to oblong.  
 320509. No. 35. Parentage includes P.I. 143409. Moderate resistance, plant short, compact.  
 320510. No. 42. Parentage includes P.I. 222269. Moderate resistance, plant fairly large, spreading.  
 320511. No. 43. Parentage includes P.I. 222269. Moderate resistance, early.  
 320512. No. 55. Parentage includes P.I. 222833. High resistance.

**320513 to 320515.**

From the Union of Soviet Socialist Republics. Tubers presented by V. S. Lekhnovitch, All-Union Institute of Plant Industry, Leningrad. Numbered June 12, 1967.

- 320513 and 320514. SOLANUM TUBEROSUM L. Solanaceae. **Potato.**  
 320513. 'Altai Beauty'. (Krasavec Altaja).  
 320514. 'Ekaterinian'. (Ekateriniskij).  
 320515. SOLANUM sp.  
 Unidentified (No. 3).

**320516 to 320530.**

From Japan. Seeds presented by Homiki Uyeki, Department of Agriculture, Ehime University, Matuya-ma, Ehime Ken. Collected in Korea unless otherwise noted. Numbered June 12, 1967.

320516. ABIES HOLOPHYLLA Maxim. Pinaceae. **Needle fir.**

**320516 to 320530—Continued**

320517. *ACER MICRANTHUM* Sieb. et Zucc. Aceraceae. **Pogoda maple.**  
Sizuoka, Japan.
320518. *ACER PSEUDO-SIEBOLDIANUM* Komarov **Purplebloom maple.**
320519. *ACER TRIFLORUM* Komarov **Three-flower maple.**
320520. *CATALPA OVATA* Don Bignoniaceae. **Japanese catalpa.**
320521. *CELTIS SINENSIS* Pers. Ulmaceae.
320522. *CHIONANTHUS RETUSUS* Lindl. Oleaceae. **Chinese fringe tree.**
320523. *CRATAEGUS PINNATIFIDA* Bunge Rosaceae. **Chinese hawthorn.**
320524. *EVODIA DANIELLII* (Benn.) Hemsl. Rutaceae.
320525. *LARIX KOREANA* Nakai Pinaceae.  
Sizuoka, Japan.
320526. *MAESA JAPONICA* Mor. ex Zoll. Myrsineae.
320527. *MALUS BACCATA* var. *MANDSHURICA* (Maxim.) C. Schneid. Rosa-  
ceae. **Manchurian crabapple.**
320528. *PINUS BUNGEANA* Zucc. ex Endl. Pinaceae. **White-barked pine.**
320529. *PINUS KORAIENSIS* Sieb. & Zucc. **Korean pine.**
320530. *PINUS FUMILA* (Pallas) Regel **Stone pine.**
320531. *SACCHARUM* (hybrid) Gramineae. **Sugarcane.**

From the Republic of South Africa. Cuttings presented by the South African Sugar Association, Mount Edgecombe. Received June 14, 1967.

N:Co.310.

**320532. CAMELLIA JAPONICA L. Theaceae. Common camellia.**

From the United States. Selection made at United States Plant Introduction Station, Glenn Dale, Maryland. Received June 16, 1967.

Number 2 selection from P.I. 274797. Flower 3 inches diameter, loose double, solid red, very attractive.

**320533 and 320534.**

From Canada. Plants purchased from Alpenglow Gardens, North Surrey British Columbia. Received April 12, 1967. Numbered June 16, 1967.

320533. *PIERIS JAPONICA* (Thunb.) G. Don Ericaceae. **Japanese pieris.**  
'Yakushmanum'.

320534. *VACCINIUM VITIS-IDAEA* L. Ericaceae. **Cowberry.**

**320535. MEDICAGO SATIVA L. Leguminosae. Alfalfa.**

From Brazil. Seeds presented by Dwayne Rohweder, University of Wisconsin Contract, Agency International Development, Rio Grande do Sul. Received June 16, 1967.

'Crioula'. From plants most typical of variety grown in Rio Grande do Sul.

**320536 to 320539.**

From Taiwan. Seeds presented by Taiwan Agricultural Research Institute, Taipei. Received June 16, 1967.

320536. *DESMODIUM SEQUAX* Wall. Leguminosae.

320537. *VICIA ANGUSTIFOLIA* L. Leguminosae.

320538. *VICIA SATIVA* L.

320539. *VICIA TETRASPERMA* (L.) Moench

**320540 and 320541.**

From the United States. Plants collected by Charles R. Gunn, New Crops Research Branch, Plant Industry Station, Beltsville, Maryland. Received June 16, 1967.

**320540.** *VICIA CAROLINIANA* Walt. Leguminosae.

Macon County, North Carolina. Perennial. Flowers white.

**320541.** *VICIA* sp.

Jasper County, Georgia. Perennial.

**320542.** *VICIA GIGANTEA* Hook. Leguminosae.

From the United States. Seeds collected by O. T. Solbrig, Department of Botany, University of California, Berkeley, Received June 16, 1967.

NU 19711.

**320543.** *VICIA SEPIUM* L. Leguminosae.

From the Union of Soviet Socialist Republics. Seeds presented by Hortus Botanicus Nikitensis, Yalta. Numbered June 16, 1967.

**320544.** *LOLIUM CANARIENSE* Steud. Gramineae.

From Canary Islands. Seeds presented by A. Garcia Cabezon, Jardin de Aclimatacion, Tenerife. Numbered June 16, 1967. Collected at Iqueste de San Andres, Tenerife, April 1965.

**320545 to 320550.**

From Taiwan. Seeds presented by Hsiung Wan, Plant Industry Division, Joint Commission on Rural Reconstruction, Taipei. Numbered June 16, 1967.

**320545 and 320546.** *GLYCINE TABACINA* Benth. Leguminosae.

**320545.** C 48. Native Penghu.

**320546.** W 51. Native Taichung.

**320547.** *GLYCINE TOMENTELLA* Hayata

W 46. Native Kingmen.

**320548.** *GLYCINE TOMENTOSA* Benth.

W 47. Native Taiwan.

**320549.** *GLYCINE* sp.

W 55. Native Kingmen.

**320550.** *GLYCINE* sp.

W 56. Native Malaysia.

**320551.** *GOSSYPIUM* sp. Malvaceae.

From France. Seeds presented by J. Raingeard, Institut de Recherches du Coton et des Textiles Exotiques, Paris. Numbered June 16, 1967.

'Bractees Atrophiees'.

**320552 to 320555.** *TRITICUM AESTIVUM* L. Gramineae.

From Argentina. Seeds presented by Hugo P. Cenoz, Instituto Nacional de Tecnologia Agropecuaria, Centro Nacional de Investigaciones Agropecuaria, Instituto de Fitotecnica, Castelar. Numbered June 16, 1967.

**320552.** D.I.V. 8034. 'Gaboto M.A.G.'.

**320553.** D.I.V. 8202. 'Puelen M.A.G.'. Guatrache.

**320554.** D.I.V. 9339. 'Baflo.

**320555.** D.I.V. 16737. 'Hucal M.A.G.'. Guatrache.

**320556. BRACHIARIA DURA Stapf Gramineae.**

From Zambia. Seeds collected by W. C. Verboom, 55 Links Avenue, Felixstowe, Suffolk, England. Numbered June 16, 1967.

Collected in Mongu, Barotseland.

**320557 to 320559.**

From Finland. Strains developed at Tammisto Plant Breeding Station by Otto Valle, Department of Plant Husbandry, University of Helsinki, Helsinki. Numbered June 16, 1967.

320557. *DACTYLIS GLOMERATA* L. Gramineae. Orchardgrass.

320558. *FESTUCA PRATENSIS* Huds. Gramineae. Meadow fescue.

320559. *PHLEUM PRATENSE* L. Gramineae. Timothy.

**320560 to 320861.**

From Israel. Seeds collected in 1962 and presented in 1964 by I. Wahl, Faculty of Agriculture, Hebrew University of Jerusalem, under Public Law 480 Project A10-CR-20. Numbered June 19, 1967.

320560 to 320735. *AVENA BARBATA* Brot. Gramineae. Slender oats.

From eastern lower Galilee.

320560. 7-112. Poriyya.

320561. 7-132. Hare Yavne'el.

320562. 7-142. Givat Hamore.

320563. 7-143. Tamra.

320564. 7-154. Ramat zevi.

320565. 7-155. Bet HaShitta.

Near Sea of Galilee.

320566. 7-113. Zemah.

320567. 7-114. Deganya.

From Mount Carmel.

320568. 7-115. North of Elyaqim.

320569. 7-120. North of Elyaqim.

320570. 7-135. Ofer.

320571. 7-145. Zikhron Ya'aqov.

From Plateau of Menashe.

320572. 7-121. Tel Yoqne'am.

320573. 7-147. Daliyya.

320574. 7-156. Binyamina.

320575. 7-158. Regavim.

320576. 7-1589. Ar'ara.

From Valley of Esdraelon.

320577. 7-127. Kefar Yehoshua.

320578. 7-128. Kefar Barukh.

320579. 7-130. Tel Adashim.

320580. 7-137. Mishmar HaEmeq.

320581. 7-139. Afula.

320582. 7-149. Megiddo.

**320560 to 320861—Continued****320560 to 320735—Continued**

320583. 7-150. Nir Yafe.

320584. 7-152. Geva.

320585. 7-161. Ram On.

320586. 7-162. Perazon.

320587. 7-165. Hefzi Bah.

From Jordan Valley.

320588. 7-133. Ashdot Ca'aqov.

From Coast of Carmel.

320589. 7-134. En-Ayyala.

From Mount Gilboa.

320590. 7-151. Yizre'er.

320591. 7-163. Nurit.

320592. 7-164. Nature Reserve.

From Valley of Bet Shean.

320593. 7-166. Sede Nahum.

320594. 7-167. Hamadya.

320595. 7-177. Reshafim.

320596. 7-178. Newe Etan.

320597. 7-182. Rewaya.

320598. 7-183. Sede Eliyyahu.

320599. 7-184. Kefar Ruppin.

320600. 7-185. Tirat Zevi.

From central coastal plain.

320601. 7-168. Pardes Hanna.

320602. 7-169. Kefar Pines.

320603. 7-179. Hadera.

320604. 7-180. Sha'ar Menashe.

320605. 7-189. Shoshanat Ha'Amaqim.

320606. 7-190. Avihayil.

320607. 7-191. Gan Yoshiyya.

320608. 7-192. Dora (Netanya).

320609. 7-193. Hadassim.

320610. 7-196. Hadassim.

320611. 7-197. Hadassim.

320612. 7-198. Hadassim.

320613. 7-199. Beerotayim.

320614. 7-200. South of Udim (N. Poleg).

320615. 7-201. West of Tel Mond.

320616. 7-202. Kefar Avoda.

320617. 7-204. Shefayim.

320618. 7-205. Bazra.

## 320560 to 320861—Continued

## 320560 to 320735—Continued

320619. 7-206. Qalmaniyya.  
 320620. 7-208. Herzliyya.  
 320621. 7-209. Ramat HaShavim.  
 320622. 7-210. Newe Yamin.  
 320623. 7-211. Tel Baruch.  
 320624. 7-212. Ramat Aviv.  
 320625. 7-215. North of Antipatris.  
 320626. 7-218. Rosh Ha'AYin.  
 320627. 7-219. Ramat Pinkas.  
 320628. 7-220. Beerot Yizhaq.  
 320629. 7-223. Kefar Habad.  
 320630. 7-229. Lod (Iyddia).  
 320631. 7-230. Lod (Iyddia).  
 320632. 7-236. Holot Yavne.  
 320633. 7-237. Bet Hanan.  
 320634. 7-238. Beer Ya'aqov.  
 320635. 7-239. Lod.  
 320636. 7-241. Mediterranean seashore west of Kefar HaNagid.  
 320637. 7-242. Zaranuga.  
 320638. 7-243. Sitriyya.  
 320639. 7-244. Ramla.  
 320640. 7-246. Bea Zakkay.  
 320641. 7-247. Bet El'azari.  
 320642. 7-248. Mazkeret Batya.  
 320643. 7-252. West of Nir Gallim.  
 320644. 7-253. Bene Darom.  
 320645. 7-255. North of Gedera.  
 320646. 7-256. West of Yesodot.  
 320647. 7-387. Kefar Monash.

## From Foothills of Samaria.

320648. 7-188. Jatt.  
 320649. 7-203. South of Taiyiba.  
 320650. 7-207. Eyal.  
 320651. 7-221. Nahshonim.  
 320652. 7-235. H. Nevallat.  
 320653. 7-250. Kefar Bin Nun.  
 320654. 7-251. Sha'alvim.

## From Judean Foothills.

320655. 7-240. Cimzo.  
 320656. 7-245. H. Bet Anava.  
 320657. 7-249. Pedaya.

**320560 to 320861—Continued****320560 to 320735—Continued**

320658. 7-257. Tal Shahar.  
320659. 7-262. Har'ol.  
320660. 7-278. Haruvit.  
320661. 7-279. Tirosch.  
320662. 7-280. East of Yishi.  
320663. 7-281. Yishi.  
320664. 7-282. Hartuv.  
320665. 7-292. West of Tel Zafit.  
320666. 7-293. Sedot Mikha.  
320667. 7-295. South of Kefar Zekharya.  
320668. 7-315. North of Bet Nir.  
320669. 7-316. Zafririm.  
320670. 7-317. West of Netiv HaLamed He.  
320671. 7-318. Adderet.  
320672. 7-330. Cal'on.  
320673. 7-332. Nehusha.  
320674. 7-344. Lakhish.  
320675. 7-355. West of H. Ramya.  
320676. 7-356. West of H. Ramya.  
320677. 7-383. West of Devira.  
320678. 7-384. Lahav.

From Judean Mountains.

320679. 7-263. Shaar Hagay.  
320680. 7-264. Mesillat Ziyon.  
320681. 7-265. Abu Ghosh.  
320682. 7-266. Qiryat Ye'arim.  
320683. 7-283. N. Soreq north of Nes Harim.  
320684. 7-284. West of Sappir.  
320685. 7-285. En Kerem.  
320686. 7-286. Jerusalem.  
320687. 7-296. Matta.  
320688. 7-297. Mevo Betar.

From southern coastal plain.

320689. 7-267. Shtulim.  
320690. 7-269. Mashmia Shalom.  
320691. 7-275. Hazav.  
320692. 7-276. Kefar Harif.  
320693. 7-277. West of Kefar Menahem.  
320694. 7-287. Nizzanim.  
320695. 7-288. Nizzanim.  
320696. 7-289. Civ'ati.



**320560 to 320861—Continued****320560 to 320735—Continued**

320697. 7-290. Avigdor.  
 320698. 7-291. Qedma.  
 320699. 7-298. Ashqelon (Afridar).  
 320700. 7-299. Tel Ashqelon.  
 320701. 7-300. Berekhya.  
 320702. 7-301. Negba.  
 320703. 7-302. Qomemiyot.  
 320704. 7-308. Sequla.  
 320705. 7-319. West of Zikim.  
 320706. 7-320. Mavqi'im.  
 320707. 7-321. Iyye Bet Tama.  
 320708. 7-325. Iyye Bet Tama.  
 320709. 7-326. Iyye Bet Tama.  
 320710. 7-327. East of Kokhav.  
 320711. 7-328. Shahar.  
 320712. 7-329. Gat.  
 320713. 7-333. East of Yad Mordekhy.  
 320714. 7-334. Gevar'am.  
 320715. 7-335. Niva.  
 320716. 7-336. Sede David.  
 320717. 7-337. West of Etan.  
 320718. 7-338. Uza.  
 320719. 7-345. Yad Mordehai.  
 320720. 7-346. Ibbim.  
 320721. 7-347. Beror Hayil.  
 320722. 7-357. Nahal Oz.  
 320723. 7-358. Kefar Azza.  
 320724. 7-359. East of Mefallsim.  
 320725. 7-380. Kissufim.  
 320726. 7-381. North of Re'im.  
 From Northern Negev.  
 320727. 7-348. N. Shiqma south of Tel Hasi.  
 320728. 7-351. N. Shiqma south of Tel Hasi.  
 320729. 7-361. South of Dorot.  
 320730. 7-362. West of Huhama.  
 320731. 7-371. Talme Bilu.  
 320732. 7-372. Qelahim.  
 320733. 7-374. Qelahim.  
 320734. 7-378. Qelahim.  
 320735. 7-382. Giv'olim.

## 320560 to 320861—Continued

320736 to 320861. AVENA STERILIS L.

Animated oats.

From eastern lower Galilee.

320736. 6-146. Bet-Qeshet.  
 320737. 6-149. Mishmar HaSheloshah.  
 320738. 6-174. En Dor.  
 320739. 6-175. Kefar Kisch.  
 320740. 6-191. Givat Hamore.  
 320741. 6-193. Tamra.  
 320742. 6-224. North of Bet HaShitta.

Near Sea of Galilee.

320743. 6-151. Tel-Qazir.

From Coast of Carmel.

320744. 6-152. En-Karmel.  
 320745. 6-181. En Ayyala.  
 320746. 6-201. Ma'yan Zevi.

From Mount Carmel.

320747. 6-153. Kerem Maharal.  
 320748. 6-154. North of Elyaqim.  
 320749. 6-183. Bat Shelomo.  
 320750. 6-184. East of Bat Shelomo.  
 320751. 6-207. Zikhron Ya'aqov.  
 320752. 6-212. Meir Shefeya.

From plateau of Menashe.

320753. 6-160. Tel Yoqne'am.  
 320754. 6-213. Daliyya.  
 320755. 6-214. South of Daliyya.

From valley of Esdraelon.

320756. 6-173. Tel Adashim.  
 320757. 6-188. HaYogev.  
 320758. 6-217. East of Megiddo.  
 320759. 6-218. Nir Yafe.  
 320760. 6-222. Ramat Zovi.  
 320761. 6-236. Hafzi-Bah.

From Jordan Valley.

320762. 6-179. Ashdot Ya'aqov.

From Valley of Bet Shean.

320763. 6-253. Sede Eliyyaho.

From central coastal plain.

320764. 6-256. East of Kefar Vitkin.  
 320765. 6-261. Avihayil.  
 320766. 6-263. Kefar Monash.  
 320767. 6-265. Dora (Netanya).

**320560 to 320861—Continued****320736 to 320861—Continued**

320768. 6-266. Hadassim.  
 320769. 6-269. Hadassim.  
 320770. 6-272. Beerotayim.  
 320771. 6-274. South of Udim (N. Poleg).  
 320772. 6-275. West of Tel Mond.  
 320773. 6-276. Kefar Avoda.  
 320774. 6-278. Shefayim.  
 320775. 6-279. Bazra.  
 320776. 6-280. Qalmaniyya.  
 320777. 6-282. Herzliyya.  
 320778. 6-284. Ramot HaShavim.  
 320779. 6-285. Newe Yamin.  
 320780. 6-286. Ramat Aviv.  
 320781. 6-290. North of Antipatris.  
 320782. 6-296. Ramat Pinkas.  
 320783. 6-299. Ezra Uvizaron.  
 320784. 6-306. Lod (Lyddia).  
 320785. 6-313. Holot Yavne.  
 320786. 6-315. Beer Ya'aqov.  
 320787. 6-316. Lod.  
 320788. 6-321. South of Ramla.  
 320789. 6-323. Ben Zakkay.  
 320790. 6-334. East of Bene Ayish.  
 320791. 6-335. West of Yesodot.

## From foothills of Samaria.

320792. 6-281. Eyal.  
 320793. 6-298. Nahshonim.  
 320794. 6-312. H. Nevallat.

## From Judean foothills.

320795. 6-317. Gimzo.  
 320796. 6-327. Pedaya.  
 320797. 6-328. Kefar Bin Nun.  
 320798. 6-336. Tal-Shahar.  
 320799. 6-337. Tal-Shahar.  
 320800. 6-339. Tal-Shahar.  
 320801. 6-359. Haruvit.  
 320802. 6-363. Haruvit.  
 320803. 6-374. West of Tel Zafit.  
 320804. 6-375. Sedot Mikha.  
 320805. 6-376. South of Kefar Zekharya.  
 320806. 6-377. Netiv HaLamed He.

**320560 to 320861—Continued****320736 to 320861—Continued**

320807. 6-386. Netiv Halamed He.  
320808. 6-411. North of Bet Nir.  
320809. 6-426. Cal'on.  
320810. 6-427. West of Bet Guvrin.  
320811. 6-428. Nehusha.  
320812. 6-440. H. Ma'aglan.  
320813. 6-450. Ahuzzam.  
320814. 6-452. West of H. Ramya.  
320815. 6-453. Amazia.  
From Judean Mountains.  
320816. 6-343. Mesillat Ziyyon.  
320817. 6-344. Sha'ar HaGay.  
320818. 6-347. Qastel.  
320819. 6-364. N. Soreq north of Nes Harim.  
320820. 6-365. West of Sappir.  
320821. 6-366. En Kerem.  
320822. 6-367. Jerusalem.  
320823. 6-392. Matta.  
320824. 6-393. Mevo Betar.  
From southern coastal plain.  
320825. 6-348. Shtulim.  
320826. 6-357. Kefar Harif.  
320827. 6-358. West of Kefar Menahem.  
320828. 6-368. Nizzanim.  
320829. 6-369. Nizzanim.  
320830. 6-371. Avigedor.  
320831. 6-373. East of Qedma.  
320832. 6-394. Ashgelon (Afridar).  
320833. 6-395. Tel Ashgelon.  
320834. 6-396. Berekhya.  
320835. 6-397. Negba.  
320836. 6-409. Nir Banim.  
320837. 6-415. Ziqim.  
320838. 6-416. Mavqi'im.  
320839. 6-423. East of Kokhav.  
320840. 6-424. Shahaar.  
320841. 6-425. Gat.  
320842. 6-430. Gevar'am.  
320843. 6-431. Niva.  
320844. 6-432. Sede David.  
320845. 6-433. West of Etan.

**320560 to 320861—Continued****320736 to 320861—Continued**

320846. 6-434. Uza.  
 320847. 6-441. Yad Mordehai.  
 320848. 6-442. Ibbim.  
 320849. 6-443. Beror Hayil.  
 320850. 6-457. South of Tel Irit.  
 320851. 6-458. East of Mefalsim.  
 320852. 6-459. Sederot.  
 320853. 6-470. West of Beeri.  
 320854. 6-485. East of Kissufin.  
 320855. 6-487. North of Re'im.  
 320856. 6-488. West of Re'im.

From Northern Negev.

320857. 6-460. South of Dorot.  
 320858. 6-472. Tequma.  
 320859. 6-473. Telme Bilu.  
 320860. 6-480. East of Sede Ze'vi.  
 320861. 6-483. Bet Qama.

**320862 to 320864. ROSA MULTIFLORA Thunb. Rosaceae.****Japanese rose.**

From the Republic of South Africa. Scions presented by the Division of Seed Control, Department of Agriculture Technical Services, Pretoria. Received June 19, 1967.

320862. 'Basye'. Clone No. 110.  
 320863. 'Brooks'. Clone No. 34.  
 320864. 'Clarke'. Clone No. 54.

**320865. COIX LACRYMA-JOBI L. Gramineae.****Jobs-tears.**

From Brazil. Seeds presented by B. V. Skvortzov, Instituto de Botanica, Sao Paulo. Received June 20, 1967.

Originally from Japan.

**320866. CAMELLIA SINENSIS (L.) Kuntze Theaceae.****Tea.**

From Pakistan. Seeds presented Jan. 15, 1965 by Pakistan Tea Board. Dacca. Received June 21, 1967.

Mixture of seeds from nucleus clones plot at Pakistan Tea Research Station.

**320867 and 320868. CAMELLIA SINENSIS (L.) Kuntze Theaceae.****Tea.**

From Brazil. Cuttings obtained Aug. 4, 1965 through the United States Agency for International Development, Rio de Janeiro. Received June 21, 1967.

320867. 'Benifomare'.

320868. 'Yamamoto'.

**320869 to 320874. MALUS SYLVESTRIS Mill. Rosaceae.****Apple.**

From Turkey. Scions presented by Crop Research and Introduction Center, Karsiyaka, Izmir. Received June 21, 1967.

Scions of 'Amasya' variety taken from individual trees.

**320869 to 320874—Continued**

- |                       |                       |
|-----------------------|-----------------------|
| 320869. CRIC 8635-67. | 320872. CRIC 8963-67. |
| 320870. CRIC 8961-67. | 320873. CRIC 8964-67. |
| 320871. CRIC 8962-67. | 320874. CRIC 8965-67. |

**320875 to 320885. CYNODON DACTYLON (L.) Pers. Gramineae. Bermudagrass.**

From the United States. Plants collected in 1966 by G. W. Burton and held by Coastal Plain Experiment Station, Tifton, Ga. Received June 21, 1967.

From Italy.

320875. Col. No. 19. Milano. In turf on thin, dry soil layer on railroad overpass. Common type. No stem gall.
320876. Col. No. 20. Brembo river valley near Lenna along road to Foppolo. Elevation 900 meters. Plant medium tall. No disease at this elevation or higher.

From France.

320877. Col. No. 22. Along road near Le Muy. Very dry area; many plants dried. Main grass on road shoulders. Common type. No stem gall.
320878. Col. No. 23. In vineyard between Remoulins and Uzes. Plant medium tall, no disease.
320879. Col. No. 24. Along highway N 107, 29 km. southeast of Florac. Elevation 800 meters. Very dry site. One small clump with no heads, medium tall, common type. No disease.
320880. Col. No. 25. Along highway N 107, 24 km. southeast of Mende. Elevation 1,000 meters. Plant tall, vigorous, resembles 'Coastal'. No disease.
320881. Col. No. 26. Roadside between Fontenay and Nallers on traffic-worn gravel. Good common type. No disease. Associated grasses *Lolium perenne*, *Agrostis* and *Festuca*.
320882. Col. No. 28. Roadside on high hill east of St. Maxient, exposed to wind, cold and heavy traffic. Associated plants *Lolium perenne*, *Festuca* and *Trifolium pratense*.
320883. Col. No. 29. In rock cracks at waters edge of Loire river near Varades. Large common type. No disease.
320884. Col. No. 30. Rambouillet. At edge of *Agrostis* lawn around Chateau. Good common type, vigorous, no disease, apparently many years old.
320885. Col. No. 31. Paris. Tuilleries and along Champs Elysees. Common types. No heads, no disease or insects. Clumps along edge of *Agrostis-Festuca-Poa* turf.

**320886 and 320887.**

From Korea. Plant material collected by E. G. Corbett and R. W. Lighty, agricultural explorers, Crops Research Division, United States Department of Agriculture, Beltsville, Maryland. For U.S.D.A.-Longwood Garden Cooperative Program. Numbered June 22, 1967.

- 320886 and 320887. *CAMELLIA JAPONICA* L. Theaceae. Common camellia.
320886. Col. No. K-19. On road from Soguipo to Cheju, Cheju Island, growing at edge of woods. Elevation 480 meters. Evergreen shrub to 1.8 meters high, very dense. Flowers not seen. Cuttings.
320887. Col. No. K-38. On trail along east coast of Ullungdo, in forest of *Acer* and *Pinus*. Elevation 300 meters. Evergreen shrub to 3 meters high. Darkest green leaves in area. Flowers not seen. Cuttings.

**320888 to 320895. CAMELLIA JAPONICA L. Theaceae.****Common camellia.**

From Japan. Plant material collected by E. G. Corbett and R. W. Lighty, agricultural explorers, Crops Research Division, United States Department of Agriculture, Beltsville, Maryland. Numbered June 22, 1967.

Kurume City, Japan. In garden of Nakahara Chyorakuen. Evergreen shrubs of race called Higo camellias. Cuttings.

- 320888. Col. No. K-510. 'Kumagai'.
- 320889. Col. No. K-512. 'Momigigari'.
- 320890. Col. No. K-513. 'Shin Turasa Nishiki'.
- 320891. Col. No. K-514. 'Hagoromo'.
- 320892. Col. No. K-516. 'Hakuturu'.

Kurume, Japan. Collected at Kurume Branch Horticultural Experiment Station. Evergreen shrubs of Higo strain of camellias. Cuttings.

- 320893. Col. No. K-521. 'Hhakaku'.
- 320894. Col. No. K-522. 'Yamato Nishiki'.
- 320895. Col. No. K-523. 'Kamagaya'.

**320896 to 320900.**

From Korea. Plant material collected by E. G. Corbett and R. W. Lighty, agricultural explorers, Crops Research Division, United States Department of Agriculture, Beltsville, Maryland. Numbered June 22, 1967.

**320896. FRAXINUS SIEBOLDIANA Blume Oleaceae.**

Col. No. K-224. On Mt. Sokni, Chungong Pukto, growing in sandy soil with pine. Elevation 660 meters. Deciduous tree to 15 meters high. Leaves pinnately compound, graceful. Seedlings.

**320897. HIBISCUS SYRIACUS L. Malvaceae. Shrub-althea.**

Col. No. K-174. On grounds of Sericultural Experiment Station, Suwon. Deciduous shrub to 4 meters high. Flowers pink, petals fringed on tip, single. Cuttings.

**320898. LILIUM LEICHTLINII var. MAXIMOWICZII (Regel) Baker Liliaceae.**

Col. No. K-101. In swampy area near Taek Wal Yong Experiment Station, Kangwon-do. Elevation 780 meters. Bulbous perennial to 1 meter high. One to 2 flowers. Bulbs round. Underground, spreading stems up to 20 cm. Bulbs.

**320899. STREPTOPUS STREPTOPOIDES (Ledeb.) Frye & Rigg. Liliaceae.**

Col. No. K-136. In shady area along trail on Mt. Chiri, Cholla Nam-do. Elevation 1,350 meters. Fleshy rooted perennial. Fruit red, terminal. Stem internodes angled. Roots.

**320900. WEIGELA SUBSESSILIS (Nakai) Bailey Caprifoliaceae.**

Col. No. K-186. Kwang Kyo. At base of rocky knoll, growing on streambank. Deciduous shrub to 1 meter high. Light-colored foliage selection. Flowers not seen. Cuttings.

**320901 to 320910.**

From Japan. Plant material collected by E. G. Corbett and R. W. Lighty, agricultural explorers, Crops Research Division, United States Department of Agriculture, Beltsville, Maryland. Numbered June 22, 1967.

**320901. WISTERIA sp. Leguminosae.**

Col. No. K-528. 'Noda'. Plants purchased from nursery, Tokyo, Japan.

**320902. WISTERIA sp.**

Col. No. K-529. 'Doyou'. Plants purchased from nursery, Tokyo, Japan.

**320901 to 320910—Continued****320903.** WISTERIA sp.

Col. No. K-530. 'Sakou'. Plants purchased from nursery, Tokyo, Japan.

**320904.** WISTERIA sp.

Col. No. K-531. 'Murasaki Kabitan'. Plants purchased from nursery, Tokyo, Japan.

**320905.** WISTERIA sp.

Col. No. K-532. 'Sirokaftan'. Plants purchased from nursery, Tokyo, Japan.

**320906.** WISTERIA sp.

Col. No. K-533. 'Sironoda'. Plants purchased from nursery, Tokyo, Japan.

**320907.** WISTERIA sp.

Col. No. K-534. 'Hagi'. Plants purchased from nursery, Tokyo, Japan.

**320908.** WISTERIA sp.

Col. No. K-535. 'Kyusyaku'. Plants purchased from nursery, Tokyo, Japan.

**320909.** WISTERIA sp.

Col. No. K-536. 'Itusai'. Plants purchased from nursery, Tokyo, Japan.

**320910.** WISTERIA sp.

Col. No. K-537. 'Nisiki'. Plants purchased from nursery, Tokyo, Japan.

**320911 to 320915.**

From Hungary. Seeds presented by A. Jánossy, National Institute of Agrobotany, Tápózele. Received June 22, 1967.

**320911.** ALIUM CEPA L. Liliaceae.**Onion.**

'Ezustfehér'. Silver white.

**320912.** APIUM GRAVEOLENS L. Umbelliferae.**Celery.**

'Hegykdí'. (tuber celery).

**320913 and 320914.** BRASSICA OLERACEA var. CAPITATA L. Cruciferae.**Cabbage.****320913.** 'F-5'.**320914.** 'F-8'.**320915.** BRASSICA OLERACEA var. VIRIDIS L.**Collard.**

'Fodroslevelü takarmánykel'.

**320916 to 320957.**

From the Union of Soviet Socialist Republics. Seeds presented by All-Union Institute of Plant Industry, Leningrad. Received June 22, 1967.

**320916.** ABIES NEPHROLEPIS (Trautv.) Maxim. Pinaceae.**320917.** ABIES SIBIRICA Ledeb.**Siberian fir.****320918.** BETULA HUMILIS Schrank Betulaceae.**320919.** BETULA MIDDENDORFFII Trautv. & Mey. in Middend.**320920.** BETULA PLATYPHYLLA Sukatchev**Asian white birch.****320921.** HORDEUM DEFICIENS Steud. Gramineae.**Deficient barley.**

No. 18838. Origin Ethiopia.

**320922 and 320923.** HORDEUM DISTICHON L.**Two-rowed barley.****320922.** No. 8687. Origin Ethiopia.



**320916 to 320957—Continued****320922 and 320923—Continued**

320923. No. 18828. Origin Ethiopia.

320924 to 320928. *HORDEUM DISTICHON* var. *PALMELLA* Harlan  
Two-rowed barley.

320924. No. 19824. Origin Algeria.

320925. No. 5933. Origin Afghanistan.

320926. No. 19531. 'Esperance'. Origin Morocco.

320927. No. 19695. G-1571. Valdimir region.

320928. No. 17843. 'Omskij 13709'. Omsk region.

320929. *HORDEUM VULGARE* L. Common barley.

No. 18830. Origin Ethiopia.

320930 to 320934. *HORDEUM VULGARE* var. *PALLIDUM* Seringe  
Six-rowed barley.

320930. No. 5977. Origin Afghanistan.

320931. No. 16638. 'Dzau-Bapust'. Origin Tadjikistan.

320932. No. 16955. 'Falarinec'. Irkutsk region.

320933. No. 18469. 'Odesskij 17'. Odessa region.

320934. No. 19569. 'Fertodi 4'. Origin Hungary.

320935 to 320954. *LENS CULINARIS* Medic. Leguminosae. Lentil.

320935. K-6. Origin Iran.

320936. K-15. 'Daghestanica'. Daghestan.

320937. K-29. Origin Germany.

320938. K-244. Origin The Ukraine.

320939. K-331. Origin Tunisia.

320940. K-336. Origin Italy.

320941. K-359. Origin Ethiopia.

320942. K-383. Origin Afghanistan.

320943. K-419. Origin Afghanistan.

320944. K-436. Origin Algeria.

320945. K-487. Origin Bulgaria.

320946. K-612. Origin Palestine.

320947. K-1177. Origin Turkey.

320948. K-1831. Origin Azerbaijan.

320949. K-1834. 'Tadjikskaja 95'. Tadjikistan.

320950. K-1849. 'Astarakskaja Mestnaja'. Origin Armenia.

320951. K-1978. Origin India.

320952. K-2079. Origin Czechoslovakia.

320953. K-2086. 'Schwarze Linse' Origin East Germany.

320954. K-2101. 'Slovenian Krayoda'. Origin Hungary.

320955. *PICEA ABIES* (L.) Karst. Pinaceae. Norway spruce.320956. *PICEA OBOVATA* Ledeb. Siberian spruce.320957. *PINUS CEMBRA* L. Pinaceae. Swiss stone pine.

**320958 to 320967. SESAMUM INDICUM L. Pedaliaceae. Sesame.**

From Venezuela. Seeds presented by Estacion Experimental Araure, through Carlos J. Ortega, Agricultural Attache, American Embassy, Caracas. Received June 22, 1967.

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|----------------------|-------------------------|
| 320958. 'Acarigua'.  | 320963. 'Morada'.       |
| 320959. 'Aceitera'.  | 320964. 'Schulze'.      |
| 320960. 'Caripucha'. | 320965. 'Venezuela 44'. |
| 320961. 'Glauc'.     | 320966. 'Venezuela 51'. |
| 320962. 'Inamar'.    | 320967. 'Venezuela 52'. |

**320968 to 320973.**

From Hungary. Seeds received from E. Kurnick, Agriculture Research Institute, Iregszemse and presented by National Institute of Agrobotany, Taposzele. Received June 22, 1967.

**320968 to 320971. PHASEOLUS VULGARIS L. Leguminosae. Common bean.**

320968. 'Iregi Juliska'. Maturity 103 days.  
 320969. 'Iregi Cardinal'. Maturity 76 days.  
 320970. 'Iregi Fullgreen'. Maturity 80 days.  
 320971. 'Iregi Wisconsin'. Maturity 92 days.

**320972 and 320973. PISUM SATIVUM L. Leguminosae. Pea.**

320972. 'Iregi sarga IP. 1'. Fodder type. Maturity 79 days.  
 320973. 'Iregi zold IP. 2'. Fodder type. Maturity 83 days.

**320974 to 320992.**

From Sierra Leone. Seeds presented by Botany Department, Fourah Bay College, Freetown. Received June 22, 1967.

320974. CAJANUS CAJAN (L.) Millsp. Leguminosae. Pigeon-pea.  
 320975. CALOPOGONIUM MUCUNOIDES Desv. Leguminosae.  
 320976. CENTROSEMA PUBESCENS Benth. Leguminosae.  
 320977. CLITORIA TERNATEA L. Leguminosae. Asian pigeonwings.  
 320978. DIGITARIA ADSCENDENS (H.B.K.) Henr. Gramineae.  
 320979. ERAGROSTIS LINEARIS (Schum. & Thonn.) Benth. Gramineae.  
 320980. ERAGROSTIS TENELLA (L.) Beauv. ex. Roem. & Schult.  
 320981. ERAGROSTIS UNIOLOIDES Retz. ex Steud. Lovegrass.  
 320982. ERAGROSTIS sp.  
 320983. LEUCAENA LEUCOCEPHALA (Lam.) De Wit Leguminosae. Leadtree.  
 320984. PANICUM BREVIFOLIUM L. Gramineae.  
 320985. PANICUM sp.  
 320986. PENNISETUM LEONIS Stapf & Hubb. Gramineae.  
 320987. PENNISETUM SUBANGUSTUM (Schum.) Stapf & C. E. Hubbard  
 320988. PHASEOLUS ADENANTHUS G. Meyer Leguminosae.  
 320989. RHYNCHOSIA PYCNOSTACHYA (DC.) Meikle Leguminosae.  
 320990. RHYNCHOSIA VIOLACEA K. Schum.  
 320991. STYLOSANTHES ERECTA Beauv. Leguminosae.  
 320992. VIGNA SINENSIS (Torner) Savi Leguminosae.

- 320993.** CUCUMIS MELO L. Cucurbitaceae. **Muskmelon.**  
From Canada. Seeds presented by Department of Agriculture, Research Station, Morden, Manitoba. Received June 22, 1967.  
'Sungold'.
- 320994 to 321020.**  
From Taiwan. Seeds presented by Taiwan Agricultural Research Institute, Taipei. Received June 27, 1967.
- 320994 to 320996.** APIUM GRAVEOLENS L. Umbelliferae. **Celery.**
- 320994.** 'Hainan'. Ta Feng Seed Company.
- 320995.** 'Huang Hsin Late'. Ta Feng Seed Company.
- 320996.** 'Huang Hsin Medium Early'. Ta Feng Seed Company.
- 320997 to 321001.** BRASSICA OLERACEA var. BOTRYTIS L. Cruciferae. **Cauliflower.**
- 320997.** 'Fengshan Early'. Nung Yu Seed Company.
- 320998.** 'Fengshan Extra Early'. Nung Yu Seed Company.
- 320999.** 'Fengshan Late'. Nung Yu Seed Company.
- 321000.** 'Fengshan Medium Early'. Nung Yu Seed Company.
- 321001.** 'Tainung No. 1'. Rich Farme Seed Company.
- 321002.** BRASSICA OLERACEA var. CAPITATA L. **Cabbage.**  
'Taiwan Early'. Taiwan Seed Service.
- 321003.** CAPSICUM ANNUUM L. Solanaceae. **Pimento.**  
'Goat's Horn'. Ta Feng Seed Company.
- 321004 and 321005.** CUCUMIS MELO L. Cucurbitaceae. **Muskmelon.**
- 321004.** 'Nung Yu No. 2'. Nung Yu Seed Company.
- 321005.** 'Tainan No. 2.'. Taiwan Seed Service.
- 321006 to 321011.** CUCUMIS SATIVUS L. **Cucumber.**
- 321006.** 'Fengyuan Green Skin'. Ta Feng Seed Company.
- 321007.** 'Improved Green Skin'. Ta Feng Seed Company.
- 321008.** 'Nanchi Black Spine'. Rich Farme Seed Company.
- 321009.** 'Nanchi White Spine'. Rich Farme Seed Company.
- 321010.** 'Nei Wu'. Rich Farme Seed Company.
- 321011.** 'Taichung Mou Gua'. Ta Feng Seed Company.
- 321012 and 321013.** LACTUCA SATIVA L. Compositae. **Lettuce.**
- 321012.** 'Native'. Ta Feng Seed Company.
- 321013.** 'White Lettuce'. Rich Farme Seed Company.
- 321014 to 321016.** LYCOPERSICON ESCULENTUM Mill. Solanaceae. **Tomato.**
- 321014.** 'Chu Yu'. Rich Farme Seed Company.
- 321015.** 'Fengshan No. 51'. Nung Yu Seed Company.
- 321016.** 'Persimmon Type'. Ta Feng Seed Company.
- 321017 and 321018.** SOLANUM MELONGENA L. Solanaceae. **Eggplant.**
- 321017.** 'Fengyuan Purple'. Rich Farme Seed Company.
- 321018.** 'Pingtung Long Red'. Nung Yu Seed Company.
- 321019 and 321020.** SPINACIA OLERACEA L. Chenopodiaceae. **Spinach.**
- 321019.** 'Round Seeded'. Ta Fang Seed Company.
- 321020.** 'Wushe Waka Maru'. Ta Feng Seed Company.

**321021 to 321023.**

From Sweden. Seeds presented by The Botanical Garden, Lund. Received June 27, 1967.

321021. *VACCINIUM OXYCOCCOS* L. Ericaceae. Small cranberry.  
 321022. *VACCINIUM ULIGINOSUM* L. Bog blueberry.  
 321023. *VACCINIUM VITIS-IDAEA* L. Cowberry.

**321024. LATHYRUS ARTICULATUS ssp. CLYMENUM (Bris.) Maire Leguminosae.**

From the United States. Plants growing at Soil Conservation Service, Agricultural Research Center, Beltsville, Maryland. Original seed collected May 18, 1966, by R. L. Henry, Agency for International Development, Kentira, Morocco. Numbered June 27, 1967.

Plant to 8 feet high; flowers purple, 1 to 2 per raceme.

**321025. LEUCAENA RETUSA Benth. Leguminosae.**

From the United States. Seeds collected by Lloyd Spetzman, New Crops Research Branch, Plant Industry Station, Beltsville, Maryland. Received June 27, 1967.

Col. No. LS 348. Junction 90-163, Comstock, Val Verde County, Texas. Across road from Border Patrol Station. Thin limestone soil; thicket with mesquite, cacti, thorn scrub in swale. Shrub to 12 feet high, 1 inch diameter. Foliage pale green; flowers yellow balls to  $\frac{3}{4}$  inch.

**321026 and 321027. LYCOPERSICON ESCULENTUM Mill. Solanaceae. Tomato.**

From the Union of Soviet Socialist Republics. Seeds presented by All-Union Institute of Plant Industry, Leningrad. Received June 27, 1967.

Possibly resistant to bacterial canker.

321026. 'Anait 20'.  
 321027. 'Budenovka 363/4'.

**321028. LYCOPERSICON ESCULENTUM Mill. Solanaceae. Tomato.**

From England. Seeds presented by L. A. Darby, Glasshouse Crops Research Institute, Littlehampton, Sussex. Received June 27, 1967.

'Baby Lea'.

**321029 to 321037.**

From Germany. Seeds presented by Institut for Pflanzenpathologic and Pflanzenschutz der Georg August Universitat, Gottingen. Received June 27, 1967.

**321029 to 321033. LYCOPERSICON ESCULENTUM Mill. Solanaceae. Tomato.**

321029. Nr. LYC 128/66. 'Magnum Bonum'.  
 321030. Nr. LYC 180/63. 'Pierette'.  
 321031. Nr. LYC 284/64. 'Perfection'.  
 321032. Nr. LYC 324/66. 'Resista'.  
 321033. Nr. LYC 1276/64. 'Pierette'.

**321034 to 321037. PHASEOLUS VULGARIS L. Leguminosae. Common bean.**

321034. 'Famos'. Bush. True type.  
 321035. 'Hilds Marona'.  
 321036. 'Hilds Rapid'.  
 321037. 'Sperling's Erato'. Bush Wax.

**321038 and 321039. ZEA MAYS L. Gramineae. Corn.**

From Hungary. Seeds presented by National Institute of Agrobotany, Taposzele. Received June 28, 1967.

**321038.** No. 1513/1966. 'P4'. Four-rowed.

**321039.** No. 3129/1964. '4P'. Four-rowed.

**321040 to 321071. LYCOPERSICON ESCULENTUM Mill. Solanaceae. Tomato.**

From the United States. Selections made at Regional Introduction Station, Geneva, N.Y. Numbered June 28, 1967.

**321040.** 4624B. Selection from P.I. 119778. Plant vigorous, indeterminate. Fruit flattened, lobed, dark red.

**321041.** G 11704S. Selection from P.I. 199016. Plant indeterminate, 80 days to first ripening. Fruit large, slightly oblate, firm, small core, 9 locules, average weight 218 grams.

**321042.** G 2166CGS. Bulk selections from P.I. 237137. Germination in 5 weeks at 10°C. Plant short, sturdy, bushy, indeterminate. Fruit variable in shape, mostly plum, good color, cracking, uneven ripening, separate easily from peduncle.

**321043.** G 8919CGS. Bulk selections from P.I. 255830. Germination in five weeks at 10°C. Plant indeterminate, medium early. Fruit mostly oblong plum 6.0 cm. by 2.6 cm. many two-lobed pepper shape.

**321044.** G 8929CGS. Bulk selections from P.I. 255840. Germination in five weeks at 10°C. Plant vigorous, indeterminate, medium early. Fruit nearly sessile, plum shape 5.5 cm. by 4.0 cm., 2 locules, good color throughout, juice dark red.

**321045.** G 8931S. Selection from P.I. 255842. Plants determinate. Fruit mostly plum shape, crack resistant, excellent color, uneven ripening, good set and yield, 80 days to ripening.

**321046.** G 8946S. Selection from P.I. 255857. Plant indeterminate, medium maturity. Fruit plum, small, excellent color, high acidity, uneven ripening. Resistant to late blight.

**321047.** G 9725S. Selection from P.I. 262162. Plant determinate, dwarf, compact, 84 days to first ripe fruit. Fruit 100 grams, good color, little cracking, uniform ripening, high yield.

**321048.** G 9808S. Selection from P.I. 262907. Plant indeterminate, 84 days to first ripening. Fruit 218 grams, slightly flat, thick walled, little cracking, good color, uniform ripening. Excellent set and yield.

**321049.** G 9809S. Selection from P.I. 262908. Plant indeterminate. Fruit flat globe 4.7 cm. by 6.0 cm., 8 locules, good internal color, little cracking.

**321050.** G 9811S. Selection from P.I. 262910. Plant indeterminate. Fruit small, long to oblong plum, paste type, flesh thick, uneven ripening.

**321051.** G 9915S. Selection from P.I. 262932. Plant determinate, open spreading. Fruit large, green base, no cracking, 73 days to ripening.

**321052.** G 10221S. Selection from P.I. 263720. Plant indeterminate. Fruit excellent external color, little cracking, uniform ripening, medium maturity, high set and yield.

**321053.** G 10387CGSA. Selection from P.I. 264336. Plant indeterminate. Fruit large, flat, medium green shoulder, red skin, depressed blossom end, corrugated, medium maturity. Germination in 5 weeks at 10 C.

**321054.** G 10387CGSB. Selection from P.I. 264336. Same as P.I. 321053 except for pink skin.

## 321040 to 321071—Continued

321055. G 3172. 'Globetrotter'. Brooks, Alberta, Canada. Plant determinate, 28 cm. high by 60 cm. wide. Fruit flat globe, 5 per cluster, 5.5 cm. by 8.5 cm., radial cracks, 11 locules. No blossom end rot or mosaic.
321056. G 3291. 'Conserva 1010'. M. Herb, Naples, Italy. Fruit flat globe, 12 per cluster, 3.5 cm. by 6.0 cm., 2 locules. No blossom end rot, susceptible to *Verticillium*.
321057. G 10706. 'Eastern States 24'. Eastern States Cooperative, West Springfield, Mass. Plant determinate, 53 cm. high by 116 cm. wide. Fruit 5 per cluster, flat globe, 7.0 cm. by 8.5 cm., 8 locules, excellent color inside and out, no cracking. Late, prolific.
321058. G 11095. 'Summer Sunrise'. Agricultural Experiment Station, Kingston, Rhode Island. Plant determinate, 50 cm. by 140 cm., leaves small. Fruit flat globe 6.5 cm. by 8.0 cm., 5 per cluster, 12 locules, blotchy ripening. Very prolific.
321059. G 11279. 'Rhode Island Early'. Plant indeterminate, 45 cm. high by 175 cm. wide, leaves small. Fruit globe 5.7 cm. deep by 6.6 cm. wide, 6 per cluster, 6 to 8 locules, excellent internal and external color. Very early.
321060. G 11906. 'Odessa'. Lake Odessa Canning Company, Lake Odessa, Mich. Plant indeterminate, 55 cm. high by 103 cm. wide, foliage dark green. Fruit deep globe 7.0 cm. by 5.0 cm., puffy, grooved, borne blossom end up, 5 per cluster, does not color in dark, even ripening. Persists on vine without rot.
321061. G 12515. 'Bounty' × 'Valiant'. Plant determinate, small. Fruit flat globe 5.1 cm. by 6.3 cm., 2 to 3 per cluster, 6 locules, flesh red, sweet. For mechanical harvesting.
321062. G 12536. 'Klein Early'. Plant indeterminate. Fruit color good, green and yellow, high acidity, 7.1 percent total solids.
321063. G 14378. 'Rosy Red'. T. O. Graham, University of Guelph, Guelph, Ontario, Canada. Plant semideterminate. Fruit color rosy red, peel clear, uniform ripening, crack resistant.
321064. G 14406. 'Keckskemeti 363'. Agricultural Experiment Institute of Duna Tiazakoz, Keckskemet, Hungary. Plant indeterminate.
321065. G 14421. 'South Australia Dwarf Red'. Arthur Yates and Company, Sydney, Australia. Plant indeterminate, brachytic.
321066. G 14422. 'Vine Red'. Vineland, Ontario, Canada.
321067. G 14423. 'Webb Special'. Vineland, Ontario, Canada. Plant indeterminate. Fruit uneven ripening, high pigment.
321068. G 14425. Arthur Yates and Company, Sydney, Australia through A. E. Kerr, Vineland, Ontario, Canada. Fruit nonuniform, leathery end, very late.
321069. G 14551. 'Novcerkasskij 416'. All-Union Institute of Plant Industry, Leningrad, Soviet Union, through L. H. Lyall, Ottawa, Canada. Plant indeterminate. Fruit flat globe 5.7 cm. by 8.3 cm., 8 to 9 locules around solid core, uneven ripening, early.
321070. G 14576. 'Micando'. Canada. Fruit oblate.
321071. G 14581. 'Pritehaid'. Canada. Plant indeterminate. Fruit oblate, 104.9 grams.
321072. GLYCINE WIGHTII (R. Grah. ex Wight & Arn.) Verdcourt Leguminosae.

**321072—Continued**

From Australia. Seeds presented by Division of Plant Industry, Commonwealth Scientific and Industrial Research Organization, Canberra. Received June 28, 1967.

C.P.I. 25702. 'Cooper'.

**321073 and 321074.**

From Brazil. Seeds collected by B. V. Skvortzov, Instituto de Botanica, Caixa, 4005, Sao Paulo. Received June 28, 1967.

**321073.** *LILIUM PHILIPPINENSE* Baker Liliaceae. **Philippine lily.**  
Large, white, late.

**321074.** *MEROSTACHYS MULTIRAMEA* Hackel Gramineae.  
Tree of Brazilian bamboo from subtropical mountain forests of Sao Paulo. Fruiting once in 40 to 50 years. Stems to 15 meters.

**321075 and 321076.**

From Chile. Seeds presented by Carlos Junge, Quinta "Santa Cruz", Chillan Viejo. Received June 28, 1967.

**321075.** *GOMORTEGA NITIDA* Ruiz & Pav. Gomortegaceae.

**321076.** *LAPAGERIA ROSEA* Ruiz & Pav. Liliaceae. **Red Chile-bells.**

**321077. LEUCAENA LEUCOCEPHALA (Lam.) De Wit Leguminosae. Leadtree.**

From Argentina. Seeds presented by Angel Marzocca, Instituto de Botanica Agricola, Castelar. Received July 6, 1967.

From cultivated tree in local botanic garden.

**321078 to 321111.**

From Kenya. Seeds collected by C.E. Smith, Jr., Crops Research Division, Plant Industry Station, Beltsville, Maryland. Numbered July 10, 1967.

**321078.** *CAPSICUM* sp. Solanaceae.

Col. No. 4630. Market in Hoey's Bridge.

**321079.** *CROTALARIA BREVIDENS* var. *PARVIFLORA* (Bak. f.) Poll. Leguminosae.

Col. No. 4636. 'Kimiro'. Market in Kimilili.

**321080 and 321081.** *DOLICHOS LABLAB* L. Leguminosae. **Hyacinth-bean.**

**321080.** Col. No. 4588. 'Njahi'. Market in Meru.

**321081.** Col. No. 4641. Market in Thompson's Falls.

**321082.** *DOMBEYA BURGESSIAE* Gerrard Sterculiaceae.

Col. No. 4631. On road to Kitale 3 miles north of Hoey's Bridge. Shrub, spreading, to 2 meters high. Flowers white, dried petals persistent around capsules.

**321083 to 321086.** *ELEUSINE CORACANA* (L.) Gaertn. Gramineae. **Ragi.**

**321083.** Col. No. 4577. Market in Ladri on road to Kisumu.

**321084.** Col. No. 4583. 'Gall Luo'. Market in Kisumu.

**321085.** Col. No. 4590. 'Wimbi'. Market in Meru.

**321086.** Col. No. 4633. Market in Kimilili.

**321087.** *PENNISETUM* sp. Gramineae.

Col. No. 4586. 'Mwere'. Market in Meru.

**321088.** *PHASEOLUS COCCINEUS* L. Leguminosae. **Scarlet runner bean.**

Col. No. 4642. 'Noe'. Market in Thompson's Falls.

## 321078 to 321111—Continued

- 321089 to 321094. *PHASEOLUS VULGARIS* L. Common bean.  
 321089. Col. No. 4569. 'Maragwe'. Market in Gilgil.  
 321090. Col. No. 4582. 'Maragwe Oganda'. Market in Kisumu.  
 321091. Col. No. 4592. 'Bijanjero'. Market in Chiganda.  
 321092. Col. No. 4629. Market in Hoey's Bridge.  
 321093. Col. No. 4637. Market in Kimilili.  
 321094. Col. No. 4645. 'Bosha'. Market in Sagana.
321095. *PROTEA GAGUEDI* Gmel. Proteaceae.  
 Between Hoey's Bridge and Kitale on the Trans Nzoia Plains. Open scrub on red lateritic soil.
321096. *SESAMUM INDICUM* L. Pedaliaceae. Sesame.  
 Col. No. 4634. Market in Kimilili.
- 321097 to 321102. *SORGHUM BICOLOR* (L.) Moench Gramineae. Kafircorn.  
 321097. Col. No. 4578.  
 321098. Col. No. 4579. 'Andiwa'.  
 321099. Col. No. 4580.  
 321100. Col. No. 4581.  
 321101. Col. No. 4587. 'Mwea'. Market in Meru.  
 321102. Col. No. 4646. 'Muhia'. Market in Sagana.
321103. *TRIFOLIUM BURCHELLIANUM* var. *JOHNSTONII* (Oliv.) Gillett Leguminosae.  
 Col. No. 4567. Top of the Aberdares at Nyeri Chania Falls. Elevation 9,000 feet.
321104. *VERNONIA* sp. Compositae.  
 Col. No. 4608. Ruwenzori Mountains, Mubuku Valley ridges. Elevation 5,000 feet.
321105. *VERNONIA* sp.  
 Col. No. 4608a. Subcollection for comparison.
- 321106 and 321107. *VIGNA SINENSIS* (Torner) Savi Leguminosae.  
 321106. Col. No. 4584. Market in Kisumu.  
 321107. Col. No. 4635. Market in Kimilili.
- 321108 to 321111. *ZEA MAYS* L. Gramineae. Corn.  
 321108. Col. No. 4568. Market in Gilgil.  
 321109. Col. No. 4589. 'Mbembe'. Market in Meru.  
 321110. Col. No. 4639. From a cornfield, Mt. Elgon. Elevation 8,000 feet.  
 321111. Col. No. 4643. 'Mbembe'. Market in Thompson's Falls.
321112. *IPOMOEA BATATAS* (L.) Lam. Convolvulaceae. Sweetpotato.  
 From Taiwan. Tubers presented by the Chiayi Branch Station, Taiwan Provincial Agricultural Experiment Station, Shantseting, Chiayi. Received July 10, 1967.  
 'Okinawa No. 100'.



**321113 to 321124.**

From Tanzania. Seeds collected by C. E. Smith, Jr., Crops Research Division, Plant Industry Station, Beltsville, Maryland. Received July 10, 1967.

- 321113.** CAJANUS CAJAN (L.) Millsp. Leguminosae. **Pigeon-pea.**  
Col. No. 4651. 'Mbaazi'. Market in Moshi.
- 321114.** ELEUSINE CORACANA (L.) Gaertn. Gramineae. **Ragi.**  
Col. No. 4655. 'Bege'. Market in Kiano.
- 321115.** PHASEOLUS AUREUS Roxb. Leguminosae. **Mungbean.**  
Col. No. 4648. 'Sholoko'. Market in Moshi.
- 321116 to 321123.** PHASEOLUS VULGARIS L. **Common bean.**  
Market in Moshi.
- 321116.** Col. No. 4649. 'Belabela'.
- 321117.** Col. No. 4650. 'Mrondo'.
- 321118.** Col. No. 4652. 'Maharagi'.
- 321119.** Col. No. 4654. 'Mahargi'.  
Market in Kiano.
- 321120.** Col. No. 4656. 'Mrondo'.
- 321121.** Col. No. 4657. 'Sisi'.
- 321122.** Col. No. 4658. 'Moono'.
- 321123.** Col. No. 4659. 'Mrondo'. Market in Gishinda.
- 321124.** VIGNA SINENSIS (Torner) Savi Leguminosae.  
Col. No. 4653. 'Punde'. Market in Moshi.

**321125 to 321141.**

From Uganda. Seeds collected by C. E. Smith, Jr., Crops Research Division, Plant Industry Station, Beltsville, Maryland. Received July 10, 1967.

- 321125 to 321130.** ELEUSINE CORACANA (L.) Gaertn. Gramineae. **Ragi.**
- 321125.** Col. No. 4610. 'Buro'. Market in Karago.  
Market in Mugusu.
- 321126.** Col. No. 4613. 'Calo'.
- 321127.** Col. No. 4614. 'Calo'.
- 321128.** Col. No. 4615. 'Calo'.
- 321129.** Col. No. 4616. 'Calo'.
- 321130.** Col. No. 4620. 'Oburo'. Market in Fort Portal.
- 321131 to 321135.** PHASEOLUS VULGARIS L. Leguminosae. **Common bean.**
- 321131.** Col. No. 4611. 'Bihimba'. Market in Karago.  
Market in Fort Portal.
- 321132.** Col. No. 4619. Kajera'.
- 321133.** Col. No. 4622. 'Bihimba'.
- 321134.** Col. No. 4623-a. 'Bihimba'.
- 321135.** Col. No. 4623-b. 'Bihimba'.
- 321136.** SESAMUM INDICUM L. Pedaliaceae. **Sesame.**  
Col. No. 4618. 'Machande'. Market in Fort Portal.
- 321137 to 321139.** SORGHUM BICOLOR (L.) Moench Gramineae. **Kafir-corn.**

**321112. IPOMOEA BATATAS (L.) Lam. Convolvulaceae.****321137 to 321139—Continued**

321137. Col. No. 4609. Market in Karago.

321138. Col. No. 4617. 'Mugusa'. Market in Mugusu. Malting type.

321139. Col. No. 4621. 'Omongusa'. Market in Fort Portal.

**321140 and 321141. VIGNA SINENSIS (Torner) Savi Leguminosae.****Cowpea.**

321140. Col. No. 4625. 'Ntendigo'. Market in Mubuku.

321141. Col. No. 4628. Market in Tororo.

**321142 to 321383. ORYZA SATIVA L. Gramineae.****Rice.**

From the Philippines. Seeds presented by the International Rice Research Institute, Los Banos, Laguna. Received July 12, 1967.

*Seed source**Selection No. and cross*

321142.	61976	IR334-17-1-3-1, (CP 231 × SLO-17)/2 × BPI-76.
321143.	61977	IR334-17-1-3-2, (CP 231 × SLO-17)/2 × BPI-76.
321144.	61978	IR334-17-1-3-3, (CP 231 × SLO-17)/2 × BPI-76.
321145.	66778	IR224-16-1-1-3, (CP 231 × SLO-17) × Dawn.
321146.	66781	IR224-16-1-3-2, (CP 231 × SLO-17) × Dawn.
321147.	66793	IR224-20-1-2-2, (CP 231 × SLO-17) × Dawn.
321148.	66798	IR224-20-3-2-1, (CP 231 × SLO-17) × Dawn.
321149.	66799	IR224-20-3-2-2, (CP 231 × SLO-17) × Dawn.
321150.	66801	IR224-20-3-2-3, (CP 231 × SLO-17) × Dawn.
321151.	66839	IR224-10-1-6-3-1, (CP 231 × SLO-17) × Dawn.
321152.	66843	IR224-10-1-6-5-1, (CP 231 × SLO-17) × Dawn.
321153.	66846	IR229-3-1-2-1, CI 9300 × Dawn.
321154.	66847	IR229-3-1-2-2, CI 9300 × Dawn.
321155.	66850	IR229-22-3-3-1, CI 9300 × Dawn.
321156.	66854	IR229-23-3-1-3, CI 9300 × Dawn.
321157.	66856	IR229-26-1-1-2, CI 9300 × Dawn.
321158.	66868	IR280-6-6-1-1, CI 9300/2 × Dawn.
321159.	66877	IR280-6-6-3-1, CI 9300/2 × Dawn.
321160.	66879	IR280-6-6-3-3, CI 9300/2 × Dawn.
321161.	67399	IR456-3-2-1, Dawn/2 × (CP231 × SLO-17).
321162.	67443	IR456-12-5-1, Dawn/2 × (CP231 × SLO-17).
321163.	67468	IR456-15-4-1, Dawn/2 × (CP 231 × SLO-17).
321164.	67471	IR456-15-6-1, Dawn/2 × (CP 231 × SLO-17):
321165.	67475	IR456-15-7-2, Dawn/2 × (CP 231 × SLO-17).
321166.	67509	IR456-18-4-1, Dawn/2 × (CP 231 × SLO-17).
321167.	67516	IR456-18-6-2, Dawn/2 × (CP 231 × SLO-17).
321168.	67526	IR456-18-11-2, Dawn/2 × (CP 231 × SLO-17).
321169.	68353	IR212-25-3-3-2, B572A3-47-15 × B5711A1-18-6.
321170.	72093	IR111-7-1-2-1, (CP 231 × SLO-17) × BPI-76.
321171.	72128	IR111-35-1-1-1, (CP 231 × SLO-17) × BPI-76.

## 321125 to 321141—Continued

<i>Seed source</i>		<i>Selection No. and cross</i>
321172.	72264	IR127-35-2-3-1, (CP 231 × SLO-17) × Sigadis.
321173.	72327	IR292-21-1-12-3, Sigadis × (CP 231 × SLO-17)/2.
321174.	72343	IR238-1-1-1-3, (CP 231 × SLO-17) × Nahng Mon S-4.
321175.	72346	IR238-1-2-2-3, (CP 231 × SLO-17) × Nahng Mon S-4.
321176.	72350	IR238-1-3-2-1, (CP 231 × SLO-17) × Nahng Mon S-4.
321177.	72354	IR238-1-3-3-2, (CP 231 × SLO-17) × Nahng Mon S-4.
321178.	72476	IR238-B-B-128-31, (CP 231 × SLO-17) × Nahng Mon S-4.
321179.	72574	IR238, (CP 231 × SLO-17) × Nahng Mon S-4.
321180.	72597	(CP 231 × SLO-17) × Nahng Mon S-4.
321181.	72608	(CP 231 × SLO-17) × Nahng Mon S-4.
321182.	72634	(CP 231 × SLO-17) × Nahng Mon S-4.
321183.	72658	IR238, (CP 231 × SLO-17) × Nahng Mon S-4.
321184.	72659	(CP 231 × SLO-17) × Nahng Mon S-4.
321185.	72674	IR238, (CP 231 × SLO-17) × Nahng Mon S-4.
321186.	72685	(CP 231 × SLO-17) × Nahng Mon S-4.
321187.	72718	IR238-21-2-1-1, (CP 231 × SLO-17) × Nahng Mon S-4.
321188.	72741	IR238-28-1-1-1, (CP 231 × SLO-17) × Nahng Mon S-4.
321189.	72743	IR238-28-1-1-3, (CP 231 × SLO-17) × Nahng Mon S-4.
321190.	72754	IR238-28-2-3-2, (CP 231 × SLO-17) × Nahng Mon S-4.
321191.	72808	IR238-28-1-5, (CP 231 × SLO-17) × Nahng Mon S-4.
321192.	72825	IR324-2-2-1-2, (CP 231 × SLO-17)/2 × Nahng Mon S-4.
321193.	72835	IR324-2-4-1-2, (CP 231 × SLO-17)/2 × Nahng Mon S-4.
321194.	72859	IR324-3-6-1-3, (CP 231 × SLO-17)/2 × Nahng Mon S-4.
321195.	72887	IR324-4-4-3-2, (CP 231 × SLO-17)/2 × Nahng Mon S-4.
321196.	72889	IR324-5-3-3-1, (CP 231 × SLO-17)/2 × Nahng Mon S-4.
321197.	72901	IR237-1-3-3-1, (CP 231 × SLO-17) × L. Yai 34.
321198.	72910	IR237-6-2-2-1, (CP 231 × SLO-17) × L. Yai 34.
321199.	72911	IR237-6-2-2-2, (CU 231 × SLO-17) × L. Yai 34.
321200.	72912	IR237-6-2-2-3, (CP 231 × SLO-17) × L. Yai 34.
321201.	72913	IR237-6-2-2-4, (CP 231 × SLO-17) × L. Yai 34.
321202.	72917	IR237-6-2-3-2, (CP 231 × SLO-17) × L. Yai 34.
321203.	73013	IR237-14-3-1-3, (CP 231 × SLO-17) × L. Yai 34.
321204.	73018	IR237-14-3-3-2, (CP 231 × SLO-17) × L. Yai 4.
321205.	73136	IR237-21-1, (CP 231 × SLO-17) × L. Yai 34.
321206.	73229	IR224-10-2-3-3-1, (CP 231 × SLO-17) × B505A1-28.
321207.	73231	IR224-10-2-3-3-3, (CP 231 × SLO-17) × B505A1-28.
321208.	73236	IR224-10-3-2-1-2, (CP 231 × SLO-17) × B505A1-28.

## 321142 to 321383—Continued

	<i>Seed source</i>	<i>Selection No. and cross</i>
321209.	73244	IR224-10-3-3-1-3, (CP 231 × SLO-17) × B505A1-28.
321210.	73248	IR224-10-3-3-3-1, (CP 231 × SLO-17) × B505A1-28.
321211.	73255	IR224-54-2-2-2, (CP 231 × SLO-17) × B505A1-28.
321212.	73261	IR224-54-3-3-1, (CP 231 × SLO-17) × B505A1-28.
321213.	74375	IR334-20-8-1, (CP 231 × SLO-17)/2 × BPI-76.
321214.	74409	IR336-8-1-3, B589A4-18-1/2 × BPI-76.
321215.	74415	IR334-3, (CP 231 × SLO-17)/2 × BPI-76.
321216.	74426	IR334-13, (CP 231 × SLO-17)/2 × BPI-76.
321217.	74427	IR334-14, (CP 231 × SLO-17)/2 × BPI-76.
321218.	74462	IR334-47, (CP 231 × SLO-17)/2 × BPI-76.
321219.	74470	IR334-55, (CP 231 × SLO-17)/2 × BPI-76.
321220.	74475	IR334-60, (CP 231 × SLO-17)/2 × BPI-76.
321221.	74599	IR478-3, (CP 231 × SLO-17) × Sukanandi.
321222.	74601	IR478-4, (CP 231 × SLO-17) × Sukanandi.
321223.	74605	IR478-8, (CP 231 × SLO-17) × Sukanandi.
321224.	74657	IR457-21, Dawn × [(CP 231 × SLO-17) × T(N)]
321225.	74681	IR457-43, Dawn × [(CP 231 × SLO-17) × T(N)]
321226.	74711	IR570-4, IR8-288-3 × ADT-27.
321227.	74724	IR570-16, IR8-288-3 × ADT-27.
321228.	74735	IR570-27, IR8-288-3 × ADT-27.
321229.	74738	IR570-30, IR8-288-3 × ADT-27.
321230.	74754	IR570-45, IR8-288-3 × ADT-27.
321231.	76545	IR329-6-5-2-2-2, Bluebelle/2 × L. Yai 34.
321232.	76546	IR329-6-5-2-2-3, Bluebelle/2 × L. Yai 34.
321233.	76553	IR329-6-5-3-3-3, Bluebelle/2 × L. Yai 34.
321234.	76554	IR329-6-5-3-3-5, Bluebelle/2 × L. Yai 34.
321235.	76568	IR329-12-3-2-1-1, Bluebelle/2 × L. Yai 34.
321236.	76569	IR329-12-3-2-1-2, Bluebelle/2 × L. Yai 34.
321237.	76570	IR329-12-3-2-2-1, Bluebelle/2 × L. Yai 34.
321238.	76571	IR329-12-3-2-2-3, Bluebelle/2 × L. Yai 34.
321239.	76572	IR329-12-3-2-2-4, Bluebelle/2 × L. Yai 34.
321240.	76573	IR329-12-3-2-2-5, Bluebelle/2 × L. Yai 34.
321241.	76574	IR329-12-3-2-3-2, Bluebelle/2 × L. Yai 34.
321242.	76576	IR329-12-3-2-3-4, Bluebelle/2 × L. Yai 34.
321243.	76578	IR329-12-3-4-2-2, Bluebelle/2 × L. Yai 34.
321244.	76579	IR329-12-3-4-2-3, Bluebelle/2 × L. Yai 34.
321245.	76590	IR329-12-3-5-3-1, Bluebelle/2 × L. Yai 34.
321246.	76595	IR329-12-3-6-1-5, Bluebelle/2 × L. Yai 34.
321247.	76598	IR329-12-3-6-2-5, Bluebelle/2 × L. Yai 34.
321248.	76676	IR329-23-1-1-2-1, Bluebelle/2 × L. Yai 34.
321249.	76679	IR329-23-1-1-2-4, Bluebelle/2 × Y. Yai 34.

## 321142 to 321383—Continued

<i>Seed source</i>		<i>Selection No. and cross</i>
321250.	76683	IR329-23-1-1-3-2, Bluebelle/2 × L. Yai 34.
321251.	76685	IR329-23-1-1-3-4, Bluebelle/2 × L. Yai 34.
321252.	76695	Bluebelle/2 × L. Yai 34.
321253.	76702	IR329-23-1-3-3-6, Bluebelle/2 × L. Yai 34.
321254.	76725	IR329-1-3-1-3, Bluebelle/2 × L. Yai 34.
321255.	76777	Bluebelle, Bluebelle/2 × L. Yai 34.
321256.	76794	IR329-15-6-1-2, Bluebelle/2 × L. Yai 34.
321257.	76802	IR329-15-7-6-2, Bluebelle/2 × L. Yai 34.
321258.	76805	IR329-19-5-2-2, Bluebelle/2 × L. Yai 34.
321259.	76807	IR329-19-5-3-3, Bluebelle/2 × L. Yai 34.
321260.	76821	IR455-1-2-1-6, Bluebelle/3 × L. Yai 34.
321261.	76822	IR455-1-5-1-2, Bluebelle/3 × L. Yai 34.
321262.	76839	IR455-3-1-4-1, Bluebelle/3 × L. Yai 34.
321263.	76850	IR455-3-3-5-1, Bluebelle/3 × L. Yai 34.
321264.	76857	IR455-5-5-1-2, Bluebelle/3 × L. Yai 34.
321265.	76870	IR153-7-1-2-1, T(N)1 × Bluebelle.
321266.	76875	IR153-20-1-1-1, T(N)1 × Bluebelle.
321267.	76878	IR153-20-1-2-2, T(N)1 × Bluebelle.
321268.	76882	IR269-1-1-1-1, Bluebelle/2 × T(N)1.
321269.	76884	IR269-1-1-2-1, Bluebelle/2 × T(N)1.
321270.	76906	IR269-12-3-1-1, Bluebelle/2 × T(N)1.
321271.	76932	IR269-26-3-2-1, Bluebelle/2 × T(N)1.
321272.	76945	IR269-32-1-2-2, Bluebelle/2 × T(N)1.
321273.	76949	IR269-32-1-3-3, Bluebelle/2 × T(N)1.
321274.	76974	IR269-26-2-1-2-1, Bluebelle/2 × T(N)1.
321275.	77125	IR454-4-4-4-3-2, Bluebelle/4 × T(N)1.
321276.	77126	IR454-4-4-4-3-3, Bluebelle/4 × T(N)1.
321277.	7501	IR269-1-1, Bluebelle/2 × T(N)1.
321278.	7502	IR269-1-1-3, Bluebelle/2 × T(N)1.
321279.	7503	IR269-16-2-3-1, Bluebelle/2 × T(N)1.
321280.	7504	IR269-16-2-3-2, Bluebelle/2 × T(N)1.
321281.	7505	IR269-16-2-3-3, Bluebelle/2 × T(N)1.
321282.	7507	IR269-26-33-1, Bluebelle/2 × T(N)1.
321283.	7508	IR269-26-3-3-2, Bluebelle/2 × T(N)1.
321284.	7509	IR269-26-3-3-3, Bluebelle/2 × T(N)1.
321285.	7511	IR269-32-1-3, Bluebelle/2 × T(N)1.
321286.	7512	IR269-32-1-3-1, Bluebelle/2 × T(N)1.
321287.	7513	IR269-46-5-2, Bluebelle/2 × T(N)1.
321288.	7514	IR269-46-5-2-1, Bluebelle/2 × T(N)1.
321289.	7515	IR269-50-4-1, Bluebelle/2 × T(N)1.
321290.	7516	IR269-50-4-1-1, Bluebelle/2 × T(N)1.

## 321142 to 321383—Continued

<i>Seed source</i>		<i>Selection No. and cross</i>
321291.	7524	IR404-1-1-6-3, Bluebelle/3 × T(N)1.
321292.	7526	IR404-1-2-2, Bluebelle/3 × T(N)1.
321293.	7528	IR404-1-2-2-3, Bluebelle/3 × T(N)1.
321294.	7529	IR404-1-3-1-1, Bluebelle/3 × T(N)1.
321295.	7531	IR404-1-3-1-3, Bluebelle/3 × T(N)1.
321296.	7532	IR404-1-3-2, Bluebelle/3 × T(N)1.
321297.	7533	IR404-1-3-2-1, Bluebelle/3 × T(N)1.
321298.	7535	IR404-1-3-2-3, Bluebelle/3 × T(N)1.
321299.	7536	IR404-1-3-11-1, Bluebelle/3 × T(N)1.
321300.	7537	IR404-1-4-8, Bluebelle/3 × T(N)1.
321301.	7538	IR404-1-4-8-1, Bluebelle/3 × T(N)1.
321302.	7539	IR404-1-4-8-2, Bluebelle/3 × T(N)1.
321303.	7540	IR404-1-8-2-3, Bluebelle/3 × T(N)1.
321304.	7541	IR404-1-4-8-3, Bluebelle/3 × T(N)1.
321305.	7542	IR404-1-9-3-1, Bluebelle/3 × T(N)1.
321306.	7543	IR404-1-9-3-3, Bluebelle/3 × T(N)1.
321307.	7544	IR404-3-2-3, Bluebelle/3 × T(N)1.
321308.	7545	IR404-3-2-7, Bluebelle/3 × T(N)1.
321309.	7546	IR404-3-2-7-1, Bluebelle/3 × T(N)1.
321310.	7547	IR404-3-2-7-2, Bluebelle/3 × T(N)1.
321311.	7549	IR404-6-2-8, Bluebelle/3 × T(N)1.
321312.	7551	IR404-6-2-8-2, Bluebelle/3 × T(N)1.
321313.	7552	IR404-6-3-10, Bluebelle/3 × T(N)1.
321314.	7553	IR404-6-3-10-1, Bluebelle/3 × T(N)1.
321315.	7554	IR404-6-3-10-2, Bluebelle/3 × T(N)1.
321316.	7556	IR404-6-16-2-1, Bluebelle/3 × T(N)1.
321317.	7559	IR329-6-5-2-1, Bluebelle/2 × L. Yai 34.
321318.	7561	IR239-10-4-2-1, Bluebelle/2 × L. Yai 34.
321319.	7562	IR329-15-3-2-2, Bluebelle/2 × L. Yai 34.
321320.	7563	IR329-15-3-2-3, Bluebelle/2 × L. Yai 34.
321321.	7564	IR329-15-3-2-4, Bluebelle/2 × L. Yai 34.
321322.	7565	IR329-15-4, Bluebelle/2 × L. Yai 34.
321323.	7566	IR329-16-4-2-1, Bluebelle/2 × L. Yai 34.
321324.	7567	IR329-23-4-3-2, Bluebelle/2 × L. Yai 34.
321325.	7568	IR481-2-8, L. Yai 34/2 × T(N)1.
321326.	7569	IR154-36-2, (CP 231 × SLO-17) × T(N)1.
321327.	7571	IR154-45-2-4-3, (CP 231 × SLO-17) × T(N)1.
321328.	7573	IR154-54-2-2, (CP 231 × SLO-17) × T(N)1.
321329.	7575	IR154-68-3-2, (CP 231 × SLO-17) × T(N)1.
321330.	7578	IR154-95-3-2, (CP 231 × SLO-17) × T(N)1.
321331.	7579	IR154-123-1-1-1, (CP 231 × SLO-17) × T(N)1.

## 321142 to 321383—Continued

	<i>Seed source</i>	<i>Selection No. and cross</i>
321332.	7580	IR157-61-3-3, L. Yai 34 × T(N)1.
321333.	7581	IR159-13-2-2, Basmati 370 × T(N)1.
321334.	7583	IR160-25-1-1, Nahng Mon S-4 × T(N)1.
321335.	7584	IR160-44-1-2, Nahng Mon S-4 × T(N)1.
321336.	7728	IR126-6-3-1, Bluebelle × Sigadis.
321337.	7730	IR127-2-2-9, (CP 231 × SLO-17) × Sigadis.
321338.	7731	IR127-35-2-3, (CP 231 × SLO-17) × Sigadis.
321339.	7733	IR140-136, (CP 231 × SLO-17) × Mas.
321340.	7735	IR181-2-2-1, L. Yai 34 × 81B-25.
321341.	7737	IR181-2-2-3, L. Yai 34 × 81B-25.
321342.	7747	IR224-10-2-3-3, (CP 231 × SLO-17) × Dawn.
321343.	7748	IR224-16-1, (CP 231 × SLO-17) × Dawn.
321344.	7751	IR237-13-2-2, (CP 231 × SLO-17) × L. Yai 34.
321345.	7752	IR237-13-2-3, (CP 231 × SLO-17) × L. Yai 34.
321346.	7754	IR237-14-2-3, (CP 231 × SLO-17) × L. Yai 34.
321347.	7755	IR237-20-3-3, (CP 231 × SLO-17) × L. Yai 34.
321348.	7756	IR237-21-1, (CP 231 × SLO-17) × L. Yai 34.
321349.	7763	IR238-36-3, (CP 231 × SLO-17) × Nahng Mon S-4.
321350.	7767	IR238-129-2, (CP 231 × SLO-17) × Nahng Mon S-4.
321351.	7770	IR238-149-2, (CP 231 × SLO-17) × Nahng Mon S-4.
321352.	7771	IR239-11-2, B581A6-545 × (CP 231 × SLO-17).
321353.	7772	IR239-112-1-1, B581A6-545 × (CP 231 × SLO-17).
321354.	7774	IR246-14-2-2, B581A6-545 × (Bbt. 50 × Jojutla).
321355.	7776	IR271-22-16-2, Dawn/2 × Sigadis.
321356.	7777	IR272-2-6-3, (CP 231 × SLO-17)/2 × Sigadis.
321357.	7778	IR272-4-1-2, (CP 231 × SLO-17)/2 × Sigadis.
321358.	7779	IR334-21-3, (CP 231 × SLO-17) × BPI-76.
321359.	7781	IR276-26-5-1, B581A6-545/2 × Peta.
321360.	7783	IR280-6-6-1, CI 9300/2 × Dawn.
321361.	7787	IR313-7-6-3, Dawn/2 × BPI-76.
321362.	7789	IR456-12-2, Dawn/2 × (CP 231 × SLO-17).
321363.	7818	IR52-18-7-2-3-2, BPI-76/2 × Kh. 68.
321364.	7837	IR66-61-1-1-2, CP 231 × Kh. 68.
321365.	7845	IR68-57-2-2-3, CP 231 × P.I. 215936.
321366.	7846	IR68-141-2-2, CP 231 × P.I. 215936.
321367.	7848	IR68-232-3-3, CP 231 × P.I. 215936.
321368.	7858	IR72-14-3-2-3, T(N)1 × Ch. 242.
321369.	7861	IR80-54-2-2, T. Vuot × P.I. 215936.
321370.	7864	IR83-71-1-2, T. Rotan × P.I. 215936.
321371.	7869	IR84-82-3-2-3, Peta × P.I. 215936.
321372.	7871	IR84-88-2-3-1, Peta × P.I. 215936.

**321142 to 321383—Continued**

<i>Seed source</i>	<i>Selection No. and cross</i>
321373. 7874	IR188-4, CI 9545 × Kh. 68.
321374. 7877	IR193-60-1-3, B573A4-20 × PI 215936.
321375. 7879	IR198-16-2-2, (CP 231 × SLO-17) × P.I. 215936.
321376. 7881	IR198-36-1-1, (CP 231 × SLO-17) × P.I. 215936.
321377. 7883	Tokai Senbon × Basmati 370.
321378. 7884	Mo-R-500 × Nato.
321379. 7926	Belle Patna.
321380. 7927	Bluebelle.
321381. 7975	IR408-1-5-6-6, Peta/3 × Belle Patna.
321382. 7976	IR408-2-1-11-1, Peta/3 × Belle Patna.
321383. 8013	Peta × T(N)1, IR39-10.

**321384 to 321386. ALLIUM CEPA L. Liliaceae. Onion.**

From Rumania. Seeds presented by Institutul de Cercetari Horti-Viticole, Bucuresti-Baneasa. Numbered July 21, 1967.

321384. 'De Buzau'.

321385. 'Spaniola'.

321386. 'Stuttgarter'.

**321387. CAPSICUM ANNUUM L. Solanaceae. Pimento.**

From Thailand. Seeds presented by R. S. Mann, P. O. Box 29, Chiangmai. Numbered July 21, 1967.

Chiangdow area. Wild.

**321388. TERAMNUS UNCINATUS (L.) Swartz Leguminosae.**

From Australia. Seeds presented by Division of Plant Industry, Commonwealth Scientific and Industrial Research Organization, Canberra. Numbered July 24, 1967.

C.P.I. 25937. Received in 1959 via Department of Agriculture, Ilonga, Kilosa, Tanganyika.

**321389. KOCHIA BREVIFOLIA R. Br. Chenopodiaceae.**

From Australia. Seeds presented by Division of Plant Industry, Commonwealth Scientific and Industrial Research Organization, Canberra. Numbered July 24, 1967.

V. 184.

**321390 to 321394.**

From Australia. Seeds presented by Division of Plant Industry, Commonwealth Scientific and Industrial Research Organization, Canberra. Numbered July 24, 1967.

321390. GLYCINE FALCATA Benth. Leguminosae.

C.Q. 537.

321391 and 321392. GLYCINE TABACINA Benth.

321391. S.C.S. 2132.

321392. S.C.S. 2139.

321393 and 321394. GLYCINE TOMENTELLA Hayata

321393. S.C.S. 2105.

321394. S.C.S. 1708.



**321395 to 321397.**

From Czechoslovakia. Seeds presented by the Central Research Institute for Plant Production, Praha 6-Ruzyne. Numbered July 24, 1967.

321395. *LOLIUM MULTIFLORUM* Lam. Gramineae. Italian ryegrass.  
 321396. *LOLIUM MULTIFLORUM* Lam. Italian ryegrass.  
 'Westerwold'.  
 321397. *LOLIUM PERENNE* L. Perennial ryegrass.

**321398 to 321417.**

From Australia. Seeds presented by Division of Plant Industry, Commonwealth Scientific and Industrial Research Organization, Canberra. Original countries of origin as indicated. Numbered July 24, 1967.

321398. *ALYSICARPUS MONILIFER* DC. Leguminosae.  
 C.P.I. 40612. Umm Higlig, Sudan.  
 321399. *ANDROPOGON DISTACHYUS* L. Gramineae. Bluestem.  
 C.P.I. 39894. Mt. Carmel, Israel.  
 321400. *ARISTIDA CILIATA* Desf. Gramineae. Threawn grass.  
 C.P.I. 39917. Near Dinona, Israel.  
 321401. *ARISTIDA LANATA* Forsk.  
 C.P.I. 39941. Western Negev, Israel.  
 321402. *ARISTIDA* sp.  
 C.P.I. 39885. Skikma Watershed Project, Israel.  
 321403. *BRACHYPODIUM DISTACHYON* (L.) Beauv. Gramineae.  
 C.P.I. 39895. Mt. Carmel, Israel.  
 321404. *CENCHRUS CILIARIS* L. Gramineae. Buffelgrass.  
 C.P.I. 40611. El Obeid, Sudan.  
 321405. *DIGITARIA* sp. Gramineae.  
 C.P.I. 40749. Mazrub, Sudan.  
 321406. *HIPPOCREPIS UNISILIQUOSA* L. Leguminosae.  
 C.P.I. 39887. Skikma Watershed Project, Israel.  
 321407. *ORYZOPSIS HOLCIFORMIS* (Bieb.) Hack. Gramineae. Ricegrass.  
 C.P.I. 39918. Near Avarim, Israel.  
 321408. *PANICUM TURGIDUM* Forsk. Gramineae.  
 C.P.I. 40751. Bara, Sudan.  
 321409. *PENNISETUM SPICATUM* (L.) Willd. Gramineae. Pearl millet.  
 C.P.I. 40753. Gedaref, Sudan.  
 321410. *PHALARIS AQUATICA* L. Gramineae. Large canarygrass.  
 C.P.I. 39886. Skikma Watershed Project, Israel.  
 321411. *PHLEUM SUBULATUM* (Savi) Aschers. & Graebn. Gramineae.  
 C.P.I. 39898. Mt. Carmel, Israel.  
 321412. *STIPAGROSTIS OBTUSA* Nees Gramineae.  
 C.P.I. 40433. Republic of South Africa.  
 321413. *STYLOSANTHES FRUTICOSA* (Retz.) Alston Leguminosae.  
 C.P.I. 40615. El Obeid, Sudan.

**321398 to 321417—Continued**

**321414.** *TRIGONELLA ARABICA* Delile Leguminosae.

C.P.I. 39924. Israel.

**321415.** *ZORNIA BRASILIENSIS* Vog. Leguminosae.

C.P.I. 34754. Legume garden, IRI Matao, Brazil.

**321416.** *ZORNIA DIPHYLLOA* (L.) Pers.

C.P.I. 34941. Legume garden, IRI Matao, Brazil.

**321417.** *ZORNIA* sp.

C.P.I. 34759. Valinhos-Sao Paulo road, Brazil.

**321418 to 321466.**

From the United States. Seeds collected in 1966 by J. M. J. de Wet, Department of Botany and Plant Pathology, Oklahoma State University, Stillwater, Okla. Numbered July 24, 1967.

**321418 to 321421.** *BOTHRIOCHLOA ALTA* (Hitchc.) Henr. Gramineae.

Collected in Texas.

**321418.** Col. No. 3692. In protected field along Interstate 35, 17 miles north of Waco.

**321419.** Col. No. 3693. Five miles south of Temple.

**321420.** Col. No. 3697. In open field 13 miles south of Austin city limits.

**321421.** Col. No. 3699. Open field on Interstate 35, two miles south of San Marcos.

**321422 to 321432.** *BOTHRIOCHLOA BARBINODIS* (Lag.) Herter

Collected in Texas.

**321422.** Col. No. 3708. Open field as weed in San Antonio.

**321423.** Col. No. 3709. Open field as weed in San Antonio.

**321424.** Col. No. 3712. On U. S. 81, 16 miles south of Lytle.

**321425.** Col. No. 3717. Fourteen miles south of Pearsall.

**321426.** Col. No. 3720. Weed along road, 10 miles south of Cotulla.

**321427.** Col. No. 3856. Twenty-three miles north of Laredo.

**321428.** Col. No. 3862. Five miles northwest of Brackettville.

**321429.** Col. No. 3863. One mile northwest of Sanderson.

**321430.** Col. No. 3865. Seventeen miles northwest of Fort Stockton.

**321431.** Col. No. 3866. Twenty-three miles northwest of Pecos.

**321432.** Col. No. 3874. One mile northeast of Texico.

**321433 to 321436.** *BOTHRIOCHLOA EDWARDSIANA* (Gould) L. R. Parodi

Collected in Texas.

**321433.** Col. No. 3701. Open field along Interstate 35, 2 miles south of San Marcos.

**321434.** Col. No. 3707. Weed in open field in San Antonio.

**321435.** Col. No. 3710. Weed in open field in San Antonio.

**321436.** Col. No. 3719. Two miles east of Cotulla, La Salle County.

**321437 to 321445.** *BOTHRIOCHLOA HYBRIDA* (Gould) Gould

Collected in Texas.

**321437.** Col. No. 3704. Open field along ditch on Interstate 35, 14 miles south of San Marcos.

**321438.** Col. No. 3706. Weed in open field in San Antonio.

## 321418 to 321466—Continued

321439. Col. No. 3715. Weed; 24 miles south of Lytle.  
 321440. Col. No. 3716. Fourteen miles south of Pearsall.  
 321441. Col. No. 3718. Along Highway 97, two miles east of Cotulla.  
 321442. Col. No. 3858. Eighteen miles south of Uvalde.  
 321443. Col. No. 3860. Three miles west of Uvalde.  
 321444. Col. No. 3868. Twenty-three miles northwest of Pecos.  
 321445. Col. No. 3871. Carlsbad Caverns National Park, New Mexico.  
 321446 to 321466. *BOTHRIUCHLOA SACCHAROIDES* (Sw.) Rydb. **Silver bluestem.**  
 Collected in Texas.  
 321446. Col. No. 3690. Hillsboro turnoff at intersection of State Highways 22 and 171 from Interstate 35 in abandoned cultivated field.  
 321447. Col. No. 3691. In protected open field along Interstate 35, 17 miles north of Waco.  
 321448. Col. No. 3694. Along Interstate 35, 5 miles south of Temple.  
 321449. Col. No. 3695. Along Interstate 35, 2 miles north of Austin, in open field. Mixed, pitted and unpitted.  
 321450. Col. No. 3696. Open field, two miles north of Austin.  
 321451. Col. No. 3698. Open field along Interstate 35, 13 miles south of Austin city limits.  
 321452. Col. No. 3700. Open field, on interstate 35, 2 miles south of San Marcos.  
 321453. Col. No. 3702. Open field along Interstate 35, 13 miles south of San Marcos.  
 321454. Col. No. 3705. Open field along ditch on Interstate 35, 23 miles south of San Marcos.  
 321455. Col. No. 3711. Open field as weed in San Antonio.  
 321456. Col. No. 3713. Sixteen miles south of Lytle.  
 321457. Col. No. 3714. Weed along road, 24 miles south of Lytle.  
 321458. Col. No. 3857. Eighty-five miles north-northwest of Laredo.  
 321459. Col. No. 3859. Four miles south of Uvalde.  
 321460. Col. No. 3861. Five miles northwest of Brackettville.  
 321461. Col. No. 3864. One mile northwest of Sanderson.  
 321462. Col. No. 3867. Twenty-three miles northwest of Pecos.  
 321463. Col. No. 3873. One mile northeast of Texico.  
 Collected in New Mexico.  
 321464. Col. No. 3869. Twenty-nine miles southeast of Carlsbad.  
 321465. Col. No. 3870. Carlsbad Caverns National Park.  
 321466. Col. No. 3872. Five miles northeast of Roswell.

## 321467 to 321600.

From Mexico. Seeds collected in July and August 1966 by J. M. J. de Wet, and held by Department of Botany and Plant Pathology, Oklahoma State University, Stillwater, Okla. Numbered Aug. 3, 1967.

- 321467 and 321468. *ANDROPOGON CAMPII* Swallen Gramineae.

**321467 to 321600—Continued****321467 and 321468—Continued**

321467. Col. No. 3732. Along wet ditch, 34 miles south of Saltillo, in mountains, on Highway 57, Nuevo Leon Province.

321468. Col. No. 3747. At Azteca motel, 122 miles south of San Luis Potosi.

**321469 to 321474. ANDROPOGON HIRTIFLORUS (Nees) Kunth Bluestem.**

321469. Col. No. 3792. Common grass on open, rolling hills, in mountains, 11 miles northwest of Oaxaca.

321470. Col. No. 3793. Along Highway 190, 11 miles northwest of Oaxaca.

321471. Col. No. 3806. In valley 15 miles west of Orizaba, Veracruz.

321472. Col. No. 3826. Common along road; 2 miles east of Morelia, Michoacan.

321473. Col. No. 3834. Along road, 109 miles west northwest of Zomora, Jalisco.

321474. Col. No. 3850. On hill, open bush, 62 miles northeast of Durango.

**321475. ANDROPOGON sp.**

Col. No. 3756. In open areas on edge of pine forest, 32 miles northeast of Tulancingo, Hidalgo.

**321476. ANDROPOGON sp.**

Col. No. 3758. Among rocks on slope along Highway 130, 44 miles northeast of Tulancingo, Hidalgo.

**321477. ANDROPOGON sp.**

Col. No. 3761. Weed along edges of sugarcane field, 80 miles southeast of Veracruz.

**321478. ANDROPOGON sp.**

Col. No. 3768. One hundred sixteen miles south of Merida, Yucatan in Campeche state.

**321479. ANDROPOGON sp.**

Col. No. 3769. Common roadside weed, 93 miles southwest of Campeche.

**321480. ANDROPOGON sp.**

Col. No. 3771. Four miles east of Coatzacoalcos, Veracruz.

**321481. ANDROPOGON sp.**

Col. No. 3772. Along swamp, 8 miles west of Coatzacoalcos, Veracruz.

**321482. ANDROPOGON sp.**

Col. No. 3795. In open forest areas of rolling hills, in mountains, 26 miles northwest of Oaxaca.

**321483. ANDROPOGON sp.**

Col. No. 3821. Forty-one miles west of Zitamaro, Michoacan.

**321484. ANDROPOGON sp.**

Col. No. 3822. Edge of standing water, 41 miles west of Zitamaro, Michoacan.

**321485. ANDROPOGON sp.**

Col. No. 3824. Along wet ditch, 90 miles west of Zitacuaro, Michoacan.

**321467 to 321600—Continued**

**321486.** *ANDROPOGON* sp.

Col. No. 3851. On hill, open bush, 62 miles northeast of Durango.

**321487 to 321539.** *BOTHRIOCHLOA BARBINODIS* (Lag.) Herter Gramineae.

**321487.** Col. No. 3721. Common weed along Highway 85, 34 miles south of Nuevo Laredo, Tamaulipas.

**321488.** Col. No. 3723. Forty-nine miles south of Nuevo Laredo, Tamaulipas. Common roadside grass but not weedy.

**321489.** Col. No. 3724. Along Highway 85, 55 miles south of Nuevo Laredo, Tamaulipas.

**321490.** Col. No. 3728. Common weed along Highway 40, 24 miles west of Monterrey, Nuevo Leon.

**321491.** Col. No. 3730. Fourteen miles south of Saltillo, Coahuila.

**321492.** Col. No. 3731. In Nuevo Leon, but 34 miles south of Saltillo, Coahuila, in mountains as roadside weed.

**321493.** Col. No. 3733. Wet ditch along Highway 57, 72 miles south of Saltillo, Coahuila, in Nuevo Leon state.

**321494.** Col. No. 3737. Two miles north of Matehuala, San Luis Potosi.

**321495.** Col. No. 3739. Three miles south of San Luis Potosi.

**321496.** Col. No. 3740. Three miles south of San Luis Potosi.

**321497.** Col. No. 3741. On Highway 57, 19 miles south of San Luis Potosi.

**321498.** Col. No. 3742. Forty-three miles south of San Luis Potosi.

**321499.** Col. No. 3743. Forty-five miles south of San Luis Potosi.

**321500.** Col. No. 3744. Forty-five miles south of San Luis Potosi.

**321501.** Col. No. 3745. Eighty-six miles south of San Luis Potosi.

**321502.** Col. No. 3748. On south facing mountain slope, four miles southeast of Queretaro.

**321503.** Col. No. 3750. Wild on rocky hill, 6 miles southeast of San Juan del Rio, Queretaro, in Hidalgo.

**321504.** Col. No. 3751. On high plateau, 22 miles east of San Juan del Rio, Queretaro, in Hidalgo.

**321505.** Col. No. 3752. On dry open plain, 8 miles east of Huichapan, Hidalgo.

**321506.** Col. No. 3754. Common weed around and on Toltec capital ruins at Tula, Hidalgo.

**321507.** Col. No. 3755. Two miles east of Pachuca, Puebla.

**321508.** Col. No. 3775. In mountains, 90 miles northwest of Juchitan de Zaragoza, Oaxaca.

**321509.** Col. No. 3776. Ninety-four miles northwest of Juchitan de Zaragoza, Oaxaca.

**321510.** Col. No. 3777. On steep cliffs, 7 miles northwest of Totolapan, Oaxaca.

**321511.** Col. No. 3779. Along road, 15 miles northwest of Totolapan, Oaxaca.

**321512.** Col. No. 3780. Common weed along cultivated field edges, in mountain valley, 13 miles southeast of Oaxaca.

**321513.** Col. No. 3781. Near Mitla ruins, common weed along road in intensively farmed area.

**321467 to 321600—Continued****321487 to 321539—Continued**

321514. Col. No. 3782. Along Highway 131, on rolling grassy hills, 10 miles south of Oaxaca.
321515. Col. No. 3787. Monte Alban, 4 miles west of Oaxaca.
321516. Col. No. 3789. Monte Alban, common grass among ruins, 4 miles west of Oaxaca.
321517. Col. No. 3791. Common grass on open, rolling hills, in mountains, 11 miles northwest of Oaxaca.
321518. Col. No. 3794. In open forest areas of rolling hills in mountains, 26 miles northwest of Oaxaca.
321519. Col. No. 3799. On top of high plateau, 51 miles northwest of Oaxaca.
321520. Col. No. 3802. In mountains, 42 miles northwest of Nochixtlan, Oaxaca.
321521. Col. No. 3803. Twenty miles northeast of Huajuapán de León, Oaxaca.
321522. Col. No. 3804. Seventeen kilometers southwest of Technuacan, Puebla on road from Huajuapán de León, Oaxaca.
321523. Col. No. 3805. In valley, 15 miles west of Orizaba, Veracruz.
321524. Col. No. 3809. Thirty-eight miles northwest of Technuacan, Puebla.
321525. Col. No. 3812. Common on toll road, 5 miles north of Puebla, on way to Mexico City.
321526. Col. No. 3813. Five miles northeast of Tlayacapan, Morelos, detouring from Atlatlahuacan to Yauhtepec.
321527. Col. No. 3814. Five miles northeast of Tlayacapan, Morelos, detouring from Atlatlahuacan to Yauhtepec.
321528. Col. No. 3835. In Jalisco state, 109 miles west, northwest of Zamora, Michoacan.
321529. Col. No. 3838. In Nayarit state, 91 miles northwest of Guadalajara, Jalisco.
321530. Col. No. 3842. In Durango state, common along road, 189 miles northeast of Mazatlan, Sinaloa.
321531. Col. No. 3843. In ditch along road, 15 miles northeast of Durango.
321532. Col. No. 3844. Twenty-four miles northeast of Durango.
321533. Col. No. 3845. Twenty-four miles northeast of Durango.
321534. Col. No. 3846. Twenty-four miles northeast of Durango on high plateau. Pilose not pitted.
321535. Col. No. 3847. Sixty-two miles northeast of Durango.
321536. Col. No. 3848. On little hill, open bush, 62 miles northeast of Durango. Nonpitted.
321537. Col. No. 3853. In dry hills, 116 miles northeast of Durango.
321538. Col. No. 3854. Weed in drainage ditch, in desert, 60 miles east of Torreon, Coahuila.
321539. Col. No. 3855. In dry creekbed, in desert, 122 miles east of Torreon, Coahuila.

**321540 and 321541. BOTHRIUCHLOA PERTUSA (L.) A. Camus**

## 321467 to 321600—Continued

## 321540 and 321541—Continued

321540. Col. No. 3762. At village Xtepen, Yucatan on Highway 180, 24 miles south of Merida.

321541. Col. No. 3763. On road to Merida, Yucatan, 5 miles north of Progreso.

321542 to 321562. *BOTHRIOCHLOA SACCHAROIDES* (Sw.) Rydb.

Silver bluestem.

321542. Col. No. 3722. Weedy grass along Highway 85, 49 miles south of Nuevo Laredo, Tamaulipas.

321543. Col. No. 3725. Along Highway 85, 55 miles south of Nuevo Laredo, Tamaulipas.

321544. Col. No. 3726. On Highway 85, 6 miles south of Sabinas Hidalgo, Nuevo Leon.

321545. Col. No. 3727. On Highway 85, 22 miles south of Sabinas Hidalgo, Nuevo Leon.

321546. Col. No. 3729. In wet gully on Highway 57, 6 miles south of Saltillo, Coahuila.

321547. Col. No. 3738. On semidesert plain, 37 miles south of Matechuala, San Luis Potosi.

321548. Col. No. 3746. As a weed along Highway 57, in Guanajuato, 86 miles south of San Luis Potosi.

321549. Col. No. 3753. On open slope, 20 miles east of Huichapan, Hidalgo.

321550. Col. No. 3757. On east slope in open spots of pine forest, 41 miles northeast of Tulancingo, Hidalgo.

321551. Col. No. 3759. Coastal plains of Puebla, 2 miles south of Emilio Carranza, Veracruz.

321552. Col. No. 3767. Along road in open area of forest, 66 miles south of Merida, Yucatan.

321553. Col. No. 3786. Monte Alban, 4 miles west of Oaxaca.

321554. Col. No. 3790. Monte Alban ruins, 4 miles west of Oaxaca.

321555. Col. No. 3796. In open pine forest, 36 miles northwest of Oaxaca.

321556. Col. No. 3797. On mountain slopes, 46 miles northwest of Oaxaca.

321557. Col. No. 3807. Top of mountain pass in among oak forest, 25 miles southwest of Orizaba, Veracruz.

321558. Col. No. 3811. Common on toll road, 5 miles north of Puebla, on way to Mexico City.

321559. Col. No. 3819. Four miles west of Zitacuaro, Michoacan.

321560. Col. No. 3820. Thirty-three miles west of Zitacuaro, Michoacan.

321561. Col. No. 3827. Along road in mountains, 67 miles west of Morelia, Michoacan.

321562. Col. No. 3832. Dominant grass in open plain, 11 miles west of Zamora, Michoacan.

321563 to 321565. *BOTHRIOCHLOA SCHLUMBERGII* (Fourn.) Henr.

321563. Col. No. 3818. Five miles north of Ciudad Ixtepan, Oaxaca.

321564. Col. No. 3830. In open field, 11 miles west of Zamora, Michoacan.

**321467 to 321600—Continued****321563 to 321565—Continued**

321565. Col. No. 3841. In Durango, 184 miles northeast of Mazatan, Sinaloa.
- 321566 to 321569. *BOTHRIOCHLOA WRIGHTII* (Hack.) Henr.
321566. Col. No. 3734. Weedy, along wet ditch, Highway 57, 72 miles south of Saltillo, Nuevo Leon.
321567. Col. No. 3735. In mountains, 143 miles south of Saltillo, Nuevo Leon.
321568. Col. No. 3736. South slope of mountain pass, 149 miles south of Saltillo, Nuevo Leon.
321569. Col. No. 3840. On high plateau in Durango, 178 miles northeast of Mazatlan, Sinaloa.
321570. *CYNODON DACTYLON* (L.) Pers. Gramineae. **Bermudagrass.**  
Col. No. 3810. Thirty-eight miles northwest of Tehuacan, Puebla.
321571. *DICHANTHIUM* sp. Gramineae.  
Col. No. 3784. Monte Alban ruins, 4 miles west of Oaxaca.
321572. *DICHANTHIUM* sp.  
Col. No. 3785. Monte Alban ruins, 4 miles west of Oaxaca.
321573. *DICHANTHIUM* sp.  
Col. No. 3788. Monte Alban, common grass among ruins, 4 miles west of Oaxaca.
321574. *DICHANTHIUM* sp.  
Col. No. 3798. On rolling hills, 51 miles northwest of Oaxaca.
321575. *DICHANTHIUM* sp.  
Col. No. 3800. On steep rocky slopes, 38 miles northwest of Nochixtlan, Oaxaca.
321576. *DICHANTHIUM* sp.  
Col. No. 3801. In mountains, 42 miles northwest of Nochixtlan, Oaxaca.
321577. *DICHANTHIUM* sp.  
Col. No. 3823. Along wet ditch, 90 miles west of Zitacuaro, Michoacan.
321578. *DICHANTHIUM* sp.  
Col. No. 3825. Common along road, 2 miles east of Morelia, Michoacan.
321579. *DICHANTHIUM* sp.  
Col. No. 3831. In open field along ditch, 11 miles west of Zamora, Michoacan.
321580. *DICHANTHIUM* sp.  
Col. No. 3849. On hill, open bush, 62 miles northeast of Durango.
321581. *ECHINOCHLOA* sp. Gramineae.  
Col. No. 3833. In Jalisco, Highway 15, north; along road in wet ditch, common in spots, 109 miles west, northwest of Zamora, Michoacan.
321582. *MUHLENBERGIA* sp. Gramineae.  
Col. No. 3778. Along small ditch in mountains, 15 miles northwest of Totolapan, Oaxaca.
321583. *ORYZOPSIS* sp. Gramineae.  
Col. No. 3808. Twenty-five southwest of Orizaba, Veracruz.



**321467 to 321600—Continued**

**321584.** *PHYSALIS* sp. Solonaceae.

Col. No. 3764. Chichen Itza ruins, 27 miles east of Valladolid, Yucatan. Annual, more or less hairy covering around berry.

**321585.** *STIPA* sp. Gramineae.

Col. No. 3749. Along little stream, 4 miles southeast of Queretaro.

**321586.** *STIPA* sp.

Col. No. 3760. On sandy bank near sea, 35 miles southeast of Veracruz, on Highway 180.

**321587.** *STIPA* sp.

Col. No. 3766. Among Uymal ruins in forest clearing, 47 miles south of Merida, Yucatan.

**321588.** *STIPA* sp.

Col. No. 3770. One mile east of Ciudad del Carmen, Campeche.

**321589.** *STIPA* sp.

Col. No. 3783. Native grass on rolling hills, 10 miles south of Oaxaca, Highway 131.

**321590.** *STIPA* sp.

Col. No. 3839. In Nayarit, 91 miles northwest of Guadalajara, Jalisco.

**321591.** *STIPA* sp.

Col. No. 3852. Seventy-eight miles northeast of Durango, among *Acacia* trees.

**321592.** *TRICHACHNE* sp. Gramineae.

Col. No. 3765. Among Uxmal ruins, 47 miles south of Merida, Yucatan.

**321593.** *TRIPSACUM* sp. Gramineae.

Col. No. 3773. In cleared areas of sparse pine forest, on slope, 59 miles northwest of Juchitan de Zaragoza, Oaxaca.

**321594.** *TRIPSACUM* sp.

Col. No. 3774. In cleared areas of sparse pine forest, on slope, 59 miles northwest of Juchitan de Zaragoza, Oaxaca.

**321595.** *TRIPSACUM* sp.

Col. No. 3815. On bare rock, where protected from grazing animals, 45 miles south of Cuernavaca, Morelos, in mountains.

**321596.** *TRIPSACUM* sp.

Col. No. 3816. Common among bamboo, 19 miles north of Taxaco de Alarcon, Guerrero.

**321597.** *TRIPSACUM* sp.

Col. No. 3817. Among rocky bamboo grove, 23 miles north of Taxaco de Alarcon, Guerrero.

**321598.** *TRIPSACUM* sp.

Col. No. 3828. Common along riverlet, 91 miles west of Morelia, Michoacan.

**321599.** *TRIPSACUM* sp.

Col. No. 3829. Along wet ditch, in mountains, 91 miles west of Morelia, Michoacan.

**321600.** *TRIPSACUM* sp.

Col. No. 3837. In Nayarit, 91 miles northwest of Guadalajara, Jalisco, among rocks.

## 321601 to 321627.

From Germany. Tubers presented by H. Ross, Max-Planck Institut für Züchtungsforschung, Köln-Vogelsang, Bundesrep. Countries of original collection as indicated. Numbered Aug. 7, 1967.

**321601.** SOLANUM CHANCAYENSE Ochoa Solanaceae.

EBS 2647. Collected by H. Ross, Sept. 24, 1965. Cerro Pativilca, Lima Province, Peru. Elevation 200 meters.  $2n=24$ .

**321602.** SOLANUM JUZEPCZUKII Bukas.

EBS 2659. Collected by M. Cardenas. Oruro, Bolivia.  $2n=36$ .

**321603.** SOLANUM MEDIANS Bitter

EBS 2641. Collected by H. Ross, September 16, 1965. Lomas de Atocongo, Lima Province, Peru. Elevation 300 meters.  $2n=24$ .

**321604.** SOLANUM MICRODONTUM Bitter

EBS 2636. Collected by Ana Maria Krueger, February, 1965. Incallayta, road Cochabamba to Santa Cruz, 150 km., Bolivia. Elevation 2,950 meters.

**321605.** SOLANUM SPARSIPILUM (Bitter) Juz. & Buk.

EBS 2658. Collected by M. Cardenas. Las Quadras near Cochabamba, Bolivia.  $2n=24$ . Received *S. ruiz-cebellosii* Card., a new species to be published by M. Cardenas.

**321606 to 321625.** SOLANUM TUBEROSUM L.

Potato.

**321606.** MPI 44.335/140. Origin *S. tuberosum* and *S. demissum*; very resistant to late blight.

**321607.** MPI 50.140/5. Origin *S. tuberosum*, *S. demissum*, *S. stoloniferum*. Resistant to late blight, leaf roll; immune viruses A and Y.

**321608.** MPI 54.4129/288. Same as P.I. 321607.

**321609.** MPI 55.957/6. Origin *S. tuberosum*, *S. demissum*, *S. stoloniferum*, *S. acaule*. Resistance same as P.I. 321607.

**321610.** MPI 55.957/24. Same as P.I. 321607 plus immunity to virus X.

**321611.** MPI 55.967/77. Origin *S. tuberosum*, *S. demissum*. Resistant to leaf roll and late blight.

**321612.** MPI 55.1002/83.

**321613.** MPI 55.101p.

**321614.** MPI 63.614/201. Origin *S. tuberosum* and *S. demissum*; very high dry matter; light yellow flesh.

**321615.** MPI 63.659/5. Same as P.I. 321614.

**321616.** 'Anett'. Early maturity, high dry matter content. Resistant to viruses A and Y, late blight and scab. Immunity to virus X from *S. acaule*.

**321617.** 'Antje'. (Received as 49.531/7).

**321618.** "Burmania". (A Dutch variety).

**321619.** Clivia'. Early maturity, good quality, high dry matter content. Resistant to viruses A and Y, late blight, scab; susceptible to leafroll.

**321620.** 'Cosima'. Late maturity, good quality, high dry matter, high yield.

**321621.** 'Feldeslohn'. Early maturity, resistant to virus Y, susceptible to A.

**321622.** 'Fina'. Early maturity, good quality, large tubers, low dry matter content. Resistant to scab; susceptible virus A and late blight.

**321601 to 321627—Continued****321606 to 321625—Continued**

321623. 'Grata'. Early maturity. Resistant to late blight and scab; susceptible to virus Y.

321624. 'Hansa'. Early maturity, good quality. Susceptible to leaf roll.

321625. 'Saphir'. (Received as 50.501/23). Immunity to X virus from *S. acuale*.

**321626. SOLANUM sp.**

EBS 2638. Collected by H. Ross, Sept. 2, 1965. Infiernillo near Atiquipa, Arequipa Province, Peru. Elevation 800 meters.  $2n=36$ . Thought to be a new species.

**321627. SOLANUM sp.**

EBS 2639. Collected by H. Ross, Sept. 3, 1965. Malpaso near Camana, Arequipa Province, Peru. Elevation 900 meters. Identical with EBS 2638 P.I. 321626.  $2n=36$ .

**321628 to 321630. BIXA ORELLANA L. Bixaceae. Annatto.**

From Puerto Rico. Seeds presented by Department of Agronomy and Soils, Agricultural Experiment Station, Mayaguez. Numbered Aug. 15, 1967.

Selections made for resistance to powdery mildew, leaf spot and twig dieback.

321628. P.R. No. 1.

321629. P.R. No. 2.

321630. P.R. No. 5.

**321631. LEUCAENA RETUSA Benth. Leguminosae.**

From the United States. Seeds presented by Soil Conservation Service, Plant Materials Center, Knox City, Tex. Numbered Aug. 15, 1967.

Seeds collected at Sonora, Tex.

**321632. TRIPSACUM LAXUM Nash Gramineae.**

**Guatemala gamagrass.**

From Costa Rica. Seeds presented by Jorge Mata Pacheco, Ministerio de Agricultura y Ganaderia, San Jose. Numbered Aug. 15, 1967.

El Alto Experiment Station.

**321633 to 321635.**

From Australia. Seeds presented by Division of Plant Industry, Commonwealth Scientific and Industrial Research Organization, Canberra. Numbered Aug. 15, 1967.

321633. *BASSIA BRACHYPTERA* R. H. Anders. Chenopodiaceae.

C 814.

321634. *BASSIA ERIACANTHA* R. H. Anders.

C 801.

321635. *BASSIA LANICUSPIS* F. v. M.

C 591.

**321636. TECOMA STANS (L.) Juss. ex H.B.K. Bignoniaceae.**

**Florida trumpetbush.**

From Kenya. Seeds collected by Robert E. Perdue, Jr., Crops Research Division, Plant Industry Station, Beltsville, Maryland. Numbered Aug. 15, 1967.

Col. No. 8180. Shrub, to 6 feet high; flowers large, yellow, attractive.

**321637 to 321640.**

From the United States. Seeds collected by H. S. Gentry, agricultural explorer, Crops Research Division, Plant Industry Station, Beltsville, Maryland. Numbered Aug. 15, 1967.

**321637 and 321638.** *PHASEOLUS ACUTIFOLIUS* var. *LATIFOLIUS* G. F. Freeman  
Leguminosae. Tepary bean.

Collected in 1966 at Papago Indian Reservation, Chukut Kuk District, Newfields, Ariz.

**321637.** Col. No. 22314. Local market. Cultivated; large, yellow.

**321638.** Col. No. 22315. Cultivated; white.

**321639.** *PHASEOLUS VULGARIS* L. Common bean.

Col. No. 22317. Collected in 1966 at Papago Indian Reservation Chukut District, Newfields, Ariz. Modern pinto; cultivated.

**321640.** *VIGNA SINENSIS* (Torner) Savi Leguminosae. Cowpea.

Col. No. 22316. Collected in 1966 at Papago Indian Reservation, Chukut Kuk District, Newfields, Ariz. Cultivated; white with black eye.

**321641 and 321642.** *LINUM USITATISSIMUM* L. Linaceae.  
Common flax.

From Poland. Seeds presented by Professor A. Listowski, Institute of Soil Science and Cultivated Plants, Pulawy. Numbered Aug. 16, 1967.

**321641.** Line 1.

**321642.** Line 3.

**321643 and 321644.**

From Portugal. Seeds presented by J. J. Paiva Caldeira, Estacao de Melhoramento de Plantas, Elvas. Numbered Aug. 16, 1967.

**321643.** *SECALE CEREALE* L. Gramineae. Rye.  
No. 5043. Centeio de Alto.

**321644.** *TRITICUM AESTIVUM* L. Gramineae.  
No. 2619. Barbela, 0248.

**321645 to 321653.**

From the Union of Soviet Socialist Republics. Seeds presented by All-Union Institute of Plant Industry, Leningrad. Numbered Aug. 16, 1967.

**321645 to 321651.** *ORYZA SATIVA* L. Gramineae. Rice.

**321645.** No. 3668. 'Vros 3716'. Krasnodar territory.

**321646.** No. 3670. 'Vros 213'. Krasnodar territory.

**321647.** No. 3767. 'Severnyi B-101'. Kuibyshev region.

**321648.** No. 3942. 'Krasnoarmiskii 313'. Krasnodar territory.

**321649.** No. 3946. 'Alakulskii'. Kazakhstan.

**321650.** No. 4429. 'Skorospelyi 8'. Krasnodar territory.

**321651.** No. 4573. 'Sputnik'. Primorsk Province.

**321652.** *ORYZA SATIVA* var. *ERYTHROCEROS* Koern.

No. 491. 'Bukhiado'. Primorsk Province.

**321653.** *ORYZA SATIVA* var. *VULGARIS* Koke.

No. 2276. Primorsk Province.

**321654 to 321656.**

From Kenya. Seeds collected by E. C. Smith, Jr., Crops Research Division, Plant Industry Station, Beltsville, Maryland. Numbered Aug. 16, 1967.

**321654.** *VERNONIA* sp. Compositae.

Col. No. 4570. In Kericho across road from entrance drive to Tea Hotel. Elevation 8,500 feet. Roadside weed to 1.25 meters high. Flowers blue. Habitat on heavy red soil.

**321655.** *VERNONIA* sp.

Col. No. 4585. 'Machegene'. Near Meri on road to Meri Game Reserve. To 1.5 meters high. Flowers clear blue.

**321656.** *VERNONIA* sp.

Col. No. 4591. Five miles from Meri on Nanyuki road. Shrub to 2 meters high. Flowers blue.

**321657 to 321664.**

From Uganda. Seeds collected by E. C. Smith, Jr., Crops Research Division, Plant Industry Station, Beltsville, Maryland. Numbered Aug. 16, 1967.

**321657.** *VERNONIA* sp. Compositae.

Col. No. 4604. Mubuku Valley in upper edge of elephant grass area in valley bottom. To 4 feet high. Phyllaries with white tips; flowers lilac.

**321658.** *VERNONIA* sp.

Col. No. 4612. Six miles from Fort Portal along road to Semliki area in pastures. Elevation 5,500 feet. To 2 meters high. Phyllary tips scarious. Flowers lilac and blue.

**321659.** *VERNONIA* sp.

Col. No. 4624. On road south from Fort Portal 4.5 miles at Tombs of Karambi. Elevation 5,500 feet. To 2 meters high. Flowers two shades of lilac.

**321660.** *VERNONIA* sp.

Col. No. 4626. South of Mubuku on Kasese road, 45 miles south of Fort Portal. Elevation 3,500 feet. In open grassland area maintained by fire. To 6 feet high. Flowers white or pale lilac.

**321661.** *VERNONIA* sp.

Col. No. 4627. About 40 miles from Mbararo on road from Kasese. To 4 meters high. Bracts white tipped. Flowers pale lilac.

**321662.** *VERNONIA* sp.

Col. No. 4632. Five miles north of Hoey's Bridge on road to Kitale. Common in area. To 3.5 meters high. Bracts white. Flowers lilac.

**321663.** *VERNONIA* sp.

Col. No. 4638. Mt. Elgon Forest. Elevation 7,800 feet. In opening in bamboo. To 4 meters high. Bracts shining white. Flowers lilac.

**321664.** *VERNONIA* sp.

Col. No. 4640. Mt. Elgon Forest. Elevation 7,500 feet. Along forest road. To 4 meters high. Bracts green. Flowers blue.

**321665 to 321669.**

From Zambia. Seeds collected by D. B. Fanshawe, Division of Forest Research, P. O. Box 879, Kitwe. Numbered Aug. 16, 1967.

**321665.** *VERNONIA HOFFMANNIANA* Hutch & Dalz. Compositae.

**321665 to 321669—Continued**

Col. No. F10040. Perennial herb with thickened rootstock. All parts sparsely white coarse puberulus; leaves sessile dentate; flowers complete purplish in large heads, solitary or in terminal corymbs; phyllaries green, acicular, pilose.

**321666.** *VERNONIA INCOMPTA* S. Moore

**321667.** *VERNONIA LUEMBENSIS* De Wild. & Muschler

**321668.** *VERNONIA PURPUREA* Sch. Bip. ex Walp.

Col. No. F10062. Stout herb of miambo woodland to 3 feet high. Leaves subsessile, scabrous, chartaceous; flowers complete, purple in terminal heads, solitary or in loose panicle; phyllaries scarious, aristate with green midrib.

**321669.** *VERNONIA* sp.

Col. No. F10018.

**321670 to 321672.**

From Kenya. Seeds collected by Robert E. Perdue, Jr., Crops Research Division, Plant Industry Station, Beltsville, Maryland. Received Aug. 18, 1967.

**321670.** *DIGITARIA SCALARUM* (Schweinf.) Chiov. Gramineae.

Col. No. 8222. Along Magadi road 0.3 mile south of junction with Langata road at west boundary of Game Park. Elevation 5,900 feet. Black soil.

**321671.** *MILLETTIA DURA* Dunn Leguminosae.

From tree on grounds of East African Herbarium, Nairobi.

**321672.** *SETARIA TRINERVIA* Stapf Gramineae.

Col. No. 8186. Central Province, Thika District, along Thika road 0.5 mile northeast of Ruiru. Elevation 5,000 feet. Growing by roadside. To 2 feet high.

**321673 and 321674.**

From Tanzania. Seeds collected by Robert E. Perdue, Jr., Crops Research Division, Plant Industry Station, Beltsville, Maryland. Received Aug. 18, 1967.

**321673.** *CENCHRUS CILIARIS* L. Gramineae. **Buffelgrass.**

Purchased in native market in Tanga.

**321674.** *SORGHUM BICOLOR* (L.) Moench Gramineae.

Purchased in native market in Tanga.

**321675 to 321682.**

From France. Seeds presented by L. Clause Seed Company, S.A., Bretigny-sur-Orge. Received Aug. 18, 1967.

**321675.** *DACTYLIS GLOMERATA* L. Gramineae. **Orchardgrass.**

'Daprime'. Late.

**321676.** *FESTUCA ARUNDINACEA* Schreb. Gramineae. **Tall fescue.**

'A.2'.

**321677.** *FESTUCA PRATENSIS* Huds. **Meadow fescue.**

'Daphne'. Early.

**321678.** *FESTUCA RUBRA* L. **Red fescue.**

'Bergere'.

**321675 to 321682—Continued**

321679. *LOLIUM MULTIFLORUM* Lam. Gramineae. Italian ryegrass.  
'Itaque'.

321680 and 321681. *LOLIUM PERENNE* L. Perennial ryegrass.  
321680. 'Raidor'. Early.

321681. 'Real'. Medium late.

321682. *PHLEUM PRATENSE* L. Gramineae. Common timothy.  
'32-4'.

321683. *RHODODENDRON HIRSUTUM* L. Ericaceae.  
Garland rhododendron.

From Switzerland. Seeds presented by Jardin Botanique de Geneva, 192, Route de Lausanne, Geneva. Received Aug. 18, 1967.

321684. *VERNONIA* sp. Compositae.

From Kenya. Seeds collected by C. E. Smith, Jr., botanist, Crops Research Division, Plant Industry Station, Beltsville, Maryland. Received Feb. 28, 1967. Numbered Aug. 21, 1967.

Col. No. 4644. 'Kinkyuy-Morerangamba'. Near Nabani Forest Station, Mt. Kenya. Elevation 7,500 feet. Plant 2 meters high. Bracts green, flowers blue.

321685 to 321687.

From France. Seeds presented by Institut de Recherches du Coton et des Textiles Exotiques, Paris. Received Aug. 25, 1967.

321685. *GOSSYPIUM BARBADENSE* L. Malvaceae. Sea-island cotton.  
'Mono'. A commercial variety grown in Togo.

321686. *GOSSYPIUM HIRSUTUM* L. Upland cotton.  
R 122. Marie Galante.

321687. *GOSSYPIUM PUNCTATUM* Schum. & Thonn. Cotton.  
R 120.

321688 and 321689. *DAUCUS CAROTA* L. Umbelliferae. Carrot.

From Japan. Seeds presented by Fujita Seed Company, Osaka. Received Aug. 25, 1967.

321688. 'Kintoki'. Early strain.

321689. 'Kintoki'. Regular strain.

321690 to 321693.

From Australia. Seeds presented by Department of Agriculture, Jarrah Road, South Perth. Received Sept. 1, 1967.

321690 and 321691. *AVENA SATIVA* L. Gramineae. Common oats.  
321690. 'Irwin'.

321691. 'Swan'.

321692 and 321693. *HORDEUM VULGARE* L. Gramineae. Common barley.  
321692. 'Bussell'.

321693. 'Dampier'.

321694 to 321696. *AVENA SATIVA* L. Gramineae. Common oats.

From New Zealand. Seeds presented by G. M. Wright, Department of Scientific and Industrial Research, Crops Research Division, Private Bag, Christchurch. Received Sept. 1, 1967.

**321694 to 321696—Continued**

321694. 'Amuri'.  
 321695. 'Mapua 65'.  
 321696. 'Mapua 70'.

**321697 to 321708.**

From England. Seeds presented by University of Reading, Reading, Berkshire. Code numbers refer to 1966 Reading University Catalog. Received Sept. 1, 1967.

321697. *HORDEUM VULGARE* L. Gramineae. **Common barley.**  
 No. 162. 'Chevalier'.  
 321698. *AEGILOPS* sp. Gramineae.  
 No. 181.  
 321699 to 321707. *TRITICUM AESTIVUM* L. Gramineae.  
 321699. No. 213. 'Carleton'.  
 321700. No. 221. 'Kolben II'.  
 321701. No. 222. 'Masterpiece'.  
 321702. No. 225. 'Nursi'.  
 321703. No. 227. 'Pilot'.  
 321704. No. 231. 'Steel'.  
 321705. No. 234. 'Welcome'.  
 321706. No. 236. 'Wilma'.  
 321707. No. 237. 'Yeoman'.

321708. *TRITICUM* × *SECALE* **Triticale.**  
 No. 238. *T. aestivum* × *S. cereale*. Chromosome 8x.

**321709 to 321714. NICOTIANA TABACUM L. Solanaceae. Tobacco.**

From Bulgaria. Seeds presented by D. K. Tsikov, Institute of Genetics and Plant Breeding, Sofia. Received Sept. 1, 1967.

321709. 'Djebel 174'.  
 321710. 'Djebel 359'.  
 321711. 'Haskowo 2002'.  
 321712. 'Ostrolist B-27-47'.  
 321713. 'Sekirka'.  
 321714. 'Trapesund'.

**321715 to 321726.**

From Argentina. Seeds collected by Rae Natalie Goodall, Botanist, Tierra del Fuego. Received Sept. 1, 1967.

321715. *ANEMONE MULTIFIDA* Poir. Ranunculaceae.  
 Col. No. R.N.G. 468. 'Brown Chico'. Estancia Harberton, near beach.  
 321716. *BACCHARIS PATAGONICA* Hook. & Arn. Compositae.  
 Col. No. R.N.G. 789. Pasture, Harberton. Dry and damp hillsides. Flowers and seeds.  
 321717. *BERBERIS BUXIFOLIA* Lam. ex Pers. Berberidaceae. **Magellan barberry.**  
 Col. No. R.N.G. 780. Near bridge over Laskifashej River, Estancia Harberton.



**321715 to 321726—Continued**

**321718.** *CHILIOTRICHUM DIFFUSUM* (Forst.) Kuntze Compositae.

Col. No. R.N.G. 775. Harberton Bay. Few flowers remaining, mostly seed.

**321719.** *DRIMYS WINTERI* Forst. Magnoliaceae. **Wintersbark drimys.**

Col. No. R.N.G. 803. Harberton Park, Estancia Harberton. Trees large. Fruit from fall flowers small; fruit from earlier flowers ripe. Flesh of seeds slippery, mealy, waxy feel, spicy odor.

**321720.** *EMBOTHRIUM COCCINEUM* Forst. Proteaceae. **Notro.**

Col. No. R.N.G. 777. Harberton peninsula. Seeds and late flowering coincide.

**321721.** *ENARGEA MARGINATA* Gaertn. Liliaceae.

Harberton peninsula.

**321722.** *ERIGERON* sp. Compositae.

Col. No. R.N.G. 701. Estancia Harberton, Cutalataca airfield. Near beach, in grass and sand. Most plants in seed, few late flowers.

**321723.** *MAYTENUS MAGELLANICUS* (Lam.) Hook. f. Celastraceae.

Col. No. R.N.G. 807. 'Lena dura'. Yahgan-Aiku-liush. Harberton Park, Estancia Harberton. Most seeds fallen, plants in bud.

**321724.** *NOTHOFAGUS ANTARCTICA* (Forst.) Oerst. Fagaceae.

Col. No. R.N.G. 776. Harberton peninsula. Seeds ripe. Large tree with fungi in hollow.

**321725.** *NOTHOFAGUS BETULOIDES* (Mirb.) Oerst.

Col. No. R.N.G. 805. Large tree above cemetery, Harberton Park, Estancia Harberton.

**321726.** *NOTHOFAGUS PUMILIO* (Poepp. & Endl.) Krasser

Col. No. R.N.G. 804. Large tree below cemetery near fence, Harberton Park. One of few trees with fruit.

**321727.** *PHASEOLUS VULGARIS* L. Leguminosae. **Common bean.**

From Italy. Seeds presented by the Rome Provincial Agrarian Society through A. Paul Danyluk, Assistant Agricultural Attache, American Embassy, Rome. Received Sept. 5, 1967.

'Cannellini Bean'.

**321728 to 321745.**

From Afghanistan. Seeds collected by L. P. Reitz, Crops Research Division, Plant Industry Station, Beltsville, Maryland. Numbered Sept. 6, 1967.

**321728 to 321742.** *TRITICUM AESTIVUM* L. Gramineae.

Lebanon Selections.

**321728.** No. 1. From Bolan Research Farm, Bost. Awnleted, white chaff, spring type.

**321729.** No. 2. Collected in Kohistan, east of Charikar. Local variety, brown and white chaff, bearded.

Collected in Charikar area.

**321730.** No. 3. Awnleted, brown chaff.

**321731.** No. 4. Brown chaff, bearded.

**321732.** No. 5. White, bearded.

Collected in Kabul River gorge.

**321728 to 321745—Continued****321728 to 321742—Continued**

321733. No. 6. Brown chaff, No. 4 awn, lax.

321734. No. 7. White chaff, awned, lax.

321735. No. 8. White dense, pubescent, awned.

Contributed by Ministry of Agriculture, Kabul.

321736. 'Aoba Komugi'. From Japan. Awnleted, white chaff.

321737. 'Elephant Tooth'. (Candan-i-Phil). Afghan wheat.

321738. 'Khosti'. From Paktia.

321739. 'Landani'. Afghan wheat.

321740. 'Maouri'. Afghan wheat.

321741. 'Paktia'. From Paktia.

321742. 'Sia Khosha'. Afghan wheat.

**321743 to 321745. TRITICUM DURUM Desf.****Durum wheat.**

321743. 'Camel Tooth'. (Shatur-i-Dandar). Afghan wheat. Contributed by Ministry of Agriculture, Kabul. Extra long grain.

321744. 'Zafrani'. Afghan wheat. Contributed by Ministry of Agriculture, Kabul.

321745. Lebanon selection. Collected in Charikar area. Brown, bearded, pubescent.

**321746 and 321747.**

From Pakistan. Seeds presented by Anwar Hussain, Agricultural Research Institute, Lyallpur. Numbered Sept. 6, 1967.

321746. *SESBANIA BISPINOSA* (Jacq.) W. F. Wight Leguminosae.

321747. *SESBANIA SPECIOSA* Taub.

**321748. GOSSYPIOIDES KIRKII (Mast.) Skovsted Malvaceae.**

From Tanzania. Seeds presented by S. A. Robertson, Ministry of Agriculture, Forest and Wildlife, Central Research Center, Ilonga, Private Bag, Kilosa. Numbered Sept. 6, 1967.

Germination test with no result, but not with scarified seed.

**321749. LYCOPERSICON ESCULENTUM Mill. Solanaceae. Tomato.**

From India. Seeds presented by Division of Plant Introduction, Indian Agricultural Research Institute, New Delhi. Numbered Sept. 6, 1967.

I.C. 13636. 'Red Cherry'.

**321750 to 321875.**

From Yugoslavia. Seeds presented by Professor Vinko Sadar, Biotechnical Faculty, University of Ljubljana, Ljubljana, under PL 480 Project E30-CR-2. Numbered Sept. 6, 1967.

321750 to 321767. *AVENA SATIVA* L. Gramineae.

**Common oats.**

321750. No. 18. 'Astor'.

321751. No. 10. 'Austriaweib'.

321752. No. 4. 'Auswuchsfester Gelb'.

321753. No. 3. 'Condor'.

321754. No. 13. 'Flamingsstreue'.

321755. No. 14. 'Flamingsweib II'.

**321750 to 321875—Continued****321750 to 321767—Continued**

- 321756. No. 15. 'Goldschatz'.
- 321757. No. 2. 'NOS Nackthafer'.
- 321758. No. 9. 'Probstdorfer Gelb'.
- 321759. No. 1. 'SP-2 Ambrus II'.
- 321760. No. 8. 'SP-45 Krnice 18'.
- 321761. No. 6. 'SP-63 Osilnica'.
- 321762. No. 16. 'SP-69 Planina 13'.
- 321763. No. 7. 'SP-138 Zice 40'.
- 321764. No. 12. 'SP-143 Bis 46'.
- 321765. No. 11. 'SP-152 Cepinci 64'.
- 321766. No. 5. 'SP-214 Muhabran 4'.
- 321767. No. 17. 'SP-307 Zitence 37'.

**321768 to 321855. HORDEUM DISTICHON L. Gramineae. Two-rowed barley.**

- 321768. No. 37. 'Abed Rigel'.
- 321769. No. 36. 'Adliker'.
- 321770. No. 78. 'Akme Futter'.
- 321771. No. 54. 'Allasch'.
- 321772. No. 77. 'Amsel'.
- 321773. No. 79. 'Anatolski Jable'.
- 321774. No. 30. 'Antalek'.
- 321775. No. 18. 'Balder'.
- 321776. No. 58. 'Bankuti Koray'.
- 321777. No. 3. 'Barin'.
- 321778. No. 57. 'Branisovicky'.
- 321779. No. 39. 'Cambrinus'.
- 321780. No. 53. 'Ceres'.
- 321781. No. 59. 'Celechovicky'.
- 321782. No. 8. 'Delta'.
- 321783. No. 63. 'Donaria'.
- 321784. No. 6. 'Eclat'.
- 321785. No. 60. 'Ekonom'.
- 321786. No. 50. 'Elsa'.
- 321787. No. 55. 'Emir'.
- 321788. No. 4. 'Eura'.
- 321789. No. 85. 'E 351 Jable'.
- 321790. No. 86. 'E 353 Jable'.
- 321791. No. 65. 'Ereya-Frigga'.
- 321792. No. 51. 'Georgine'.
- 321793. No. 61. 'Godolloi'.
- 321794. No. 25. 'Heines Hanna'.
- 321795. No. 41. 'Hella'.

**321750 to 321875—Continued****321768 to 321855—Continued**

321796. No. 29. 'Herta'.  
321797. No. 56. 'Impala'.  
321798. No. 34. 'Ingrid'.  
321799. No. 1. 'Irnbut'.  
321800. No. 21. 'Isaria'.  
321801. No. 23. 'Isaria Nova'.  
321802. No. 2. 'Jable 26'.  
321803. No. 19. 'Juliane'.  
321804. No. 14. 'Kazimierski'.  
321805. No. 22. 'Kenia'.  
321806. No. 7. 'Kocherperle'.  
321807. No. 76. 'Krimskij 301'.  
321808. No. 16. 'Lichtis Maia'.  
321809. No. 99. 'Martha'.  
321810. No. 67. 'Martonvasari FB-102'.  
321811. No. 68. 'Martonvasari-104'.  
321812. No. 24. 'MGZ'.  
321813. No. 43. 'Minerva'.  
321814. No. 9. 'Nota 9'.  
321815. No. 75. 'Odesskij 97'.  
321816. No. 70. 'Odeskij 14'.  
321817. No. 20. 'Osijeski 20'.  
321818. No. 42. 'Pallas'.  
321819. No. 35. 'Paula'.  
321820. No. 100. 'Perfekta'.  
321821. No. 31. 'Peroga 3'.  
321822. No. 28. 'Plena'.  
321823. No. 62. 'Proskovcuv hanacky'.  
321824. No. 98. 'Quantum'.  
321825. No. 32. 'Sandomierski'.  
321826. No. 45. 'Skrzeszowski'.  
321827. No. 27. 'SP-1 Adlesici'.  
321828. No. 81. 'SP-5 Biljana 13'.  
321829. No. 13. 'SP-9 Cerovec 32'.  
321830. No. 48. 'SP-13 Brezje 4'.  
321831. No. 71. 'SP-25 Dramlje 41'.  
321832. No. 66. 'SP-40 Koritnice 10'.  
321833. No. 74. 'SP-41 Kostabona 17'.  
321834. No. 52. 'SP-45 Krnice 18'.  
321835. No. 82. 'SP-49 Lepa njiva'.  
321836. No. 17. 'SP-52 Lokavec 19'

**321750 to 321875—Continued****321768 to 321855—Continued**

321837. No. 64. 'SP-62 Oresje 5'.  
 321838. No. 49. 'SP-69 Planina 13'.  
 321839. No. 69. 'SP-76 Podnanos 66'.  
 321840. No. 11. 'SP-120 Trojica 8'.  
 321841. No. 72. 'SP-122 Vel. Brdo 28'.  
 321842. No. 10. 'SP-138 Zice 40'.  
 321843. No. 44. 'SP-173 Hoc. Pohorje'.  
 321844. No. 26. 'SP-200 Kupljenik 7'.  
 321845. No. 33. 'SP-246 Retje 89'.  
 321846. No. 73. 'SP-357 Srednja vas'.  
 321847. No. 40. 'Una'.  
 321848. No. 5. 'Union'.  
 321849. No. 12. 'Str. Franken III'.  
 321850. No. 46. 'Vada'.  
 321851. No. 15. 'Violetta III'.  
 321852. No. 38. 'Volla'.  
 321853. No. 47. 'Wisa'.  
 321854. No. 96. 'Zagreb 48'.  
 321855. No. 97. 'Zeocrithon Zagreb'.

**321856 to 321867. HORDEUM VULGARE L.****Common barley.**

321856. No. 89. 'Amrigschwander'.  
 321857. No. 88. 'Bigo'.  
 321858. No. 90. 'E + 13 Jable'.  
 321859. No. 87. 'Japonski 424'.  
 321860. No. 83. 'No. 16 Tirolska'.  
 321861. No. 84. 'No. 18 Tirolska'.  
 321862. No. 95. 'Orazio I'.  
 321863. No. 94. 'Pumpervielzeilige'.  
 321864. No. 91. 'SP-170 Grabonos 15'.  
 321865. No. 93. 'SP-220 Okrog 9'.  
 321866. No. 92. 'SP-271 Strojna'.  
 321867. No. 80. Mixed undefined SP-282.

**321868. SECALE CEREALE L. Gramineae.****Rye.**

- No. 1. 'Karlshuldska'.

**321869 to 321875. TRITICUM AESTIVUM L. Gramineae.**

321869. No. 6. 'Heines Kolben'.  
 321870. No. 5. 'Karntner Fruher'.  
 321871. No. 4. 'Karntneer Grannen'.  
 321872. No. 7. 'Opal'.  
 321873. No. 1. 'SP-246 Retje 89'.  
 321874. No. 3. 'Strubes Grano'.  
 321875. No. 2. 'Tiroler Dinkel'.

**321876 to 322031. TRITICUM AESTIVUM L. Gramineae.**

From Turkey. Seeds presented by J. G. Ross, University of Nebraska Contract, Ataturk University, Erzurum. Numbered Sept. 7, 1967.

321876. B-840.	321916. B-885.
321877. B-846.	321917. B-886.
321878. B-847.	321918. B-887.
321879. B-848.	321919. B-888.
321880. B-849.	321920. B-889.
321881. B-850.	321921. B-890.
321882. B-851.	321922. B-891.
321883. B-852.	321923. B-893.
321884. B-853.	321924. B-895.
321885. B-854.	321925. B-896.
321886. B-855.	321926. B-897.
321887. B-856.	321927. B-898.
321888. B-857.	321928. B-899.
321889. B-858.	321929. B-900.
321890. B-859.	321930. B-901.
321891. B-860.	321931. B-902.
321892. B-861.	321932. B-903.
321893. B-862.	321933. B-904.
321894. B-863.	321934. B-905.
321895. B-864.	321935. B-906.
321896. B-865.	321936. B-907.
321897. B-866.	321937. B-909.
321898. B-867.	321938. B-910.
321899. B-868.	321939. B-911.
321900. B-869.	321940. B-912.
321901. B-870.	321941. B-913.
321902. B-871.	321942. B-914.
321903. B-872.	321943. B-915.
321904. B-873.	321944. B-916.
321905. B-874.	321945. B-917.
321906. B-875.	321946. B-918.
321907. B-876.	321947. B-919.
321908. B-877.	321948. B-920.
321909. B-878.	321949. B-921.
321910. B-879.	321950. B-922.
321911. B-880.	321951. B-923.
321912. B-881.	321952. B-924.
321913. B-882.	321953. B-925.
321914. B-883.	321954. B-926.
321915. B-884.	321955. B-927.

## 321876 to 322031—Continued

321956. B-928.	321994. B-970.
321957. B-929.	321995. B-971.
321958. B-930.	321996. B-973.
321959. B-932.	321997. B-974.
321960. B-933.	321998. B-975.
321961. B-934.	321999. B-976.
321962. B-936.	322000. B-977.
321963. B-937.	322001. B-978.
321964. B-938.	322002. B-980.
321965. B-939.	322003. B-981.
321966. B-940.	322004. B-982.
321967. B-941.	322005. B-983.
321968. B-942.	322006. B-984.
321969. B-943.	322007. B-985.
321970. B-944.	322008. B-986.
321971. B-945.	322009. B-987.
321972. B-946.	322010. B-988.
321973. B-947.	322011. B-989.
321974. B-949.	322012. B-990.
321975. B-950.	322013. B-991.
321976. B-951.	322014. B-992.
321977. B-952.	322015. B-993.
321978. B-953.	322016. B-994.
321979. B-954.	322017. B-995.
321980. B-955.	322018. B-996.
321981. B-956.	322019. B-997.
321982. B-957.	322020. B-998.
321983. B-958.	322021. B-999.
321984. B-959.	322022. B-1000.
321985. B-960.	322023. B-1001.
321986. B-961.	322024. B-1002.
321987. B-962.	322025. B-1003.
321988. B-963.	322026. B-1004.
321989. B-964.	322027. B-1005.
321990. B-965.	322028. B-1006.
321991. B-966.	322029. B-1007.
321992. B-967.	322030. B-1008.
321993. B-968.	322031. B-1015.

## 322032 to 322036.

From France. Cuttings presented by the Station Recherches Viticoles, Department of Agriculture, Angers. Received Sept. 7, 1967.

322032 and 322033. *MALUS SYLVESTRIS* Mill. Rosaceae.

Apple.

## 322032 to 322036—Continued

322032. 'Reinette Da Mana'.

322033. 'Rose de Benaugé'.

322034 to 322036. PYRUS COMMUNIS L. Rosaceae.

Common pear.

322034. 'Belle Guerandaise'.

322035. 'Le Nain Vert'.

322036. 'President Heron'.

## 322037 to 322280. TRITICUM AESTIVUM L. Gramineae.

From India. Seeds presented by the Division of Plant Introduction, Indian  
Agricultural Research Institute, New Delhi. Received Sept. 7, 1967.

322037. WC 359.	322069. WC 412.
322038. WC 381.	322070. WC 413.
322039. WC 382.	322071. WC 414.
322040. WC 383.	322072. WC 415.
322041. WC 384.	322073. WC 416.
322042. WC 385.	322074. WC 417.
322043. WC 386.	322075. WC 418.
322044. WC 387.	322076. WC 419.
322045. WC 388.	322077. WC 420.
322046. WC 389.	322078. WC 421.
322047. WC 390.	322079. WC 422.
322048. WC 391.	322080. WC 423.
322049. WC 392.	322081. WC 424.
322050. WC 393.	322082. WC 425.
322051. WC 394.	322083. WC 426.
322052. WC 395.	322084. WC 427.
322053. WC 396.	322085. WC 428.
322054. WC 397.	322086. WC 430.
322055. WC 398.	322087. WC 431.
322056. WC 399.	322088. WC 432.
322057. WC 400.	322089. WC 433.
322058. WC 401.	322090. WC 434.
322059. WC 402.	322091. WC 435.
322060. WC 403.	322092. WC 436.
322061. WC 404.	322093. WC 437.
322062. WC 405.	322094. WC 438.
322063. WC 406.	322095. WC 440.
322064. WC 407.	322096. WC 441.
322065. WC 408.	322097. WC 442.
322066. WC 409.	322098. WC 443.
322067. WC 410.	322099. WC 444.
322068. WC 411.	322100. WC 445.



## 322037 to 322280—Continued

322101. WC 446.	322143. WC 488.
322102. WC 447.	322144. WC 489.
322103. WC 448.	322145. WC 490.
322104. WC 449.	322146. WC 491.
322105. WC 450.	322147. WC 492.
322106. WC 451.	322148. WC 493.
322107. WC 452.	322149. WC 494.
322108. WC 453.	322150. WC 495.
322109. WC 454.	322151. WC 496.
322110. WC 455.	322152. WC 497.
322111. WC 456.	322153. WC 498.
322112. WC 457.	322154. WC 499.
322113. WC 458.	322155. WC 500.
322114. WC 459.	322156. WC 501.
322115. WC 460.	322157. WC 502.
322116. WC 461.	322158. WC 503.
322117. WC 462.	322159. WC 504.
322118. WC 463.	322160. WC 505.
322119. WC 464.	322161. WC 506.
322120. WC 465.	322162. WC 507.
322121. WC 466.	322163. WC 508.
322122. WC 467.	322164. WC 509.
322123. WC 468.	322165. WC 510.
322124. WC 469.	322166. WC 511.
322125. WC 470.	322167. WC 512.
322126. WC 471.	322168. WC 513.
322127. WC 472.	322169. WC 514.
322128. WC 473.	322170. WC 516.
322129. WC 474.	322171. WC 517.
322130. WC 475.	322172. WC 518.
322131. WC 476.	322173. WC 519.
322132. WC 477.	322174. WC 520.
322133. WC 478.	322175. WC 521.
322134. WC 479.	322176. WC 522.
322135. WC 480.	322177. WC 523.
322136. WC 481.	322178. WC 524.
322137. WC 482.	322179. WC 525.
322138. WC 483.	322180. WC 526.
322139. WC 484.	322181. WC 527.
322140. WC 485.	322182. WC 528.
322141. WC 486.	322183. WC 529.
322142. WC 487.	322184. WC 530.

## 322037 to 322280—Continued

322185.	WC 531.	322227.	E 4871.
322186.	WC 532.	322228.	E 5477.
322187.	WC 533.	322229.	Sona 227.
322188.	WC 534.	322230.	Hyb.11.
322189.	WC 535.	322231.	RS 31-1.
322190.	WC 536.	322232.	NP 201.
322191.	WC 537.	322233.	NP 202.
322192.	WC 538.	322234.	NP 412.
322193.	WC 539.	322235.	NP 710.
322194.	WC 540.	322236.	NP 718.
322195.	WC 541.	322237.	NP 718 A.
322196.	WC 542.	322238.	NP 720.
322197.	WC 543.	322239.	NP 737.
322198.	WC 544.	322240.	NP 745.
322199.	WC 545.	322241.	NP 755.
322200.	WC 546.	322242.	NP 758.
322201.	WC 547.	322243.	NP 761.
322202.	WC 548.	322244.	NP 770.
322203.	WC 549.	322245.	NP 771.
322204.	WC 550.	322246.	NP 775.
322205.	WC 551.	322247.	NP 783.
322206.	WC 553.	322248.	NP 784.
322207.	WC 554.	322249.	NP 785.
322208.	WC 555.	322250.	NP 786.
322209.	WC 655.	322251.	NP 789.
322210.	WC 684.	322252.	NP 790.
322211.	WC 720.	322253.	NP 792.
322212.	WC 722.	322254.	NP 796.
322213.	WC 821.	322255.	NP 797.
322214.	WC 847.	322256.	NP 798.
322215.	WC 887.	322257.	NP 809.
322216.	WC 891.	322258.	NP 823.
322217.	WC 947.	322259.	NP 824.
322218.	WC 950.	322260.	NP 825.
322219.	WC 963.	322261.	NP 835.
322220.	WC 991.	322262.	NP 836.
322221.	WC 998.	322263.	NP 846.
322222.	WC 1001.	322264.	NP 848.
322223.	WC 1006.	322265.	NP 851.
322224.	WC 1017.	322266.	NP 852.
322225.	WC 1073 A.	322267.	NP 862.
322226.	WC 1073 B.	322268.	NP 863.

## 322037 to 322280—Continued

- |                 |   |
|-----------------|---|
| 322269. NP 865. | 322276. C 591.  |
| 322270. NP 875. | 322277. K 65.   |
| 322271. NP 876. | 322278. K 68.   |
| 322272. NP 880. | 322279. Kharchia (Salinity resistant).                    |
| 322273. C 281.  | 322280. Kharchia 65 (Resistant to stem and stripe rusts). |
| 322274. C 303.  | Pedigree: EG 953 × Kharchia.                              |
| 322275. C 306.  |   |

322281. *TREVIA NUDIFLORA* L. Euphorbiaceae.

From India. Seeds presented by S. N. Mitra, Botanical Survey of India, Indian Botanic Garden, Calcutta. Received Sept. 8, 1967.

## 322282 to 322286.

From the Union of Soviet Socialist Republics. Budsticks collected by H. J. Brooks, agricultural explorer, Crops Research Division, Plant Industry Station, Beltsville, Maryland. Received Sept. 8, 1967.

322282. *CYDONIA OBLONGA* Mill. Rosaceae. Quince.

B-6 Along road at Yalta. Tree small but vigorous.

322283. *PRUNUS* sp. Rosaceae. (Wild cherry)

B-1. Fifteen miles on road from Yalta to Bakhchisaray, on the south slope of the mountains. Altitude 2,000 feet. Tree very large, 2 feet in diameter.

322284. *PRUNUS* sp. (Wild cherry)

B-5. Thirty-eight miles on road from Yalta to Bakhchisaray, into the second mountain range. Altitude 2,000 feet. Tree very large.

322285 and 322286. *PYRUS COMMUNIS* L. Rosaceae. Pear.

322285. B-2. Thirty miles on road from Yalta to Bakhchisaray, over the first mountain range into second range. Altitude 2,400 feet. Tree large, very old.

322286. B-3. Thirty-five miles on road from Yalta to Bakhchisaray, over the first mountain range into second range. Altitude 2,000 feet. Tree very tall, trunk diameter of 10 inches.

322287. *STIPA JOANNIS* Celak. Gramineae.

From Hungary. Seeds presented by A. Janossy, National Institute of Agrobotany, Tapioszele. Received Sept. 8, 1967.

Collected on slopes of dolomitic-limestone highlands of Kis-Szenas. Elevation 1,300 feet. Mixed with *S. pulcherrima*.

## 322288 to 322688.

From Brazil. Seeds presented by Theodore Hymowitz, Instituto de Pesquisas, IRI, Campinas, Sao Paulo. Numbered Sept. 12, 1967.

322288. *AESCHYNOMENE PANICULATA* Vog. Leguminosae.

IRI 1749. Brasilia, D. F.

322289. *AESCHYNOMENE* sp.

IRI 1237. Sao Jose do Rio Preto, Sao Paulo.

322290. *AESCHYNOMENE* sp.

IRI 1416. Sertaozinho, Sao Paulo.

322291. *AESCHYNOMENE* sp.

IRI 1796. Sao Jose do Rio Preto, Sao Paulo.

## 322288 to 322688—Continued

322292. *AESCHYNOMENE* sp.

IRI 1809. Frutal, Sao Paulo.

322293. *AESCHYNOMENE* sp.

IRI 1822. Sao Jose do Rio Preto, Sao Paulo.

322294. *AESCHYNOMENE* sp.

IRI 1973. Niteroi, Rio de Janeiro state.

322295. *AESCHYNOMENE* sp.

IRI 2030. Brasilia, D. F.

322296. *ALYSICARPUS VAGINALIS* (L.) DC. Leguminosae. **Alyceclover.**

IRI 1349. Introduced to Matao, Sao Paulo from Instituto Zootecnia, Rio de Janeiro. Original source unknown.

322297. *ASTRAGALUS SINICUS* L. Leguminosae. **Chinese milkvetch.**

IRI 1605. Introduced to Matao, Sao Paulo from Taiwan (Formosa).

322298. *CAESALPINIA FERREA* Mart. Leguminosae.

IRI 2125. Introduced to Matao, Sao Paulo from Experiment Station in Campos, Rio de Janeiro. Original source unknown.

322299 and 322300. *CAESALPINIA PULCHERRIMA* (L.) Swartz

**Flowerfence.**

322299. IRI 1256. Jaboticabal, Sao Paulo.

322300. IRI 2112. Introduced to Matao, Sao Paulo from private garden location on the Espirito Santo, Rio de Janeiro border.

322301 to 322303. *CALOPOGONIUM MUCUNOIDES* Desv. Leguminosae.

322301. IRI 1281. Matao, Sao Paulo.

322302. IRI 2109. Colatina, Espirito Santo.

322303. IRI 2432. Introduced to Matao, Sao Paulo from Escola Agronomia do Bahia, Cruzdas Almas, Bahia. Original source unknown.

322304. *CALOPOGONIUM* sp.

IRI 2138. Introduced to Matao, Sao Paulo from CEPEC, Ilheus Bahia. Original source unknown.

322305. *CALOPOGONIUM* sp.

IRI 2429. Donated to Matao, Sao Paulo by IPEAL, Cruzdas Almas Bahia. Original source unknown.

322306 and 322307. *CANAVALIA ENSIFORMIS* (L.) DC. Leguminosae.

**Jack bean.**

322306. IRI 1211. Sao Jose do Rio Preto, Sao Paulo.

322307. IRI 1304. Colina, Sao Paulo.

322308. *CANAVALIA MARITIMA* (Aubl.) Thouars

IRI 1481. Ubatuba, Sao Paulo.

322309. *CANAVALIA OBTUSIFOLIA* (Lam.) DC.

IRI 1350. Introduced to Matao, Sao Paulo from Instituto Zootecnia, Rio de Janeiro. Original source unknown.

322310. *CANAVALIA* sp.

IRI 1518. Sao Jose do Rio Preto, Sao Paulo.

322311. *CASSIA ALATA* L. Leguminosae.

**Ringworm cassia.**

IRI 1020. Sylvania, Sao Paulo.

## 322288 to 322688—Continued

322312. *CASSIA ANGULATA* Vog.

IRI 1050. Matao, Sao Paulo.

322313 and 322314. *CASSIA BICAPSULARIS* L.

322313. IRI 1367. Matao, Sao Paulo.

322314. IRI 1721. Itirucu, Bahia.

322315. *CASSIA CATHARTICA* Mart.

IRI 1008. Santa Lucia, Sao Paulo.

322316 to 322319. *CASSIA FLEXUOSA* L.

322316. IRI 1009. Bueno Andrade, Sao Paulo.

322317. IRI 1019. Santa Lucia, Sao Paulo.

322318. IRI 1063. Bauru, Sao Paulo.

322319. IRI 1366. Bueno Andrade, Sao Paulo.

322320 to 322322. *CASSIA LATISTIPULA* Benth.

322320. IRI 1071. Ribeirao dos Porcos, Sao Paulo.

322321. IRI 1072. Rio Claro, Sao Paulo.

322322. IRI 1322. Rio Claro, Sao Paulo.

322323 and 322324. *CASSIA ROTUNDIFOLIA* Pers.

322323. IRI 1043. Motuca, Sao Paulo.

322324. IRI 1115. Matao, Sao Paulo.

322325. *CASSIA* sp.

IRI 1210. Guatapara, Sao Paulo.

322326. *CASSIA* sp.

IRI 1399. Guararapes, Sao Paulo.

322327. *CENTROSEMA ARENARIUM* Benth. Leguminosae.

IRI 1355. Introduced to Matao, Sao Paulo from IPEAL, Belem, Para. Original source unknown.

322328. *CENTROSEMA KERMESII* Burkart

IRI 1091. Matao, Sao Paulo.

322329. *CENTROSEMA PLUMIERI* (Turp.) Benth.

IRI 1283. Matao, Sao Paulo.

322330 to 322334. *CENTROSEMA PUBESCENS* Benth.

322330. IRI 1282. Matao, Sao Paulo.

322331. IRI 1332. Matao, Sao Paulo.

322332. IRI 1346. Introduced to Matao, Sao Paulo from Instituto Zootecnia, Rio de Janeiro. Original source unknown.

322333. IRI 1975. Belem, Para.

322334. IRI 1976. Belem, Para.

322335 to 322337. *CENTROSEMA VIRGINIANUM* (L.) Benth.

**Piedmont butterfly-pea.**

322335. IRI 1353. Rio Claro.

322336. IRI 2070. Cabo Frio, Rio de Janeiro.

322337. IRI 2365. Feira de Santana, Bahia.

## 322288 to 322688—Continued

322338. *CENTROSEMA* sp.

IRI 1235. Sao Jose do Rio Preto, Sao Paulo.

322339. *CENTROSEMA* sp.

IRI 1266. Ribeirao Chibarro, Sao Paulo.

322340. *CENTROSEMA* sp.

IRI 1414. Donated by Howard Ream, United States Agency for International Development. Original source unknown.

322341. *CENTROSEMA* sp.

IRI 1534. Ribeirao Chibarro, Sao Paulo.

322342. *CENTROSEMA* sp.

IRI1601. Barretos, Sao Paulo.

322343. *CENTROSEMA* sp.

IRI 2052. Introduced to Matao, Sao Paulo from CEPEC, Ilheus Bahia. Original source unknown.

322344. *CENTROSEMA* sp.

IRI 2065. Vitoria, Espirito Santo.

322345. *CENTROSEMA* sp.

IRI 2066. Vitoria, Espirito Santo.

322346. *CENTROSEMA* sp.

IRI 2068. Vitoria, Espirito Santo.

322347. *CENTROSEMA* sp.

IRI 2069. Guarapari, Espirito Santo.

322348. *CENTROSEMA* sp.

IRI 2074. Santa Antonio, Espirito Santo.

322349. *CENTROSEMA* sp.

IRI 2075. Cabo Frio, Rio de Janeiro.

322350. *CENTROSEMA* sp.

IRI 2372. Medena, Minas Gerais.

322351. *CENTROSEMA* sp.

IRI 2384. Serra do Marsal, Bahia.

322352. *CENTROSEMA* sp.

IRI 2385. Itambe, Bahia.

322353. *CENTROSEMA* sp.

IRI 2387. Serra do Marsal, Bahia.

322354. *CENTROSEMA* sp.

IRI 2390. Mata Escura, Bahia.

322355. *CENTROSEMA* sp.

IRI 2391. Serra do Marsal, Bahia.

322356. *CENTROSEMA* sp.

IRI 2527. Ubata, Bahia.

322357 to 322363. *CLITORIA LAURIFOLIA* Poir. Leguminosae.

322357. IRI 1139. Caraguatatuba, Sao Paulo.

## 322288 to 322688—Continued

## 322357 to 322363—Continued

322358. IRI 1356. Sao Sebastiao, Sao Paulo.  
 322359. IRI 1395. Gaviao Puxoto, Sao Paulo.  
 322360. IRI 1411. Sao Sebastiao, Sao Paulo.  
 322361. IRI 1810. Itape, Sao Paulo.  
 322362. IRI 2006. Ilheus, Bahia.  
 322363. IRI 2015. Ilheus, Bahia.

## 322364 to 322366. CLITORIA TERNATEA L.

Asian pigeonwings.

322364. IRI 1208. Sertaozinho, Sao Paulo.  
 322365. IRI 1293. Matao, Sao Paulo.  
 322366. IRI 1308. Colina, Sao Paulo.

## 322367 to 322369. CROTALARIA ANAGYROIDES HBK. Leguminosae.

322367. IRI 1086. Jaboticabal, Sao Paulo.  
 322368. IRI 1173. Matao, Sao Paulo.  
 322369. IRI 1994. Campo Grande, Mato Grosso.

## 322370. CROTALARIA BALANSAE Micheli

IRI 1440. Montenegro, Rio Grande do Sul.

## 322371 to 322373. CROTALARIA BRACHYSTACHYA Benth.

322371. IRI 1029. Tamoio, Sao Paulo.  
 322372. IRI 1273. Avare, Sao Paulo.  
 322373. IRI 1980. Campos, Rio de Janeiro.

## 322374. CROTALARIA ERIOCARPA Benth.

IRI 1413. Donated by Howard Ream, United States Agency for International Development. Original source unknown.

## 322375 and 322376. CROTALARIA GRANTIANA Harv.

322375. IRI 1312. Introduced to Matao, Sao Paulo from Colina, Sao Paulo. Original source unknown.  
 322376. IRI 1316. Introduced to Matao, Sao Paulo from Colina, Sao Paulo. Original source unknown.

## 322377. CROTALARIA JUNCEA L.

Sunnhemp.

IRI 2473. Introduced to Matao, Sao Paulo from Escola do Agronomia, Cruzdas Almas, Bahia. Original source unknown.

## 322378 and 322379. CROTALARIA LANCEOLATA E. Mey.

Lance crotalaria.

322378. IRI 1089. Bauru, Sao Paulo.  
 322379. IRI 1142. Bauru, Sao Paulo.

## 322380. CROTALARIA PAULINA Schrank

IRI 1309. Introduced to Matao, Sao Paulo from Colina, Sao Paulo. Original source unknown.

## 322381. CROTALARIA PILOSA Mill.

IRI 2471. Mata de Sao Joao, Bahia.

## 322382 to 322391. CROTALARIA SALTIANA Andrews

322382. IRI 1064. Bauru, Sao Paulo. Mixed slightly with *C. stipularia*.  
 322383. IRI 1070. Rio Claro, Sao Paulo.

**322288 to 322688—Continued****322382 to 322391—Continued**

322384. IRI 1785. Introduced to Matao, Sao Paulo from CEPEC, Ilheus, Bahia. Original source unknown.
322385. IRI 2020. Introduced to Matao, Sao Paulo from CEPEC, Ilheus, Bahia. Original source unknown.
322386. IRI 2034. Araruama, Rio de Janeiro.
322387. IRI 2039. Guararapes, Sao Paulo.
322388. IRI 2062. Introduced to Matao, Sao Paulo from CEPEC, Ilheus, Bahia. Original source unknown.
322389. IRI 2468. Introduced from IPEAL, Cruzdas Almas, Bahia to Matao, Sao Paulo. Original source unknown.
322390. IRI 2475. Santa Antonio Jesus, Bahia.
322391. IRI 2486. Ubata, Sao Paulo.

**322392 to 322395. CROTALARIA STIPULARIA Desv.**

322392. IRI 1015. Matao, Sao Paulo.
322393. IRI 1253. Ribeirao Bonito, Sao Paulo.
322394. IRI 1464. Introduced to Matao, Sao Paulo from Rio Grande do Sul. Original source unknown.
322395. IRI 2470. Mata de Sao Joao, Bahia.

**322396. CROTALARIA USARAMOENSIS Baker f.**

IRI 1045. Silvania, Sao Paulo.

**322397. CROTALARIA sp.**

IRI 1005. Santa Lucia, Sao Paulo.

**322398. CROTALARIA sp.**

IRI 1121. Bueno de Andrade, Sao Paulo.

**322399. CROTALARIA sp.**

IRI 1127. Sertaozinho, Sao Paulo.

**322400. CROTALARIA sp.**

IRI 1238. Cedral, Sao Paulo.

**322401. CROTALARIA sp.**

IRI 1720. Montes Claros, Minas Gerais.

**322402. CROTALARIA sp.**

IRI 1786. Introduced to Matao, Sao Paulo from CEPEC, Ilheus, Bahia. Original source unknown.

**322403. CROTALARIA sp.**

IRI 1788. Ilheus, Bahia.

**322404. CROTALARIA sp.**

IRI 1985. Brasilia, D. F.

**322405. CROTALARIA sp.**

IRI 2028. BR-4, 60 km. north of Minas Gerais in Bahia.

**322406. CROTALARIA sp.**

IRI 2086. Cabo Frio, Rio de Janeiro.

**322407. CROTALARIA sp.**

IRI 2143. Monte Alegre, Sao Paulo.



## 322288 to 322688—Continued

322408. *CROTALARIA* sp.

IRI 2434. Iturussu, Bahia.

322409. *CROTALARIA* sp.

IRI 2474. Ubata, Bahia.

322410. *DALBERGIA* sp. Leguminosae.

IRI 2137. Ilheus, Bahia.

322411. *DESMANTHUS VIRGATUS* (L.) Willd. Leguminosae.

IRI 1417. Garanhuns, Pernambuco.

322412. *DESMODIUM BARBATUM* (L.) Benth. Leguminosae.

IRI 1741. Introduced to Matao, Sao Paulo from Turrialba, Costa Rica. Original source unknown.

322413. *DESMODIUM CAMPYLOCAULON* F. Muell. ex Benth.

IRI 1704. Introduced to Matao, Sao Paulo from Hawaii Experiment Station. HES 5546.

322414 to 322426. *DESMODIUM CANUM* (Gmel.) Schinz & Thell.

**Kaimi-clover.**

322414. IRI 1335. Matao, Sao Paulo.

322415. IRI 1343. Araraquara, Sao Paulo.

322416. IRI 1441. Introduced to Matao, Sao Paulo from Sao Gabriel, Rio Grande do Sul. Original source unknown.

Donated by Hawaii Experiment Station.

322417. IRI 1667. HES 5009.

322418. IRI 1668. HES 5010.

322419. IRI 1670. HES 5145.

322420. IRI 1671. HES 5324.

322421. IRI 1672. HES 5334.

322422. IRI 1673. HES 5335.

322423. IRI 1674. HES 5362.

322424. IRI 1738. Rio Claro, Sao Paulo.

322425. IRI 2308. Ipiau, Bahia.

322426. IRI 2330. Mata de Sao Joao, Bahia.

322427 to 322429. *DESMODIUM CUNEATUM* Hook. & Arn.

322427. IRI 1092. Rio Mogi, Sao Paulo.

Donated by Hawaii Experiment Station.

322428. IRI 1701. HES 4805.

322429. IRI 1702. HES 5030.

322430 to 322444. *DESMODIUM DISCOLOR* Vogel

322430. IRI 1186. Matao, Sao Paulo.

322431. IRI 1194. Sertaozinho, Sao Paulo.

322432. IRI 1200. Matao, Sao Paulo.

322433. IRI 1219. Araraquara, Sao Paulo.

322434. IRI 1241. Rio Claro, Sao Paulo.

322435. IRI 1250. Ribeirao Bonito, Sao Paulo.

## 322288 to 322688—Continued

## 322430 to 322444—Continued

322436. IRI 1254. Atibaia, Sao Paulo.  
 322437. IRI 1255. Matao, Sao Paulo.  
 322438. IRI 1264. Ribeirao Bonito, Sao Paulo.  
 322439. IRI 1280. Matao, Sao Paulo.  
 322440. IRI 1307. Colina, Sao Paulo.  
 322441. IRI 1336. Matao, Sao Paulo.  
 322442. IRI 1347. Introduced to Matao, Sao Paulo from Instituto Zootecnia, Rio de Janeiro. Original source unknown.  
 322443. IRI 1412. Matao, Sao Paulo.  
 322444. IRI 1800. Barretos, Sao Paulo.
- 322445 and 322446. *DESMODIUM DISTORTUM* (Aubl.) Macbride  
 322445. IRI 1710. Donated by Hawaii Experiment Station. HES 5144.  
 322446. IRI 1715. Donated by Hawaii Experiment Station. HES 4525.
322447. *DESMODIUM GANGETICUM* (L.) DC.  
 IRI 1631. Donated by Hawaii Experiment Station. HES 5347.
- 322448 to 322450. *DESMODIUM INTORTUM* (Mill.) Urb.  
 322448. IRI 1611. Donated to Matao, Sao Paulo from Australia. Aust.  
 BEERWA.  
 322449. IRI 1622. Donated by Hawaii Experiment Station. HES 5053.  
 322450. IRI 1625. Donated by Hawaii Experiment Station. HES 5523.
322451. *DESMODIUM LEIOCARPUM* (Spreng.) Don  
 IRI 1768. Sao Roque, Sao Paulo.
- 322452 and 322453. *DESMODIUM OVALIFOLIUM* Guill. & Perr.  
 322452. IRI 1681. Donated by Hawaii Experiment Station. HES 5325.  
 322453. IRI 1682. Donated by Hawaii Experiment Station. HES 5409.
- 322454 to 322462. *DESMODIUM PABULARE* Hoehne  
 322454. IRI 1024. Santa Lucia, Sao Paulo.  
 322455. IRI 1040. Jabuticabal, Sao Paulo.  
 322456. IRI 1046. Rio Mogi, Sao Paulo.  
 322457. IRI 1098. Matao, Sao Paulo.  
 322458. IRI 1114. Matao, Sao Paulo.  
 322459. IRI 1122. Sertaozinho, Sao Paulo.  
 322460. IRI 1138. Sao Sebastiao, Sao Paulo.  
 322461. IRI 1188. Bauru, Sao Paulo.  
 322462. IRI 1192. Boiadeira, Sao Paulo.
- 322463 to 322466. *DESMODIUM PERPLEXUM* Schubert  
 322463. IRI 1679. HES 5132.  
 322464. IRI 1687. HES 5168.  
 322465. IRI 1688. HES 5169.  
 322466. IRI 1689. HES 5170.

## 322288 to 322688—Continued

322467 to 322473. *DESMODIUM SANDWICENSE* E. Mey.

Donated by Hawaii Experiment Station.

322467. IRI 1657.

322468. IRI 1658. HES 5137.

322469. IRI 1659. HES 5157.

322470. IRI 1661. HES 5337.

322471. IRI 1663. HES 5348.

322472. IRI 1664. HES 5406.

322473. IRI 1666. HES 5522.

322474. *DESMODIUM SCORPIURUS* Desv.

IRI 1637. Donated by Hawaii Experiment Station. HES 5141.

322475 to 322497. *DESMODIUM TORTUOSUM* (Sw.) DC.

Donated by Hawaii Experiment Station.

322475. IRI 1635. HES 4240.

322476. IRI 1636. HES 5137.

322477. IRI 1638. HES 5156.

322478. IRI 1639. HES 5178.

322479. IRI 1640. HES 5179.

322480. IRI 1641. HES 5180.

322481. IRI 1642. HES 5400.

322482. IRI 1643. HES 5401.

322483. IRI 1645. HES 5041.

322484. IRI 1646. HES 5042.

322485. IRI 1647. HES 5043.

322486. IRI 1648. HES 5044.

322487. IRI 1649. HES 5050.

322488. IRI 1650. HES 5402.

322489. IRI 1651. HES 5403.

322490. IRI 1652. HES 5404.

322491. IRI 1653. HES 5512.

322492. IRI 1654. HES 5515.

322493. IRI 1655. HES 5519.

322494. IRI 1656. HES 5534.

322495. IRI 1713. HES 5032.

322496. IRI 1717. HES 5171.

322497. IRI 1781. Joao, Sao Paulo.

322498 and 322499. *DESMODIUM UNCINATUM* (Jacq.) DC.

322498. IRI 1162. Matao, Sao Paulo.

322499. IRI 1190. Rio Sao Lourenco, Sao Paulo.

322500. *DESMODIUM* sp.

IRI 1197. Neves Paulista, Sao Paulo.

## 322288 to 322688—Continued

322501. *DESMODIUM* sp.  
IRI 1218. Matao, Sao Paulo.
322502. *DESMODIUM* sp.  
IRI 1340. Santa Lucia, Sao Paulo.
322503. *DESMODIUM* sp.  
IRI 1536. Matao, Sao Paulo.
322504. *DESMODIUM* sp.  
IRI 1602. Santa Lucia, Sao Paulo.
322505. *DESMODIUM* sp.  
IRI 1644. Donated by Hawaii Experiment Station. HES 4383.
322506. *DESMODIUM* sp.  
IRI 1695. Donated by Hawaii Experiment Station. HES 5054.
322507. *DESMODIUM* sp.  
IRI 1766. Registro, Sao Paulo.
322508. *DESMODIUM* sp.  
IRI 1790. Brasilia, D. F.
322509. *DESMODIUM* sp.  
IRI 1797. Matao, Sao Paulo.
322510. *DESMODIUM* sp.  
IRI 1812. Frutal, Sao Paulo.
322511. *DESMODIUM* sp.  
IRI 1937. 'Silverleaf'. Imported from Australia.
322512. *DESMODIUM* sp.  
IRI 1962. Governor Valadares, Minas Gerais.
322513. *DESMODIUM* sp.  
IRI 1964. Governor Valadares, Minas Gerais.
322514. *DESMODIUM* sp.  
I 1978. Matao, Sao Paulo.
322515. *DESMODIUM* sp.  
IRI 2064. Cabo Frio, Rio de Janeiro.
322516. *DESMODIUM* sp.  
IRI 2146. Matao, Sao Paulo.
322517. *DESMODIUM* sp.  
IRI 2307. Serra do Marsal, Bahia.
322518. *DESMODIUM* sp.  
IRI 2309. Ipiau, Bahia.
322519. *DESMODIUM* sp.  
IRI 2314. Ipiau, Bahia.
322520. *DESMODIUM* sp.  
IRI 2332. Donated by IPEAL, Cruzdas Almas, Bahia to Matao, S<sup>e</sup> Paulo.

## 322288 to 322688—Continued

322521. *DESMODIUM* sp.

IRI 2334. Donated by IPEAL, Cruzdas Almas, Bahia to Matao, Sao Paulo.

322522. *DESMODIUM* sp.

IRI 2345. Governor Valadares, Minas Gerais.

322523. *DESMODIUM* sp.

IRI 2347. Governor Valadares, Minas Gerais.

322524. *DESMODIUM* sp.

IRI 2350. Teofilio Otoni, Minas Gerais.

322525. *DIOCLEA* sp. Leguminosae.

IRI 1762. Registro, Sao Paulo.

322526. *DIOCLEA* sp.

IRI 1782. Itabuna, Bahia.

322527. *DIOCLEA* sp.

IRI 2482. Jequie, Bahia.

322528. *DOLICHOS AXILLARIS* E. Mey. Leguminosae.

IRI 1375. Imported from Australia, 1962 to Matao, Sao Paulo.

322529 to 322536. *DOLICHOS LABLAB* L.

**Hyacinth-bean.**

322529. IRI 1299. Matao, Sao Paulo.

322530. IRI 1302. Colina, Sao Paulo.

322531. IRI 1303. Colina, Sao Paulo.

322532. IRI 1371. Imported to Matao, Sao Paulo from Australia.

322533. IRI 1474. Monte Alto, Sao Paulo.

322534. IRI 1737. Santa Amaro, Sao Paulo.

322535. IRI 2148. Var. 697. Instituto Agronomico, Campinas, Sao Paulo.

322536. IRI 2534. Feira de Jequie, Bahia.

322537 and 322538. *ERIOSEMA FLORIBUNDUM* Benth. Leguminosae.

322537. IRI 1006. Santa Lucia, Sao Paulo.

322538. IRI 1007. Rincao—Rio Mogi, Sao Paulo.

322539. *ERIOSEMA* sp.

IRI 1032. Rio Jacare, Sao Paulo.

322540. *ERIOSEMA* sp.

IRI 2507. On BR-4, between Jequie and Salvador, Bahia.

322541. *GALACTIA JUSSIAEANA* Kunth Leguminosae.

IRI 1351. Donated by Instituto Zootecnia, Rio de Janeiro.

322542. *INDIGOFERA HIRSUTA* L. Leguminosae.

**Hairy indigo.**

IRI 1047. Rio Mogi, Sao Paulo.

322543. *INDIGOFERA LESPEDEZIODES* HBK.

IRI 1363. Matao, Sao Paulo.

322544. *INDIGOFERA SUFFRUTICOSA* Mill.

**Anil indigo.**

IRI 1011. Bueno Andrade, Sao Paulo.

## 322288 to 322688—Continued

322545. *INDIGOFERA* sp.

IRI 1180. Sertaozinho, Sao Paulo.

322546. *INDIGOFERA* sp.

IRI 1227. Sao Jose do Rio Preto, Sao Paulo.

322547. *INDIGOFERA* sp.

IRI 1311. Colina, Sao Paulo.

322548. *INDIGOFERA* sp.

IRI 1776. Campo Grande, Mato Grosso.

322549. *INDIGOFERA* sp.

IRI 1998. Terenos, Mato Grande.

322550. *INDIGOFERA* sp.

IRI 2088. Colatina, Esperito Santo.

322551. *LESPEDEZA CUNEATA* (Dumont) G. Don Leguminosae.

Chinese lespedeza.

IRI 1178. Introduced to Sertaozinho, Sao Paulo. Original source unknown.

322552 and 322553. *LEUCAENA LEUCOCEPHALA* (Lam.) de Wit Leguminosae. Leadtree.

322552. IRI 1239. Matao, Sao Paulo.

322553. IRI 1988. Introduced from Belem, Para to Matao, Sao Paulo.

Original source unknown.

322554. *LOTONONIS BAINESII* Baker Leguminosae.

IRI 1270. Introduced from Australia to Matao, Sao Paulo.

322555 and 322556. *LOTUS CORNICULATUS* L. Leguminosae.

Birdsfoot trefoil.

322555. IRI 1444. Introduced to Matao, Sao Paulo from Rio Grande do Sul.

322556. IRI 1828. Introduced to Matao, Sao Paulo from Pelotas, Rio Grande do Sul.

322557. *MACHAERIUM* sp. Leguminosae.

IRI 1984. On BR-4, 12 km. in Bahia from Minas Gerais border.

322558. *MACHAERIUM* sp.

IRI 2024. On BR-4, 14 km. in Bahia from Minas Gerais border.

322559. *MEDICAGO POLYMORPHA* L. Leguminosae.

IRI 1368. Introduced to Matao, Sao Paulo from Pocas de Caldas, Minas Gerais. Original source unknown.

322560. *MELILOTUS ALBA* Desr. Leguminosae.

White sweetclover.

IRI 1296. Introduced to Matao, Sao Paulo from Buru, Sao Paulo.

Original source unknown.

322561. *MIMOSA CONFERTA* Benth. Leguminosae.

IRI 1113. Araraquara, Sao Paulo.

322562. *MIMOSA GLAUDESCENS* Benth.

IRI 1172. Araraquara, Sao Paulo. Mixed with crotalaria.

322563. *MIMOSA METICULOSA* Mart.

IRI 1083. Araraquara, Sao Paulo.

## 322288 to 322688—Continued

322564. *MIMOSA NEUROLOMA* Benth.

IRI 1324. Matao, Sao Paulo.

322565. *MIMOSA SPRUCEANA* Benth.

IRI 1400. Matao, Sao Paulo.

322566. *MIMOSA* sp.

IRI 1010. Matao, Sao Paulo.

322567. *MIMOSA* sp.

IRI 1059. Santa Barbara, Sao Paulo.

322568. *MIMOSA* sp.

IRI 1080. Santa Barbara, Sao Paulo.

322569. *PERIANDRA DULCIS* Mart. ex Benth. Leguminosae.

IRI 1364. Motuca, Sao Paulo.

322570. *PERIANDRA HETEROPHYLLA* Benth.

IRI 1779. On road to Anapolis, Goiaz, 65 km. south of Brasilia, D. F.

322571 to 322574. *PHASEOLUS ANGULARIS* (Willd.) W. F. Wight Leguminosae. Adzuki bean.

322571. IRI 1182. Sertaozinho, Sao Paulo.

322572. IRI 1206. Sertaozinho, Sao Paulo.

322573. IRI 1207. Sertaozinho, Sao Paulo.

322574. IRI 1313. Colina, Sao Paulo.

322575 to 322581. *PHASEOLUS ATROPURPUREUS* DC.

322575. IRI 1201. Introduced to Matao, Sao Paulo. Original source unknown. Mixed with *P. bracteatus*.

322576. IRI 1390. Introduced from Australia. C.Q. 364.

322577. IRI 1391. Introduced from Australia. C.P.I. 16879.

322578. IRI 1392. Introduced from Australia. C.P.I. 18556.

322579. IRI 1553. Introduced to Matao, Sao Paulo from Rio Grande do Sul.

322580. IRI 1614. 'Siratro'. Introduced from Australia, 1962.

322581. IRI 1938. 'Siratro'. Imported from Australia, 1965. Mixed.

322582 to 322585. *PHASEOLUS BRACTEATUS* Nees & Mart.

322582. IRI 1453. Introduced to Matao, Sao Paulo from Taquara, Rio Grande do Sul.

322583. IRI 1480. Introduced to Matao, Sao Paulo. Original source unknown.

322584. IRI 1603. Aracatuba, Sao Paulo.

322585. IRI 2277. Itaberaba, Bahia.

322586 to 322590. *PHASEOLUS CARACALLA* L.

Snail bean.

322586. IRI 1018. Rio Jacare, Sao Paulo.

322587. IRI 1268. Rio Turvo, Sao Paulo.

322588. IRI 1289. Ribeirao Chibarro, Sao Paulo.

322589. IRI 1463. Lagoa dos Patos, Rio Grande do Sul.

322590. IRI 1543. Sao Sebastiao, Sao Paulo.

## 322288 to 322688—Continued

322591 to 322594. *PHASEOLUS LATHYROIDES* L.

322591. IRI 1393. Introduced from Australia. C.Q. 520. Mixed with *P. atropurpureus*.

322592. IRI 1552. Introduced to Matao, Sao Paulo from Rio Grande do Sul. Original source unknown.

322593. IRI 2303. Introduced to Matao, Sao Paulo from Cruzdas Almas, Bahia. Original source unknown.

322594. IRI 2284. Valley of Paraguassu, Bahia.

322595 to 322599. *PHASEOLUS PANDURATUS* Mart.

322595. IRI 1002. Rio Mogi, Sao Paulo.

322596. IRI 1108. Santa Lucia, Sao Paulo.

322597. IRI 1149. Matao, Sao Paulo.

322598. IRI 1166. Matao, Sao Paulo.

322599. IRI 1259. Matao, Sao Paulo.

322600. *PHASEOLUS* sp.

IRI 1265. Dourado, Sao Paulo.

322601. *POIRETIA TETRAPHYLLA* (Poir.) Burkart Leguminosae.

IRI 1285. Araraquara, Sao Paulo.

322602 to 322612. *GLYCINE WIGHTII* (R. Grah. ex Wight & Arn.) Verdcourt Leguminosae.

322602. IRI 1284. Introduced to Matao, Sao Paulo. Original source unknown.

322603. IRI 1287. Introduced to Matao, Sao Paulo. Original source unknown.

322604. IRI 1301. Introduced to Matao, Sao Paulo. Original source unknown.

322605. IRI 1345. Donated by Instituto Zootecnia, Rio de Janeiro.

322606. IRI 1388. Introduced from Australia. C.P.I. 25702.

322607. IRI 1394. Introduced from Australia. C.Q. 363.

322608. IRI 1616. 'Clarence'. Introduced from Australia.

322609. IRI 1617. 'Cooper'. Introduced from Australia.

322610. IRI 1736. Santa Amaro, Sao Paulo.

322611. IRI 1811. On road between Bauru and Marilia, Sao Paulo.

322612. IRI 2147. c.v. 804. Instituto Agronomico, Campinas Sao Paulo.

322613. *GLYCINE WIGHTII* (R. Grah. ex Wight & Arn.) Verdcourt

IRI 1298. Introduced to Matao, Sao Paulo. Original source unknown.

322614 and 322615. *RHYNCHOSIA MINIMA* (L.) DC. Leguminosae.

322614. IRI 1398. Donated to Matao, Sao Paulo by Frigonfco Anglo. Original source unknown. Mixture.

322615. IRI 2098. Along coastal highway 5 km. north of Campos, Rio de Janeiro.

322616 and 322617. *RHYNCHOSIA PHASEOLOIDES* (Sw.) DC.

*Crabseye rhynchosia.*

322616. IRI 1055. Lencois Paulista, Sao Paulo.

322617. IRI 1323. Sobradinho, Sao Paulo.



**322288 to 322688—Continued**

**322618.** RHYNCHOSIA sp.

IRI 1584. Matao, Sao Paulo.

**322619.** RHYNCHOSIA sp.

IRI 2451. Santa Amaro, Bahia.

**322620.** RHYNCHOSIA sp.

IRI 2452. Along highway between Alagomhos to Salvador, Bahia.

**322621.** RHYNCHOSIA sp.

IRI 2454. On BR-4, Km. 557, north of Governor Valadares, Minas Gerais. Collected in state of Bahia.

**322622.** RHYNCHOSIA sp.

IRI 2455. On BR-4, Km. 596, north of Governor Valadares, Minas Gerais. Collected in state of Bahia.

**322623.** RHYNCHOSIA sp.

IRI 2458. On BR-4 between Jequie and Milagre, Bahia.

**322624.** RHYNCHOSIA sp.

IRI 2460. Salvador, Bahia.

**322625.** RHYNCHOSIA sp.

IRI 2531. Salvador, Bahia.

**322626 and 322627.** SESBANIA EXASPERATA H.B.K. Leguminosae.

**322626.** IRI 1319. Introduced to Matao, Sao Paulo from Colina, Sao Paulo. Original source unknown.

**322627.** IRI 1987. Introduced to Matao, Sao Paulo from Belem, Para. Original source unknown.

**322628.** SESBANIA PUNICEA Benth.

IRI 1465. Introduced to Matao, Sao Paulo from Rio Grande do Sul. Original source unknown.

**322629.** SESBANIA SESBAN (L.) Merr.

IRI 1012. Introduced to Matao, Sao Paulo from garden in Motieca, Sao Paulo. Original source unknown.

**322630.** SESBANIA sp.

IRI 1263. Guatapara, Sao Paulo.

**322631.** STIZOLOBIUM ATERRIMUM Piper & Tracy Leguminosae.

**Velvetbean.**

IRI 1300. Introduced to Matao, Sao Paulo from Sertaozinho, Sao Paulo. Original source unknown.

**322632.** STIZOLOBIUM DEERINGIANUM Bort.

**Deering velvetbean.**

IRI 1305. Introduced to Matao, Sao Paulo from Colina, Sao Paulo. Original source unknown.

**322633.** STIZOLOBIUM sp.

IRI 1588. Donated by Instituto Agronomico, Campinas to Matao, Sao Paulo. Original source unknown.

**322634.** STYLOSANTHES CAPITATA Vog. Leguminosae.

IRI 2142. Crato, Ceara.

**322635 to 322640.** STYLOSANTHES GRACILIS H.B.K.

**322635.** IRI 1022. Matao, Sao Paulo.

## 322288 to 322688—Continued

322636. IRI 1258. Matao, Sao Paulo.  
322637. IRI 1277. Guararapes, Sao Paulo.  
322638. IRI 1279. Ribeirao Bonito, Sao Paulo.  
322639. IRI 1288. Guariba, Sao Paulo.  
322640. IRI 1476. Pedra Branca, Sao Paulo.  
322641 and 322642. *STYLOSANTHES GUYANENSIS* (Aubl.) Swartz  
322641. IRI 1079. Between Sao Carlos and Rio Claro, Sao Paulo.  
322642. IRI 1348. Donated to Matao, Sao Paulo by Instituto Zootecnia,  
Rio de Janeiro. Original source unknown.  
322643 to 322645. *STYLOSANTHES HUMILIS* H.B.K.  
322643. IRI 1372. Introduced from Australia.  
322644. IRI 1517. Sao Jose do Rio Preto, Sao Paulo.  
322645. IRI 1615. Introduced from Australia. (Townsville Lucerne).  
322646. *STYLOSANTHES MONTEVIDENSIS* Vog.  
IRI 1060. Collected between Jau and Bauru, Sao Paulo.  
322647. *STYLOSANTHES* sp.  
IRI 1051. Sao Jose do Rio Preto, Sao Paulo.  
322648. *STYLOSANTHES* sp.  
IRI 1126. Bueno de Andrade, Sao Paulo.  
322649. *STYLOSANTHES* sp.  
IRI 1257. Matao, Sao Paulo.  
322650. *STYLOSANTHES* sp.  
IRI 1397. Matao, Sao Paulo.  
322651. *STYLOSANTHES* sp.  
IRI 1410. Matao, Sao Paulo.  
322652. *STYLOSANTHES* sp.  
IRI 1477. Pedra Branca, Sao Paulo.  
322653. *STYLOSANTHES* sp.  
IRI 1478. Pedra Branca, Sao Paulo.  
322654. *STYLOSANTHES* sp.  
IRI 1574. Donated to Matao, Sao Paulo from Sao Francisco do Sul,  
Santa Catarina. Original source unknown.  
322655. *STYLOSANTHES* sp.  
IRI 1991. Terenos, Mato Grosso.  
322656. *STYLOSANTHES* sp.  
IRI 2035. Bauru, Sao Paulo.  
322657. *STYLOSANTHES* sp.  
IRI 2080. Twenty-six km. north of Niteroi, Rio de Janeiro.  
322658. *STYLOSANTHES* sp.  
IRI 2084. Vitoria, Espirito Santo.  
322659 and 322660. *TEPHROSIA BREVIPES* Benth. Leguminosae.

## 322288 to 322688—Continued

## 322659 and 322660—Continued

322659. IRI 1157. Bueno de Andrade, Sao Paulo.

322660. IRI 1199. Matao, Sao Paulo.

322661. *TEPHROSIA CANDIDA* DC.

IRI 1272. Matao, Sao Paulo.

322662. *TEPHROSIA LEPTOSTACHYA* DC.

IRI 1320. Matao, Sao Paulo.

322663 to 322671. *TERAMNUS UNCINATUS* (L.) Swartz Leguminosae.

322663. IRI 1242. Rio Mogi, Sao Paulo.

322664. IRI 1243. Rio Claro, Sao Paulo.

322665. IRI 1244. Rio Claro, Sao Paulo.

322666. IRI 1274. Angatuba, Sao Paulo.

322667. IRI 1275. Tiete, Sao Paulo.

322668. IRI 1286. Donated to Matao, Sao Paulo by Instituto Agronomico. Campinas. Original source unknown.

322669. IRI 1331. Campos de Jordao, Sao Paulo.

322670. IRI 1467. Vinhedo, Sao Paulo.

322671. IRI 1943. On Rodovia Fernao Dias, 261 km. to Belo Horizonte, Minas Gerais.

322672. *TERAMNUS VOLUBILIS* Sw.

IRI 1220. Avandava, Sao Paulo.

322673. *TERAMNUS* sp.

IRI 1944. On BR-4, 86 km. south of Governador Valadares, Minas Gerais.

322674 to 322676. *TRIFOLIUM ALEXANDRINUM* L. Leguminosae.

Berseem clover.

322674. IRI 1835. Donated to Matao, Sao Paulo by IPEACS, Km. 47, Rio de Janeiro. Original source unknown.

322675. IRI 2042. Donated to Matao, Sao Paulo by IPEACS, Km. 47, Rio de Janeiro. Original source unknown. Km. 47 Introduction No. 26/65.

322676. IRI 2043. Donated to Matao, Sao Paulo by IPEACS, Km. 47, Rio de Janeiro. Original source unknown. Km. 47 Introduction No. 27/65.

322677. *VICIA SATIVA* L. Leguminosae.

IRI 1450. Introduced to Matao, Sao Paulo from Rio Grande do Sul. Original source unknown.

322678 to 322680. *VIGNA LUTEOLA* (Jacq.) Benth. Leguminosae.

322678. IRI 1129. Sao Sebastiao, Sao Paulo.

322679. IRI 1136. Caraguatatuba, Sao Paulo.

322680. IRI 1986. Donated to Matao, Sao Paulo by IPEAL, Belem Para. Original source unknown.

322681. *VIGNA VEXILLATA* (L.) A. Rich

IRI 1327. Sao Sebastiao, Sao Paulo.

322682. *VIGNA* sp.

IRI 2026. Urucuca, Bahia.

**322288 to 322688—Continued**

322683 and 322684. *ZORNIA BRASILIENSIS* Vog. Leguminosae.

322683. IRI 1221. Sao Jose do Rio Preto, Sao Paulo.

322684. IRI 1321. Matao, Sao Paulo.

322685 to 322687. *ZORNIA DIPHYLLO* (L.) Pers.

322685. IRI 1292. Matao, Sao Paulo.

322686. IRI 1402. Matao, Sao Paulo.

322687. IRI 1404. Matao, Sao Paulo.

322688. *ZORNIA* sp.

IRI 2045. Matao, Sao Paulo.

**322689 to 322695. *GLYCINE MAX* (L.) Merr. Leguminosae.**

**Soybean.**

From Angola. Seeds presented by Instituto de Investigacao Agronomica de Angola, Nova Lisboa. Numbered Sept. 18, 1967.

322689. C 8015. 'Improved'. Origin unknown. Maturity 129 days. Nonshattering. Yield 2.550 kg. per hectare.

322690. C 8037. 'Bean No. 279'. Origin unknown. Maturity 128 days. Nonshattering. Yield 2.550 kg. per hectare.

322691. C 8092. 'Jubiltan 109'. Origin Mozambique. Maturity 129 days. Nonshattering. Yield 2.870 kg. per hectare.

322692. E 939. 'Max C.P1159A8'. Origin Australia. Maturity 128 days. Nonshattering. Yield 2.430 kg. per hectare.

322693. E 1151. 'Bicolor'. Origin Angola. Maturity 117 days. Little resistance to shattering. Yield 2.290 kg. per hectare.

322694. E 1155. 'Hernnon'. Origin unknown. Maturity 126 days. Little resistance to shattering. Yield 2.290 kg. per hectare.

322695. E 1217. 'Bicolor do Cuima'. Origin Angola. Maturity 118 days. Nonshattering. Yield 2.290 kg. per hectare.

**322696. *TRITICUM AESTIVUM* L. Gramineae.**

From Germany. Seeds presented by E. Rehse, Heine-Peragis Getreidezucht, Einbeck. Numbered Sept. 18, 1967.

'Habicht'. 'Cappelle Desprez' × 'Breustedts Werla'.

**322697 to 322704.**

From Kenya. Seeds presented by J. G. Boonman, National Agricultural Research Station, Kitale. Original sources as indicated. Received Sept. 11, 1967.

322697. *TRIFOLIUM CHERANGANIENSE* Gillett Leguminosae.

K 50112. Cherangani.

322698. *TRIFOLIUM LUGARDII* Bullock

K 6474. Kitale.

322699. *TRIFOLIUM REPENS* L.

**Whiteclover.**

K 53945. Bamenda, Nigeria.

322700. *TRIFOLIUM RUEPELIANUM* Fresen.

K 5777. Kitale.

322701. *TRIFOLIUM SEMIPILOSUM* Fresen.

**Kenya clover.**

K 5154. Kabete.

**322697 to 322704—Continued****322702.** TRIFOLIUM STEUDNERI Schweinf.

K 51100. Eldoret.

**322703.** TRIFOLIUM TEMBENSE Fres.

K 5252. Ol Joro Orok.

**322704.** TRIFOLIUM USAMBARENSE Taub.

K 5756. Embu.

**322705.** VERNONIA SHIRENSIS Oliver & Hiern Compositae.

From South Africa. Seeds collected by W. Duthie, Durban. Received Sept. 11, 1967.

Nagel Dam, Valley of Thousand Hills, approximately 50 miles west of Durban, Natal Province. Elevation 1,325 feet. Population massed in an area of approximately 50 yards square and located approximately 20 yards from high water mark (summer rainfall).

**322706 to 322711.**

From the Union of Soviet Socialist Republics. Budsticks collected by H. J. Brooks, agricultural explorer, Crops Research Division, Plant Industry Station, Beltsville, Maryland. Received Sept. 14, 1967.

**322706.** MESPILUS GERMANICA L. Rosaceae. **Medlar.**

B-31. Botanical Garden at Askaniya-Nova, Ukraine. Fruit to 2.5 cm.

**322707.** PYRUS BETULAEFOLIA Bunge Rosaceae. **Birchleaf pear.**

B-35. Botanical Garden at Askaniya-Nova, Ukraine. Fruit with no grit.

**322708.** PYRUS CALLERYANA Decaisne **Callery pear.**

B-32. Botanical Garden at Askaniya-Nova, Ukraine.

**322709.** PYRUS sp.B-34. Botanical Garden at Askaniya-Nova, Ukraine. Resembles *P. calleryana*. Fruit 1.5 cm., oval, conspicuous lenticels, 3 to 4 carpels; considerable grit; stem 2 to 2.5 cm.**322710.** PYRUS sp.

B-36. Botanical Garden at Askaniya-Nova, Ukraine. Leaves serrate; fruit oval, conspicuous lenticels, 2 cm. diameter with only 4 carpels; stem 4 cm.

**322711.** PYRUS sp.

B-37. Botanical Garden at Askaniya-Nova, Ukraine. Leaves serrate; dwarf tree, 2 meters high, 2 meters wide; trunk 7.5 cm in diameter; fruit 2.0 cm. round with 4 carpels; stem 3.5 to 4 cm.

**322712 to 322715.**

From the Union of Soviet Socialist Republics. Budsticks presented by the Institute of Plant Industry, Leningrad. Received Sept. 14, 1967.

**322712.** MALUS BACCATA (L.) Moench Rosaceae. **Siberian crabapple.**

No. 2316.

**322713.** MALUS BACCATA var. MANDSHURICA (Maxim.) C. Schneid. **Manchurian crabapple.**

No. 2330.

**322714 and 322715.** MALUS SYLVESTRIS Mill. **Apple.****322714.** No. 711. 'Kendall Kitaiki'.**322715.** No. 1639. 'Tayeshnoe'.

**322716. TRITICUM DURUM Desf. Gramineae. Durum wheat.**

From Mexico. Seeds presented by International Maize and Wheat Improvement Center, Mexico, D. F. Numbered Sept. 18, 1967.

'Oviachic 65'. (Pi-Sinai No. 2) Tc 60 D10224Br8y-3c-1y.

**322717 to 322731. CAPSICUM ANNUUM L. Solanaceae. Pimento.**

From India. Seeds presented by A. Abraham, University of Kerala, Trivandrum, under Public Law 480, Project A7-CR-178. Numbered Sept. 18, 1967.

322717. C 4. Fruit paired, erect, 0.75 inches long, 0.25 inch wide; green turning to orange red.

322718. C 4. Fruit paired, erect, 1.75 inches long, 0.50 inch wide; yellowish white turning to orange red.

322719. C 14. Fruit single, pendent, 2.50 inches long, 1.25 inches wide; green turning to deep red.

322720. C 15. Fruit single, pendent, 3.50 inches long, 0.50 inch wide; green turning to deep red.

322721. C 27. Fruit paired, pendent, 0.75 inches long, 1.00 inch wide; green turning to bright red.

322722. C 37. Fruit paired, almost erect, 0.50 inches long, 0.75 inch wide; green turning to bright red.

322723. C 38. Fruit 2 to 3, pendent, 0.75 inch long, 1.25 inches wide; pale green turning to orange red.

322724. C 47. Fruit single, pendent, 5.00 inches long, 1.00 inch wide; green turning to deep red.

322725. C 093. Fruit single, 3.00 inches long, 1.75 inches wide; dark green turning to canary yellow.

322726. C 108. Fruit single, pendent, 0.50 inches long, 0.50 inch wide; green turning to deep red.

322727. CA 1. Fruit single, pendent, 2.25 inches long, 2.75 inches wide; green turning to deep red.

322728. CG 10. Fruit single, erect, 0.50 inches long, 0.50 inch wide; yellowish white with purple tint, turning to orange red.

322729. CH 83. Fruit single, almost pendent, 4.00 inches long, 1.25 inches wide; waxy yellow turning to orange red.

322730. CV 36. Fruit single, erect, 2.25 inches long, 0.50 inch wide; violet tinted turning to deep red.

322731. CW 87. Fruit single, pendent, 2.75 inches long, 2.00 inches wide; green turning to deep red.

**322732 and 322733.**

From the Union of Soviet Socialist Republics. Roots and stolons collected by W. H. Skrdla, agricultural explorer, Crops Research Division, Plant Industry Station, Beltsville, Maryland. Received Sept. 19, 1967.

322732. CYNODON DACTYLON (L.) Pers. Gramineae. **Bermudagrass.**

S-102. Dry clay south slope, 5 miles southeast of Stavropol. Collected from several plants. (Stolons)

322733. IRIS sp. Iridaceae

S-68. Ten miles northwest of Stavropol. Altitude 1,800 feet. Wild type. (Roots)

**322734. PHALARIS CANARIENSIS L. Gramineae.**

From Turkey. Seeds collected in 1952 by R. K. Godfrey, agricultural explorer, Bureau of Plant Industry, Soils, and Agricultural Engineering, Beltsville, Maryland. Numbered Sept. 19, 1967.

Component of P.I. 206463.

**322735 to 322742. TRITICUM DURUM Des. Gramineae.**

**Durum wheat.**

From Italy. Seeds presented by Cirillo Maliani, Instituto di Genetica Vegetabile Maliani, Ardea, Roma. Received Sept. 19, 1967.

322735. 1 D.	322739. 8 D.
322736. 4 B.	322740. 11 C.
322737. 5 B.	322741. 12 D.
322738. 7 D.	322742. 16 A.

**322743 and 322744. NICOTIANA TABACUM L. Solanaceae.**

**Tobacco.**

From Brazil. Seeds collected by B. C. Nichols, Agricultural Research Service, Tobacco Experiment Station, Greeneville, Tennessee. Received Sept. 19, 1967.

322743. T.I. 1498. 'Rippel'. Dark air-cured Galpao. Grown in mountains in vicinity of Santa Cruz.

322744. T.I. 1499. 'Amarela'. Dark air-cured Galpao. Grown in lowlands in vicinity of Santa Cruz.

**322745 to 322761.**

From the Union of Soviet Socialist Republics. Seeds presented by All-Union Institute of Plant Industry, Leningrad. Received Sept. 19, 1967.

322745. ABIES HOLOPHYLLA Maxim. Pinaceae. Needle fir.  
Primorski Region.

322746. ABIES SACHALINENSIS (Schmidt) Masters Sakhalin fir.  
Sakhalin Region.

322747. ABIES SIBIRICA Ledeb. Siberian fir.  
Krasnoyarsk Region.

322748. BETULA ERMANNII Champ. Betulaceae.  
Kamchatka Peninsula.

322749. BETULA PLATYPHYLLA Sukatchev Asian white birch.  
Kamchatka Peninsula.

322750. BETULA PLATYPHYLLA Sukatchev Asian white birch.  
Primorski Region.

322751. BETULA SCHMIDTII Regel Schmidts birch.  
Primorski Region.

322752. LARIX SIBIRICA Ledeb. Pinaceae. Siberian larch.  
Krasnoyarsk Region.

322753 and 322754. PICEA ABIES (L.) Karst. Pinaceae. Norway spruce.

322753. Karelian Autonomous Soviet Socialist Republic.

322754. Moscow Region.

322755 to 322757. PICEA JEZOENSIS (Sieb. & Zucc.) Carr. Yeddo spruce.

322755. Khabarovsk Region.

322756. Primorski Region.

322757. Sakhalin Region.

**322745 to 322761—Continued**322758. *PICEA OBOVATA* Ledeb.

Siberian spruce.

Krasnoyiarsk Region.

322759 and 322760. *PINUS PUMILA* (Pallas) Regel Pinaceae.

Stone pine.

322759. Amurskaya Region.

322760. Kamchatka Peninsula.

322761. *PINUS SIBIRICA* Mayr

Krasnoyiarsk Region.

**322762 to 323090. CYAMOPSIS TETRAGONOLOBA (L.) Taub. Le-  
guminosae. Guar.**

From India. Seeds presented by Indian Agricultural Research Institute,  
Division of Plant Introduction, New Delhi. Material assembled for test-  
ing under Public Law 480, Project A7-CR-143. Numbered Sept. 20, 1967.

322762. I.C. 32/P2-1.

322792. I.C. 1004/P3.

322763. I.C. 32/P2-2.

322793. I.C. 1097/P3.

322764. I.C. 33.

322794. I.C. 1856/P1.

322765. I.C. 33/P2-1.

322795. I.C. 2383-1.

322766. I.C. 33/P2-2.

322796. I.C. 2383-2.

322767. I.C. 35.

322797. I.C. 2383/P3.

322768. I.C. 39.

322798. I.C. 2383/P3-1.

322769. I.C. 40/P1.

322799. I.C. 2493.

322770. I.C. 40/P2.

322800. I.C. 2493/P1.

322771. I.C. 41/P1.

322801. I.C. 3103.

322772. I.C. 42/P1.

322802. I.C. 3118.

322773. I.C. 44A/P1.

322803. I.C. 3118/P1.

322774. I.C. 44B.

322804. I.C. 3215/P1.

322775. I.C. 57A-1.

322805. I.C. 3267.

322776. I.C. 57A-2.

322806. I.C. 3268-1.

322777. I.C. 57A-1-1.

322807. I.C. 3268-2.

322778. I.C. 57A-1-2.

322808. I.C. 3268-1-1.

322779. I.C. 439.

322809. I.C. 3268-1-2.

322780. I.C. 439/P1.

322810. I.C. 5491.

322781. I.C. 439/P3.

322811. I.C. 5493.

322782. I.C. 547/P3.

322812. I.C. 5494/P1.

322783. I.C. 547A/P3.

322813. I.C. 5496/P1.

322784. I.C. 547B/P1.

322814. I.C. 5656/P1.

322785. I.C. 642/P2.

322815. I.C. 5694/P2-1.

322786. I.C. 642/P2-1-1.

322816. I.C. 5694/P2-2.

322787. I.C. 642/P2-1-2.

322817. I.C. 5694/P3-1.

322788. I.C. 739/P2.

322818. I.C. 5694/P3-2.

322789. I.C. 860.

322819. I.C. 7546-1.

322790. I.C. 860/P1.

322820. I.C. 7546-2.

322791. I.C. 907 U.

322821. I.C. 7590.



## 322762 to 323090—Continued

322822.	I.C. 7592.	322864.	I.C. 8926/P3.
322823.	I.C. 8423.	322865.	I.C. 8929/P2.
322824.	I.C. 8431.	322866.	I.C. 8932/P1-1.
322825.	I.C. 8431/P1.	322867.	I.C. 8932/P1-2.
322826.	I.C. 8431A/P2-1.	322868.	I.C. 8934/P3.
322827.	I.C. 8431A/P2-2.	322869.	I.C. 8936.
322828.	I.C. 8432/P1.	322870.	I.C. 8936/P1.
322829.	I.C. 8432/P2.	322871.	I.C. 8937/P3.
322830.	I.C. 8437.	322872.	I.C. 8947/P3.
322831.	I.C. 8444.	322873.	I.C. 8952.
322832.	I.C. 8445/P2.	322874.	I.C. 8968.
322833.	I.C. 8446/P1.	322875.	I.C. 8968/P1.
322834.	I.C. 8447/P1.	322876.	I.C. 8978/P2.
322835.	I.C. 8448.	322877.	I.C. 8980.
322836.	I.C. 8448/P3.	322878.	I.C. 8987.
322837.	I.C. 8450/P3.	322879.	I.C. 9003.
322838.	I.C. 8451.	322880.	I.C. 9004.
322839.	I.C. 8452.	322881.	I.C. 9004/P2.
322840.	I.C. 8452/P3.	322882.	I.C. 9007.
322841.	I.C. 8453-1.	322883.	I.C. 9007-1.
322842.	I.C. 8453-2.	322884.	I.C. 9007-2.
322843.	I.C. 8453/P2.	322885.	I.C. 9007/P2.
322844.	I.C. 8454.	322886.	I.C. 9008.
322845.	I.C. 8455.	322887.	I.C. 9009.
322846.	I.C. 8456.	322888.	I.C. 9010.
322847.	I.C. 8456/P1.	322889.	I.C. 9014/P1.
322848.	I.C. 8540/P3.	322890.	I.C. 9016.
322849.	I.C. 8781.	322891.	I.C. 9016/P2.
322850.	I.C. 8783A.	322892.	I.C. 9017/P2-1.
322851.	I.C. 8831.	322893.	I.C. 9017/P2-2.
322852.	I.C. 8842.	322894.	I.C. 9021/P1.
322853.	I.C. 8842/P2.	322895.	I.C. 9026-1.
322854.	I.C. 8866/P1.	322896.	I.C. 9026/P1.
322855.	I.C. 8871.	322897.	I.C. 9026/P2.
322856.	I.C. 8872.	322898.	I.C. 9026/P3.
322857.	I.C. 8883.	322899.	I.C. 9030.
322858.	I.C. 8890-1.	322900.	I.C. 9031.
322859.	I.C. 8890-2.	322901.	I.C. 9031-1.
322860.	I.C. 8897.	322902.	I.C. 9031/P1.
322861.	I.C. 8919/P1-1.	322903.	I.C. 9033.
322862.	I.C. 8919/P1-2.	322904.	I.C. 9036/P2-1.
322863.	I.C. 8926/P2.	322905.	I.C. 9036/P2-2.

## 322762 to 323090—Continued

322906. I.C. 9037.	322948. I.C. 9231-2.
322907. I.C. 9037-1.	322949. I.C. 9231/P2.
322908. I.C. 9039-1.	322950. I.C. 9232.
322909. I.C. 9039-2.	322951. I.C. 9233/P3.
322910. I.C. 9040/P2.	322952. I.C. 9234.
322911. I.C. 9041.	322953. I.C. 9234/P1-1.
322912. I.C. 9042/P2.	322954. I.C. 9234/P1-2.
322913. I.C. 9049.	322955. I.C. 9235/P1.
322914. I.C. 9051.	322956. I.C. 9777-1.
322915. I.C. 9053.	322957. I.C. 9777-2.
322916. I.C. 9054/P1.	322958. I.C. 10304/P3.
322917. I.C. 9054/P3.	322959. I.C. 10305/P1.
322918. I.C. 9057.	322960. I.C. 10308.
322919. I.C. 9063/P1-1.	322961. I.C. 10313.
322920. I.C. 9063/P1-2.	322962. I.C. 10318.
322921. I.C. 9065.	322963. I.C. 10334.
322922. I.C. 9067/P2.	322964. I.C. 10335.
322923. I.C. 9067/P3.	322965. I.C. 10336.
322924. I.C. 9073/P3.	322966. I.C. 10339.
322925. I.C. 9075.	322967. I.C. 10342.
322926. I.C. 9077/P1.	322968. I.C. 10345.
322927. I.C. 9194-1.	322969. I.C. 10346.
322928. I.C. 9194-2.	322970. I.C. 10350.
322929. I.C. 9195.	322971. I.C. 10352/P3.
322930. I.C. 9196/P1.	322972. I.C. 10354.
322931. I.C. 9197.	322973. I.C. 10356.
322932. I.C. 9197/P2.	322974. I.C. 10367.
322933. I.C. 9199.	322975. I.C. 10376.
322934. I.C. 9202.	322976. I.C. 10467.
322935. I.C. 9203.	322977. I.C. 10467-1-1.
322936. I.C. 9203/P1.	322978. I.C. 10467-1-2.
322937. I.C. 9204.	322979. I.C. 10503.
322938. I.C. 9205/P2-1.	322980. I.C. 10504/P2.
322939. I.C. 9205/P2-2.	322981. I.C. 10504/P3.
322940. I.C. 9207/P1.	322982. I.C. 10507.
322941. I.C. 9208/P2.	322983. I.C. 10510.
322942. I.C. 9229/P2.	322984. I.C. 10510.
322943. I.C. 9229/P3.	322985. I.C. 10511.
322944. I.C. 9230.	322986. I.C. 10515.
322945. I.C. 9230-1.	322987. I.C. 10520.
322946. I.C. 9230-2.	322988. I.C. 10520/P1.
322947. I.C. 9231-1.	322989. I.C. 10523A.

## 322762 to 323090—Continued

322990. I.C. 10523/P2.	323032. I.C. 11458.
322991. I.C. 10524-1.	323033. I.C. 11466.
322992. I.C. 10524-2.	323034. I.C. 11496.
322993. I.C. 10527/P3.	323035. I.C. 11498.
322994. I.C. 10636.	323036. I.C. 11499.
322995. I.C. 11116.	323037. I.C. 11501-1.
322996. I.C. 11286-1.	323038. I.C. 11501-2.
322997. I.C. 11290.	323039. I.C. 11503.
322998. I.C. 11308-1.	323040. I.C. 11506.
322999. I.C. 11308-2.	323041. I.C. 11508.
323000. I.C. 11310.	323042. I.C. 11512.
323001. I.C. 11349.	323043. I.C. 11512-1.
323002. I.C. 11350.	323044. I.C. 11515.
323003. I.C. 11353.	323045. I.C. 11519.
323004. I.C. 11354.	323046. I.C. 11521.
323005. I.C. 11357.	323047. I.C. 11525.
323006. I.C. 11372.	323048. I.C. 11530-1.
323007. I.C. 11376-1.	323049. I.C. 11530-2.
323008. I.C. 11376-2.	323050. I.C. 11536.
323009. I.C. 11378-1.	323051. I.C. 11702.
323010. I.C. 11379.	323052. I.C. 11703.
323011. I.C. 11384.	323053. I.C. 11704.
323012. I.C. 11385.	323054. I.C. 11705.
323013. I.C. 11387.	323055. I.C. 11749.
323014. I.C. 11388.	323056. I.C. 11751.
323015. I.C. 11389.	323057. I.C. 11769.
323016. I.C. 11391.	323058. I.C. 11770.
323017. I.C. 11405.	323059. I.C. 11803.
323018. I.C. 11407.	323060. I.C. 11804.
323019. I.C. 11410.	323061. I.C. 11805.
323020. I.C. 11413-1.	323062. I.C. 11806.
323021. I.C. 11413-2.	323063. E.C. 248/P3.
323022. I.C. 11415.	323064. E.C. 248A.
323023. I.C. 11419.	323065. E.C. 248A/P1.
323024. I.C. 11423.	323066. E.C. 2448/P2.
323025. I.C. 11425.	323067. E.C. 36420.
323026. I.C. 11426.	323068. E.C. 36951.
323027. I.C. 11427-1.	323069. E.C. 36952.
323028. I.C. 11430.	323070. E.C. 36953.
323029. I.C. 11430-1.	323071. P.I.G. 1.
323030. I.C. 11433.	323072. P.I.G. 3.
323031. I.C. 11433-1.	323073. P.I.G. 4.

**322762 to 323090—Continued**

323074. P.I.G. 5.	323083. P.I.G. 22.
323075. P.I.G. 6.	323084. P.I.G. 23.
323076. P.I.G. 9.	323085. P.I.G. 25.
323077. P.I.G. 11.	323086. P.I.G. 26-1.
323078. P.I.G. 12.	323087. P.I.G. 26-2.
323079. P.I.G. 15.	323088. P.I.G. 27.
323080. P.I.G. 16.	323089. 'Nanbahar'.
323081. P.I.G. 19.	323090. 'Sadabahar'.
323082. P.I.G. 20.	

**323091 and 323092. HIBISCUS CANNABINUS L. Malvaceae.****Kenaf.**

From India. Seeds presented by Jute Agricultural Institute, Barrach Pore, West Bengal through Division of Plant Introduction, Indian Agricultural Research Institute, New Delhi. Received Sept. 21, 1967.

Released for superior performance in India.

323091. 'H.C. 583'.

323092. 'H.C. 584'.

**323093. TRITICUM AESTIVUM L. Gramineae.**

From Guatemala. Seeds presented by Astolfo Fumagalli, Labor Ovalle, Quezaltenango. Received Sept. 21, 1967.

'Xelaju 66'.

**323094 to 323190.**

From Lebanon. Seeds collected by R. W. Allard, Department of Agronomy, University of California, Davis, Calif. Random collections from plants on undisturbed site on the campus of American University, Beirut. Received Sept. 21, 1967.

<b>323094 to 323140. AVENA BARBATA Brot. Gramineae.</b>	<b>Slender oats.</b>
323094. No. 1.	323111. No. 18.
323095. No. 2.	323112. No. 19.
323096. No. 3.	323113. No. 20.
323097. No. 4.	323114. No. 21.
323098. No. 5.	323115. No. 22.
323099. No. 6.	323116. No. 23.
323100. No. 7.	323117. No. 24.
323101. No. 8.	323118. No. 25.
323102. No. 9.	323119. No. 26.
323103. No. 10.	323120. No. 27.
323104. No. 11.	323121. No. 28.
323105. No. 12.	323122. No. 29.
323106. No. 13.	323123. No. 30.
323107. No. 14.	323124. No. 31.
323108. No. 15.	323125. No. 32.
323109. No. 16.	323126. No. 33.
323110. No. 17.	323127. No. 34.

## 323094 to 323190—Continued

## 323094 to 323140—Continued

323128. No. 35.	323135. No. 42.
323129. No. 36.	323136. No. 43.
323130. No. 37.	323137. No. 44.
323131. No. 38.	323138. No. 45.
323132. No. 39.	323139. No. 46.
323133. No. 40.	323140. No. 47.
323134. No. 41.	

## 323141 to 323190. AVENA STERILIS L.

## Animated oats.

323141. No. 1.	323166. No. 26.
323142. No. 2.	323167. No. 27.
323143. No. 3.	323168. No. 28.
323144. No. 4.	323169. No. 29.
323145. No. 5.	323170. No. 30.
323146. No. 6.	323171. No. 31.
323147. No. 7.	323172. No. 32.
323148. No. 8.	323173. No. 33.
323149. No. 9.	323174. No. 34.
323150. No. 10.	323175. No. 35.
323151. No. 11.	323176. No. 36.
323152. No. 12.	323177. No. 37.
323153. No. 13.	323178. No. 38.
323154. No. 14.	323179. No. 39.
323155. No. 15.	323180. No. 40.
323156. No. 16.	323181. No. 41.
323157. No. 17.	323182. No. 42.
323158. No. 18.	323183. No. 43.
323159. No. 19.	323184. No. 44.
323160. No. 20.	323185. No. 45.
323161. No. 21.	323186. No. 46.
323162. No. 22.	323187. No. 47.
323163. No. 23.	323188. No. 48.
323164. No. 24.	323189. No. 49.
323165. No. 25.	323190. No. 50.

## 323191. VIBURNUM GRANDIFLORUM Wall. Caprifoliaceae.

From England. Cuttings presented by the Crown Estate Office, The Great Park, Windsor, Berks. Received Sept. 27, 1967.

'Snow White'.

323192. LOTUS PEREGRINUS L. Leguminosae. **Trefoil.**

From Crete. Seeds collected in 1964 by P. F. Knowles, University of California, Davis, Calif. Received Sept. 28, 1967.

**323192—Continued**

Col. No. N-24B. In a field with other weeds 1.8 miles west of Rethymnon. Annual, flat on ground. Component of P.I. 300237.

(*Lotus halophilus*).

**323193 to 323197.**

From Sweden. Scions presented by K. E. Flinck, Aktiebolaget, Findus, Bjuv. Received Sept. 28, 1967.

**323193.** COTONEASTER ASCENDENS Flinck & Hylmo Rosaceae.

**323194.** COTONEASTER BULLATA Bois

**323195.** COTONEASTER DAMMERI C. Schneid.  
'Skogsholmen'.

**323196.** COTONEASTER DIVARICATA Rhed. & Wils. Spreading cotoneaster.

**323197.** COTONEASTER SIKANGENSIS Flinck & Hylmo

Origin Sikang Province, Western China, elevation 2,800 meters. Closely related to *C. obscurus*. Upright; leaves thick, coriaceous elliptic ovate; fruits reddish orange, shiny. Adaptable for cultivation in cold climates.

**323198 to 323231. SACCHARUM (hybrid) Gramineae.**

**Sugarcane.**

From Hawaii. Cuttings presented by the Hawaiian Sugar Planters Association, Honolulu. Received Sept. 28, 1967.

<b>323198.</b> H.39-7028.	<b>323215.</b> H.63-8365.
<b>323199.</b> H.48-2094.	<b>323216.</b> H.63-8366.
<b>323200.</b> H.48-3166.	<b>323217.</b> H.63-8370.
<b>323201.</b> H.49-3533.	<b>323218.</b> H.63-8382.
<b>323202.</b> H.50-2036.	<b>323219.</b> H.65-8061.
<b>323203.</b> H.50-5217.	<b>323220.</b> H.65-8401.
<b>323204.</b> H.51-2279.	<b>323221.</b> H.65-8405.
<b>323205.</b> H.51-8194.	<b>323222.</b> H.65-8415.
<b>323206.</b> H.52-246.	<b>323223.</b> H.65-8420.
<b>323207.</b> H.52-4610.	<b>323224.</b> H.65-8421.
<b>323208.</b> H.53-4662.	<b>323225.</b> H.65-8425.
<b>323209.</b> H.54-775.	<b>323226.</b> H.65-8432.
<b>323210.</b> H.57-5174.	<b>323227.</b> H.65-8437.
<b>323211.</b> H.58-9973.	<b>323228.</b> H.65-8440.
<b>323212.</b> H.60-6909.	<b>323229.</b> 'Keong Java'.
<b>323213.</b> H.61-6010.	<b>323230.</b> 'Lahi (7)'.
<b>323214.</b> H.61-6008.	<b>323231.</b> P.O.J. 1499.

**323232 and 323233. SACCHARUM (hybrid) Gramineae.**

**Sugarcane.**

From Kenya. Cuttings presented by the Director, East African Agricultural and Forestry Regional Organization, Nairobi. Received Sept. 28, 1967.

**323232.** POJ-3142.

**323233.** POJ-3150.

**323234 to 323241. ARACHIS HYPOGAEA L. Leguminosae.**

From the Republic of South Africa. Seeds presented by Plant Introduction Officer, Department of Agricultural Technical Services, Pretoria. Received Oct. 2, 1967.

323234. 64.G.195. Selection 48-15 from Senegal × Natal Common.  
 323235. 64.G.202. Mwitunde × Natal Common.  
 323236. 64.G.204. Mwitunde × Natal Common.  
 323237. 64.G.208. Natal Common × Kanyoma. Small dwarf plant bearing long, large kernels.  
 323238. 65.G.221. 51D×48-15. (51D=Tjina × Barberton).  
 323239. 65.G.280. Natal Common × Mount Makulu.  
 323240. 'Bosbok'. From Bushbuckridge area where Natal Common has been grown for over 100 years.  
 323241. Selection 5. From Natal Common.

**323242. HIBISCUS CANNABINUS L. Malvaceae. Kenaf.**

From The Netherlands. Seeds presented by K. van der Meer, International Land Development Consultants N.V., Arnhem. Received October 2, 1967.  
 G 41.

**323243 and 323244.**

From Venezuela. Seeds presented by George P. Gibbs, Apartado 393, Barquisimeto. Received Sept. 26, 1967.

**323243. SESBANIA sp. Leguminosae.**

From Rio Claro. Elevation 4,500 feet. Climate cool, dry, sunny; soil acid. Upright, to 3 feet high; flowers pink; foliage liked by animals.

**323244. VITIS sp. Vitaceae.**

From Carachi. Elevation 6,000 feet.

**323245 to 323252. SACCHARUM (hybrid) Gramineae.****Sugarcane.**

From Australia. Cuttings presented by the Bureau of Sugar Experiment Stations, Brisbane, Queensland. Received Oct. 6, 1967.

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|------------------|-----------------|
| 323245. BN. 192. | 323249. Q. 84.  |
| 323246. Bn. 810. | 323250. Q. 85.  |
| 323247. KO. 168. | 323251. Q. 86.  |
| 323248. Q. 83.   | 323252. SJ. 16. |

**323253 and 323254. AVENA SATIVA L. Gramineae.****Common oats.**

From Mexico. Seeds presented by the Instituto Nacional de Investigaciones Agricolas, Chapingo. Received Oct. 9, 1967.

323253. 'Chihuahua'. From the cross of AB177 C.I.7149 × Putnam C.I. 7531.  
 323254. 'Cuauhtemoc'. From the cross of AB177 C.I.7149 × Putnam 61 C.I. 7531.

**323255 to 323264.**

From Australia. Seeds presented by Division of Plant Industry, Commonwealth Scientific and Industrial Research Organization, Canberra. Received Oct. 10, 1967.

**323255 to 323264—Continued**

323255. *DACTYLIS GLOMERATA* L. Gramineae. Orchardgrass.  
S227. 'Currie'.
323256. *FESTUCA ARUNDINACEA* Schreb. Gramineae.  
N837. 'Demeter'.
323257. *LOLIUM RIGIDUM* Gaud. Gramineae. Wimmera ryegrass.  
W98. 'Merridan'.
323258. *MEDICAGO TRUNCATULA* Gaertn. Leguminosae.  
N662. '173 Barrel Medic'.
- 323259 and 323260. *TRIFOLIUM HIRTUM* All. Leguminosae. Rose clover.  
323259. T.H.40. 'Kondinin'.
323260. T.H.55. 'Sirint'.
- 323261 to 323264. *TRIFOLIUM SUBTERRANEUM* L. Subterranean clover.  
323261. V274. 'Geraldton'. 323263. 'Dinninup'.
323262. C1230. 'Howard'. 323264. 'Uniwager'.

**323265 to 323306.**

From Pakistan. Seeds collected by Ralph S. Matlock, Department of Agronomy, Oklahoma State University, Stillwater, Okla. Received Oct. 11, 1967.

- 323265 to 323269. *ARACHIS HYPOGAEA* L. Leguminosae.  
From Rawalpindi. Presented by Rafiq Ahmad.
323265. Col. No. 8. 'Senegal Gambia'. Spreading bunch.
323266. Col. No. 9. 'B-4'. Selection from India lines.
323267. Col. No. 10. 'No. 334'. Selection from India lines. Spreading (runner). Two to 3 seeds per fruit.
323268. Col. No. 11. 'No. 45'. Selection from India lines. New runner variety. Inferior to 'No. 334'. (P.I. 323267).
323269. Col. No. 16. Agricultural Research Institute, Tando Jam. Presented by Manzoor Ahmad A. Baluch. Runner. (Believe same as P.I. 323267).
323270. *BRASSICA NAPUS* L. Cruciferae. Winter rape.  
Col. No. 19. 'Sarsoon'. S-9. Agricultural Research Institute, Tando Jam. Presented by Manzoor Ahmad A. Baluch.
323271. *CARTHAMUS LANATUS* L. Compositae.  
Col. No. 5. Near Peshawar, north of USAID Staff House. Wild safflower. Dry eroded area. Ten to 18 inches high. Heads 0.75 inch diameter; 12 to 20 seeds per head.
323272. *CARTHAMUS OXYACANTHA* Bieb.  
Col. No. 4. 'Pholi'. Near Pesawar, north of USAID Staff House.
323273. *CENTAUREA* sp. Compositae.  
Col. No. 3. 'Camel Thorn'. Dry eroded wasteland near Peshawar. Appears to be wild safflower species. Plant 6 to 12 inches high. Head with 6 spines. Boiled and given for gonorrhea.
323274. *CYAMOPSIS TETRAGONOLOBA* (L.) Taub. Leguminosae. Guar.  
Col. No. 13. Presented by Salin J. Malick, agricultural manager, Lever Brothers. Local guar grown for green manure on experimental farms near Rahim Yar Khan. White-seeded type.



**323265 to 323306—Continued**

**323275.** GLYCINE sp. Leguminosae.

Col. No. 7. 'Mirjanhat'. Rawalpindi. Presented by Rafiq Ahmad. Believed to be of Burmese origin. Yellow.

**323276.** GLYCINE sp.

Col. No. 12. 'Mothi'. Ayub Research Institute, Lyallpur. Presented by Shamshad A. Kahn, Oilseed Botanist. Native species.

**323277.** GLYCINE sp.

Col. No. 14. 'K-16'. Native variety. Seed small, black. Presented by Manzoor Ahmad A. Baluch, Associate Professor of Botany, Agricultural Research Institute, Tando Jam.

**323278.** GLYCINE sp.

Col. No. 15. 'K-30'. Seed small, black. Presented by Manzoor Ahmad A. Baluch, Associate Professor of Botany, Agricultural Research Institute, Tando Jam.

**323279 to 323281.** HELIANTHUS ANNUUS L. Compositae. **Sunflower.**

**323279.** Col. No. 1. Peshawar. Ornamental on military post. Seed small, white grey striped. Head to 2.5 inches diameter.

**323280.** Col. No. 6. Ayub Research Institute, Lyallpur. Seed black.

**323281.** Col. No. 20. 'Black Sayar'. Agricultural Research Institute, Tando Jam. Presented by Manzoor Ahmad A. Baluch. Only local variety grown.

**323282 to 323293.** PHASEOLUS AUREUS Roxb. Leguminosae. **Mungbean.**

Ayub Agricultural Research Institute, Lyallpur. Presented by Shamshad Kahn.

**323282.** Col. No. 22. 'No. 1'. Early. Seed small, green.

**323283.** Col. No. 23. 'No. 41M'. Seed small, green.

**323284.** Col. No. 24. 'T 54'.

**323285.** Col. No. 25. 'No. 153'. Seed small green.

**323286.** Col. No. 26. 'No. 156'. Seed small, green.

**323287.** Col. No. 27. 'No. 164'. Seed small, green.

**323288.** Col. No. 28. 'No. 217'. Seed small, green.

**323289.** Col. No. 29. 'No. 269'. Seed small, green.

**323290.** Col. No. 30. 'No. 305'. Seed small, green.

**323291.** Col. No. 31. 'No. 390'. Seed small, green.

**323292.** Col. No. 32. 'No. II'. Seed small, green.

**323293.** Col. No. 39. 'No. 170'. Seed small, green.

**323294 to 323303.** PHASEOLUS MUNGO L.

**Urd.**

Ayub Agricultural Research Institute, Lyallpur. Presented by Shamshad A. Kahn.

**323294.** Col. No. 33. 'No. 48'. Seed small, black.

**323295.** Col. No. 34. 'No. 59'.

**323296.** Col. No. 35. 'No. 80'. Seed small, black.

**323297.** Col. No. 36. 'No. 102'. Seed small, black.

**323298.** Col. No. 37. 'No. 125'. Seed small, black.

**323299.** Col. No. 38. 'No. 152'. Seed medium, black.

**323265 to 323306—Continued****323294 to 323303—Continued**

323300. Col. No. 40. 'No. 216'. Seed small, black.
323301. Col. No. 41. 'No. 267'. Seed medium, black.
323302. Col. No. 42. 'No. 654'. Seed medium, black.
323303. Col. No. 43. 'No. 891'. Seed medium, black.
323304. *RICINUS COMMUNIS* L. Euphorbiaceae. **Castorbean.**  
Col. No. 21. 'C-22. Castor'. Agricultural Research Institute, Tando Jam.  
Presented by Manzoor Ahmad A. Baluch. Planted in desert area. Seed small; high oil content (49.5 percent).
- 323305 and 323306. *SESAMUM INDICUM* L. Pedaliaceae. **Sesame.**  
From Agricultural Research Institute, Tando Jam. Presented by Manzoor Ahmad A. Baluch.
323305. Col. No. 17. 'S-19'. Seed black. High yielding; disease resistant.
323306. Col. No. 18. 'S-17'. Best white-seeded type. Some disease resistance.

**323307 to 323309.**

From the Union of Soviet Socialist Republics. Budsticks collected by H. J. Brooks, agricultural explorer, Crops Research Division, Plant Industry Station, Beltsville, Maryland. Received Oct. 13, 1967.

**323307 and 323308. PRUNUS DOMESTICA** L. Rosaceae. **Common plum.**

323307. B-156. Forester's orchard near Camel Mountain, 18 km. west of Zheleznovodsk. Fruit to 4.0 cm., blue-black color; yellow flesh; pit completely free.

323308. B-158. Forester's orchard near Camel Mountain, 18 km. west of Zheleznovodsk. Similar to P.I. 323307, but larger and sweeter fruit.

**323309. PYRUS COMMUNIS** L. Rosaceae. **Common pear.**

B-154. Near television tower, Pyatigorsk. Spreading tree, 15 feet high, 15 feet wide; fruit 2.5 cm., very gritty.

**323310 to 323312.**

From Brazil. Plants presented by Roberto Burle Marx, Rio de Janeiro. Received Oct. 16, 1967.

323310. *ECHINODORUS* sp. Alismaceae.

323311. *PONTERERIA* sp. Pontederiaceae.

323312. *REUSSIA ROTUNDIFOLIA* (L.f.) Castell. Pontederiaceae.

**323313. ATRIPLEX HORTENSIS** L. Chenopodiaceae.**Garden orach.**

From Poland. Seeds presented by Plant Breeding Institute, Grodnow, through K. W. Kreitlow, Crops Research Division, Plant Industry Station, Beltsville, Maryland. Received Oct. 18, 1967.

Collected 30 km. east of Krakow. Used locally for forage and silage.

**323314 to 323325.**

From India. Seeds presented by A. Abraham, University of Kerala, Trivandrum, under P.L. 480 Project A7-CR-178. Received Oct. 18, 1967.

323314. *CAPSICUM ANNUUM* L. Solanaceae. **Pimento.**

323315. *CAPSICUM* sp.

## 323314 to 323325—Continued

323316. *CUCUMIS SATIVUS* L. Cucurbitaceae. Cucumber.
323317. *CUCURBITA PEPO* L. Cucurbitaceae. Pumpkin.
- 323318 and 323319. *HIBISCUS ESCULENTUS* L. Malvaceae. Okra.
323318. Green.
323319. Red.
323320. *LYCOPERSICON ESCULENTUM* Mill. Solanaceae. Tomato.
323321. *PHASEOLUS AUREUS* Roxb. Leguminosae. Mungbean.
- 323322 to 323324. *SOLANUM MELONGENA* L. Solanaceae. Eggplant.
323322. No. 1. Long.
323323. No. 2.
323324. No. 3.
323325. *VIGNA SINENSIS* (Torner) Savi Leguminosae.
- 323326 to 323328. *SKIMMIA JAPONICA* Thunb. Rutaceae. Japanese skimmia.
- From England. Plants purchased from Treseders' Nurseries, Truro, Cornwall. Received Oct. 19, 1967.
323326. 'Jackmans Female'.
323327. 'Nymana Female'.
323328. 'Redruth'.
323329. *MANGIFERA FOETIDA* Lour. Anacardiaceae.
- From Singapore. Seeds presented by the Director, Botanic Garden. Received Oct. 19, 1967.
- 323330 to 323338.
- From Poland. Plants received from Polska Akademia Nauk, Kornik, Poznan. Received Oct. 19, 1967.
323330. *ALNUS JAPONICA* Sieb. Zucc. Betulaceae. Japanese alder.
- 'Purpurea'.
323331. *ELAEAGNUS* sp. Elaeagnaceae.
323332. *LONICERA XYLOSTEUM* L. Caprifoliaceae. European fly honeysuckle.
- 'Compacta'.
323333. *POPULUS CANESCENS* (Ait.) Smith Salicaceae.
- 'Pyramidalis'.
323334. *PTEROCARYA PTEROCARPA* (Michx.) Kunth Juglandaceae.
- 'Albo-maculata'.
323335. *RIBES ALPINUM* L. Saxifragaceae. Mountain currant.
- 'Verno-aureum'.
323336. *SALIX ALBA* L. Salicaceae. White willow.
- 'Pyramidalis'.
- 323337 and 323338. *THUJA OCCIDENTALIS* L. Pinaceae. Arborvitae.
323337. 'Aurescens'.
323338. 'Hoseri'.

**323339 to 323341.**

From the Republic of South Africa. Seeds presented by National Botanic Gardens, Kirstenbosch, Newlands, Cape Province. Received Oct. 19, 1967.

323339. *ERICA GLAUCA* var. *ELEGANS* (Andrews) Bolus Ericaceae.

323340. *ERICA PEZIZA* Lodd.

No. 248.

323341. *ERICA TAXIFOLIA* Bauer ex Wendl.

No. 250 A.

**323342 to 323347. TRITICUM AESTIVUM L. Gramineae.**

From Pakistan. Seeds presented by Cereal Botanist, Ayub Agricultural Research Institute, Lyallpur. Received Oct. 24, 1967.

323342. BxK 8y 5839—376a-3a-3a.

323343. C-273.

323344. Indus 66.

323345. LR 64—Sn 64—D19008-52M-6Y-3M-2Y.

323346. Mexipak 65.

323347. Pak.20.

**323348 to 323350. HIBISCUS CANNABINUS L. Malvaceae. Kenaf.**

From India. Seeds presented by Indian Agricultural Research Institute, Division of Plant Introduction, New Delhi. Received Oct. 24, 1967.

323348. H.C. 129.

323349. H.C. 166.

323350. MT 102 EL.

**323351 and 323352.**

From Canada. Seeds presented by J. E. Fitzsimmons, University of Alberta, Edmonton. Received Oct. 24, 1967.

323351. *AVENA SATIVA* L. Gramineae. Common oats.

No. O.T. 706. 'Grizzly'. (Scotch Victory × Palu).

323352. *HORDEUM VULGARE* L. Gramineae. Common barley.

No. H-59-14. 'Centennial'. (Lenta × Sanalta).

**323353 to 323387. SECALE CEREALE L. Gramineae. Rye.**

From Spain. Seeds presented by Estacion Experimental de Aula Dei, Zaragoza. Received Oct. 25, 1967.

323353. No. IR5. 'Balbo'.

323354. No. IR7. 'Balbo'.

323355. No. 3P5. 'Florida Black'. Wallace selection.

323356. No. 4N13. 'Florida Black'. Commercial.

323357. No. 5C11. 'Elbon'.

323358. No. 5E7. 'Elbon'.

323359. No. 5G5. 'Elbon'.

323360. No. 5J4. 'Elbon'.

323361. No. 5R1. 'Elbon'.

323362. No. 5T17. 'Elbon'.

323363. No. 6B13. 'Caribou'.

**323353 to 323387—Continued**

- 323364. No. 7C5. 'Wrens'. Rust resistant.
- 323365. No. 7N14. 'Wrens'. Rust resistant.
- 323366. No. 9E7. 'Wrens Abruzzi'.
- 323367. No. 9F1. 'Wrens Abruzzi'.
- 323368. No. 9F2. 'Wrens Abruzzi'.
- 323369. No. 10T5. 'Explorer'. Rust resistant.
- 323370. No. 12C16. 'Del Pais'.
- 323371. No. 14A4. 'Villarobledo A'.
- 323372. No. 15D2. 'Huesca'.
- 323373. No. 15D9. 'Huesca'.
- 323374. No. 15G7. 'Huesca'.
- 323375. No. 15R11. 'Huesca'.
- 323376. No. 17C5. 'Prolific'.
- 323377. No. 19E8. 'Gator'.
- 323378. No. 20Y8. 'Inbred (x 178)'.
- 323379. No. 21D1. '18'.
- 323380. No. 21P3. '18'.
- 323381. No. 22 X 1. 'Adams'.
- 323382. No. 23R5. 'Imperial'.
- 323383. Synthetic II.
- 323384. Synthetic III.
- 323385. Synthetic V.
- 323386. Synthetic VI.
- 323387. Synthetic IX.

**323388 to 323400. TRITICUM AESTIVUM L. Gramineae.**

From Kenya. Seeds presented by R. Little, International Rust Testing Centre, Plant Breeding Station, Njoro. Received Oct. 25, 1967.

Varieties released in 1966-67.

- 323388. 'Bonny'.
- 323389. 'Bounty'.
- 323390. 'Kenya Civet'.
- 323391. 'Kenya Kudu'.
- 323392. 'Kenya Leopard'.
- 323393. 'Romany'.
- 323394. 'Token'.

Varieties not released to date.

- 323395. 'Beacon'.
- 323396. 'Bonito'.
- 323397. 'Mentor'.
- 323398. 'Trophy'.
- 323399. 'Kenya Cheetah'.=(Warigo × Sterling).
- 323400. 1338.F.6.C.3.B.=(Australia 26A × K 117A).

**323401 to 323406. HORDEUM VULGARE L. Gramineae. Common barley.**

From Korea. Seeds presented by Sang Ki Hahn, Seoul National University, Suwon. Received Oct. 25, 1967.

323401. 'Buheung'.

323402. 'Chilbo'.

323403. 'Suwon No. 4'.

323404. 'Suwon No. 6'.

323405. 'Suwon No. 18'.

323406. 'Yungwolyukak'. The most winter hardy in Korea.

**323407. ADESMIA BICOLOR (Poir.) DC. Leguminosae.**

From Uruguay. Seeds presented by Botanical Laboratory of the Faculty of Agronomy, through Agricultural Attache, American Embassy, Montevideo. Received Oct. 27, 1967.

Collected February 1963 from Botanic Garden.

**323408 to 323419. TRITICUM AESTIVUM L. Gramineae.**

From Yugoslavia. Seeds presented by Mirko Koric, Institute for Plant Breeding, Gunduliceva 20, Zagreb. Received Oct. 27, 1967.

323408. 'Bojka'. 323414. 'Vigorka 371'.

323409. 'Orkanka Brkulja'. 323415. 'Vitka'.

323410. 'Orkanka Golica'. 323416. 'Vlatka'.

323411. 'Rubinka 9/18'. 323417. 'Zdravka'.

323412. 'Rubinka 22/39'. 323418. 'Zekar'.

323413. 'Vigorka 37/16'. 323419. 'ZK × SP'.

**323420. VITIS sp. Vitaceae.**

From Venezuela. Seeds presented by George P. Gibbs, Apartado 393, Barquisimeto. Received Nov. 1, 1967.

Fruit clusters over 12 inches long, loose; berries small, black, good flavor.

**323421 to 323441.**

From Austria. Seeds presented by H. Jungbauer, Botanic Garten, 1070 Wien, Myrtheng. 3. Received Nov. 1, 1967.

323421. ACTINIDIA CHINENSIS Planch. Dilleniaceae. Yang tao.

323422. AEGILOPS (hybrid) Gramineae.

(*A. longissima* × *Triticum durum*).

323423. BECKMANNIA ERUCIFORMIS (L.) Host. Gramineae. Sloughgrass.

323424. CANNA EDULIS Ker. Cannaceae. Edible canna.

323425. CRAMBE MARITIMA L. Cruciferae. Common seakale.

323426. CRAMBE TATARIA Sebeok

323427. CUCUMIS MELO L. Cucurbitaceae. Muskmelon.

323428. CYCLANTHERA PEDATA (L.) Schrad. Cucurbitaceae.

323429. HIBISCUS ESCULENTUS L. Malvaceae. Okra.

323430. PHASEOLUS sp. Leguminosae.

323431. PHORMIUM COLENSOI LeJolis Liliaceae. Flaxlily.

323432. SAMBUCUS NIGRA f. AUREA (Sweet) Schwerin Caprifoliaceae.

## 323421 to 323441—Continued

323433. *SECALE CEREALE* L. Gramineae. Rye.
323434. *TRITICUM* (hybrid). Gramineae.  
(*T. dicoccum* × *T. monococcum*).
323435. *TRITICUM DICOCCUM* Schrank Emmer.
323436. *TRITICUM MACHA* Dekapr. & Men.
323437. *TRITICUM MONOCOCCUM* L.
323438. *TRITICUM SPELTA* L. Spelt.
323439. *TRITICUM SPHAEROCOCCUM* Percival
323440. *TRITICUM TURGIDUM* var. *SPECIOSUM* Percival
323441. *VITIS VINIFERA* L. Vitaceae. European grape.  
'Capensia Nigra'.
323442. *HELIANTHUS ANNUUS* L. Compositae. Sunflower.  
From France. Seeds presented by A. Cauderon, Centre de Recherches Agromonomiques, Clermont-Ferrand. Received Nov. 2, 1967.  
Carries male-sterility factor closely linked with green seedling color.
323443. *RHODODENDRON TSUSIOPHYLLUM* Sugimoto. Ericaceae.  
From Japan. Plants presented by W. H. Hodge, The Tokyo Office of the U. S. National Science Foundation. Received Nov. 2, 1967.  
From the mountains near Hakone (Mt. Fuji area). Prostrate or decumbent, much-branched shrub to 0.5 m. high, the branches densely brown strigose; leaves rather thick, nearly sessile, elliptic to narrowly so, sometimes obovate, 7 to 10 mm. long, 4 to 6 mm. wide, acute at both ends, mucronulate, brown-strigose, on upper side, on margins and midrib beneath; flowers 1 to 3, white, umbellate, the pedicels densely brown-strigose, 1 to 3 mm. long; calyx minute; corolla shallowly 4 or 5 lobed, tubular-campanulate, 7 to 10 mm. long, white-puberulent externally; stamens 5, included, the filaments pilose, the anthers longitudinally dehiscent; style glabrous; ovary 3-locular, densely strigose; capsules broadly ovoid. June-July. Rare.
- 323444 and 323445.  
From Pakistan. Seeds collected by N. H. French, United States Agency for International Development, Lahore. Received Nov. 3, 1967.
323444. *CENCHRUS CILIARIS* L. Gramineae.  
Col. No. 3. Vijudo, Hyderabad. Plant tall on sandy soil. Head light colored, burr awns prominent. High production, low palatability.
323445. *CENCHRUS PRIEURII* (Kunth) Maire  
Col. No. 4. Vijudo, Hyderabad. Plant robust, tall on sandy soil, leaves broad. High production, reported low palatability.
- 323446 to 323478.  
From Poland. Seeds presented by Jan Piech, Główny Ośrodek Badawczy, Instytut Uprawy Nawożenia i Gleboznawstwa, Puławy. Received Nov. 3, 1967.
- 323446 to 323448. *HORDEUM VULGARE* L. Gramineae. Common barley.
323446. 'Kostek'.
323447. 'Mikulicki Wczesny'.
323448. 'Ślaski I'.
- 323449 to 323457. *SECALE CEREALE* L. Gramineae. Rye.
323449. 'Chrobre'.

**323446 to 323478—Continued****323449 to 323457—Continued**

323450. 'Dankowskie Szttywne I'. U 4b/65.  
 323451. 'Garczynskie Ludowe'.  
 323452. M 3b/65.  
 323453. 'Noteckie Tetra'.  
 323454. 'Smolickie krotkie'.  
 323455. Szk 6b/65.  
 323456. 'Wloszanowskie'.  
 323457. 'Wloszanowskie N'.

**323458 to 323478. TRITICUM AESTIVUM L. Gramineae.**

Spring wheat.

323458. 'Ostka Chlopicka'. 323460. 'Pulawska Twarda'.  
 323459. 'Ostka Popularna'. 323461. 'Rokicka'.

Winter wheat.

323462. 297/63. 323471. 'Kujawianka  
Wielawicka'  
 323463. 486/63. 323472. 'Leszczynska Wczesna'.  
 323464. C 48/63. 323473. 'Malgorzatka Udycka'.  
 323465. C 517/63. 323474. 'Modzurowska'.  
 323466. D 130/63. 323475. 'Ninka II'.  
 323467. O 219/62. 323476. 'Olza'.  
 323468. 'Bezostaja'. 323477. 'Slazaczka'.  
 323469. 'Dankowska Biala'. 323478. 'Zelazna'.  
 323470. 'Eka Nowa'.

**323479. PIERIS JAPONICA (Thunb.) G. Don Ericaceae.****Japanese pieris.**

From England. Plants presented by Hillier & Sons, Winchester. Received  
 Nov. 6, 1967.

'Blush'.

**323480. ERYTHROXYLON COCA Lam. Erythroxylaceae.****Cocaine plant.**

From Austria. Seeds presented by H. Jungbauer, Botanic Garten, 1079 Wien,  
 Myrtheng. 3. Received Nov. 1, 1967.

**323481 to 323496.**

From the United States. Selections made at Regional Plant Introduction  
 Station, Geneva, N. Y. All reported resistant to crown rust *Puccinia*  
*coronata* var. *avenae*. Received Nov. 7, 1967.

**323481 to 323495. ARRHENATHERUM ELATIUS (L.) Presl Gramineae.****Tall oatgrass.**

323481. Col. No. 64-416. G-5778S-2. Selection from P.I. 234687.  
 Erect, vigorous, 38 inches by 18 inches, leaves dark green, excellent  
 winter hardiness and spring recovery.

323482. Col. No. 64-436. G-6091S-10. Selection from P.I. 235543.  
 Very erect and vigorous, 47 inches by 12 inches, excellent winter  
 hardiness and spring recovery.



**323481 to 323496—Continued****323481 to 323495—Continued**

323483. Col. No. 64-445. G-8102S-6. Selection from P.I. 251571. Semi-erect, medium to excellent vigor, 40 inches by 28 inches, excellent winter hardiness and spring recovery, very leafy, shatters.
323484. Col. No. 64-445. G-8102S-13. Selection from P.I. 251571. Erect, very vigorous, 42 inches by 25 inches, leaves dark green, excellent winter hardiness and spring recovery, shatters.
323485. Col. No. 64-447. G-8104S-6. Selection from P.I. 251573. Semi-erect, very vigorous, 45 inches by 35 inches, leafy, excellent winter hardiness and spring recovery, shatters.
323486. Col. No. 64-457. G-8276S-7. Selection from P.I. 253294. Semi-erect to erect, vigorous, 42 inches by 29 inches, extremely leafy, leaves dark green, good winter hardiness, excellent spring recovery.
323487. Col. No. 64-460. G-8579S-10. Selection from P.I. 255166. Semi-erect to erect, 41 inches by 28 inches. Good winter hardiness and spring recovery.
323488. Col. No. 64-463. G-8636S-2. Selection from P.I. 255400. Excellent vigor, prostrate to semi-erect, 44 inches by 36 inches, leafy, excellent winter hardiness and spring recovery.
323489. Col. No. 64-468. G-8640S-13. Selection from P.I. 255404. Semi-erect to erect, medium vigor, 37 inches by 29 inches, excellent winter hardiness and spring recovery.
323490. Col. No. 64-470. G-8642S-14. Selection from P.I. 255406. Semi-erect to erect, very vigorous, 35 inches by 30 inches, very leafy, leaves dark green, excellent winter hardiness and spring recovery.
323491. Col. No. 64-472. G-8644S-14. Selection from P.I. 255408. Semi-erect to erect, good vigor, 41 inches by 33 inches, medium leafiness, good winter hardiness and spring recovery.
323492. Col. No. 64-474. G-8629S-2. Selection from P.I. 255466. Very erect, good vigor, 40 inches by 31 inches, good leafiness, excellent winter hardiness and spring recovery.
323493. Col. No. 67-402. G-6857S-3. Selection from P.I. 180806. Good to excellent vigor, erect, 31 inches by 20 inches, leaves dark green, good winter hardiness and spring recovery.
323494. Col. No. 67-402. G-6857S-5. Selection from P.I. 180806. Medium vigor, semi-erect to erect, 24 inches by 13 inches, lodges slightly, good winter hardiness and spring recovery.
323495. Col. No. 67-419. G-5781S-7. Selection from P.I. 234736. Very erect, medium vigor, 40 inches by 14 inches, very leafy, leaves dark green, moderate winter hardiness and spring recovery.
323496. *ARRHENATHERUM ERIANTHUM* Boiss. & Reut.  
Col. No. 64-458. G-8534S-10. Selection from P.I. 254870. Semi-erect to erect, medium vigor, 43 inches by 19 inches, medium leafiness, fair winter hardiness and spring recovery.

**323497. JUGLANS REGIA L. Juglandaceae. Persian walnut.**

From the Union of Soviet Socialist Republics. Seeds presented by a Government Forester, Stavropol, Ukraine. Received Nov. 8, 1967.

B-150.

**323498 to 323500.**

From the Union of Soviet Socialist Republics. Seeds presented by All-Union Institute of Plant Industry, Leningrad. Received Nov. 13, 1967.

**323498 to 323500—Continued**

- 323498 and 323499. *CUCUMIS MELO* L. Cucurbitaceae. Muskmelon.  
 323498. K-5442. 'Te-be-cin'. Originally from China.  
 323499. K-5688. 'Mango melon'. Originally from China.  
 323500. *CUCUMIS* sp.  
 K-2005. Originally from China.

**323501 to 323505.**

From Australia. Seeds presented by Division of Plant Industry, Commonwealth Scientific and Industrial Research Organization, Canberra. Received Nov. 13, 1967.

323501. *EUCALYPTUS COCCIFERA* Hook. f. Myrtaceae.  
 323502. *EUCALYPTUS GLAUCESCENS* Maiden & Blakely  
 323503. *EUCALYPTUS NIPHOPHILA* Maiden & Blakely  
 323504. *EUCALYPTUS PERRINIANA* Rodway  
 323505. *EUCALYPTUS SIMMONDSII* Maiden

**323506 to 323512.**

From India. Seeds presented by Indian Agricultural Research Institute, Division of Plant Introduction, New Delhi. Received Nov. 14, 1967.

323506. *AMARANTHUS LEUCOCARPUS* S. Wats. Amaranthaceae.  
 'Local Amaranth'.  
 323507. *CENTELLA ASIATICA* (L.) Urban Umbelliferae.  
 I.W. 2699. Occurs locally in Delhi.  
 323508 and 323509. *HIBISCUS ESCULENTUS* L. Malvaceae. Okra.  
 323508. I.C. 10238. Pods very long.  
 323509. I.C. 12933. Pods long.  
 323510. *LYCOPERSICON ESCULENTUM* Mill. Solanaceae. Tomato.  
 I.S. 13665. 'Kalianpur'.  
 323511. *PHYTOLACCA ACINOSA* Roxb. Phytolaccaceae. India pokeberry.  
 E.C. 25927.  
 323512. *TRIFOLIUM ALEXANDRINUM* L. Leguminosae. Berseem clover.  
 'Pusa Giant Berseem'. (tetraploid).

**323513 to 323529.**

From India. Seeds presented by Indian Agricultural Research Institute, Division of Plant Introduction, New Delhi. Received Nov. 14, 1967.

- 323513 to 323516. *CARTHAMUS TINCTORIUS* L. Compositae. Safflower.  
 323513. I.C. 11122. (N.P. 1).  
 323514. I.C. 11123. (N.P. 2).  
 323515. I.C. 11151. (N.P. 30).  
 323516. I.C. 11174. (N.P. 30).  
 323517 to 323525. *GLYCINE MAX* (L.) Merr. Leguminosae. Soybean.  
 323517. E.C. 18593. Nepal.  
 323518. E.C. 18595. Nepal.  
 323519. E.C. 18596. Nepal.

## 323513 to 323529—Continued

## 323517 to 323525—Continued

323520. E.C. 18646. Nepal.  
 323521. I.C. 9461.  
 323522. I.C. 11115A.  
 323523. I.C. 13006.  
 323524. I.C. 13007.  
 323525. I.C. 13008.  
 323526 and 323527. *HELIANTHUS ANNUUS* L. Compositae Sunflower.  
 323526. E.C. 16070.  
 323527. E.C. 16750.  
 323528 and 323529. *SESAMUM INDICUM* L. Pedaliaceae. Sesame.  
 323528. N.P. 3.  
 323529. N.P. 6.

## 323530 to 323548.

From Kenya. Seeds presented by D. A. Skeates, Forest Department Arboretum, Nairobi. Received Nov. 14, 1967.

323530. *ALBIZIA LEBBECK* (L.) Benth. Leguminosae.  
 323531. *CADIA* sp. Leguminosae.  
 323532. *CALPURNIA AUREA* (Lam.) Benth. Leguminosae.  
 323533. *CASSIA FLORIBUNDA* Cav. Leguminosae.  
 323534. *CASSIA SIAMEA* Lam. Siamese senna.  
 323535. *CASSIA SPECTABILIS* DC.  
 323536. *CASSIA* sp.  
 323537. *CORDIA ABYSSINICA* R. Br. Boraginaceae.  
 323538. *CORDYLINE FRAGRANS* (Ker) Planch. Liliaceae.  
 323539. *CROTON MEGALOCARPUS* Hutchinson Euphorbiaceae.  
 323540. *DOMBEYA MASTERSII* Hook. Sterculiaceae.  
 323541. *ERYTHRINA ABYSSINICA* Lam. Leguminosae. Coraltree.  
 323542. *ERYTHRINA* sp.  
 323543. *ERYTHRINA* sp.  
 323544. *FILICIMUM DECIPIENS* (Wight & Arn.) Thwaites Sapindaceae.  
 323545. *GARDENIA URCELLIFORMIS* Hiern Rubiaceae.  
 323546. *KIGELIA AETHIOPICA* Decne. Bignoniaceae.  
 323547. *MILLETTIA DURA* Dunn Leguminosae.  
 323548. *OLEA CHRYSOPHYLLA* Lam. Oleaceae.  
 323549. *PACHYRHIZUS TUBEROSUS* (Lam.) Spreng. Leguminosae. Yam-bean.

From El Salvador. Seeds presented by Benjamin J. Birdsall, Agency for International Development, American Embassy, San Salvador. Received Nov. 14, 1967.

'Jicama'.

**323550 to 323581. GLYCINE MAX (L.) Merr. Leguminosae. Soybean.**

From India. Seeds collected by Theodore Hymowitz, Agricultural Experiment Station, University of Illinois, Urbana, Illinois. Received Nov. 15, 1967.

323550. Col. No. H 67-1. Niglat, Nainital District. Elevation 5,300 feet.  
323551. Col. No. H. 67-2. Bumsyun, Nainital District. Elevation 4,000 feet.  
323552. Col. No. H 67-3. Bajina, Nainital District. Elevation 4,500 feet.  
323553. Col. No. H 67-4. Uprari, Nainital District.  
323553. Col. No. H 67-4. Uprari, Nainital District. Elevation 5,000 feet.  
323554. Col. No. H 67-5. Naini, Nainital District. Elevation 5,600 feet.  
323555. Col. No. H 67-6. Naini, Nainital District. Elevation 5,600 feet.  
323556. Col. No. H 67-7. Rieuni, Nainital District. Elevation 5,650 feet.  
323557. Col. No. H 67-8. Kapalkote, Nainital District. Elevation 6,000 feet.  
323558. Col. No. H 67-9. Deolikhan, Nainital District. Elevation 6,100 feet.  
323559. Col. No. H 67-10. Sitlakhhet, Nainital District. Elevation 7,000 feet.  
323560. Col. No. H 67-11. Boura Estate, Nainital District. Elevation 7,500 feet.  
323561. Col. No. H 67-12. Bari, Almora District. Elevation 3,900 feet.  
323562. Col. No. H 67-13. Sakar, Almora District. Elevation 4,100 feet.  
323563. Col. No. H 67-14. Parolia, Almora District. Elevation 3,300 feet.  
323564. Col. No. H 67-15. Bhawari, Almora District. Elevation 4,500 feet.  
323565. Col. No. H 67-16. Jeetap, Almora District. Elevation 4,850 feet.  
323566. Col. No. H 67-17. Kousani, Almora District. Elevation 5,500 feet.  
323567. Col. No. H 67-18. Falsim, Almora District. Elevation 5,900 feet.  
323568. Col. No. H 67-19. Pirsal, Almora District. Elevation 4,700 feet.  
323569. Col. No. H 67-20. Maniager, Almora District. Elevation 6,100 feet.  
323570. Col. No. H 67-21. Ladholi, Almora District. Elevation 6,300 feet.  
323571. Col. No. H 67-22. Dania, Almora District. Elevation 5,900 feet.  
323572. Col. No. H 67-23. Matila, Almora District. Elevation 4,500 feet.  
323573. Col. No. H 67-24. Chaukhni, Almora District. Elevation 4,800 feet.  
323574. Col. No. H 67-25. Salisanoli, Almora District. Elevation 3,600 feet.  
323575. Col. No. H 67-26. Niri, Almora District. Elevation 4,100 feet.  
323576. Col. No. H 67-27. Pan, Almora District. Elevation 4,600 feet.  
323577. Col. No. H 67-28. Naughari, Almora District. Elevation 4,200 feet.  
323578. Col. No. H 67-29. Hauli, Almora District. Elevation 4,700 feet.  
323579. Col. No. H 67-30. Deora Panee, Nainital District. Elevation 5,600 feet.

**323550 to 323581—Continued**

323580. Col. No. H 67-31. Panuwa Dokhan, Nainital District. Elevation 5,200 feet.

323581. 'Seoni Yellow'. Collected by P. L. Digarsey at Seoni, Madhya Pradesh.

**323582 to 323591.**

From Portugal. Seeds presented by Jardim e Museu Agricola do Ultramar, Lisbon. Received Nov. 15, 1967.

323582 to 323585. *ARACHIS HYPOGAEA* L. Leguminosae.

323582. Amendoim de Andalazia, Espanha.

323583. 'Amendoim Vermelho'.

323584. 'Spanish Bunch'.

323585. 'Virginia Bunch 335A'.

323586 and 323587. *GLYCINE MAX* (L.) Merr. Leguminosae. Soybean.

323586. 'Dobrangeana'.

323587. 'Sangora'.

323588. *HELIANTHUS MULTIFLORUS* W. Young Compositae.

323589 to 323591. *RICINUS COMMUNIS* L. Euphorbiaceae. Castorbean.

323589. 'Bomboniensis'.

323590. 'Cimanon'.

323591. 'Zanzibariensis'.

**323592 to 323605. *LINUM USITATISSIMUM* L. Linaceae.**

**Common flax.**

From Argentina. Seeds presented by Instituto Nacional de Tecnologia Agropecuaria, Estacion Experimental Agropecuaria, Parana, Entre Rios. Received Nov. 15, 1967.

323592. 'Buenos Aires 106'. High oil content.

323593. 'Lino Blanco 34-1-2'. Immune to all races of rust in Argentina.

323594. 'Mocoreta'. High oil content.

323595. 'Parana'.

323596. 'Puelche'.

323597. 'Rancagua'. Resistant to pasmo.

323598. 'Santa Catalina No. 6'.

323599. 'Taragui'. Resistant to lodging.

323600. 'Timbu'. Resistant to pasmo.

323601. 'Toba'.

323602. H677 F5-2-1-1-1. Immune to all races of rust in Argentina.

323603. H723 F3-6-3-4-2-2. Immune to all races of rust in Argentina.

323604. Hp.856 F6/60-8.

323605. 58 H13 b-1. Immune to all races of rust in Argentina.

**323606 to 323610. *TRITICUM AESTIVUM* L. Gramineae.**

From Australia. Seeds presented by the University of Sydney, Sydney. Received Nov. 15, 1967.

323606. 'Spica'.

**323606 to 323610—Continued**

323607. 'Steinwedel 2 × Khagli'.  
 323608. S2303-W2044.  
 323609. W150. Cowna No. 24.  
 323610. W176. Plowman No. 3.

**323611 and 323612.**

From England. Plants presented by George Jackman & Sons, Woking, Surrey. Numbered Nov. 16, 1967.

323611. *CORTADERIA SELLOANA* (Schantz) Aschers. & Graebn. Gramineae.  
 323612. *ROMNEYA TRICHOCLALYX* Eastw. Papaueraceae.

**323613 to 323616.**

From Denmark. Scions presented by University Botaniske Have, Copenhagen. Numbered Nov. 16, 1967.

323613. *HEDERA HELIX* f. *ARBORESCENS* (Loud.) Schneider Araliaceae.  
 323614. *HEDERA HELIX* f. *DELTOIDEA* (Hibberd) Tobler  
 323615. *HEDERA HELIX* var. *HIBERNICA* (Kirchn.) Jaeger  
 323616. *POTENTILLA* (hybrid) Rosaceae.  
 (*P. nepalensis* × *P. pennsylvanicum*)

**323617 to 323621.**

From Afghanistan. Seeds presented by J. B. Taylor, Department of Scientific and Industrial Research, Auckland, New Zealand. Pamirs Mountains. Elevation 7,000 to 8,000 feet. Received Nov. 16, 1967.

323617. *MALUS PUMILA* Mill. Rosaceae. Paradise apple.  
 No. 8. Serghlan Valley. Tree to 20 feet high.  
 323618 and 323619. *PYRUS COMMUNIS* L. Rosaceae. Common pear.  
 323618. No. 5. Baharak Valley. Tree to 20 feet high.  
 323619. No. 7. Serghalan Valley. Tree to 25 feet high.  
 323620. *ROSA* sp. Rosaceae.  
 No. 6. Baharak Valley. Shrub to 4 feet high.  
 323621. *VITIS* sp. Vitaceae.  
 No. 9. Baharak Valley. Vine.

**323622 to 323629.**

From the Union of Soviet Socialist Republics. Seeds presented by J. B. Taylor, Department of Scientific and Industrial Research, Auckland, New Zealand. Received Nov. 16, 1967.

323622. *ACER* sp. Aceraceae.  
 No. 2. Kazakhstan. Tree to 40 feet high. Leaves yellow in autumn.  
 323623. *ACER* sp.  
 No. 4. Kazakhstan. Tree to 15 feet high. Leaves red in autumn.  
 323624. *CORNUS* sp. Cornaceae.  
 No. 1. Kazakhstan. Shrub to 8 feet high. Berries blue.  
 323625. *COTONEASTER* sp. Rosaceae.  
 No. 13. Arboretum, Timiraysev Academy, Moscow. Shrub to 5 feet high.

## 323622 to 323629—Continued

323626 and 323627. *MALUS BACCATA* (L.) Moench Rosaceae.  
Siberian crabapple.

323626. No. 11. Arboretum, Timiraysev Academy, Moscow. Tree to 15 feet high. Fruit yellow.

323627. No. 12. (Received as *Malus baccata* var. *pallasiana*). Tree to 12 feet high.

323628. *MALUS PRUNIFOLIA* (Willd.) Borkh. Pearleaf crabapple.

No. 10. 'Kitaika Saninskaya'. Tree to 20 feet high.

323629. *MALUS PUMILA* Mill. Paradise apple.

No. 3. Kazakhstan. Tree to 20 feet high.

323630. *OXYPETALUM COERULEUM* (D. Don) Decne. Asclepiada-  
ceae.

From Portugal. Seeds presented by Ailsa Lambe, Banco do Algarve, Porti-  
mao, Algarve. Received Nov. 17, 1967.

323631. *OPIZIA STOLONIFERA* Presl Gramineae.  
Acapulco grass.

From Puerto Rico. Stolons presented by the Agricultural Experiment  
Station, Rio Piedras. Received Nov. 20, 1967.

323632 to 323649. *TRITICUM AESTIVUM* L. Gramineae.

From Yugoslavia. Seeds presented by Slavko Borojevic, Institute for Agri-  
cultural Research, Novi Sad. Received Nov. 20, 1967.

323632. NS-322. S-13 × Aobakomughi. Dwarf.

323633. NS-602. S-13 × Aobakomughi. Semidwarf.

323634. NS-732. S-13 × Aobakomughi. Dwarf.

323635. NS-735. S-13 × Aobakomughi. Semidwarf.

323636. NS-736. S-13 × Aobakomughi. Dwarf.

323637. NS-737. S-13 × Aobakomughi. Semidwarf.

323638. NS-611. Fortunato 2 × C1913170. Resistant to leaf rust.

323639. NS-622. Fortunato 2 × C1913170. Resistant to leaf rust.

323640. NS-175/1-1. [(U1 × Selkirk) × San Pastore] × Mara. Early.  
Very productive; resistant to leaf rust.

323641. Crvena Zvezda. [(U1 × Selkirk) × San Pastore] × Mara.  
Early. Very productive; resistant to leaf rust.

323642. ND-310. [(U1 × Selkirk) × San Pastore] × Mara. Early.  
Very productive; resistant to leaf rust.

323643. NS-314. [(U1 × Selkirk) × San Pastore] × Mara. Early  
Very productive; resistant to leaf rust.

323644. NS-439. [(U1 × Selkirk) × San Pastore] × Mara. Early.  
Very productive; resistant to leaf rust.

323645. NS-440. [(U1 × Selkirk) × San Pastore] × Mara. Early  
Very productive; resistant to leaf rust.

323646. NS-32. Heine VII × 129. Registered.

323647. Backa. Heine VII × 129. Registered.

323648. Panonija. Heine VII × 129. Registered.

323649. Brkulja-4. Mara × Funo. Registered.

**323650 to 323931.**

From the United States. Seeds collected in 1964-1966 by G. Viehmeyer, North Platte Experiment Station, North Platte, Nebr. Numbered Nov. 20, 1967.

**323650.** ACER GRANDIDENTATA Nutt. ex Torr. & Gray Aceraceae.

Col. No. V66-28. Eight miles northeast of Alpine, Wyoming, along U. S. Highways 26-89. Thicket forming maple spreading by natural layers.

**323651 and 323652.** AMELANCHIER ALNIFOLIA Nutt. ex Roemer Rosaceae. Serviceberry.

**323651.** Col. No. V64-422. Four miles east of Cedar City, Utah. Growing in alluvial fan at mouth of canyon. Common in area. Bush large, upright; leaves small.

**323652.** Col. No. V65-83. Fifteen miles north of Egnar, Colorado. Leaves smaller than the type.

**323653.** AMELANCHIER UTAHENSIS Koehne Serviceberry.

Col. No. V64-394. Four miles west of Escalante, Utah, on dry slope. Shrub; leaves small; fruit small.

**323654.** AMELANCHIER sp.

Col. No. V64-387. Northeast of Escalante, Utah, in desert. Small-leaved form, common in desert.

**323655.** AMELANCHIER sp.

Col. No. V64-429. Along Highway 14, east of Cedar City, Utah, in cool moist canyon. Leaves large; fruit sweet, black.

**323656.** AQUILEGIA CAERULEA James Ranunculaceae.

Colorado columbine.

Col. No. V66-12. Twelve miles southwest of Lander, Wyoming. Flowers large, white.

**323657.** ARTEMISIA sp. Compositae.

Col. No. V66-2. Ten miles north of Medicine Bow, Wyo. Low suffruticose plant; foliage gray. Similar to *A. tridentata*.

**323658.** ATRIPLEX sp. Chenopodiaceae.

Col. No. V66-3. Subshrub; gray green.

**323659.** BERBERIS HAEMATOCARPA Wooton Berberidaceae. Barberry.

Col. No. V66-80. One mile north of bridge over Colorado River, 6 miles south of Junction of Utah 128 and U. S. Highways 6 and 50.

**323660.** BERBERIS NEVINII var. HAEMATOCARPA (Wooton) Benson

Col. No. V64-393. Rocky south facing slope three miles west of Escalante, Utah. Evergreen; fruit red. May be host to black stem rust.

**323661 and 323662.** BETULA PAPYRIFERA var. COMMUTATA (Regel) Fern. Betulaceae.

**323661.** Col. No. V64-545. West of Escalante, Utah in red rocks.

**323662.** Col. No. V64-551. Two miles north of bridge on Calf Creek, Utah 17, south of Boulder.

**323663.** BUCKLEYA sp. Santalaceae.

Col. No. V64-500. Kansas. To 15 inches high; foliage glaucous.

**323664.** CELTIS OCCIDENTALIS L. Ulmaceae. Common hackberry.

Col. No. V64-516. Aqua Fria Wash, west of Arizona U. S. 79, one mile north of Dugas turnoff. Elevation 3,800 feet. Low tree; branches contorted; leaves small, thick.



## 323650 to 323931—Continued

323665. *CERCOCARPUS INTRICATUS* S. Wats. Rosaceae.

**Mountain mahogany.**

Col. No. V64-437. On cliff face along country road 9 miles above Kanarrville, Utah. Evergreen shrub, densely branched, compact, to 4 feet high and wide; leaves small, dark.

323666 to 323670. *CERCOCARPUS LEDIFOLIUS* Nutt. ex Torr. & Gray

323666. Col. No. V64-421. Four miles east of Cedar City, Utah in mouth of canyon growing along intermittent stream and on adjacent slopes. Evergreen shrub, large, to 12 feet high; fruit showy, many; foliage narrow, dark. Common in area.

323667. Col. No. V65-43. Dry slope south side of Bighorn Mountains along Wyoming Highway 16.

323668. Col. No. V65-71. Along U. S. 89, Kiabab Forest, Arizona.

323669. Col. No. V65-79. Eight miles east of Bitter Springs, Arizona, along U. S. 89. Very dry site.

323670. Col. No. V65-92. Black Box Canyon, 12 miles west, 4 miles south Green River, Utah.

323671. *CERCOCARPUS MONTANUS* Raf.

Col. No. V64-470. On rocky slope 2½ miles south of Colorado-Wyoming line on Highway 287.

323672 to 323675. *CHAMAEBATIARIA MILLEFOLIUM* (Torr.) Maxim. Rosaceae. **Fern bush.**

323672. Col. No. V64-523. South rim of Grand Canyon.

323673. Col. No. V64-553. Twenty-four miles north of Bryce Canyon Park on Utah 22 where road enters Otter Creek Canyon.

323674. Col. No. V64-554. Twenty-one miles north of Panguitch, Utah, Highway 89; cliff base west side of road. Sievar River Valley.

323675. Col. No. V64-559. Park Service Headquarters, south rim Grand Canyon, Ariz., growing in rocks and poor soil. Shrub, upright, to 6 feet high; leaves finely divided; flowers in panicles, borne terminally of current season's wood, white.

323676. *COREOPSIS* sp. Compositae.

Col. No. V66-70. Forty-five miles southeast of Castle Dale, Utah. Flowers large, bright yellow. Common on upland.

323677 to 323679. *CORNUS STOLONIFERA* Michx. Cornaceae. **Dogwood.**

323677. Col. No. V64-419. Six miles east of Cedar City, Utah, in moist, deep canyon. Clump 4 feet high, 20 feet wide; good bark color. Some resistance to leaf spot.

323678. Col. No. V65-46. Along U. S. 89 just inside numbered entrance to Lewis and Clark National Forest, Mont.

323679. Col. No. V66-58. At forks by ranger station near top of pass, Utah 31, Bear Creek Canyon.

323680 to 323687. *COWANIA MEXICANA* D. Don Rosaceae. **Cliff rose.**

323680. Col. No. V65-53. Among sage brush along forest road 5 miles south of Forest Service building, Fredonia, Ariz., on logging road. Evergreen shrub, upright; flowers 1 inch across, white.

323681. Col. No. V65-57. Kiabab Plateau, Ariz., along U. S. 89. Elevation 8,000 feet. Tall; flowers 1 inch across, medium yellow.

323682. Col. No. V65-70. Along logging road 17 miles south of Fredonia, Ariz., on road to Kiabab.

## 323650 to 323931—Continued

## 323680 to 323687—Continued

323683. Col. No. V65-77. Black Box Canyon, 12 miles west, 4 miles south of Green River, Utah, on very dry site.
323684. Col. No. V65-94. Kiabab Plateau, Ariz., near hybrid plants of *Cowania* and *Fallugia*.
323685. Col. No. V66-72. Sixty-six miles southeast from Castle Dale on north-facing slope in San Rafael Swell, Utah. Evergreen, flowers large.
323686. Col. No. V66-75. San Rafael Swell, 69 miles southeast of Castle Dale, Utah.
323687. Col. No. V64-504. Grand Canyon National Park, Ariz.
323688. *CUPRESSUS ARIZONICA* Greene Pinaceae. Arizona cypress.  
Col. No. V64-521. Above Sedona, Ariz., Schnebly Hill Road. At upper limit of range. Elevation 6,000 feet.
323689. *DASYLIRION LEIOPHYLLUM* Engelm. ex Trel. Liliaceae.  
Col. No. V64-560. 'Sotol'. Rocky desert, Davis Mountains. Elevation 6,000 feet. Rosette of narrow saw-toothed leaves to 30 inches long; flower stalk to 12 feet high.
323690. *DELPHINIUM NELSONII* Greene Ranunculaceae.  
Col. No. V65-26. Thirty-eight miles south of Evanston, Wyo., 1 mile west of north entrance to Wasatch National Forest. Low with tuberous root; flowers dark with white beard.
323691. *DELPHINIUM* sp.  
Col. No. 64-444. 'Larkspur'. Fifteen miles above Kanarraville, Utah in dry mountain meadow in dense stand of plants. Common on mesa top on road between Kanarraville and Zion Park. To 7 feet high; foliage coarse; flowers blue with white beard.
323692. *DELPHINIUM* sp.  
Col. No. V64-463. Forty-two miles north of Durango along Colorado 550. Elevation 9,000 feet. To 5 feet high; leaves deeply notched.
323693. *ERIOGONUM* sp. Polygonaceae.  
Col. No. V64-405. Twenty miles west of Escalante, Utah, along Utah 54. Roundtopped, 24 inches by 18 inches; perianths brilliant yellow, in 2 to 3 inch umbels. Mound of brilliant yellow when in full fruit.
323694. *ERIOGONUM* sp.  
Col. No. V64-406. In road ditch 20 miles west of Escalante, Utah. Small plants without bloom. Possibly same as P.I. 323693, foliage larger and fleshier.
323695. *ERIOGONUM* sp.  
Col. No. V64-546. Dead Mare Wash, west of Escalante, Utah 54. Subshrub, 2 inches high, 2 feet wide; flowers brilliant yellow.
- 323696 to 323699. *FALLUGIA PARADOXA* (D. Don) Endl. Rosaceae.
323696. Col. No. V64-477. East of Escalante, Utah, along Highway Utah 54.
323697. Col. No. V65-68. 'Apache Plume'. North side Kiabab Plateau, Ariz. Low shrub.
323698. Col. No. V65-81. Five miles south of The Gap, Ariz. in sagebrush hills.

## 323650 to 323931—Continued

## 323696 to 323699—Continued

323699. Col. No. V65-87. Seventeen miles south of Fredonia on forestry road to Kiabab Forestry, Ariz.

323700. *FENDLERA RUPICOLA* Engelm. & Gray Saxifragaceae.

Col. No. V65-56. North of Egnar, Colorado, along Colorado 80. Shrub, upright.

323701 to 323707. *FRAXINUS ANOMALA* Torr. ex Wats. Oleaceae.

323701. Col. V64-398. Five miles west of Escalante, Utah, in talus at base of sandstone cliff.

323702. Col. No. V64-515. Seven Springs campground. Tree to 65 feet high.

323703. Col. No. V64-548. Utah 54 south of Escalante River crossing.

323704. Col. No. V65-72. 'One leaf ash'. Three miles north of Bluff, Utah, on rocky cliff.

323705. Col. No. V65-75. 'One leaf ash'. Eleven miles north of Egnar, Colo. on sandstone slope. To 15 inches high; caps large; foliage thick, glaucous; sessile obovate, leaves slim, obovate.

323706. Col. No. V65-78. Black Box Canyon, 12 miles west, 4 miles south, Green River, Utah.

323707. Col. No. V66-66. Twenty-one miles southeast of Castle Dale Road to San Rafael swell.

323708. *GERANIUM* sp. Geraniaceae.

Col. No. V65-52. 'Wild geranium'. Southwest slope of Bighorn Mountains on Wyoming 117. Flowers deep purple rose, good.

323709. *HEUCHERA EASTWOODIAE* C. O. Rosend. Butters & Lakela Saxifragaceae.

Col. No. V64-535. East of tunnel, Zion National Park. Pubescent leaves and petioles. Flowers green.

323710 to 323712. *JUNIPERUS MONOSPERMA* (Engelm.) Sarg. Pinaceae.  
Cherrystone juniper.

323710. Col. No. V66-55. Five miles east of Hiawatha, Utah, in sand along Utah 122.

323711. Col. No. V66-56. Five miles east of Hiawatha, Utah, in sand along Utah 122.

323712. Col. No. V66-64. Juniper stand on very dry exposed ledges 12 miles east of Castle Dale, Utah. San Rafael Swell road.

323713. *JUNIPERUS* sp.

Col. No. V64-518. 'Alligator Juniper'. On Mogollon Rim above Sedona, Ariz.

323714. *JUNIPERUS* sp.

Col. No. V65-47. Sweetgrass hills, 28 miles east of Sweetgrass, Mont. Low horizontal type.

323715. *LIRIODENDRON TULIPIFERA* L. Magnoliaceae. Tulip tree.

Col. No. V64-487. 'Tulip tree'. 2151 Arapahoe, Boulder, Colo.

323716 to 323719. *LONICERA INVOLUCRATA* (Richards.) Banks Caprifoliaceae.  
Honeysuckle.

323716. Col. No. V64-461. Along Colorado 550, 42 miles north of Durango, about 2 miles south of Silverton. Elevation 9,000 feet. Compact, 3 feet high by 15 feet wide; fruit in twin berried clusters, black.

## 323650 to 323931—Continued

## 323716 to 323719—Continued

323717. Col. No. V66-18. Half Moon Lake near Pinedale, Wyo. Good plant growing in full sun.

323718. Col. No. V66-35. Nine miles south of Evanston, Wyo., in wet meadow, full sun. Spreading, 2 feet high by 7 feet wide.

323719. Col. No. V66-43. Two miles east of Hanna, Utah, along irrigation ditch.

## 323720 to 323722. MAHONIA REPENS (Lindl.) G. Don Berberidaceae.

Creeping mahonia.

323720. Col. No. V64-350. 'Oregon grape'. Three miles west of Glenwood Springs, Colo., under pines and in full sun. Foliage good; in fruit.

323721. Col. No. V64-489. One mile south of Curie Health Springs road along Left Hand Creek road south slope, full sun, above Lyons, Colo. To 8 inches high; rapidly spreading by rhizomes; very free fruiting.

323722. Col. No. V66-21. Ten miles north of Junction of Highways 187 and 189, west of Pinedale, Wyo., on dry sagebrush slope in full sun without wind protection.

## 323723 and 323724. MIRABILIS MULTIFLORA (Torr.) A. Gray Nyctaginaceae.

323723. Col. No. V64-501. Two miles east of Portland, Colo.

323724. Col. No. V64-505. Cheyenne Horticultural Field Station.

## 323725. MONARDA FISTULOSA L. Labiatae.

Wildbergamot.

Col. No. V65-48. Upland slope, Okatos, Alberta, Canada. Flower heads extra large.

## 323726. OENOTHERA MISSOURIENSIS Sims. Onagraceae.

Col. No. V64-495. 'Evening primrose'. Prairie Gem Ranch owned by Claude Ban, Smithville, S. Dak. Gumbo soil; stems decumbent; flowers 3 to 4 inch, yellow; leaves lanceolate, pubescent; pods large, 2 to 3 inch, winged.

## 323727. OENOTHERA SERRULATA Nutt.

Col. No. V64-392. 'Sun drops'. Three miles west of Escalante, Utah. Low, suffruticose; flowers yellow; long blooming.

## 323728 to 323730. PACHYSTIMA MYRSINITES (Pursh) Raf. Celastraceae.

323728. Col. No. V64-418. Six miles east of Cedar City, Utah, growing in areas of above average moisture. Leaves shiny, green.

323729. Col. No. V64-532. East of tunnel, Zion National Park, Utah. To 2 feet high.

323730. Col. No. V66-11. Twelve miles southwest of Lander, Wyo., full sun, west-facing bank, dry site.

## 323731. PEDICULARIS CRENULATA Benth. Scrophulariaceae.

Col. No. V66-85-66. Along Wyoming 230, east of Woods Landing, Wyoming. Flowers purple; alleged to be partial parasite.

## 323732. PENSTEMON ALBIDUS Nutt. Scrophulariaceae.

Col. No. V64-337. One mile north of Wray, Colo., sandy soil. Ornamental; to 15 inches high; flowers white. Leaf margins serrate or entire.

## 323733. PENSTEMON ALPINUS Torr.

Col. No. V65-49. Roadside, Bighorn Mountains, on Highway 14, 24 miles southwest of Sheridan, Wyo.

## 323650 to 323931—Continued

323734. *PENSTEMON ANGUSTIFOLIUS* Nutt. ex Pursh

Col. No. V64-338. Sandy soil 15 miles south of Yuma, Colo. Foliage glaucous; leaves lanceolate; flowers blue.

323735 and 323736. *PENSTEMON AURIBERBIS* Pennell

323735. Col. No. V64-558. Three miles east of Canyon City, Colo., Highway 50.

323736. Col. No. V65-42. East of Canyon City, Colo., along U. S. 50. Flowers low, purple.

323737. *PENSTEMON BARBATUS* ssp. *TORREYI* (Benth.) Keck

Col. No. V64-369. Along Utah 117 near divide south of Teasdale, Utah. Flowers red, slender stemmed.

323738 to 323741. *PENSTEMON BRIDGESII* A. Gray.

323738. Col. No. V64-380. High ridge on Utah 117 south of Boulder, Utah. Plants old, large; growing in roadside ditch. Winter hardy.

323739. Col. No. V64-424. Four miles east of Cedar City, Utah, in rocky wash along Utah 14.

323740. Col. No. V64-438. County Road 11 miles above Kanarrville, Utah.

323741. Col. No. V64-454. East end of tunnel leaving Zion National Park, Utah.

323742. *PENSTEMON BUCKLEYI* Pennell

Col. No. V64-384. In dune sand along Utah 117 northeast of Esclante, Utah. Foliage glaucous, lanceolate; stems stiff, upright, to 2 feet high; flowers blue, seed black.

323743 and 323744. *PENSTEMON CAESPITOSUS* Nutt. ex A. Gray

323743. Col. No. V64-408. Dry desert prairie 8 miles west of Bryce Canyon National monument and in pines on adjacent hillsides; very common at this site, north of Utah 12. Rock plant, low, 1 inch high, 12 inches across; flowers small, blue, in leaf axils. Staminode bearded.

323744. Col. No. V65-16. One mile west of Burnt Fork, Wyo. Prostrate, free flowering.

323745. *PENSTEMON LINARIOIDES* A. Gray subsp. *COMPACTIFOLIUS* Keck

Col. No. V65-17. Four miles northwest of Lone Tree, Wyo., alluvial soil of intermittent stream. Prostrate, flowers blue.

323746. *PENSTEMON CLUTEI* A. Nels.

Col. No. V64-522. Sunset Crater National Monument, Ariz., growing in cinders. To 30 inches high; glaucous, foliage serrate; flowers rose.

323747. *PENSTEMON COMARRHENUS* A. Gray

Col. No. V64-373. High elevations between Teasdale and Escalante, Utah. Plants tall; basal rosettes good, flower pedicels long.

323748. *PENSTEMON CRANDALLII* ssp. *GLABRESCENS* (Pennell) Keck

Col. No. V64-499. Dry valley 15 miles northwest Saguache, Colo. Plant low; flowers small, pale blue; foliage slender, greyish.

323749 to 323755. *PENSTEMON EATONII* A. Gray

323749. Col. No. V64-374. In weathered sandstone  $\frac{1}{2}$  mile south of Boulder, Utah. Stems coarse; leaves rough, lanceolate; flowers tubular, red.

323750. Col. No. V64-426. Four miles east of Cedar City, Utah. Foliage rough, dull green; leaves lanceolate, flowers red.

## 323650 to 323931—Continued

## 323749 to 323755—Continued

323751. Col. No. V64-547. River crossing on Highway 54 south of Escalante, Utah.
323752. Col. No. V65-28. 'Scarlet bugler'. Deer Creek Reservation, 4 miles above Wildwood, Utah, on talus at cliff base.
323753. Col. No. V65-29. Fishlake Road, 7 miles southwest of Salina, Utah. Flowers red.
323754. Col. No. V66-46. Five miles north of U. S. 40 along Utah 208. Near northeast range of species.
323755. Col. No. V66-50. Two miles below Soldier Summit, Utah, north of Highways 6 and 50. Flowers red.
323756. *PENSTEMON EATONII* ssp. *UNDOSUS* (M. E. Jónes) Keck  
Col. No. V64-378. 'Scarlet bugler'. In sand 5 miles south of Boulder, Utah.
323757. *PENSTEMON FREMONTII* Torr. & Gray  
Col. No. V65-11. Dry wash along Highway 318, northwest of Sunbeam, Colorado. Low *Habroanthus*; leaves pubescent.
323758. *PENSTEMON GLABER* Pursh Scrophulariaceae.  
Col. No. V64-478. Cheyenne Horticultural Field Station. Combines longevity with good plant habit. Good dark blue form.
323759. *PENSTEMON HAVARDII* A. Gray Scrophulariaceae.  
Col. No. V64-510. Chisos Mountains, Big Bend National Park, Tex. Elevation 6,000 feet. Tall; leaves broad, glaucous; flowers red.
- 323760 and 323761. *PENSTEMON LARICIFOLIUS* ssp. *EXILIFOLIUS* (A. Nels.) Keck  
323760. Col. No. V64-472. Road ditch along Highway 287, 2 miles northwest of Tie Siding, Wyo. Cespitose perennial to 1 inch high; leaves linear, bright green; flower stems to 6 inches high; flowers white.
323761. Col. No. V66-1. Ten miles north of Medicine Bow, Wyo. Low plant with cespitose crown; fruiting culms to 6 inches; florets lavender.
- 323762 and 323763. *PENSTEMON LEIOPHYLLUS* Pennell  
323762. Col. No. V64-412. One mile west of Utah 14 and U. S. 89 junction. Foliage glaucous.
323763. Col. No. V64-414. Seventeen miles west of Utah 14 and U. S. 14 and U. S. 89 junction, in spruce-fir association, Utah. High elevation. Upright; leaves very smooth. May be *P. laevis*. Blue-flowered species belonging in Section *Habroanthus*.
- 323764 to 323766. *PENSTEMON LINARIOIDES* A. Gray  
323764. Col. No. V64-423. In mouth of canyon, four miles east of Cedar City, Utah. Low, spreading; flowers blue; foliage fine.
323765. Col. No. V64-464. Seven miles north of Cedaredge, Colo., on backslope of highway 65; also in adjacent pastures among trees and shrubs. Rock plant; low, spreading; flowers axillary, blue, long blooming.
323766. Col. No. V64-557. Thirty-five miles east of Durango, Colo., Highway 160.
323767. *PENSTEMON LINARIOIDES* ssp. *OMPACTIFOLIUS* Keck  
Col. No. V64-519. Mogollon Rim, Schnebly Hill Road above Sedona, Ariz.

## 323650 to 323931—Continued

323768. *PENSTEMON MENSARUM* Pennell

Col. No. V64-467. North slope of Grand Mesa, 31 miles south of Cedar-edge, Colo.

323769 to 323772. *PENSTEMON OUSTERHOUTII* Pennell

323769. Col. No. V64-342. Eight miles southwest of Gypsum, Colo., in overgrazed pasture, pinon-juniper association. Foliage glaucous, stems stiff, upright.

323770. Col. No. V64-347. Three miles west Glenwood Springs, Colo., south-facing slope in stand of Gambell's oak. Slender, upright; fruit borne on long pedicles.

323771. Col. NA. V65-76. Eighteen miles north of Egnar, Colo., along highway, growing in weathered sandstone. To 20 inches high; foliage thick, glaucous; leaves obovate.

323772. Col. No. V65-82. East slope Mt. Ellen, 20 miles south of Hands-ville, Utah. Plant low, glaucous; stems stiff, upright.

323773 to 323776. *PENSTEMON PALMERI* A. Gray Palmer penstemon.

323773. Col. No. V64-425. Rocky wash along Utah 14, four miles east of Cedar City, Utah. Plant tall, glaucous; leaves uniformly connate cauline.

323774. Col. No. V64-436. Rocky road 8 miles above Kanarraville, Utah.

323775. Col. No. V64-450. Oak Creek Canyon, Zion National Park, Utah.

323776. Col. No. V64-525. Eight miles north of Kanab, Utah.

323777 and 323778. *PENSTEMON SCARIOSUS* Pennell

323777. Col. No. V64-453. Beyond east end of tunnel on Utah 15 leaving Zion Park, Utah.

323778. Col. No. V64-456. Near summit east of Zion National Park tunnel on Highway 15, Utah.

323779 and 323780. *PENSTEMON SECUNDIFLORUS* Benth. in DC.

323779. Col. No. V64-484. Two miles east of junction of Colorado Highways 72 and 119, west of Denver, Colo.

323780. Col. No. V65-9. One and one-half miles north of Big Creek Ranch, Highway 230, Wyo.

323781 to 323794. *PENSTEMON STRICTUS* Benth.

323781. Col. No. V64-344. Twenty miles southwest of Gypsum, Colo- rado, Cottonwood Pass road. Upright; flowers dark blue.

323782. Col. No. V64-365. Sand, eight miles south of Teasdale, Utah. Foliage glaucous; rosette stage, no bloom.

323783. Col. No. V64-366. Sandy soil, 8 miles southeast of Teasdale, Utah. Stems upright; flowers blue; corolla 0.8 inches long, bracts tiny, erose; anthers woolly, staminoide, glabrous.

323784. Col. No. V64-370. Fifteen miles east of Escalante, Utah, along Utah 117.

323785. Col. No. V64-458. Twelve miles north of Durango, Colo., along Colorado 550. Mat forming.

323786. Col. No. V64-459. Eighteen miles north of Durango, Colo., along Colorado 550.

323787. Col. No. V64-465. Seven miles north of Cedaredge, Colo., on backslope of Colorado 65.

## 323650 to 323931—Continued

## 323781 to 323794—Continued

323788. Col. No. V64-466. One mile north of Cedaredge, Colo., on back-slope of Colorado 65 in rocks and clay.

323789. Col. No. V65-6. Rocky bank 3 miles west of Woods Landing, Wyo.

323790. Col. No. V65-8. One and one-half miles north of Big Creek Ranch, Wyo., along Highway 230.

323791. Col. No. V65-90. West slope of Uncompahgre Plateau, Colo. Elevation 8,000 feet. Flowers dark.

323792. Col. No. V66-19. Half Moon Lake near Pinedale, Wyo.

323793. Col. No. V66-81. Thirty-seven miles north of Loma, Colo., on Colorado 139.

323794. Col. No. V66-82. U. S. 40, west side of Rabbit Ear Pass, Colo. Elevation 7,200 feet.

323795. *PENSTEMON UNILATERALIS* Rydberg

Col. No. V64-565. Three miles east of Nederland, Colo.

323796 to 323798. *PENSTEMON UTAHENSIS* Eastw.

323796. Col. No. V64-376. Sandy wash 5 miles south of Boulder, Utah. Foliage glaucous; stems to 15 inches; leaves lanceolate.

323797. Col. No. V64-396. Four miles west of Escalante, Utah, along Highway 54. Plant low; basal leaves glaucous, oblanceolate.

323798. Col. No. V64-400. Five miles west of Escalante, Utah, on sandstone cliff face. Plant long lived; flowering scapes 30 inches long; leaves glaucous, margins entire.

323799. *PENSTEMON VIRENS* Pennell ex Rydb.

Col. No. V64-448. Eight miles south of Kanarraville on road to Zion National Park, Utah. To 2 feet high; leaves smooth, glossy, green, outer ends obscurely serrate; flowers blue in dense clusters; lower bracts leaflike, the upper tiny. Attractive.

323800 and 323801. *PENSTEMON WATSONII* A. Gray

323800. Col. No. V64-368. Along Utah 117 between Teasdale and Boulder, Utah, rocky soil. High elevation. To 18 inches high, mint clustered; flowers dark blue, in dense clusters.

323801. Col. No. V64-371. Along Utah 117 between Bicknell and Escalante, Utah. High elevation. Common in dry mountain meadows. To 18 inches high; flowers small, small, blue, in clusters.

323802. *PENSTEMON WHIPPLEANUS* A. Gray

Col. No. V66-83. U. S. 40, west side of Rabbit Ear Pass, Colorado. Elevation 7,200 feet. Flowers white.

323803. *PENSTEMON* sp.

Col. No. V64-343. Cottonwood Pass road southwest of Gypsum, Colorado, in overgrazed pasture. Mint cluster. Possibly same as P.I. 303456; not genetically distinct.

323804. *PENSTEMON* sp.

Col. No. V64-346. Three miles west of Glenwood Springs, Colorado; south slope in stand of Gambell's oak. Foliage glaucous; stems to 30 inches; seed large, light brown; leaves ovate-lanceolate.

323805. *PENSTEMON* sp.

Col. No. V64-358. Sunglow Park, 3 miles east of Bicknell, Utah. Basal foliage spatulate, glaucous; seed stalks upright.



## 323650 to 323931—Continued

## 323806. PENSTEMON sp.

Col. No. V64-359. Sunglow Park, 3 miles east of Bicknell, Utah. Plant low, glaucous; foliage narrow, to 7 inches high.

## 323807. PENSTEMON sp.

Col. No. V64-377. Seven miles south of Boulder, Utah, along Utah 117, in sandy soil. Plant low; foliage glaucous, lanceolate, mat forming; seed large, black.

## 323808. PENSTEMON sp.

Col. No. V64-395. Four miles west of Escalante, Utah, along Highway 54. Leaves basal, lanceolate, deep green; stalks upright; seed large, black.

## 323809. PENSTEMON sp.

Col. No. V64-397. Five miles west of Escalante, Utah, along Utah 54. Leaves low rosette, lanceolate.

## 323810. PENSTEMON sp.

Col. V64-402. Eight miles west of Escalante, Utah, along Utah 54. In rosette and fruiting stage. Possibly *P. barbatus*.

## 323811. PENSTEMON sp. Scrophulariaceae.

Col. No. V64-407. Twenty miles west of Escalante, Utah; dry overgrazed pasture. Basal rosettes dark green; flowers blue.

## 323812. PENSTEMON sp.

Col. No. V64-409. Red canyon east of first tunnel on Utah 12 west of Escalante, Utah. Plant low; foliage glaucous.

## 323813. PENSTEMON sp.

Col. No. V64-428. East of Cedar City, on rocky banks along Utah 14. To 2 feet high; stems in clumps, many, red; foliage shiny bright green; leaves lanceolate, undulate margins.

## 323814. PENSTEMON sp.

Col. No. V64-439. Eleven miles above Kanarraville, Utah, on road to Zion National Park. Foliage glaucous; spikes strict.

## 323815. PENSTEMON sp.

Col. No. V64-441. Twelve miles above Kanarraville, Utah. To 40 inches high; foliage glaucous; leaves not perfoliate.

## 323816. PENSTEMON sp.

Col. No. V64-447. Fifteen miles southeast of Cedar City, Utah, on road to Zion National Park. Tall; foliage glaucous.

## 323817. PENSTEMON sp.

Col. No. V64-451. Oak Creek Canyon, Zion National Park, Utah.

## 323818. PENSTEMON sp.

Col. No. V64-468. One mile inside north entrance to Grand Mesa National Forest in boulder field along old Colorado 65.

## 323819. PENSTEMON sp.

Col. No. V64-474. West of Cheyenne, Wyo., 9 miles east of Happy Jack Recreation Area on Happy Jack Road. Low, mat forming; drought tolerant. Possibly *P. rydbergii*.

## 323820. PENSTEMON sp.

Col. No. V64-479. Two miles east of Vail, Colorado, along U. S. 6. Low, mat forming.

## 323650 to 323931—Continued

## 323821. PENSTEMON sp.

Col. No. V64-483. Fifteen miles west of Denver, Colo., along Highway 72. Narrow leaved.

## 323822. PENSTEMON sp.

Col. No. V64-486. Along James Creek above Lyons, Colo. To 30 inches high; flowers blue. Resembles *P. unilateralis*.

## 323823. PENSTEMON sp.

Col. No. V64-490. Five miles east of junction of Colorado Highways 72 and 119 in rocky soil. Colorado. Stems ascending; flowers blue. Resembles *P. glaber*.

## 323824. PENSTEMON sp.

Col. No. V64-491. Southwest facing rocky slope, Colorado, Highway 72. Low, mat forming; flowers mint cluster.

## 323825. PENSTEMON sp.

Col. No. V64-493. Left Hand Creek road above Lyons, Colo. Resembles *P. glaber*.

## 323826. PENSTEMON sp.

Col. No. V64-502. Sandia Crest Road, Cibola National Forest, N. Mex. Elevation 10,000 feet. Perennial, low, mat forming.

## 323827. PENSTEMON sp.

Col. No. V64-526. Eight miles north of Kanab, Utah, in sand. Tall; foliage green; flowers blue.

## 323828. PENSTEMON sp.

Col. No. V64-527. Zion National Park, Utah, red rock.

## 323829. PENSTEMON sp.

Col. No. V64-533. East of tunnel, Zion National Park, Utah. Tall; leaves scabrous, turning red in fall.

## 323830. PENSTEMON sp.

Col. No. V65-7. West of Woods Landing, Wyo., 1 mile east of entrance to Chimney Park, second camp, gravelly roadside. To 8 inches high; flowers light blue; lobes large, open faced.

## 323831. PENSTEMON sp.

Col. No. V65-21. Three miles southeast of Evanston, Wyo. To 18 inches high; flowers interrupted spikes, dark blue; foliage slightly glaucous.

## 323832. PENSTEMON sp.

Col. No. V65-25. North of Uintas, 35 miles south of Evanston, Wyoming, along Utah 150. To 18 inches high; flowers interrupted spikes, sky blue; foliage slightly glaucous.

## 323833. PENSTEMON sp.

Col. No. V65-27. One-fourth mile east of Coop Creek, along Utah 150. Low, mat forming.

## 323834. PENSTEMON sp.

Col. No. V65-30. Fish Lake Road, 7 miles southwest of Salina, Utah. Low scabrous; foliage glaucous; flowers pale blue.

## 323835. PENSTEMON sp.

Col. No. V65-33. Five miles northeast of Fremont, Utah. To 20 inches high; leaves thick, broad, glaucous; flowers blue to lavender.

## 323650 to 323931—Continued

323836. *PENSTEMON* sp.

Col. No. V65-67. South of Fredonia, Ariz., along U. S. 89. Medium high; foliage glaucous.

323837. *PENSTEMON* sp.

Col. No. V65-69. Twelve miles southeast of Panguitch, Utah, along Utah 12, Red Canyon recreation area. Low, glaucous, spreading by short rhizomes.

323838. *PENSTEMON* sp.

Col. No. V66-10. South of Lander, Wyo., on a gravelly southeast slope. Flowers blue.

323839. *PENSTEMON* sp.

Col. No. V66-15. Near Boulder, Wyo. Flowers mint clustered; blue.

323840. *PENSTEMON* sp.

Col. No. V66-27. Eighteen miles northeast of Alpine, Wyo., along U. S. Highway 26 and 89. Flowers blue.

323841. *PENSTEMON* sp.

Col. No. V66-36. Two miles south of Wyoming state line, along Utah 150. Flowers blue.

323842. *PENSTEMON* sp.

Col. No. V66-39. Above Kamas, Utah, along Utah 150. Plant suffruticose.

323843. *PENSTEMON* sp.

Col. No. V66-40. Five miles east of Woodland, Utah, along Utah 35.

323844. *PENSTEMON* sp.

Col. No. V66-41. Seven miles east of Woodland, Utah, along Utah 35.

323845. *PENSTEMON* sp.

Col. No. V66-42. East of summit on Utah 35.

323846. *PENSTEMON* sp.

Col. No. V66-44. Along Utah 208, 4 miles north of junction with U. S. 40. Foliage glaucous; leaves entire; browsed by deer.

323847. *PENSTEMON* sp.

Col. No. V66-47. Along country road on west side of Strawberry Lake, Utah, south of U. S. 40. To 20 inches high; pubescent; not conspicuously second; flowers blue.

323848. *PENSTEMON* sp.

Col. No. V66-48. Along road south of U. S. 40, 6 miles south of Strawberry Lake, Utah, in rocky soil among aspen. To 16 inches high; second; flowers bright blue.

323849. *PENSTEMON* sp.

Col. No. V66-49. One mile south of pass over mountain range that lies between U. S. 40 and U. S. 50 and 6 miles south of Strawberry Lake, Utah. Elevation 6,500 feet.

323850. *PENSTEMON* sp.

Col. No. V66-51. Three miles below Soldier Summit, Utah, north of U. S. Highways 6 and 50.

323851. *PENSTEMON* sp.

Col. No. V66-54. Five miles east of Hiawatha, along Utah 122. Foliage glaucous; browsed by deer.

## 323650 to 323931—Continued

323852. *PENSTEMON* sp.

Col. No. V66-57. Bear Creek Canyon, 10 miles west of Huntington, Utah, along Utah 31. Mint cluster.

323853. *PENSTEMON* sp.

Col. No. V66-60. Six miles east of pass, along Utah 31. Flowers blue; secund.

323854. *PENSTEMON* sp.

Col. No. V66-61. Near pass, along Utah 31, in full sun. To 2 feet high; flowers bright blue; spike secund.

323855. *PENSTEMON* sp.

Col. No. V66-63. Along Utah 29, east slope of range 20 miles above Orangeville, Utah. Flowers blue.

323856 and 323857. *PERAPHYLLUM RAMOSISSIMUM* Nutt. ex Torr. & A. Gray  
Rosaceae.

323856. Col. No. V64-446. 'Squaw apple'. Fifteen miles above Kanarraville, Utah, along route to Zion National Park. Shrub, low; branches arching.

323857. Col. No. V65-62. 'Squaw apple'. South of Panquitch, Utah, along U. S. 89. Shrub.

323858. *PHILADELPHUS MICROPHYLLUS* A. Gray Saxifragaceae.

Col. No. V64-563. 'Mock orange'. Bright Angel Trail, Grand Canyon National Park, Arizona. Elevation 8,300 feet. Shrub, small.

323859. *PHLOX* sp. Polemoniaceae.

Col. No. V65-20. Dry wash, 4 miles northwest Lone Tree, Wyo. Perennial, caespitose; flowers white.

323860. *PHLOX* sp.

Col. No. V65-34. Thirteen miles northeast of Fremont, Utah. Low, mat forming; flowers pink.

323861 and 323862. *PINUS FLEXILIS* James Pinaceae. Limber pine.

323861. Col. No. V64-473. West of Cheyenne, Wyo., along Happy Jack road about 1 mile west of Happy Jack sports area.

323862. Col. No. V64-476. Two miles southeast of Pine Bluffs, Wyo.

323863 and 323864. *PLATANUS WRIGHTII* S. Wats. Platanaceae.

323863. Col. No. V64-517. Aqua Fria Wash, Ariz., west of U. S. 79, one mile north of Dugas turnoff. Elevation 3,800 feet.

323864. Col. No. V64-520. Seven Springs Campground, north of Cave Creek, Ariz.

323865. *POPULUS FREMONTII* var. *WISLIZENI* S. Wats. Salicaceae.

Col. No. V66-68. Along washes in San Rafael Swell area 25 miles southeast Castle Dale, Utah. Desert cottonwood. Seed germinated in 24 hours.

323866. *POTENTILLA ANSERINA* L. Rosaceae.

Col. No. V66-86. East of Woods Landing, along Wyoming 230. Very silvery form.

323867 to 323869. *POTENTILLA FRUTICOSA* L. Shrubby cinquefoil.

323867. Col. No. V64-488. Two miles east of Junction of Colorado Highways 72 and 119, dry hillside. Shrub, low; flowers yellow.

323868. Col. No. V65-44. At Medicine Wheel National Monument, Big-horn Mountains, Wyo. Very dwarf, spreading habit; 2 to 6 inches high by 12 to 18 inches wide.

## 323650 to 323931—Continued

## 323867 to 323869—Continued

323869. Col. No. V65-91. Columbine Pass, Uncompahgre Plateau, Colo. Elevation 10,000 feet. Foliage pubescent; flowers large.

323870. *POTENTILLA* sp.

Col. No. V64-471. Dry, rocky, south slope among mountain mahogany and juniper; two miles south of Colorado-Wyoming line along Highway 287. Low, spreading by rhizomes; leaves pinnate; flowers small, yellow.

323871. *POTENTILLA* sp.

Col. No. V66-5. Two miles north of Kortez Dam, Alcova, Wyoming, on rocky slope. Plant rhizomatose; foliage bright green; flowers bright yellow, ½ inch across.

323872. *POTENTILLA* sp.

Col. No. V66-37. On pass, Utah 150, near Summit County Marker (County line). Herbaceous; foliage glaucous; flowers yellow.

323873. *PRUNUS SPINOSA* L. Rosaceae.

Blackthorn.

Col. No. V65-1. 'Plum'. Colorado Fish and Wildlife Nursery, 1.5 miles north of Junction of Colorado 14 and U. S. 87 northeast of Ft. Collins, Colorado. Shrub, dense, spiny, to 8 feet high at 7 years of age; fruits many, dried on plant.

323874 and 323875. *PTELEA TRIFOLIATA* L. Rutaceae.

Hop-tree.

323874. Col. No. V64-524. 'Wafer Ash'. Above Sedona, Ariz. Elevation 6,000 feet. Shrub to 8 feet high; fruit large, in clusters; stems bare.

323875. Col. No. V65-85. 'Wafer Ash'. Along Forestry Road, 20 miles south of Fredonia, Ariz.

323876 to 323879. *PURSHIA TRIDENTATA* (Pursh) DC. Rosaceae.

323876. Col. No. V64-389. 'Bitterbush'. Highway backslope on Highway 54, 3 miles west of Escalante, Utah; dry site. Clone 1. Low, wide spreading by natural layers.

323877. Col. No. V64-390. Three miles west of Escalante, Utah. Plant prostrate.

323878. Col. No. V64-430. Fourteen miles east of Cedar City, Utah, on Highway 14; growing on sterile 3 to 1 backslope. Elevation 8,900 feet. Plants stoloniferous, to 1 foot high, spreading 12 to 18 inches; free rooting.

323879. Col. No. V64-475. Nine miles east of Happy Jack Recreation area, west of Cheyenne, Wyo.

323880 to 323883. *QUERCUS GAMBELII* Nutt. Fagaceae.

323880. Col. No. V64-349. 'Scrub oak'. Three miles west of Glenwood Springs, Colo., rocky west slope.

323881. Col. No. V64-381. Calf Creek Recreation area, northeast of Escalante, Utah. Trees and fruits larger than normal.

323882. Col. No. V64-411. One mile west of Junction of Utah 14 and U. S. 89.

323883. Col. No. V64-443. 'Scrub oak'. Twelve miles above Kanarrville, Utah, on mountain road. Shrubby; thicket forming.

323884. *QUERCUS TURBINELLA* Greene

Col. No. V64-452. Oak Creek Canyon, Zion National Park, Utah. Evergreen scrub oak; leaves glaucous, holly like.

## 323650 to 323931—Continued

323885 to 323887. *RHUS TRILOBATA* Nutt. Anacardiaceae.

323885. Col. No. V65-84. Forest road southwest of Big Springs on Kiabab Forest, Ariz. Shrub, large; berries small, bright red, showy; lacks pubescence on fruit.

323886. Col. No. V66-52. Three miles below Soldiers Summit, Utah, north of U. S. Highways 6 and 59, Strawberry Lake road.

323887. Col. No. V66-78. South of bridge, Utah 128, 30 miles northeast of Moab, Utah. Strong growing, 15 feet high by 35 feet wide; fruit clusters 1 foot long. Sandy soil.

323888. *RHUS TRILOBATA* var. *SIMPLICIFOLIA* (Greene) Barkl.

Col. No. V65-61. 'Skunk bush'. In sandstone, Black Box Canyon, 12 miles west, 4 miles south of Green River, Utah. Unifoliate form of *R. trilobata*, attractive.

323889. *RIBES CEREUM* Dougl. Saxifragaceae.

Col. No. V64-341. 'Squaw current'. One mile north of Georgetown, Colo., in area of dune sand where wind drifts sand into the clumps, making large mounds. Appears mound layered; fruit red.

323890. *RIBES ODORATUM* Wendl.

Col. No. V66-32. Two miles south of Evanston, Wyo., Bear River cutoff. Foliage shining, glabrous with reduced lobes.

323891. *RIBES* sp.

Col. No. V64-432. High Mountain Meadow two miles north of Highway 14 on road to Cedar Breaks National Monument, Utah. Shrub very thorny, dense, roundtopped; fruit insipid, red.

323892. *ROSA ACICULARIS* Lindl. Rosaceae.

Col. No. V64-469. 'Wild rose'. One mile south of north entrance of Grand Mesa National Forest along Colorado 65. To 4 feet high; fruit large, red, showy.

323893. *ROSA* sp.

Col. No. V64-434. 'Wild rose'. Twelve miles east of Cedar City, Utah on Highway 14 in deep shade. *R. acicularis* type. Foliage good; fruit red.

323894. *ROSA* sp.

Col. No. V64-440. 'Wild rose'. Ten miles above Kanarraville on road to Zion National Park, Utah. Plant to 6 feet high; branches arching; 7 to 9 leaflets on dull green leaves; thorns scattered; large, showy, globose red fruit.

323895. *ROSA* sp.

Col. No. V64-494. Two miles west of Buckham Park, Left Hand Creek road. Above Lyons, Colo. Nine-foliate leaves, coarse serrations, slender infrastipular thorns, not hooked. Fruit bright red, globose, 0.6 inches diameter; calyx persistent.

323896. *ROSA* sp.

Col. No. V64-496. Portland, Colorado. Plant shrubby, tall; on south talus slope.

323897. *ROSA* sp.

Col. No. V65-35. Roadside, 13 miles northeast of Fremont, Utah. Plant low; flowers bright pink; strong infrastipular recurved thorn.

323898. *SALIX* sp. Salicaceae.

Col. No. V66-34. Nine miles south of Evanston, Wyo., Bear River cutoff, wet meadow, full sun. Low, spreading, 5 feet high by 10 feet wide. Foliage silvery.

## 323650 to 323931—Continued

323899. *SALVIA REGLA* cav. Labiatae.

Col. No. V64-509. Chisos Mountains, Big Bend National Park. Elevation 6,500 feet. Shrub to 3.5 feet high; flowers red, very showy, long blooming season.

323900. *SAMBUCUS COERULEA* Raf. Caprifoliaceae.

Col. No. V65-66. Roadside between Fredonia, Ariz. and Kiabab Plateau in very dry site. Shrub, large; fruit glaucous in large flat clusters.

323901. *SAMBUCUS RACEMOSA* L. European red elder.

Col. No. V64-431. South of Cedar Breaks National Monument, Utah, among alpine fir. Elevation 9,800 feet. Elderberry, clumps to 4 feet, dense; fruit red.

323902. *SAMBUCUS* sp.

Col. No. V64-367. Dry rocky slope southeast of Teasdale, Utah. Shrub, strong growing; fruits blue.

323903. *SAMBUCUS* sp.

Col. No. V64-482. Near Maryville, Colo. Elevation 8,600 feet. Bush to 3 feet high; flowers white; berries red.

323904. *SAMBUCUS* sp.

Col. No. V65-51 1-2. Nursery at Brooks, Alberta, Canada. Apparently hybrid of *S. pubens* crossed with a black-fruited form among seedlings in nursery.

323905 and 323906. *SHEPHERDIA CANADENSIS* (L.) Nutt. Eleagnaceae.  
Russet buffalo-berry.

323905. Col. No. V64-433. Rim of Cedar Breaks National Monument, Utah, 6 miles northeast of headquarters. Elevation 10,000 feet. Shrub, low, spreading, fruit red.

323906. Col. No. V65-50. Dry wash, Sweetgrass Hills, east of Sweetgrass, Mont. Plant low, 18 inches high by 4 feet wide; fruit red, showy.

323907 to 323913. *SHEPHERDIA ROTUNDIFOLIA* Parry

323907. Col. No. V64-355. Sunglow Park, 3 miles east of Bicknell, Utah. Common on rocky canyon walls. Evergreen shrub, compact, roundtopped; leaves fleshy, scruffy, grey green.

323908. Col. No. V64-379. Sixteen miles south of Boulder, Utah, along Utah 117, in sandstone.

323909. Col. No. V64-385. Twenty-five miles northeast of Escalante, Utah, in sandstone.

323910. Col. No. V64-401. Eight miles west of Escalante, Utah, on dry sandstone slope.

323911. Col. No. V64-528. On cliffs east of tunnel, Utah 15, Zion National Park, Utah.

323912. Col. No. V64-528-31. On cliffs east of tunnel, Utah 15, Zion National Park, Utah.

323913. Col. No. V65-32. Sunglow Park, Bicknell, Utah. Shrub.

323914. *STANLEYA PINNATA* (Pursh) Britton Cruciferae.

Col. No. V65-4. Black Box Canyon, 12 miles west and 8 miles south of Green River, Utah, in sandstone. Perennial, long lived; leaves glaucous; flowers yellow, in spikes to 3 feet long.

323915. *SYMPHORICARPOS LONGIFLORUS* Gray Caprifoliaceae.

Col. No. V64-445. Fifteen miles above Kanarraville toward Zion National Park, Utah. Two to 3 feet high by 5 feet wide; leaves small; berries white, showy.

## 323650 to 323931—Continued

## 323916. SYMPHORICARPOS sp.

Col. No. V65-24. West slope above Bear River, 10 miles southwest of Evanston, Wyo. Shrub, dense, low.

## 323917. TAMARIX sp. Tamariaceae.

Col. No. V66-69. Twenty-five miles southeast of Castle Dale, Utah. Compact.

## 323918 and 323919. YUCCA BACCATA Torr. in Emory Liliaceae.

323918. Col. No. V64-403. Eight miles west of Escalante, Utah, along Highway 54. Small.

323919. Col. No. V64-442. Twelve miles southeast of Kanarrville, Utah, along road toward Zion National Park, Utah. Elevation 9,000 feet.

Tall-branched inflorescence; leaves wide, dark green.

## 323920. YUCCA GLAUCA Nutt.

Col. No. V64-340. 'Soap weed'. Sandy soil, 25 miles south of Yuma, Colo. Smaller than Nebraska form.

## 323921 to 923923. YUCCA HARRIMANNIAE Trel.

323921. Col. No. V64-351. 'Yucca'. In clay and rocks, 15 miles northwest of Grand Junction, Colorado. Cespitose or short stemmed; leaves  $\frac{3}{8}$  by 12 inches, sharp tipped, filamentose margins. Dwarf form; flowering scapes 4 feet.

323922. Col. No. V65-59. Sandstone along Black Box Road 4 miles west, 4 miles north of Green River, Utah. Leaves short, stiff; pods constrictive.

323923. Col. No. V65-64. East slope of Uncompahgre Plateau west of Delta, Colo.

## 323924. YUCCA sp.

Col. No. V64-375. Five miles south of Boulder, Utah, in sandy wash. Dwarf form; leaves to 8 inches long, margins with curled white fibers, tends to be rhizomatous.

## 323925. YUCCA sp.

Col. No. V65-54. Along U. S. 89 between Carmel Junction and Knab, Utah, in sandy soil. Acaulescent in appearance, glaucous concave in ventral side, 1 to 2 cm. wide to 40 cm. long; almost fleshy.

## 323926. YUCCA sp.

Col. No. V65-58. Along Colorado 80, north of Egnar, Colo. Leaves narrow, filamentose on margins.

## 323927. YUCCA sp.

Col. No. V65-60. Utah. In sandstone.

## 323928. YUCCA sp.

Col. No. V65-63. Along U. S. 89 Alternate in Vermilion Cliffs, Ariz. In sand. Probably same as (P.I. 323925).

## 323929. YUCCA sp.

Col. No. V65-65. In sandstone along Colorado 80 north of Egnar, Colo. Leaves very narrow, filamentose.

## 323930. ZAUSCHNERIA GARRETTII A. Nels. Onagraceae.

Col. No. V64-435. 'Firechalice'. Along rocky road 8 miles northeast of Kanarrville, Utah, in south facing talus slope. Perennial, 1 to 2 feet high; leaves lanceolate; flowers scarlet, showy.



**323650 to 323931—Continued**

**323931.** *ZINNIA GRANDIFLORA* Nutt. Compositae.

Col. No. V65-40. Six miles east of Canyon City, Colo. Perennial, compact herb, showy 6-inch mounds; rays yellow, disk orange; flowers 1 inch across.

**323932 and 323933.** *JUNIPERUS CONFERTA* Parlature Pinaceae.

From Japan. Cuttings and seeds presented by Masami Sato, Biological Institute, Ibaraki University, Mito. Received Nov. 21, 1967.

**323932.** Cuttings.

**323933.** Seeds.

**323934.** *MEDICAGO SATIVA* L. Leguminosae. **Alfalfa.**

From New Zealand. Seeds presented by Crops Research Division, Department of Scientific and Industrial Research, Christchurch. Received Nov. 21, 1967.

Creeping form.

**323935.** *HIBISCUS LASIOCARPUS* Cav. Malvaceae.

From the United States. Seeds collected in 1960 by H. W. Miller, Regional Plant Materials Service, Soil Conservation Service, Portland, Oreg. Received Nov. 27, 1967.

Collected in Berry Patch Gun Club, Sutter County, Calif.

**323936.** *ARACHIS GLABRATA* Benth. Leguminosae.

From Uganda. Plants presented by the Senior Botanist, Kawanda Research Station, Kampala. Received Nov. 27, 1967.

**323937.** *CUCUMIS MELO* L. Cucurbitaceae. **Muskmelon.**

From Afghanistan. Seeds collected by G. Gordon Hadley, World Health Organization, Kabul. Received Nov. 27, 1967.

Collected in Mazar-i-Sharif province.

**323938 to 323941.**

From England. Seeds presented by B. D. Dowker, National Vegetable Research Station, Wellesbourne, Warwick. Received Nov. 27, 1967.

**323938.** *BETA VULGARIS* L. Chenopodiaceae. **Sugar beet.**  
'Avon Early'. Bolt resistant.

**323939.** *BRASSICA NAPUS* L. Cruciferae. **Winter rape.**  
From New Zealand. Resistant to cabbage aphid.

**323940 and 323941.** *LACTUCA SATIVA* L. Compositae. **Lettuce.**

**323940.** 'Avoncrisp'. Mildew resistant.

**323941.** 'Avondefiance'. Mildew resistant.

**323942 and 323943.**

From Taiwan. Cuttings collected by J. L. Creech, Crops Research Division, Plant Industry Station, Beltsville, Maryland. Received Nov. 29, 1967.

**323942.** *ACTINIDIA CHINENSIS* var. *SETOSA* H. L. Li Dilleniaceae.

Col. No. 1523. From a single plant. Moist woods, climbing on rocks and trees, Alishan. Elevation 2,200 meters.

**323943.** *OSMANTHUS AURANTIACUS* var. *THUNBERGII* (Makino) Honda Oleaceae.

Col. No. 1516. On sunny slopes of Mt. Morrison. Elevation 3,100 meters.

**323944 to 323946. SACCHARUM (hybrid) Gramineae.****Sugarcane.**

From Barbados. Cuttings presented by the West Indies Sugar Cane Breeding Station, Groves, St. George. Received Nov. 30, 1967.

323944. B-3337.

323945. B-6130.

323946. B-59162.

**323947. BOUGAINVILLEA sp. Nyctaginaceae.**

From Kenya. Plants presented by Parks Superintendent, City Parks Department; Nairobi. Received Nov. 30, 1967.

'Natalii'.

**323948. QUERCUS ILEX var. GRAMUNTIA (L.) Loud. Fagaceae.**

From France. Seeds presented by the Station Amelioration des Plantes Forestieres Nancy. Received Dec. 1, 1967.

**323949 to 323954.**

From Hungary. Scions and seeds presented by the National Institute of Agrobotany, Tapioszele. Received Dec. 1, 1967.

323949 to 323951. JUGLANS REGIA L. Juglandaceae. **Persian walnut.**

323949. 'Milotai 10'. Scions.

323950. 'Tizacsecsi 10'. Scions.

323951. 'Tizacsecsi 83'. Scions.

323952 to 323954. JUGLANS REGIA L. **Persian walnut.**

323952. 'Milotai'. Seeds.

323953. 'Tizacsecsi 10'. Seeds.

323954. 'Tizacsecsi 83'. Seeds.

**323955 and 323956. AVENA SATIVA L. Gramineae.****Common oats.**

From Japan. Seeds presented by Takeshi Kumagai, Hokkaido Agricultural Experiment Station, Hitsujigaoka, Sapporo, Hokkaido. Received Dec. 4, 1967.

323955. 'Otsuku'.

323956. 'Zenshin'.

**323957 to 324063.**

From the Union of Soviet Socialist Republics. Seeds collected by Howard J. Brooks, Crops Research Division, Plant Industry Station, Beltsville, Maryland. Received Dec. 4, 1967.

323957. ARONIA MELANOCARPA (Michx.) Ell. Rosaceae.

**Black chokeberry.**

Col. No. B-85. Stavropol Botanic Garden, Stavropol. Plant to 1.2 m. high. Fruit 1.3 cm. diameter, purple black, edible.

323958 and 323959. CORNUS MAS L. Cornaceae.

**Cornelian-cherry.**

323958. Col. No. B-121. About 50 km. west of Pyatiborsk, in pasture near village of Bekesheuskaya. Elevation 540 m. Rainfall 16 inches. Tree to 3 m. high; fruit 1.7 cm. diameter by 2.3 cm. long, dark red, edible.

323959. Col. No. B-140. Pyatiborsk. Donated by L. T. Bobro, Senior Engineer, Forestry Department, Stavropol. Lowest winter temperature  $-5^{\circ}\text{C}$ .

## 323650 to 323931—Continued

**323960.** *CORYLUS* sp. Betulaceae.

Col. No. B-116. Teberda Resort. Wooded areas around stream. Elevation 1,300 m. Tree spreading, about 3.6 m.; fruit sparse.

**323961.** *CORYLUS* sp.

Col. No. B-122. About 50 km. west of Pyatiborsk, in pasture near village of Bekesheuskaya. In edge of forest. Elevation 540 m.

**323962.** *COTINUS COGGYRIA* Scopoli Anacardiaceae. **Smoke tree.**

Col. No. B-139. Pyatiborsk. Donated by L. T. Bobro, Senior Engineer, Forestry Department, Stavropol. Lowest winter temperature  $-5^{\circ}\text{C}$ .

**323963.** *CRATAEGUS ALTAICA* (Loud.) Lange Rosaceae.

Col. No. B-33. In Botanic Garden at Ascania-Nova, Ukraine. To 3.6 m. high, spreading; fruit 1 cm. diameter, orange.

**323964.** *CRATAEGUS MOLLIS* Scheele

Col. No. B-41. In Botanic Garden at Ascania-Nova, Ukraine. Tree to 4.5 m. high, very thorny; fruit 2 cm., red, very showy.

**323965.** *CRATAEGUS* sp.

Col. No. B-73. About 20 to 25 km. south-southeast of Stavropol. Elevation 660 m. on forested plateau, in open field. To 3 m. high; fruit 1.3 cm. long, 0.9 cm. wide, red, very showy.

**323966.** *CRATAEGUS* sp.

Col. No. B-74. About 20 to 25 km. south-southeast of Stavropol. Elevation 660 m. on forested plateau, in open. Tree 3 m. by 3 m.; fruit 1.0 cm. diameter by 1.5 cm. long, red, showy.

**323967.** *CRATAEGUS* sp.

Col. No. B-149. Three km. southeast of Kislovodsk. Elevation 800 m., steep terrain, open. Tree 4.5 m. high, ornamental; fruit 1.8 cm. diameter, 2.1 cm. long, red, large.

**323968.** *DELPHINIUM* sp. Ranunculaceae.

Col. No. B-30. From natural reserve at Ascania-Nova, Ukraine. Rainfall about 320 mm. To 45 cm. high; flowers 0.5 cm. wide, blue. Very drought resistant.

**323969.** *DIANTHUS* sp. Caryophyllaceae.

Col. No. B-29. From natural reserve, Ascania-Nova, Ukraine. Yearly rainfall about 320 mm. 25-30 cm. high; flowers 1.5 cm. diameter, cerise. Most plants already dead.

**323970.** *DIANTHUS* sp.

Col. No. B-42. Six km. northwest of Stavropol, sparse forest area, shallow alkaline soil. About 400-500 mm. rainfall. Elevation 570 m. Flowers single, pink; similar to P.I. 323969, with little variation among plants.

**323971.** *DIANTHUS* sp.

Col. No. B-75. About 130 km. south of Stavropol, in area of Mt. Barahaka. Collections made just south of village of Elycha. Elevation 990 m. Plant 30-35 cm. high, in open. Flowers solitary, 5 petals, deeply serrated, white, very fragrant, about 2 cm. wide.

**323972.** *ELAEAGNUS ANGUSTIFOLIA* L. Elaeagnaceae. **Russian olive.**

Col. No. B-141. Pyatiborsk. Presented by L. T. Bobro, Senior Engineer, Forestry Department, Stavropol. Lowest winter temperature  $-5^{\circ}\text{C}$ .

## 323650 to 323931—Continued

323973. *LINUM AUSTRIACUM* L. Linaceae. Austrian flax.

Col. No. B-43. Six km. northwest of Stavropol, Sparse forest area, shallow alkaline soil. About 400-500 mm. rainfall. Elevation 570 m. To 30 cm.; flowers 2.5 dm. diameter, 5 petals, solitary, pale blue, lasting only 1 or 2 days.

323974. *MALUS PRUNIFOLIA* (Willd.) Borkh. Rosaceae. Pearleaf crabapple.

Col. No. B-38. In Botanic Garden at Ascania-Nova, Ukraine. Fruit 1.5 cm. to 2.0 cm.; stem 3.0 cm.

323975 to 323994. *MALUS SYLVESTRIS* Mill. Apple.

About 20 km. south southwest of Stavropol, on forested plateau. Rainfall 500 mm. Elevation 600 m.

323975. Col. No. B-54. Origin Finland. Tree small; fruit yellow, 2.5 cm. diameter, stem 1.5 cm., very astringent.

323976. Col. No. B-55. Fruit to 3.0 cm., green, very tart; stem 1 cm. long.

323977. Col. No. B-58. Tree old, in abandoned orchard; fruit early, yellow green, nice finish, to 6.25 cm., sour but edible.

323978. Col. No. B-65. Old abandoned orchard. Varieties appeared to be collected from wild. Tree old; fruit to 5 cm. diameter, yellow undercolor, 50 percent red, tart but edible.

323979. Col. No. B-80. About 136 km. south of Stavropol, in area of Mt. Barahaka, south of village of Elycha. Elevation 660 m. Fruit conic to 4.0 cm., stem 1.0 cm., yellow green.

Teberda Resort. Wooded areas around stream. Elevation 1,330 m.

323980. Col. No. B-88. Fruit 3.0 cm. diameter, green, very tart.

323981. Col. No. B-89. Fruit 2.0 cm. diameter, yellow green, tart.

323982. Col. No. B-91. Fruit 3.0 cm. diameter, yellow, tart.

Dombay. Elevation 1,600 m. Forester's home orchard. Highest elevation where apples were found.

323983. Col. No. B-92. Fruit to 4.0 cm. diameter, yellow green, tart.

323984. Col. No. B-93. Tree not thriving. Fruit to 6.0 cm. diameter, green, tart.

Teberda Resort. East into wooded canyon. Elevation 1,600 m. Apples and pears found from 1,330 to 1,500 m.

323985. Col. No. B-97. Fruit to 3.0 cm. diameter, green, very tart.

323986. Col. No. B-98. Fruit to 2.5 cm. diameter, green, very tart, immature.

Thirteen km. north of Teberda Resort, in open pastures.

323987. Col. No. B-103. Fruit to 3.0 cm. diameter, green, very astringent; stem 1.0 cm. long, very thin.

323988. Col. No. B-107. Fruit to 3.0 cm., yellow green, tart.

323989. Col. No. B-108. Fruit 2.5 cm., yellow green, very tart.

323990. Col. No. B-110. Fruit to 2.0 cm., green, very astringent.

About 50 km. west of Pyatiborsk, near village of Bekesheuskaya, Pasture, in open. Elevation 540 m.

323991. Col. No. B-127. Fruit to 4.5 cm., yellow green, edible; stem slender, 2.5 cm. long. Better of wild apples seen.

## 323957 to 324063—Continued

## 323975 to 323994—Continued

323992. Col. No. B-129. Fruit 5.0 cm., green, very good flavor.

323993. Col. No. B-135. Pyatiborsk. Presented by L. T. Bobro, Senior Engineer, Forestry Department, Stavropol. Lowest winter temperature  $-5^{\circ}\text{C}$ .

323994. Col. No. B-152. Near Pyatiborsk, in shelterbelt. Collected from about 10 wild seedling trees all much the same. Fruit 3.75 cm., green, tart, late.

## 323995. MALUS sp.

Col. No. B-39. Locally called *M. niedzwetzkyana*. In Botanic Garden at Ascania-Nova, Ukraine. Fruit 1.3 cm. diameter, 1.5 cm. long; deciduous calyx; stem 2.5 to 3.0 cm.

## 323996. MALUS sp.

Col. No. B-40. Locally called *M. zumi*. In Botanic Garden at Ascania-Nova, Ukraine. Fruit 0.8 to 1.0 cm., round, yellow red; deciduous calyx; stem 3.0 to 3.5 cm.

## 323997. MALUS sp.

Col. No. B-45. Six km. northwest of Stavropol, sparse forest area, shallow alkaline soil. About 400 to 500 mm. rainfall. Elevation 570 m. Fruit 3.0 cm. diameter, green, very bitter; stem 1.5 cm. Tree low, spreading, because of low rainfall and shallow soil.

## 323998. MALUS sp.

Col. No. B-50. Six km. northwest of Stavropol, edge of sparse forest area, shallow alkaline soil. Elevation 570 m. About 400 to 500 mm. rainfall. Fruit mostly on ground, to 3.5 cm. diameter, yellow, very sour and bitter; inconspicuous lenticels; stem 0.5 cm.

## 323999. MORUS ALBA L. Moraceae.

White mulberry.

Col. No. B-138. Pyatiborsk. Presented by L. T. Bobro, Senior Engineer, Forestry Department, Stavropol. Lowest winter temperature  $-5^{\circ}\text{C}$ .

## 324000 and 324001. PRUNUS AVIUM L. Rosaceae.

Sweet cherry.

324000. Col. No. B-95. Teberda Resort, east into wooded canyon. Elevation 1,600 m. Apples and pears found from 1,330 to 1,500 m. Large, wild black cherry growing in front yard of Forester's house. Fruit to 1.2 cm., purple black, extremely bitter; stem to 4.0 cm., very hardy, bears fruit annually.

324001. Col. No. B-131. Pyatiborsk. Presented by L. T. Bobro, Senior Engineer, Forestry Department, Stavropol. Lowest winter temperature  $-5^{\circ}\text{C}$ .

## 324002 to 324010. PRUNUS CERASIFERA DIVARICATA (Ledeb.) C. Schneid

Cherry plum.

324002. Col. No. B-48. Six km. northwest of Stavropol, sparse forest area, shallow alkaline soil. About 400 to 500 mm. rainfall. Elevation 570 m. Tree to 3 m., bushy, growing with apple and hawthorn, spiny. Fruit 2.0 cm. diameter, yellow, tasty.

About 20 to 25 km. south southeast of Stavropol, on forested plateau. Elevation 660 m.

324003. Col. No. B-68. Fruit largest seen in area, 2.4 cm. diameter, slightly elongated, deep yellow.

324004. Col. No. B-69. Fruit 2.0 cm., yellow speckled with red.

324005. Col. No. B-70. Fruit 2.4 cm diameter, pale yellow.

## 323957 to 324063—Continued

## 324002 to 324010—Continued

324006. Col. No. B-72. Fruit 2.4 cm. diameter, red skin and flesh, late ripening.

324007. Col. No. B-117. Assumed to be propagated from a selection found in wild. Fruit 3.0 cm., orange, flesh yellow. Largest seen.

324008. Col. No. B-118. Fruit 2.3 cm. diameter, very deep red.

324009. Col. No. B-123. About 50 km. west of Pyatiborsk, in pasture near village of Bekesheuskaya. Elevation 540 m. Large selection, fruit 2.7 cm. diameter, yellow.

324010. Col. No. B-132. Pyatiborsk. Presented by L. T. Bobro, Senior Engineer, Forestry Department, Stavropol. Lowest winter temperature  $-5^{\circ}\text{C}$ .

## 324011 to 324012. PRUNUS DOMESTICA L.

Common plum.

324011. Col. No. B-81. About 20 to 25 km. south southeast of Stavropol. About 660 m. on forested plateau, near abandoned farmhouse. Appears same as 'Stanley Prune' of commerce.

324012. Col. No. B-157. Forester's orchard, near Camel Mountain, 18 km. west of Zheleznovodsk. Fruit to 4.0 cm., blue black, flesh yellow, pit completely free, very good. Much fruit still on tree.

## 324013. PRUNUS FRUTICOSA Pall.

European dwarf cherry.

Col. No. B-84. Stavropol Botanic Garden, Stavropol. To 9 m. high. Fruit 1.0 cm. diameter; stem 2.5 cm.

## 324014 to 324018. PRUNUS MANDSHURICA (Maxim.) Koehne

Manchurian apricot.

About 20 to 25 km. south southeast of Stavropol, on forested plateau. Elevation 660 m.

324014. Col. No. B-64. Wild apricot. Trees to 6 m. high, in shelterbelt. Fruit all on ground.

324015. Col. No. B-82. Wild apricot. In shelterbelt. One tree, only 7 fruit, very late; fruit to 5.0 cm., very good.

324016. Col. No. B-133. Locally called "Armeniaca vulgaris". Pyatiborsk. Presented by L. T. Bobro, Senior Engineer, Forestry Department, Stavropol. Lowest winter temperature  $-5^{\circ}\text{C}$ .

3.2 km. southeast of Kislovodsk. Elevation 800 m., steep terrain, open.

324017. Col. No. B-145. Tree vigorous; fruit 3.0 cm. diameter, round, stone partly cling; late ripening mostly on ground.

324018. Col. No. B-147. Tree very vigorous, fruit 3.0 cm. wide, 3.8 cm. long, freestone, sweet, good; prolific, very late ripening, about half still on tree.

## 324019. PRUNUS PERSICA (L.) Batch

Peach.

Col. No. B-153. In forestry planting at Pyatiborsk. Seedlings from wild tree found on collective farm in area. Very uniform; fruit 4.0 to 4.5 cm. diameter, white, cling, green when ripe, acid but quite good, very late, fall from tree while firm.

## 324020. PRUNUS SALICINA Lindl.

Japanese plum.

Col. No. B-143. 3.2 km. southeast of Kislovodsk. Elevation 800 meters, steep terrain, open, abandoned orchard. Tree three m. high; fruit 3.0 cm., green, round; clingstone. Very delicious.

## 324021 and 324022. PRUNUS SPINOSA L.

Blackthorn.

## 323957 to 324063—Continued

## 324021 and 324022—Continued

324021. Col. No. B-51. Six km. northwest of Stavropol, sparse forest area, shallow alkaline soil. About 400 to 500 mm. rainfall. Elevation 570 m. Bush to 1.5 m. high, very productive; spiny; fruit to 1.6 cm. diameter, very tart; stem 0.5 cm.; bloom on fruit.

324022. Col. No. B-71. About 20 to 25 km. south southeast of Stavropol, on forested plateau. Elevation 660 m. Bush to 3 m. high. Tallest *P. spinosa* seen.

## 324023. PRUNUS VULGARIS Schur

Col. No. B-130. Pyatiborsk. Presented by L. T. Bobro, Senior Engineer, Forestry Department, Stavropol. Lowest winter temperature  $-5^{\circ}\text{C}$ .

## 324024. PRUNUS sp.

Col. No. B-119. Two dried fruit and one pit. From traveller at Teberda Resort. Origin unknown.

## 324025. PRUNUS sp.

Col. No. B-120. No data. From traveller at Teberda Resort. Origin unknown.

## 324026 to 324050. PYRUS COMMUNIS L.

Common pear.

Six km. northwest of Stavropol, sparse forest area, shallow alkaline soil. About 400 to 500 mm. rainfall. Elevation 570 m.

324026. Col. No. B-46. Tree very large in deep forest, multiple trunk, to 45 cm. in diameter, to 30 cm. in diameter; fruit pyriform to 2.5 cm., much grit, large core, past ripe; stem 2.5 cm.

324027. Col. No. B-47. Tree in open; trunk 42 cm. diameter; fruit to 2.8 cm., round, extreme grit, large core; stem 3.0 cm.

324028. Col. No. B-52. About 20 km. south southwest of Stavropol, on forested plateau. Elevation 600 m. Rainfall about 500 mm. Tree large, in open; fruit to 3.0 cm., ovate, moderate grit, astringent, early to ripen; stem 2.5 cm.

About 20 to 25 km. south southeast of Stavropol, on forested plateau. Elevation 660 m.

324029. Col. No. B-60. Tree very large, in old abandoned orchard; best of pears; fruit 5.0 cm. diameter, pyriform, yellow, early, much grit, astringent; stem 3.0 cm.

324030. Col. No. B-62. Tree extremely large, 55 cm. diameter; in old abandoned orchard. Fruit 4 cm. diameter, pyriform, yellow, showy calyx, very gritty, astringent; stem 5 cm.

About 20 to 25 km. south southeast of Stavropol, on forested plateau. Elevation 660 m.

324031. Col. No. B-66. Tree old; fruit to 2.5 cm., pyriform, yellow, much grit, astringent.

324032. Col. No. B-67. Tree very old; fruit to 4.0 cm., largest seen thus far, moderate grit, large core, astringent, showy calyx.

About 85 m. south of Stavropol, in area of Mt. Barahaka. Collections made south of village of Elycha. Elevation 990 m.

324033. Col. B-76. Fruit oval, to 2.5 cm. diameter, green, moderate grit, astringent; stem 3.0 cm.

324034. Col. No. B-78. Fruit 2.5 cm., moderate grit; stem 1.0 cm.

324035. Col. No. B-79. Fruit to 3.5 cm., round, relatively little grit, showy calyx; stem 3.0 cm.

## 323957 to 324063—Continued

## 324026 to 324050—Continued

324036. Col. No. B-90. Teberda Resort. Wooded areas around stream. Elevation 1,330 m. Fruit to 3.0 cm., considerable grit; stem 2.5 cm.

Teberda Resort, east into wooded canyon. Elevation 1,600 m. Apples and pears found from 1,330 to 1,500 m.

324037. Col. No. B-96. Fruit to 2.5 cm. diameter, ovate, very gritty, considerable russet, edible, nonastringent; stem 2.5 cm.

324038. Col. No. B-99. Fruit to 2.5 cm., much grit, astringent.

324039. Col. No. B-100. Fruit to 2.0 cm., pyriform, very astringent, showy calyx; stem 2.5 cm.

324040. Col. No. B-101. Fruit to 3.0 cm., large core, moderate grit, showy calyx; stem 2.5 cm.

324041. Col. No. B-102. At home of forester in Teberda Resort village. Huge seedling tree, very vigorous, probably over 100 years; fruit 2.5 cm., large core, moderate grit, very astringent, showy calyx; stem 3.5 cm.

Eight miles north of Teberda Resort.

324042. Col. No. B-104. In old abandoned seedling orchard. Fruit to 2.5 cm., round, very gritty, very astringent; stem 3.0 cm.

324043. Col. No. B-105. In old abandoned seedling orchard. Fruit to 2.5 cm., ovate, moderate grit, very astringent; stem 3.0 cm.

324044. Col. No. B-106. In open pastures. Fruit 2.0 cm. diameter, ovate, little grit, astringent; stem 2.0 cm.

324045. Col. No. B-109. Fruit 2.5 cm., ovate, large core, much grit; stem 2.0 cm.

324046. Col. No. B-111. Tree very large; fruit ovate, yellow, small core, very astringent, no grit; stem 3.0 cm.

About 50 km. west of Pyatiborsk, in pasture near village of Bekesheuskaya. Elevation 540 m.

324047. Col. No. B-124. Fruit to 3.0 cm., round, green, much grit, very astringent, showy calyx; stem 1.5 cm.

324048. Col. No. B-125. Tree small; fruit to 2.6 cm. diameter, less astringent than most, much grit, large core, yellow green, round; stem 2.0 cm.

324049. Col. No. B-134. Pyatiborsk. Presented by L. T. Bobro, Senior Engineer, Forestry Department, Stavropol. Lowest winter temperature  $-5^{\circ}\text{C}$ .

324050. Col. No. B-155. Near Mount Razealka, Zheleznovodsk. Elevation 930 m. Tree spreading; fruit 2.5 cm., round, green, astringent, gritty, very showy calyx with extremely long lobes.

## 324051. PYRUS sp.

Col. No. B-35. Botanical Garden, Ascania-Nova, Ukraine. Typical; no grit.

## 324052. PYRUS sp.

Col. No. B-36. Botanical Garden, Ascania-Nova, Ukraine. Probably a *P. betulaefolia* hybrid as there was no grit, fruit ovate, conspicuous lenticels, 2.0 cm. diameter, four carpels, stem 4.0 cm., leaves serrate, no pubescence.

## 324053. PYRUS sp.

Col. No. B-37. Tree dwarf, 1.8 m. high and wide; trunk 7.5 cm. diameter, fruit 2.0 cm., round, deciduous calyx, 4 carpels, little grit; stem 3.5 to 4.0 cm., leaves serrate.



## 323957 to 324063—Continued

324054. *RHODODENDRON FLAVUM* G. Don Ericaceae.

Col. No. B-77. About 136 km. south of Stavropol, in area of Mt. Barahaka, south of village of Elycha. Plants in shade along edge of forest, growing with fruit trees; flowers reportedly yellow.

324055. *RHODODENDRON LUTEUM* Sweet

Col. No. B-142. About 3.2 km. southeast of Kislovodsk, steep terrain, open. Elevation 800 m. Plants to 1 m. high, massed, considerable variability.

324056. *RIBES AUREUM* Pursa Saxifragaceae. **Slender golden currant.**

Col. No. B-137. Pyatiborsk. Presented by L. T. Bobro, Senior Engineer, Forestry Department, Stavropol. Lowest winter temperature  $-5^{\circ}\text{C}$ .

324057. *ROSA CANINA* L. Rosaceae. **Dog rose.**

Col. No. B-136. Pyatiborsk. Presented by L. T. Bobro, Senior Engineer, Forestry Department, Stavropol. Lowest winter temperature  $-5^{\circ}\text{C}$ .

324058. *RUBUS* sp.

Col. No. B-56. About 20 km. south southwest of Stavropol, on forested plateau. Rainfall 500 mm. Elevation 600 m. Prostrate in moist areas; plant thorny, berries with 3 to 12 drupelets to 6 mm. each, seeds large, purple, tart.

324059. *RUBUS* sp.

Col. No. B-126. Blackberry identical with P.I. 324058 except more drupelets and berries. To 30 cm. high, creeping, small thorns, bloom present on fruit.

324060. *SCABIOSA ORIENTALIS* (L.) Lag. Dipsacaceae.

Col. No. B-44. Six km. northwest of Stavropol, sparse forest area, shallow alkaline soil. About 400 to 500 mm. rainfall. Elevation 570 m. Plant to 61 cm. flowers 2.5 to 3.0 cm. wide, solitary, pale yellow.

324061. *SORBUS AUCUPARIA* L. Rosaceae. **European mountain-ash.**

Col. No. B-86. Stavropol Botanic Garden, Stavropol. Tree. Extremely large; fruit 1 cm. diameter, clusters, bright red, showy.

324062. *VACCINIUM* sp. Ericaceae.

Col. No. B-115. Wild blueberries. Southeast of Teberda Resort, above the tree line. Elevation 2,700 m. Plants very small; fruits 0.7 cm. diameter, few. Growing among *Rhododendron caucasicum*.

324063. *VIOLA* sp. Violaceae.

Col. No. B-57. About 20 km. south southwest of Stavropol, on forested plateau. Rainfall 500 mm. Elevation 600 m. Plant to 15 cm., pale yellow.

324064. *COTONEASTER* sp. Rosaceae.

From England. Plants presented by Exbury Gardens Ltd., Exbury, Southampton, Hampshire. Received Dec. 6, 1967.

324065. *LYCOPERSICON ESCULENTUM* Mill. Solanaceae. **Tomato.**

From the Philippines. Seeds presented by Bureau of Plant Industry, Department of Agriculture and Natural Resources, Manila. Received Dec. 11, 1967.

'Nagcarlan'. Strain 1.

324066 to 324068. *GLYCINE MAX* (L.) Merr. Leguminosae. **Soybean.**

From Rhodesia. Seeds presented by J. R. Tattersfield, Department of Research and Specialist Services, Ministry of Agriculture, Salisbury Research Station, Salisbury. Received Dec. 6, 1967.

## 324066 to 324068—Continued

324066. 'Geduld'.

324067. 'Hernon 237.'

324068. 'Hernon 273'.

## 324069. BRASSICA OLERACEA var. CAPITATA L. Cruciferae.

Cabbage.

From India. Seeds presented by Indian Agricultural Research Institute,  
Division of Plant Introduction, New Delhi. Received Dec. 7, 1967.

'Drum Head'.

## 324070 to 324076.

From India. Seeds presented by Indian Agricultural Research Institute,  
Division of Plant Introduction, New Delhi. Received Dec. 8, 1967.

324070 to 324075. TRITICUM AESTIVUM L. Gramineae.

324070. Hyb. 65.

324073. NP. 829.

324071. 'Riddley'.

324074. NP. 830.

324072. C. 286.

324075. NP. 832.

324076. TRITICUM DICOCCUM Schrank

Emmer.

NP. 200.

## 324077 and 324078.

From Brazil. Plant material collected by E. P. Imle, American Cocoa Research  
Institute, Washington, D. C. Received Dec. 8, 1967.

324077. HELICONIA sp. Musaceae.

Col. No. 140. Garden of E. T. Bullard, above Rio de Janeiro. Flowers  
bright red, last several weeks when cut. Plants.

324078. PRUNUS PERSICA (L.) Batsch Rosaceae.

Peach.

Col. No. 139. Seeds extracted from fruit purchased in Rio de Janeiro.  
Fruit small, round; flesh white; perfumed, freestone.

## 324079 to 324098.

From Ireland. Plants received from National Botanic Garden, Glasnevin,  
Dublin 9. Received Dec. 11, 1967.

324079 to 324085. CHAMAECYPARIS LAWSONIANA (Murray) Parl. Pinaceae.  
Lawson falsecypress.

324079. 'Ericoides'.

324083. 'Nidiformis'.

324080. 'Knowfieldensis Glauca'.

324084. 'Pygmaea Argentea'.

324081. 'Luteanana'.

324085. 'Shawii'.

324082. 'Mimina Gracilis'.

324086. CHAMAECYPARIS LAWSONIANA f. LUTEA (Gard. Chron.) Schneider  
'Compacta'.324087. CHAMAECYPARIS OBTUSA f. NANA (Carr.) Beissner  
'Argentea'.324088 and 324089. CHAMAECYPARIS OBTUSA f. TETRAGONA Rehder  
Hinoki falsecypress.

324088. 'Flabelliformis'.

324089. 'Minima'.

324090. CHAMAECYPARIS PISIFERA (Sieb. & Zucc.) Endl. **Sawara retinospora.**  
 'Plumosa Flavescens'.
324091. CHAMAECYPARIS PISIFERA f. AUREA (Gord.) Rehder  
 'Pygmaea'.
324092. CHAMAECYPARIS PISIFERA f. PLUMOSA (Carr.) Beissn.  
 'Nana'.
324093. CRYPTOMERIA JAPONICA (L.f.) D. Don Pinaceae. **Common cryptomeria.**  
 'Pygmaea'.
324094. JUNIPERUS CHINENSIS L. Pinaceae. **Chinese juniper.**  
 'Kaizuka'.
324095. JUNIPERUS COMMUNIS var. SAXATILIS Pall. **Juniper.**
324096. JUNIPERUS VIRGINIANA L. **Eastern redcedar.**  
 'Aurea Nana'.
324097. THUJA ORIENTALIS L. Pinaceae. **Oriental arborvitae.**  
 'Minima Glauca'.
324098. THUJA ORIENTALIS f. JUNIPEROIDES (Carr.) Asch. & Graeb.
- 324099 to 324119.**  
 From New Zealand. Plants received from Duncan and Davies Ltd., Westown,  
 New Plymouth. Received Dec. 11, 1967.
324099. CHAMAECYPARIS LAWSONIANA (Murray) Parl. Pinaceae. **Lawson falsecypress.**  
 'B. D. Edington'.
324100. JUNIPERUS SABINA L. Pinaceae. **Savin juniper.**  
 'Knap Hill'.
- 324101 and 324102. MAGNOLIA CAMPBELLII Hook. f. & Thoms. Magnolia-  
 ceae.
324101. No Data.
324102. 'Charles Raffill'.
324103. MAGNOLIA DAWSONIANA Rehd. & Wils.
324104. MAGNOLIA DELAVAYI Franch.
324105. MAGNOLIA DENUDATA Desr. **Yulan.**
324106. MAGNOLIA LILIFLORA Desr. ex Lam.
324107. MAGNOLIA MOLLIOMATA W.W. Sm.
324108. MAGNOLIA SARGENTIANA ROBUSTA Rehd. & Wils.
324109. MAGNOLIA SIEBOLDII K. Koch **Oyama magnolia.**
324110. MAGNOLIA SINENSIS (Rehd. & Wils.) Stapf.
- 324111 and 324112. MAGNOLIA × SOULANGIANA Soul.  
 324111. 'Amabilia'.  
 324112. 'San Jose'.
324113. MAGNOLIA × SOULANGIANA Soul.
324114. MAGNOLIA × SOULANGIANA var. LENNI (van Houtte) Rehd.  
 'Alba'.

**324099 to 324119—Continued**324115. *MAGNOLIA SPRENGERI* Pampanini.324116. *MAGNOLIA THOMPSONIANA* (Loud.) C. de Vos324117. *MAGNOLIA* × *VEITCHII* Bean324118. *MAGNOLIA* × *WATSONII* Hook f.324119. *THUJA ORIENTALIS* f. *BEVERLEYENSIS* (Rehd.) Rehd. Pinaceae.**324120. PYRUS COMMUNIS L. Rosaceae. Common pear.**

From Sweden. Scions presented by Institutet for Vaxtforadning av Frukt Och Bar Balsgard, Fjalkestad. Received Dec. 11, 1967.

'Herzogin Elsa'.

**324121. PYRUS sp. Rosaceae.**

From Italy. Scions presented by Osservatorio Fitopatologica, Largo Santa Susanna, Rome. Received Dec. 11, 1967.

No. 41. 'Djebel Goutava'.

**324122. FESTUCA cf. PRATENSIS Huds. Gramineae.**

From the Union of Soviet Socialist Republics. Seeds collected by agricultural explorers Quentin Jones and Wesley Keller, Crops Research Division, Beltsville, Maryland. Numbered Dec. 28, 1967.

Contaminant from P.I. 314523.

**324123. BANDEIRAEA SIMPLICIFOLIA (Vahl ex DC.) Benth. Leguminosae.**

From Ghana. Seeds collected January 1966 for S. B. Penick &amp; Company, New York at request of Hynson, Westcott &amp; Dunning Pharmaceutical Laboratory, Baltimore, Maryland. Received Dec. 11, 1967.

Lot No. BHC-96.

**324124 to 324134. PYRUS COMMUNIS L. Rosaceae.****Common pear.**

From Italy. Scions presented by Istituto di Frutticoltura, Rome. Received Dec. 11, 1967.

324124. 'Akce'.

324130. 'I P. 1100'.

324125. 'Bella Di Diugno'.

324131. 'Itala'.

324126. 'Butirra Di Roma'.

324132. 'Mellina'.

324127. 'Fragrante'.

324133. 'Mora'.

324128. 'Grata'.

324134. 'Musta Bey'.

324129. 'I P. 258'

324135. 'Porporata'.

**324136 to 324138.**

From England. Plants purchased from Hillier and Sons, Winchester. Received Dec. 11, 1967.

324136. *ABIES CHENSIENSIS* Van Tieghem ex Sargent Pinaceae.324137. *PICEA ABIES* (L.) Karst. Pinaceae.

Norway spruce.

324138. *PICEA BICOLOR* var. *REFLEXA* Shirasawa & Koyama**324139 to 324150.**

From Malaysia. Seeds presented by Department of Agriculture, Kuala Lumpur. Received Dec. 12, 1967.

324139 to 324148. *VIGNA SINENSIS* (Torner) Savi Leguminosae.

**324139 to 324150—Continued****324139 to 324148—Continued**

324139. 'E. G. Crowder'. Heavy grayish mottling, medium size.  
 324140. I. C. 394. Medium small, purplish gray mottling, distinct black rim around hilum.  
 324141. I. C. 409. Purplish gray mottling, medium small.  
 324142. New Era 2/59. Light tan, very small.  
 324143. New Era 8/59. Dark cream colored, very small, nearly round.  
 324144. New Era 10/59. Light tan, medium small, oblong flattened.  
 324145. No. 4. Dark brown, medium small, flattened.  
 324146. No. 5. Black, flattened.  
 324147. No. 6. Purplish black, flat kidney shaped.  
 324148. Philippines. Cream colored, brownish eye, medium.

**324149 and 324150. VIGNA SESQUIPEDALIS (L.) Fruwirth****Yardlong cowpea.**

324149. 'Light Green Podded'. Irregular cream and tan color patches; seed medium size, normal bean shape.  
 324150. 'Long Beans'; local. Dark tan, elongated kidney shape, medium size.

**324151 to 324158. TRITICUM AESTIVUM L. Gramineae.**

From Kenya. Seeds presented by R. Little, Department of Agriculture, Plant Breeding Station, P. O. Njoro. Received Dec. 12, 1967.

- |                    |                    |
|--------------------|--------------------|
| 324151. 'Catcher'. | 324155. 'Primex'.  |
| 324152. 'Gabrino'. | 324156. 'Salmayo'. |
| 324153. 'Lenana'.  | 324157. 294P.      |
| 324154. 'Menco'.   | 324158. 354P.      |

**324159 to 324181.**

From the Union of Soviet Socialist Republics. Seeds collected by Howard J. Brooks, Crops Research Division, Plant Industry Station, Beltsville, Maryland. Received Dec. 13, 1967.

**324159. CRATAEGUS sp. Rosaceae.**

Col. No. B-8. In forest 26 km. northwest of Yalta. Elevation 540 m. Tree 4.2 m.; fruit 0.8 cm. wide, 1.0 cm. long; stem 1.5 to 2.0 cm.

**324160. CRATAEGUS sp.**

Col. No. B-18. In open area 72 km. from Yalta to Bakhchisaray. Elevation 360 m. Tree 6 m. high, thriving in full sun; fruit 1.0 cm. long, 0.7 cm. wide; 2 to 3 carpels; pedicel 3.5 to 4 cm. long.

**324161. MALUS PUMILA var. PARADISIACA (Medic.) C. Schneid. Rosaceae.**

Col. No. B-12. 'Wild apple'. Along road about 32 km. northwest of Yalta. Elevation 900 m. Tree medium sized, fruit 3.0 cm. diameter; stem 0.5 cm.

**324162 and 324163. MALUS SYLVESTRIS Mill.****Apple.**

324162. Col. No. B-9. In forest 32 km. northwest of Yalta. Elevation 900 m. Tree small, barely alive in heavy forest; fruit 3.0 to 3.5 cm.; stem 0.8 cm.; not ripe.

324163. Col. No. B-16. About 56 km. on road to Bakhchisaray into second mountain range. Elevation 600 m. Tree of good size, growing in deep forest.

## 324159 to 324181—Continued

324164. *DUCHESNEA INDICA* (Andr.) Focke Rosaceae.

Col. No. B-83. Botanic Garden, Stavropol. Plant prostrate, spreading; leaves glossy; fruit 1.5 cm., tasteless, red, large double calyx easily removed.

324165 and 324166. *PRUNUS CERASIFERA* var. *DIVARICATA* (Ledeb.) C. Schneid Rosaceae.

323165. Col. No. B-27. Along road west of Yalta, Crimea. Extremely fruitful; fruit 2.0 cm. diameter, yellow.

324166. Col. No. B-28. Along road west of Yalta, Crimea. Extremely fruitful; fruit 2.0 cm. diameter, maroon.

324167. *PRUNUS SPINOSA* L.

Blackthorn.

Col. No. B-23. Thirteen km. west of Yalta, Crimea. Elevation 300 m. Plant to 0.9 m. high.

324168 to 324170. *PYRACANTHA COCCINEA* Roemer Rosaceae. Firethorn.

324168. Col. No. B-20. South of Bakhchisaray, in open area. Elevation 300 m. Plant low, spreading; fruit 0.7 cm. diameter, deep orange.

324169. Col. No. B-21. Open hillside, about 16 km. west of Yalta. Elevation 300 m. Upright, 1.4 m. high; fruit 0.7 cm. diameter, deep orange clusters, extremely showy.

324170. Col. No. B-22. Open hillside, about 16 km. west of Yalta. Elevation 300 m. Prostrate form, 2 m. wide, 30 cm. high; fruit same as P.I. 324169 but clusters not as full.

324171 and 324172. *PYRUS COMMUNIS* L. Rosaceae.

Common pear.

324171. Col. No. B-4. Wild pear. About 56 km. on road from Yalta to Bakhchisaray, over the first range of mountains, into second range. Elevation 600 m. growing on edge of road in deep forest. Tree very tall, trunk diameter 25 cm.; very little growth. Fruit 2.5 cm. to 3 cm.; stem 1 cm.; calyx showy.

324172. Col. No. B-11. Wild pear. About 32 km. northwest of Yalta in heavy forest. Elevation 600 m. Tree medium sized, little new growth; fruit pyriform, 3.5 cm. to 4 cm. diameter, moderate grit; stem 1.5 to 2.0 cm., showy calyx.

324173 to 324179. *PYRUS ELAEGNIFOLIA* Pall.

324173. Col. No. B-7. Twenty-six km. northwest of Yalta, in forest area. Elevation 540 m. Tree 4.5 m. high, very slow growing. Fruit 2 cm. or less, calyx persistent and very showy; stem 1.6 cm.

324174. Col. No. B-10. Wild pear. In heavy forest about 32 km. northwest of Yalta. Elevation 900 m. Tree tall, very old, trunk 56 cm. diameter; fruit 2.0 cm., stem 3.0 to 3.5 cm., very showy calyx.

324175. Col. No. B-13. Wild pear. About 35 km. northwest of Yalta on road from Yalta to Bakhchisaray, in open on plateau. Elevation 990 m. Plant bushlike, to 0.9 m. high; fruit 1.5 cm. diameter, slightly pyriform; stem 2.5 to 3.5 cm., showy calyx; leaves only slightly pubescent.

324176. Col. No. B-14. Wild pear. About 37 km. northwest of Yalta on road to Bakhchisaray, on edge of plateau near forest of second mountain range. Elevation 900 m. Tree to good size, trunk 20 cm. diameter; fruit 2 cm., nearly round; very large and showy calyx; extreme grit; leaves very pubescent.

In open on top of mountain near forester house between castle and gates of Baydar. Elevation 750 m.

324177. Col. No. B-24. Wild pear. Tree small, 2.4 m. high; fruit 2 cm. diameter, nearly round; extremely gritty; stem 1.0 to 1.5 cm., large calyx.

**324159 to 324181—Continued****324173 to 324179—Continued**

324178. Col. No. B-25. Wild pear. Tree large, trunk 30 cm., estimated to be 150 years old, very fertile with many seeds; fruit 1.8 cm. diameter, nearly round; very gritty; stem 2.0 cm., leaves small.

324179. Col. No. B-26. Wild pear. Tree 3.6 m. high, smaller tree in "pear forest", probably 40 years old; fruit 2.5 cm. diameter, nearly round, moderate grit.

**324180. PYRUS sp.**

Col. No. B-15. Wild pear. About 56 km. northwest of Yalta on road to Bakhchisaray into second mountain range. Elevation 600 m. Tree of good size, adjacent to road; fruit to 2.5 cm. diameter, excessive grit, very showy calyx; stem 2.0 to 2.5 cm.; moderate pubescence on leaves.

**324181. SORBUS DOMESTICA L. Rosaceae. Service tree.**

Col. No. B-19. South of Bakhchisaray, in open area. Elevation 300 m. Tree large, to 7.5 m. high; fruit 1.5 cm. wide, 2.0 cm. long, ovate, 5 carpels, few seeds per fruit. Only tree seen in area.

**324182 and 324183. FRAGARIA (hybrid). Rosaceae.**

From Japan. Plants presented by the Ministry of Agriculture and Forestry, Shimokuriyagawa, Morioka. Received Dec. 14, 1967.

324182. 'Benizuru'.

324183. 'Fukuba'.

**324184 to 324186. ZOYSIA JAPONICA Steud. Gramineae.****Japanese lawngrass.**

From Korea. Seeds and stolons presented by the College of Agriculture, Seoul National University, Suwon. Received Dec. 18, 1967.

324184. No. 301. Mt. Chilbo, Suwon. Stolons.

324185. No. 302. Mt. Chilbo, Suwon. Seeds.

324186. No. 303. Mt. Huasan, Kyunggido. Seeds.

**324187 to 324190. GLYCINE MAX (L.) Merr. Leguminosae.****Soybean.**

From the Philippines. Seeds presented by J. C. Moomaw, International Rice Research Institute, Los Banos, Laguna, through Theodore Hymowitz, Urbana, Illinois. Numbered Dec. 19, 1967.

324187. 'Black Manchurian'. Highest yielding in test at Laguna.

324188. No. 486. Bred at University of Philippines, College of Agriculture, Los Banos.

324189. 'Taichung-E24'. Originally from Taiwan Agricultural Research Institute, Taipei, Taiwan.

324190. 'Taichung-E32'. Originally from Taiwan Agricultural Research Institute, Taipei, Taiwan.

**324191. HELIANTHUS ANNUUS L. Compositae. Sunflower.**

From the United Arab Republic. Seeds presented by Yayah Salah, Food and Agriculture Organization of the United Nations, Cairo. Received Dec. 20, 1967.

**324192 to 324229. AVENA STERILIS L. Gramineae.****Animated oats.**

From Israel. Seeds presented by Faculty of Agriculture, The Hebrew University of Jerusalem, Rehovot. Received Dec. 20, 1967.

## 324192 to 324229—Continued

324192. AS-1.	324211. AS-21.
324193. AS-2.	324212. AS-22.
324194. AS-3.	324213. AS-23.
324195. AS-4.	323214. AS-25.
324196. AS-5.	324215. AS-26.
324197. AS-6.	324216. AS-27.
324198. AS-7.	324217. AS-28.
324199. AS-8.	324218. AS-29.
324200. AS-9.	324219. AS-30.
324201. AS-10.	324220. AS-31.
324202. AS-11.	324221. AS-32.
324203. AS-12.	324222. AS-33.
324204. AS-13.	324223. AS-34.
324205. AS-14.	324224. AS-35.
324206. AS-15.	324225. AS-36.
324207. AS-16.	324226. AS-37.
324208. AS-17.	324227. AS-38.
324209. AS-18.	324228. AS-39.
324210. AS-19.	324229. AS-40.

324230. *CAMELLIA CRAPNELLIANA* Tutch. Theaceae.

From Hong Kong. Seeds presented by Hong Kong Herbarium, Parks, Recreation and Amenities Division, Urban Services Department, Central Government Offices. Received Dec. 26, 1967.

324231. *BROMUS* cf. *RIPARIUS* Rehm. Gramineae.

From the Union of Soviet Socialist Republics. Seeds presented by All-Union Institute of Plant Industry, Leningrad. Numbered Dec. 26, 1967.

Contaminant found in P.I. 315380.

324232 to 324234. *BRASSICA OLERACEA* var. *CAPITATA* L. Cruciferae. **Cabbage.**

From Wales. Seeds presented by Department of Botany, University College of Swansea, Singleton Park, Swansea. Received Dec. 20, 1967.

Seacliffs. West Glamorgan.

324232. Col. No. 1.

324233. Col. No. 2.

324234. Col. No. 3.

## 324235 to 324246.

From Sweden. Seeds presented by Plant Breeding Institution, Weibullsholm, Landskrona. Received December 21, 1967.

324235. *BETA VULGARIS* L. Chenopodiaceae. **Sugar beet.**  
'Banco'.

324236 to 324238. *BRASSICA OLERACEA* var. *CAPITATA* L. Cruciferae. **Cabbage.**

324236. 'Ditmarsker'.



**324235 to 324246—Continued****324236 to 324238—Continued**

324237. 'Pondus'.

324238. 'Tardus'.

324239. *CUCUMIS SATIVUS* L. Cucurbitaceae. **Cucumber.**  
'Favor II'.

324240 and 324241. *DAUCUS CAROTA* L. Umbelliferae. **Carrot.**

324240. 'Fortuna'.

324241. 'Minerva'.

324242. *LACTUCA SATIVA* L. Compositae. **Lettuce.**  
'Irene'.

324243 to 324245. *PHASEOLUS VULGARIS* L. Leguminosae. **Common bean.**

324243. 'Argus'.

324244. 'Bacon'.

324245. 'Herta'.

324246. *PISUM SATIVUM* L. **Pea.**  
'Regia'.

**324247 to 324253.**

From Australia. Seeds presented by D. F. Cameron, Experimental Queensland. Received Dec. 22, 1967.

324247 and 324248. *STYLOSANTHES GUYANENSIS* (Aubl.) Swartz Leguminosae.

324247. C.P.I. 34917.

324248. C.P.I. 34920.

324249 to 324253. *STYLOSANTHES HUMILIS* H.B.K.

324249. No. 25.

324252. No. 78.

324250. No. 26.

324253. No. 119.

324251. No. 59.

**324254 to 324257. PRUNUS PERSICA (L.) Batsch Rosaceae.****Peach.**

From Australia. Scions presented by Victorian Plant Research Institute, Burnley, Victoria. Numbered Dec. 22, 1967.

'Golden Queen'. Indexed negatively for cherry ringspot, prune dwarf and dark green sunken mottle viruses. Scions from individual trees.

324254. R6T23.

324256. R10T21.

324255. R6T27.

324257. R11T24.

**324258 to 324260.**

From Canada. Plants presented by R. A. Hamilton, Manotick, Ontario. Numbered Dec. 26, 1967.

324258. *EUONYMUS BUNGEANUS* Maxim. Celastraceae.

**Winterberry euonymous.**324259. *EUONYMUS EUROPAEUS* L.

'Fructu-coccinea'.

324260. *EUONYMUS EUROPAEUS* f. *ALBUS* (West.) Rehd.

**324261 to 324287.**

From Israel. Seeds collected by J. Katznelson, The Volcani Institute of Agricultural Research, Regional Experiment Station, Neve-Ya'ar, Haifa. Received Dec. 26, 1967.

**324261.** *ORYZOPSIS HOLCIFORMIS* (Bieb.) Hack. Gramineae. Ricegrass.  
PC 1 (68).

**324262 and 324263.** *TRIFOLIUM* (hybrid) Leguminosae.

**324262.** (*Trifolium pilulare* Boiss. × *T. subterraneum*).

**324263.** (*Trifolium subterraneum* × *T. eriosphoerun* Boiss.)

**324264 and 324265.** *TRIFOLIUM MICHELIANUM* Savi

**324264.** NYT 1205. Fifteen km. east of Mush, Turkey.

**324265.** NYT 1206. Fifteen km. from Bergama, Izmir, Turkey. road to Foca.

**324266 to 324278.** *TRIFOLIUM NIGRESCENS* Viv. Ball clover.

**324266.** No. 123. Five km. south of Gaziemir, Turkey.

**324267.** No. 126. Forty-two km. south of Gaziemir, Turkey.

**324268.** No. 130. Five km. west of Aidin, Turkey.

**324269.** No. 132. Wofsoke, Turkey.

**324270.** No. 135. Seven km. west of Aidin, Turkey.

**324271.** No. 136. Thirty-seven km. east of Ortalkar, Turkey.

**324272.** No. 137. Seventy-two km. east of Aidin, Turkey, to Denizli.

**324273.** No. 146. Seventy km. from Wofkula, Turkey.

**324274.** NYT 645. Upper Galilee, Israel, Karai-Deshe.

**324275.** NYT 652. Butterfly Valley, Rhodos.

**324276.** NYT 1215. Forty km. west of Bingol, Turkey.

**324277.** NYT 1219. Eight km. east of Mush, Turkey.

**324278.** NYT 1220. Nine km. east of Mush, Turkey.

**324279 to 324285.** *TRIFOLIUM NIGRESCENS* ssp. *MENEGHINIANUM* (Clem.) Zoh.

**324279.** No. 143. Usak graveyard, Turkey.

**324280.** No. 146. Seventy km. west of Kula, Turkey.

**324281.** NYT 672. Lehavoth, Habashan, Upper Galilee, Israel.

**324282.** NYT 678. Izrael Valley, Yokneam, Israel.

**324283.** NYT 681. Jehuda hills, Hulda, Israel.

**324284.** NYT 682. Upper Galilee, Idmith, Israel.

**324285.** NYT 683. Upper Galilee, Mairon-Saasa road, Israel.

**324286 and 324287.** *TRIFOLIUM SUBTERRANEUM* L. Subterranean clover.

**324286.** No. 923.

**324287.** No. 953.

**324288 to 324304.**

From England. Plants purchased from Hillier and Sons, Winchester. Numbered Dec. 26, 1967.

**324288.** *ABIES CONCOLOR* (Gord.) Hoopes Pinaceae. White fir.  
'Fastigiata'.

## 324288 to 324305—Continued

324289. *ABIES MAGNIFICA* A. Murr. Red fir.  
'Nana'.
- 324290 and 324291. *ABIES NORDMANNIANA* (Steven) Spach Nordmann fir.  
324290. 'Nana'.  
324291. 'Pendula'.
324292. *CHAMAECYPARIS OBTUSA* f. *GRACILIS* (Rehd.) Rehd. Pinaceae.  
Falsecypress.
323293. *CHAMAECYPARIS PISIFERA* (Sieb. & Zucc.) Endl. Sawara retinospora.  
'Gold Spangel'.
324294. *PICEA ABIES* (L.) Karst. Pinaceae. Norway spruce.  
'Pumila Nigra'.
- 323295 and 324296. *PICEA ORIENTALIS* (L.) Link Oriental spruce.  
324295. 'Doverside Pendula'.  
324296. No Data.
324297. *PICEA PUNGENS* Englem.
324298. *PINUS CEMBRA* f. *COLUMNARIS* (Beiss.) Rehd. Pinaceae. Swiss stone pine.
324299. *PINUS KORAIENSIS* Sieb. & Zucc. Korean pine.  
'Winton'.
- 324300 and 324301. *PINUS PUMILA* (Pallas) Regel Stone pine.  
324300. 'Compacta'.  
324301. 'Nana'.
324302. *PINUS SYLVESTRIS* L. Scotch pine.  
'Doone Valley'.
324303. *TSUGA CANADENSIS* (L.) Carr. Pinaceae. Canadian hemlock.  
'Greenwood Lake'.
324304. *TSUGA CANADENSIS* f. *GRACILIS* (Gord.) Beissn.
324305. *BROMUS INERMIS* Leyss. Gramineae. Smooth bromegrass.
- From the Union of Soviet Socialist Republics. Seeds presented by Botanical Gardens in Kazakhstan and Uzbekistan through All-Union Institute of Plant Industry, Leningrad. Numbered Dec. 26, 1967.
- 324306 and 324307. *LYCOPERSICON ESCULENTUM* Mill. Solanaceae. Tomato.
- From Ghana. Seeds presented by Crops Research Institute, Ghana Academy of Science, Bunso, Bosuso. Numbered Dec. 26, 1967.
- A degree of resistance to *Sclerotium rolfsii* Sacc.
324306. M 40. 'Maui'.  
324307. M 86/8. Hybrid.

## INDEX OF COMMON AND SCIENTIFIC NAMES

\* If the species of a genus do not have distinct common names they share the same common name as the genus.

*Abeliophyllum distichum*, 319272-319273.  
*Abies chensiensis*, 324136.  
*concolor*, 324288.  
*holophylla*, 320516, 322745.  
*magnifica*, 324289.  
*nephrolepis*, 320916.  
*nordmanniana*, 324290, 324291.  
*sachalinensis*, 322746.  
*sibirica*, 320917, 322747.  
*Acer argutum*, 318594.  
*grandidentata*, 323650.  
*micranthum*, 320517.  
*pseudo-sieboldianum*, 320518.  
*takesimense*, 318512.  
*triflorum*, 320519.  
 sp., 323622, 323623.  
*Aceriphyllum rossii*, 318513.  
*Actinidia chinensis*, 323421.  
*chinensis* var. *setosa*, 323942.  
*latifolia*, 318405, 318406.  
*Adenophora* sp., 318514.  
*Adesmia bicolor*, 323407.  
*Adonis aestivalis*, 319386.  
*Aegilops* (hybrid), 323422.  
*longissima*, 318647.  
*speltoides*, 318648.  
 sp., 321698.  
*Aeschynomene paniculata*, 322288.  
 sp., 322289-322295.  
*Ageratum* sp., 319332.  
*Agropyron cristatum*, 318922.  
*intermedium*, 318923.  
*Agrostis castellana*, 318924-318933.  
 sp., 318934.  
*Albizia lebeck*, 323530.  
 Alder, Japanese. See *Alnus japonica*.  
 Alfalfa. See *Medicago sativa*.  
*Allium cepa*, 318506, 318886, 320911,  
 321384-321386.  
*thunbergii*, 318515.  
*Alnus japonica*, 323330.  
*Alopecurus arundinaceus*, 319815.  
*geniculatus*, 318935.  
*pratensis*, 318936.  
 Alyceclover. See *Alysicarpus vaginalis*.  
*Alysicarpus monilifer*, 321398.  
*vaginalis*, 322296.  
*Amaranthus leucocarpus*, 323506.  
*Amelanchier alnifolia*, 323651, 323652.  
*utahensis*, 323653.  
 sp., 323654, 323655.  
*Ammi copticum*, 319414.  
*Ammophila arenaria*, 319816.  
*Amsinckia tessellata*, 319416.  
*Andropogon campii*, 321467, 321468.  
*distachyus*, 321399.  
*hirtiflorus*, 321469-321474.

*Andropogon*—Continued  
 sp., 321475-321486.  
*Anemone multifida*, 321715.  
 Annatto. See *Bixa orellana*.  
*Annona cherimola*, 319333.  
*Anthyllis vulneraria*, 318937.  
*Aphyllanthes monspeliensis*, 318938.  
*Apium graveolens*, 320912, 320994-320996.  
 Apple. See *Malus sylvestris*.  
 paradise. See *M. pumila*.  
 Apricot, manchurian. See *Prunus mandshurica*.  
*Aquilegia caerulea*, 323656.  
*Arachis glabrata*, 318672, 323936.  
*hypogaea*, 318465, 318729-318744,  
 319174-319178, 319709-319711,  
 319714-319814, 320054-320058,  
 323234-323241, 323265-323269,  
 323582-323585.  
*hypogaea* f. *nambyquarae*, 320059.  
*villosa* var. *correntina*, 318673.  
 Arborvitae. See *Thuja occidentalis*.  
 Oriental. See *T. orientalis*.  
*Arbutus unedo*, 318447.  
*Argyrolobium linnaeanum*, 318939.  
*Arisaema amurense*, 319240.  
*amurense* var. *serratum*, 319241.  
*heterophyllum*, 319242-319243.  
*japonicum*, 319244.  
*peninsulae*, 319245, 319246.  
*ringens*, 319247.  
*robustum*, 319248, 319249.  
 sp., 319250.  
*Aristida ciliata*, 321400.  
*lanata*, 321401.  
 sp., 321402.  
*Armoracia lapathifolia*, 318401-318404, 319150, 320034.  
*Aronia melanocarpa*, 323957.  
*Arrhenatherum elatius*, 318940-318943, 323481-323495.  
*erianthum*, 323496.  
*Artemisia* sp., 323657.  
*Aruncus aethusifolius*, 318516.  
*Asarum maculatum*, 318517.  
*Aster spathulifolius*, 318518.  
*Astragalus cymbaearcarius*, 318944-318946.  
*glycyphyllos*, 319817, 319818.  
*hamosus*, 318947.  
*incanus*, 318948.  
*macrorrhizus*, 318949.  
*sinicus*, 322297.  
*Athyrium grammitoides*, 320396.  
*japonicum*, 320397.  
*yokoscense*, 320398, 320399.  
*Atractylis lyrata*, 319274.

- Atriplex hortensis*, 323313.  
sp., 323658.
- Avena barbata*, 317919-317959,  
320560-320735, 323094-323140.  
*bromoides*, 318950-318956.  
*sativa*, 320204-320208, 320472,  
320473, 321690, 321691, 321694-  
321696, 321750-321767, 323253-  
323254, 323351, 323955-323956.  
*sterilis*, 317960-318400, 320410-  
320445, 320736-320861, 323141-  
323190, 324192-324229.
- Azalea, Japanese. See *Rhododendron japonicum*.
- Baccharis patagonica*, 321716.
- Ballya zebrina*, 320053.
- Bandeiraea simplicifolia*, 324123.
- Barberry. See *Berberis haematocarpa*.  
magellan. See *B. buxifolia*.
- Barley, common. See *Hordeum vulgare*.  
bulbous. See *H. bulbosum*.  
deficient. See *H. deficiens*.  
six-rowed. See *H. vulgare* var. *pallidum*.  
two-rowed. See *H. spp.\**
- Bassia brachyptera*, 321633.  
*eriacantha*, 321634.  
*lanicuspis*, 321635.
- Bean. See *Phaseolus spp.\**  
adzuki. See *P. angularis*.  
common. See *P. vulgaris*.  
metcalfe. See *P. metcalfei*.  
mung. See *P. aureus*.  
rice. See *P. calcaratus*.  
scarlet runner. See *P. coccineus*.  
snail. See *P. caracalla*.  
teparry. See *P. acutifolius* var. *latifolius*.
- Beckmannia eruciformis*, 323423.
- Beet, sugar. See *Beta vulgaris*.
- Beggarweed. See *Desmodium spp.\**
- Begonia sp.*, 319334.
- Berberis buxifolia*, 321717.  
*haematocarpa*, 323659.  
*nevinii* var. *haematocarpa*, 323660.
- Beta vulgaris*, 318677, 323938, 324235.
- Betula chinensis*, 318654.  
*davurica*, 318710.  
*ermanii*, 318705, 318711, 322748.  
*humilis*, 318706, 318712, 320918.  
*middendorffii*, 318707, 320919.  
*nana*, 319172.  
*papyrifera* var. *commutata*,  
323661, 323662.  
*platyphylla*, 318713, 320920, 322749,  
322750.  
*schmidtii*, 318714, 322751.
- Birch. See *Betula spp.\**  
Asian white. See *B. platyphylla*.  
dahurian. See *B. davurica*.  
Schmidts. See *B. schmidtii*.
- Biscutella laevigata*, 319405.
- Bixa orellana*, 321628-321630.
- Blackthorn. See *Prunus spinosa*.
- Bluebeard, common. See *Caryopteris incana*.
- Blueberry, bog. See *Vaccinium uliginosum*.
- Bluestem. See *Andropogon spp.\**  
silver. See *Bothriochloa saccharoides*.
- Bothriochloa alta*, 321418-321421.  
*barbinodis*, 321422-321432,  
321487-321539.  
*edwardsiana*, 321433-321436.  
*hybrida*, 321437-321445.  
*pertusa*, 321540, 321541.  
*saccharoides*, 321446-321466,  
321542-321562.  
*schlumbergii*, 321563-321565.  
*wrightii*, 321566-321569.
- Bougainvillea sp.*, 323947.
- Box. See *Buxus microphylla* var. *koreana*.  
common. See *B. sempervirens*.
- Brachiaria dura*, 320556.
- Brachypodium distachyon*, 321403.  
*phoenicoides*, 318958-318961.  
*sylvaticum*, 318962.
- Brassica campestris*, 319413, 319417.  
*campestris* var. *sarson*, 319692-  
319694.  
*napus*, 323270, 323939.  
*oleracea* var. *botrytis*, 320997-  
321001.  
*oleracea* var. *capitata*, 320913,  
320914, 321002, 324069, 324232-  
324234, 324236-324238.  
*oleracea* var. *viridis*, 320915.
- Broadbean. See *Vicia faba*.
- Bromus inermis*, 319206, 324305.  
cf. *riparius*, 324231.
- Broomcorn, spike. See *Cytisus nigricans*.
- Buckleya sp., 323663.
- Buffalo-berry, russet. See *Shepherdia canadensis*.
- Burclover, California. See *Medicago polymorpha* var. *vulgaris*.
- Butterfly-pea, Piedmont. See *Centrosema virginianum*.
- Buxus microphylla* var. *koreana*,  
319275-319280.  
*sempervirens*, 320077.
- Cabbage. See *Brassica oleracea* var. *capitata*.
- Cadia sp.*, 323531.
- Caesalpinia ferrea*, 322298.  
*pulcherrima*, 322299, 322300.
- Cajanus cajan*, 319335, 320974, 321113.
- Calamagrostis arundinaceae* var. *brachytricha*, 318519.
- Calanthe discolor*, 319251.
- Calopogonium mucunoides*, 318466,  
320975, 322301-322303.  
sp., 322304, 322305.
- Calpurnia aurea*, 323532.
- Caltha palustris*, 319406.

- Camellia crapnelliana*, 324230.  
*japonica*, 319162-319164, 319281-319283, 320532, 320886-320895.  
*sasanqua*, 319284, 319285.  
*sinensis*, 320866-320868.  
 Camellia, common. See *Camellia japonica*.  
*sasanqua*. See *C. sasanqua*.  
*Campanula takesimana*, 318520.  
*Camptosorus sibiricus*, 319252.  
*Canavalia ensiformis*, 322306, 322307.  
*maritima*, 322308.  
*obtusifolia*, 322309.  
 sp., 319336, 322310.  
*Canna edulis*, 323424.  
*indica*, 318800.  
 Canna, edible. See *Canna edulis*.  
*Capsicum annuum*, 319337, 321003, 321387, 322717-322731, 323314.  
 sp., 321078, 323315.  
*Caralluma newbrounii*, 318497.  
*Cardamine impatiens*, 319387.  
*Carex fusanensis*, 318521.  
 Carrot. See *Daucus carota*.  
*Carthamus lanatus*, 323271.  
*oxyacantha*, 323272.  
*tinctorius*, 323513-323516.  
*Caryopteris incana*, 318522, 319286.  
*Cassia alata*, 318686, 322311.  
*angulata*, 322312.  
*bicapsularis*, 322313, 322314.  
*cathartica*, 322315.  
*flexuosa*, 322316-322319.  
*floribunda*, 323533.  
*latistipula*, 322320-322322.  
*mimosoides*, 318801.  
*occidentalis*, 318802.  
*rotundifolia*, 322323, 322324.  
*siamea*, 323534.  
*spectabilis*, 323535.  
 sp., 322325, 322326, 323536.  
 Cassia, ringworm. See *Cassia alata*.  
*Castanea mollissima*, 319193, 319194.  
 Castorbean. See *Ricinus communis*.  
*Catalpa ovata*, 320520.  
 Catalpa, Japanese. See *Catalpa ovata*.  
 Cauliflower. See *Brassica oleracea* var. *botrytis*.  
 Celery. See *Apium graveolens*.  
*Celtis occidentalis*, 323664.  
*sinensis*, 318595, 320521.  
*Cenchrus ciliaris*, 319459, 321404, 321673, 323444.  
*prieurii*, 323445.  
*Centaurea* sp., 323273.  
*Centella asiatica*, 323507.  
*Centranthus macrosiphon*, 319398.  
*Centrosema arenarium*, 322327.  
*kermesii*, 322328.  
*plumieri*, 322329.  
*pubescens*, 318803, 320976, 322330-322334.  
*virginianum*, 322335-322337.  
 sp., 322338-322356.  
*Cercocarpus intricatus*, 323665.  
*ledifolius*, 323666-323670.  
*montanus*, 323671.  
*Chamaebatiaria millefolium*, 323672-323675.  
*Chamaecyparis lawsoniana*, 324079-324085, 324099.  
*lawsoniana* f. *lutea*, 324086.  
*obtusa* f. *gracilis*, 324292.  
*obtusa* f. *nana*, 324087.  
*obtusa* f. *sanderi*, 318632.  
*obtusa* f. *tetragona*, 324088, 324089.  
*pisifera*, 324090, 324293.  
*pisifera* f. *aurea*, 324091.  
*pisifera* f. *plumosa*, 324092.  
*Chamaepeuce afra*, 319407.  
*hispanica*, 319399.  
 Cherimoya. See *Annona cherimola*.  
 Cherry, European dwarf. See *Prunus fruticosa*.  
 sweet. See *P. avium*.  
 Chickpea. See *Cicer arietinum*.  
 Chile-bells, red. See *Lapageria rosea*.  
*Chilotrichium diffusum*, 321718.  
*Chionanthus retusus*, 320522.  
*Chloranthus japonicus*, 318523.  
*Chloris gayana*, 318747, 319460-319464, 320045.  
 Chokeberry, black. See *Aronia melanocarpa*.  
*Chrysanthemum sibiricum*, 318524.  
*zawadskii*, 318525.  
*Cicer arietinum*, 319338, 319339.  
*Cimicifuga dahurica*, 319287.  
 Cinquefoil, shrubby. See *Potentilla fruticosa*.  
 Citron. See *Citrus medica*.  
*Citrullus lanatus*, 319212, 319235-319239.  
*Citrus medica*, 320079.  
 sp., 320080, 320081.  
*Clematis viticella*, 317907.  
 Clematis, Italian. See *Clematis viticella*.  
*Clitoria laurifolia*, 322357-322363.  
*ternatea*, 319465, 320977, 322364-322366.  
 Clover. See *Trifolium* spp.\*  
 ball. See *T. nigrescens*.  
 berseem. See *T. alexandrinum*.  
 cluster. See *Trifolium glomeratum*.  
 kaimi. See *Desmodium canum*.  
 Kenya. See *Trifolium semipilosum*.  
 red. See *T. pratense*.  
 rose. See *T. hirtum*.  
 strawberry. See *T. fragiferum*.  
 subterranean. See *T. subterraneum*.  
 sweet. See *Melilotus* spp.\*  
 white. See *M. alba*.  
 white. See *Trifolium repens*.

- Cocaine plant. See *Erythroxylon coca*.
- Coeloglossum viride* var. *bracteatum*, 319261.
- Coffea arabica*, 318715, 318716.
- Coffee, Arabian. See *Coffea arabica*.
- Coix lacryma-jobi*, 318749, 318804, 320865.
- Coleus blumei* var. *verschaffeltii*, 318435, 318436.
- Collard. See *Brassica oleracea* var. *viridis*.
- Columbine, Colorado. See *Aquilegia caerulea*.
- Comfrey. See *Symphytum officinale*.
- Coniogramme fraxinea* var. *intermedia*, 320400.
- japonica*, 319253.
- Convallaria keiskei*, 318526.
- Coraltree. See *Erythrina abyssinica*.
- Cordia abyssinica*, 323537.
- Cordyline fragrans*, 323538.
- Coreopsis* sp., 323676.
- Corn. See *Zea mays*.
- Cornelian-cherry. See *Cornus mas*.
- Cornus mas*, 323958, 323959.
- stolonifera*, 323677-323679. sp., 323624.
- Coronilla minima*, 318963.
- Cortaderia selloana*, 323611.
- Corylus avellana*, 318463, 318678-318682.
- sp., 323960, 323961.
- Cotinus coggygria*, 323962.
- Cotoneaster ascendens*, 323193.
- bullata*, 323194.
- cinnabarina*, 319221.
- dammeri*, 323195.
- divaricata*, 323196.
- sikangensis*, 323197.
- sp., 323625, 324064.
- Cotoneaster*, spreading. See *Cotoneaster divaricata*.
- Cotton. See *Gossypium punctatum*.
- sea-island. See *G. barbadense*.
- upland. See *G. hirsutum*.
- Cowania mexicana*, 323680-323687.
- Cowberry. See *Vaccinium vitis-idaea*.
- Cowpea. See *Vigna* spp.\*
- yardlong. See *V. sesquipedalis*.
- Crabapple, Manchurian. See *Malus baccata* var. *mandshurica*.
- pearleaf. See *M. prunifolia*.
- Siberian. See *M. baccata*.
- Crambe abyssinica*, 319691.
- cordifolia*, 318833.
- maritima*, 323425.
- tatarica*, 323426.
- Cranberry, small. See *Vaccinium oxycoccus*.
- Crataegus altaica*, 323963.
- mollis*, 323964.
- pinnatifida*, 320523.
- sp., 323965-323967, 324159, 324160.
- Crotalaria anagyroides*, 322367-322369.
- balansae*, 322370.
- brachystachya*, 322371-322373.
- brevidens* var. *parviflora*, 321079.
- ericarpa*, 322374.
- goreensis*, 318805.
- grantiana*, 322375, 322376.
- juncea*, 322377.
- lanceolata*, 322378, 322379.
- pavulina*, 322380.
- pilosa*, 322381.
- saltiana*, 322382-322391.
- stipularia*, 322392-322395.
- usaramoensis*, 322396.
- sp., 322397-322409.
- Crotalaria*, lance. See *Crotalaria lanceolata*.
- Croton megalocarpus*, 323539.
- Cryptomeria japonica*, 324093.
- Cryptomeria*, common. See *Cryptomeria japonica*.
- Cucumber. See *Cucumis sativus*.
- Cucumis anguria*, 320052.
- melo*, 318653, 319213, 319214, 320993, 321004, 321005, 323427, 323498, 323499, 323937.
- melo* var. *flexuosus*, 319215.
- sativus*, 319216, 321006-321011, 323316, 324239.
- sp., 319217-319219, 323500.
- Cucurbita maxima*, 318415-318433.
- moschata*, 318822-318824.
- cf. *moschata*, 318825.
- pepo*, 318826-318830, 323317.
- sp., 318831, 318832.
- Cupressus arizonica*, 323688.
- currant, mountain. See *Ribes alpinum*.
- slender golden. See *R. aureum*.
- Cushaw. See *Cucurbita moschata*.
- Cyamopsis tetragonoloba*, 322762-323090, 323274.
- Cyclanthera pedata*, 323428.
- Cydista diversifolia*, 320471.
- Cydonia oblonga*, 322282.
- Cynodon dactylon*, 318964, 318965, 320875-320885, 321570, 322732.
- Cypress, Arizona. See *Cupressus arizonica*.
- Cypripedium japonicum*, 318527.
- macranthum*, 319254.
- Cytisus nigricans*, 318748.
- Dactylis glomerata*, 318966-318979, 320557, 321675, 323255.
- Dahlia* sp., 319340.
- Dalbergia* sp., 322410.
- Dasytirion leiophyllum*, 323689.
- Daucus aureus*, 319403.
- carota*, 319858-319860, 321688, 321689, 324240, 324241.
- Davallia mariesii*, 320402.
- Daylily. See *Heemerocallis dumortieri*.
- Delphinium nelsonii*, 323690.
- sp., 323691, 323692, 323968.

- Deschampsia reuteri*, 319002.  
*Desmanthus virgatus*, 322411.  
*Desmodium barbatum*, 322412.  
*campylocaulon*, 322413.  
*canum*, 322414–322426.  
*cuneatum*, 322427–322429.  
*discolor*, 319466, 322430–322444.  
*distortum*, 319467, 322445–322446.  
*gangeticum*, 322447.  
*glabrum*, 319341.  
*intortum*, 319468, 322448–322450.  
*leiocarpum*, 322451.  
*ovalifolium*, 322452, 322453.  
*pabulare*, 322454–322462.  
*perplexum*, 322463–322466.  
*sandwicense*, 319469, 322467–322473.  
*scorpiurus*, 322474.  
*sequax*, 320536.  
*tortuosum*, 322475–322497.  
*uncinatum*, 319470, 322498, 322499.  
*velutinum*, 318806.  
 sp., 319342–319351, 319471, 322500–322524.  
*Deutzia glabrata*, 319288.  
*Dianthus* sp., 323969, 323970, 323971.  
*Dichanthium* sp., 321571–321580.  
*Digitaria adscendens*, 320978.  
*scalarum*, 321670.  
 sp., 321405.  
*Dioclea lasiocarpa*, 318467.  
 sp., 322525, 322526, 322527.  
 Dogwood. See *Cornus stolonifera*.  
*Dolichos axillaris*, 322528.  
*formosus*, 319472.  
*lablab*, 319473, 321080, 321081, 322529–322536.  
*Dombeya burgesiae*, 321082.  
*mastersii*, 323540.  
*Doronicum plantagineum*, 319222.  
*Drimys winteri*, 321719.  
*Drimys*, winterbark. See *Drimys winteri*.  
*Dryopteris varia*, 319255.  
 sp., 319256.  
*Duchesnea indica*, 324164.  
*Echinochloa haploclada*, 319195.  
 sp., 321581.  
*Echinodorus* sp., 323310.  
 Eggplant. See *Solanum melongena*.  
*Elaeagnus angustifolia*, 323972.  
*umbellata*, 319289.  
 sp., 323331.  
*Elaeagnus*, autumn. See *Elaeagnus umbellata*.  
 Elder, European red. See *Sambucus racemosa*.  
*Eleusine coracana*, 318750, 318897, 318898, 321083–321086, 321114, 321125–321130.  
*Elymus arenarius*, 319819.  
*Embothrium coccineum*, 321720.  
 Emmer. See *Triticum dicoccum*.  
*Enargea marginata*, 321721.  
*Entolasia imbricata*, 318669.  
*Eragrostis linearis*, 320979.  
*papposa*, 318863.  
*tef*, 318899–318903.  
*tenella*, 320980.  
*unioloides*, 320981.  
 sp., 320982.  
*Erianthus elephantinus*, 318607–318613.  
*munja*, 318614, 318615.  
*ravennae*, 318616.  
*Erica glauca* var. *elegans*, 323339.  
*peziza*, 323340.  
*taxifolia*, 323341.  
*Erigeron* sp., 321722.  
*Eriogonum* sp., 323693–323695.  
*Eriosema floribundum*, 322537, 322538.  
 sp., 322539, 322540.  
*Erythrina abyssinica*, 323541.  
 sp., 323542, 323543.  
*Erythroxylon coca*, 323480.  
*Eucalyptus coccifera*, 323501.  
*glaucescens*, 323502.  
*niphophila*, 323503.  
*perriniana*, 323504.  
*simmondsii*, 323505.  
*Euonymus bungeanus*, 324258.  
*europaeus*, 324259.  
*europaeus f. albus*, 324260.  
*fortunei* var. *radicans*, 318528.  
*japonica*, 318529.  
*sieboldiana*, 319290.  
*Euonymus*, winterberry. See *Euonymus bungeanus*.  
*Euphorbia matritensis*, 319400.  
*Evodia daniellii*, 320524.  
*Fallugia paradoxa*, 323696–323699.  
 Falsebeech. See *Nothofagus* spp.\*  
 Falsecypress. See *Chamaecyparis obtusa* f. *gracilis*.  
 Hinoki. See *C. obtusa* f. *tetragona*.  
 Lawson. See *C. lawsoniana*.  
*Fendlera rupicola*, 323700.  
 Fern bush. See *Chamaebatiaria millefolium*.  
 Fescue. See *Festuca ampla*.  
 meadow. See *F. pratensis*.  
 red. See *F. rubra*.  
 sheep. See *F. ovina*.  
 tall. See *F. arundinacea*.  
*Festuca ampla*, 318980–318984.  
*arundinacea*, 318985–318988, 321676, 323256.  
*ovina*, 318989, 318990.  
*pratensis*, 318991, 320558, 321677.  
 cf. *pratensis*, 324122.  
*rubra*, 318992, 318993, 321678.  
 Filbert. See *Corylus avellana*.  
*Filicium decipiens*, 323544.  
 Fir. See *Abies* spp.\*  
 needle. See *A. holophylla*.  
 nordmann. See *A. nordmanniana*.  
 red. See *A. magnifica*.



## Fir—Continued

- sakhalin. See *A. sachalinensis*.  
 Siberian. See *A. sibirica*.  
 white. See *A. concolor*.
- Firethorn, scarlet. See *Pyracantha coccinea*.
- Flax, Austrian. See *Linum austriacum*.  
 common. See *L. usitatissimum*.
- Flaxlily. See *Phormium colensoi*.
- Flowerfence. See *Caesalpinia pulcherrima*.
- Fortanisia phillyraeoides*, 319291.  
*Forsythia ovata*, 318532, 318533.  
*viridissima* var. *koreana*, 318530–318531.
- Foxtail. See *Alopecurus arundinaceus*  
 meadow. See *A. pratensis*.  
 water. See *A. geniculatus*.
- Fragaria* (hybrid), 318674, 318675, 318885, 319548, 319839–319841, 319850, 319851, 320060, 324182, 324183.
- Fraginus anomala*, 323701–323707.  
*sieboldiana*, 320896.
- Fringe tree, Chinese. See *Chionanthus retusus*.
- Galactia jussiaeana*, 322541.  
*striata*, 319352.
- Gardenia urcelliformis*, 323545.  
*Gastrocotyle hispida*, 319388.  
*Gazania pinnata*, 318659.
- Gentiana scabra* var. *buergeri*, 318534, 319292.  
*uchiyamai*, 318535, 318536.  
 sp., 318537.
- Geranium* sp., 323708.
- Gerbera* (hybrid), 318538, 318539.
- Gherkin, West Indian. See *Cucumis anguria*.
- Ginkgo biloba*, 318464.
- Glycine falcata*, 321390.  
*max*, 319525–319533, 319534–319538, 322689–322695, 323517–323525, 323550–323581, 323586, 323587, 324066–324068, 324187–324190.  
*tabacina*, 319697, 320545, 320546, 321391, 321392.  
*tomentella*, 319696, 320547, 321393, 321394.  
*tomentosa*, 320548.  
*wightii*, 319474–319479, 321072, 322602–322608, 322610–322612, 322613.  
 sp., 320549, 320550, 323275–323278.
- Gomortega nitida*, 321075.
- Gossypoides brevilanatum*, 319165.  
*kirkii*, 321748.
- Gossypium barbadense*, 321685.  
*hirsutum*, 318676, 321686.  
*punctatum*, 321687.  
 sp., 320551.
- Grape, European. See *Vitis vinifera*.
- Grass, Acapulco. See *Opizia stolonifera*.  
 beach. See *Ammophila arenaria*.  
 bent. See *Agrostis castellana*.  
 Bermuda. See *Cynodon dactylon*.  
 blue, bulbous. See *Poa bulbosa*.  
 brome, smooth. See *Bromus inermis*.  
 buffel. See *Cenchrus ciliaris*.  
 canary, large. See *Phalaris aquatica*.  
 reed. See *P. arundinacea*.  
 dune, European. See *Elymus arenarius*.  
 falsebrome. See *Brachypodium* spp.\*  
 gama, Guatemala. See *Tripsacum laxum*.  
 goat. See *Aegilops longissima*, *A. speltoides*.  
 guinea. See *Panicum maximum*.  
 Japanese lawn. See *Zoysia japonica*.  
 love. See *Eragrostis* spp.\*  
 molasses. See *Melinis minutiflora*.  
 needle. See *Stipa* spp.\*  
 oat, tall. See *Arrhenatherum elatius*.  
 orchard. See *Dactylis glomerata*.  
 panic. See *Panicum* spp.\*  
 rhodes. See *Chloris gayana*.  
 rice. See *Oryzopsis holciformis*.  
 rye, Italian. See *Lolium multiflorum*.  
 perennial. See *L. perenne*.  
 wimmera. See *L. rigidum*.  
 slough. See *Beckmannia eruciformis*.  
 smilo. See *Oryzopsis miliacea*.  
 threeawn. See *Aristida ciliata*.  
 wheat, crested. See *Agropyron cristatum*.  
 intermediate. See *A. intermedium*.
- Guar. See *Cyamopsis tetragonoloba*.
- Hackberry, common. See *Celtis occidentalis*.
- Hawthorn, Chinese. See *Crataegus pinnatifida*.
- Heath. See *Erica* spp.\*
- Hedera helix* f. *arborescens*, 323613.  
*helix* var. *deltoides*, 323614.  
*helix* var. *hibernica*, 323615.  
*rhombes*, 318540.
- Hedysarum coronarium*, 318994.
- Helianthus annuus*, 318468, 318600, 323279–323281, 323442, 323526, 323527, 324191.  
*multiflorus*, 323588.
- Heliconia* sp., 324077.
- Helictotrichon sulcatum*, 318957.
- Heliotropium indicum*, 318807.
- Heloniopsis orientalis*, 318541.

- Hemerocallis dumortieri*, 319820.  
sp., 319293.
- Hemlock, Canadian. See *Tsuga canadensis*.
- Hepatica asiatica*, 318542-318544.
- Heuchera eastwoodiae*, 323709.
- Hibiscus cannabinus*, 318717-318727,  
323091, 323092, 323242, 323348-  
323350.  
*coulteri*, 319353.  
*esculentus*, 323318, 323319, 323429,  
323508, 323509.  
*lasiocarpus*, 323935.  
*syriacus*, 320897.
- Hippocrepis commutata*, 318995,  
318996.  
*glauca*, 318997.  
*multisiliquosa*, 318998.  
*salzmannii*, 318999, 319000.  
*scabra*, 319001.  
*unisiliquosa*, 321406.
- Holly. See *Ilex insignis*.  
Chinese. See *I. cornuta*.  
English. See *I. aquifolium*.  
luster leaf. See *I. latifolia*.
- Honeysuckle. See *Lonicera involucrata*.  
European fly. See *L. xylosteum*.
- Hoodia barklyi*, 318498.  
*burkei*, 318499.
- Hop, common. See *Humulus lupulus*.
- Hop-tree. See *Ptelea trifoliata*.
- Hordeum bulbosum*, 318649, 319003,  
320196.  
*deficiens*, 320921.  
*distichon*, 320922, 320923, 321768-  
321855.  
*distichon* var. *palmella*, 320924-  
320928.  
*vulgare*, 319863-319867, 320199-  
320203, 320209-320243, 320474-  
320478, 320929, 321692, 321693,  
321697, 321856-321867, 323352,  
323401-323406, 323446-323448.  
*vulgare* var. *pallidum*, 320930-  
320934.
- Horseradish. See *Armoracia laphathifolia*.
- Hosta albomarginata*, 318545.  
*longipes*, 318546, 319294, 319295.  
*ventricosa*, 319821.  
sp., 318547.
- Huernia zebrina*, 318500.
- Humulus lupulus*, 320456-320462,  
320463-320465.
- Hyacinth-bean. See *Dolichos lablab*.
- Hydrangea serrata*, 318548.
- Ilex aquifolium*, 318652, 319168.  
*colchica*, 319169.  
*cornuta*, 319170.  
*crenata* f. *microphylla*, 318549.  
*insignis*, 318660.  
*latifolia*, 319171.  
*wightiana*, 318661.
- Impatiens edgeworthii*, 319389.  
*sulcata*, 319390.
- Indigo. See *Indigofera* spp.\*  
anil. See *I. suffruticosa*.  
hairy. See *I. hirsuta*.
- Indigofera arrecta*, 318808.  
*hirsuta*, 322542.  
*lespedezioides*, 322543.  
*spicata*, 319480.  
*subulata*, 319481.  
*suffruticosa*, 322544.  
sp., 322545-322550.
- Ipomoea batatas*, 318843-318861,  
319541-319547, 320197, 320446-  
320455, 320493-320499, 321112.  
*pedicellaris*, 319354.  
sp., 319355-319365.
- Iris ensata* var. *spontanea*, 318550.  
*ruthenica*, 318551.  
*sanguinea*, 318552, 318553.  
sp., 318554-318557, 322733.
- Ironweed. See *Vernonia abyssinica*.
- Izora coccinea*, 318809.  
*duffii*, 318810.
- Jack bean. See *Canavalia ensiformis*.
- Jobs-tears. See *Coix lacryma-jobi*.
- Juglans regia*, 318708, 319549, 323497,  
323949-323951, 323952-323954.
- Jujube. See *Zizyphus jujuba*.
- Juniper. See *Juniperus communis*  
var. *saxatilis*.  
cherrystone. See *J. monosperma*.  
Chinese. See *J. chinensis*.  
sargent. See *J. chinensis* var.  
*sargentii*.  
savin. See *J. sabina*.  
shore. See *J. conferta*.
- Juniperus chinensis*, 324094.  
*chinensis* f. *aurea*, 319296.  
*chinensis* var. *sargentii*, 318558.  
*communis* var. *saxatilis*, 324095.  
*conferta*, 323932, 323933.  
*monosperma*, 323710-323712.  
*sabina*, 324100.  
*virginiana*, 324096.  
sp., 323713, 323714.
- Jurinea anatolica*, 319394.  
*carduiformis*, 319391.
- Kenaf. See *Hibiscus cannabinus*.
- Kidneyvetch. See *Anthyllis vulneraria*.
- Kigelia aethiopica*, 323546.
- Kochia brevifolia*, 321389.
- Koeleria caudata*, 319004-319011.  
*vallesiana*, 319012-319016.
- Lactuca sativa*, 320467, 321012, 321013,  
323940, 323941, 324242.
- Lagoecia cuminoides*, 319404.
- Lapageria rosea*, 321076.
- Lapsana communis*, 319401.
- Larch, Siberian. See *Larix sibirica*.
- Larix koreana*, 320525.  
*sibirica*, 322752.
- Lathyrus articulatus* ssp. *clymenum*,  
321024.

Leadtree. See *Leucaena leucocephala*.  
*Lemmaphyllum microphyllum*, 319257.  
*Lens culinaris*, 319366, 319367, 319524,  
 320935-320954.  
 Lentil. See *Lens culinaris*.  
*Leontopodium souliei*, 319223.  
*stoechas*, 319224.  
*Lespedeza bicolor*, 318637.  
*cuneata*, 322551.  
*daurica*, 318638.  
 × *divaricata*, 318639.  
*inschanica*, 318640.  
*tomentosa*, 318641.  
*Lespedeza*, Chinese. See *Lespedeza*  
*cuneata*.  
 Lettuce. See *Lactuca sativa*.  
*Leucaena leucocephala*, 317908-317913,  
 319482, 319843-319846, 320983,  
 321077, 322552, 322553.  
*retusa*, 321025, 321631.  
*trichodes*, 317914.  
 sp., 317915-317918.  
*Ligustrum vulgare*, 318631.  
 Lilac, manchurian. See *Syringa*  
*amurensis*.  
 nodding. See *S. reflexa*.  
*Lilium amabile*, 318559, 318560,  
 319297, 319298.  
*distichum*, 319299, 319300.  
*hansonii*, 319301-319304.  
*leichtlinii* var. *maximowiczii*,  
 319305, 320898.  
*miquelianum*, 318561, 318562,  
 319306-319312.  
*philippinense*, 321073.  
*tigrinum* var. *fortunei*, 319313.  
 sp., 318563-318566.  
 Lily. See *Lilium* spp.\*  
 hanson. See *L. hansonii*.  
 Philippine. See *L. philippinense*.  
 Lily-of-the-valley. See *Convallaria*  
*keiskei*.  
*Linum austriacum*, 323973.  
*usitatissimum*, 320155-320183,  
 321641, 321642, 323592-323605.  
*Liparis* sp., 319258.  
*Liriodendron chinense*, 318633.  
*tulipifera*, 323715.  
*Liriope graminifolia*, 318567.  
*spicata*, 318568.  
*Litchi chinensis*, 319540.  
*Lithospermum arvense*, 319395.  
*tenuiflorum*, 319392.  
*Lolium canariense*, 320544.  
*multiflorum*, 321395, 321396,  
 321679.  
*perenne*, 319017, 321397, 321680,  
 321681.  
*rigidum*, 319018, 323257.  
*Lonicera involucrata*, 323716-323719.  
*xylostemum*, 323332.  
*Lotononis batesii*, 319483, 322554.  
*Lotus arenarius*, 319019, 319020.  
*corniculatus*, 319822, 319823,  
 322555, 322556.

Lotus—Continued

*peregrinus*, 323192.  
 sp., 319021-319025.  
 Lychee. See *Litchi chinensis*.  
*Lycopersicon esculentum*, 318507,  
 319368, 319369, 319695, 319893-  
 319895, 320198, 320468-320470,  
 321014-321016, 321026, 321027,  
 321028, 321029-321033, 321040-  
 321071, 321749, 323320, 323510,  
 324065, 324306, 324307.  
*Lycoris koreana*, 318569.  
*Machaerium* sp., 322557, 322558.  
*Maesa japonica*, 320526.  
*Magnolia campbellii*, 318662, 324101,  
 324102.  
*dawsoniana*, 324103.  
*delavayi*, 324104.  
*denudata*, 324105.  
*liliflora*, 324106.  
*mollicomata*, 324107.  
*sargentiana robusta*, 324108.  
*sieboldii*, 324109.  
*sinensis*, 324110.  
 × *soulangiana*, 324111-324113.  
 × *soulangiana* var. *lenni*, 324114.  
*sprengeri*, 324115.  
*thompsoniana*, 324116.  
 × *veitchii*, 324117.  
 × *watsonii*, 324118.  
*Magnolia*, oyania. See *Magnolia*  
*sieboldii*.  
 Mahogany, mountain. See  
*Cercocarpus intricatus*.  
*Mahonia repens*, 323720-323722.  
*Mahonia*, creeping. See *Mahonia*  
*repens*.  
*Maianthemum dilatatum*, 318570.  
 Maidenhair-tree. See *Ginkgo biloba*.  
*Malus baccata*, 322712, 323626, 323627.  
*baccata* var. *mandshurica*, 320527,  
 322713.  
*prunifolia*, 323628, 323974.  
*pumila*, 323617, 323629.  
*pumila* var. *paradisiaca*, 324161.  
*sylvestris*, 318409, 318410, 318683,  
 318745, 319437, 319847, 320869-  
 320874, 322032, 322033, 322714,  
 322715, 323975-323994, 324162,  
 324163.  
 sp., 323995-323998.  
*Malva alcea*, 319396.  
*parviflora*, 319402.  
*Mangifera foetida*, 323329.  
 Maple. See *Acer argutum*.  
 pogoda. See *A. micranthum*.  
 purplebloom. See *A. pseudo-*  
*sieboldianum*.  
 three-flower. See *A. triflorum*.  
*Maytenus magellanicus*, 321723.  
 Meadowrue, narrowleaf. See  
*Thalictrum lucidum*.  
 yellow. See *T. flavum*.  
 Medic. See *Medicago* spp.\*  
 black. See *M. lupulina*.

## Medic—Continued

- buttonclover. See *M. orbicularis*.  
 Tifton. See *M. rigidula*.  
*Medicago lupulina*, 319026.  
*orbicularis*, 319027, 319028.  
*polymorpha*, 322559.  
*polymorpha* var. *vulgaris*, 319029–  
 319038.  
*rigidula*, 319039–319042.  
*sativa*, 319043, 319044, 319712,  
 320535, 323934.  
*tribuloides*, 319045.  
*truncatula*, 323258.  
*turbinata*, 319046–319050.  
 sp., 319051.  
 Medlar. See *Mespilus germanica*.  
*Melandrium* sp., 318571.  
 Melic. See *Melica ciliata*.  
*Melica ciliata*, 318864.  
*Melilotus alba*, 322560.  
*segetalis*, 318508.  
*sulcata*, 319052.  
*Melinis minutiflora*, 319484, 320046.  
*Merostachys multiramea*, 321074.  
*Mespilus germanica*, 322706.  
*Michelia cathcartii*, 318663.  
*excelsa*, 318664.  
*lanuginosa*, 318665.  
 Milkvech. See *Astragalus* spp.\*  
 Chinese. See *A. sinicus*.  
 Millet. See *Setaria sphacelata*.  
 foxtail. See *S. italica*.  
 pearl. See *Pennisetum spicatum*.  
 proso. See *Panicum miliaceum*.  
*Milletia dura*, 321671, 323547.  
*Mimosa conferta*, 322561.  
*glaucescens*, 322562.  
*meticulosa*, 322563.  
*neuroloma*, 322564.  
*spruceana*, 322565.  
 sp., 322566–322568.  
*Minklersia galactioides*, 319370.  
*Mirabilis multiflora*, 323723, 323724.  
*Miscanthus sinensis*, 318572.  
*Monarda fistulosa*, 323725.  
*Morus alba*, 323999.  
 Mountain-ash, European. See *Sorbus  
 aucuparia*.  
*Mucuna gigantea*, 318501.  
*Muhlenbergia* sp., 321582.  
 Mulberry, white. See *Morus alba*.  
 Muskmelon. See *Cucumis melo*.  
*Mussaenda erythrophylla*, 318811.  
*Nicotiana tabacum*, 318756, 318757,  
 321709–321714, 322743, 322744.  
*Nothofagus antarctica*, 321724.  
*betuloides*, 321725.  
*pumilio*, 321726.  
*Notoxylinon flaviflorum*, 319166.  
 Notro. See *Embothrium coccineum*.  
 Nut, babassu. See *Orbignya  
 barbosiana*.  
 Oats, animated. See *Avena sterilis*.  
 common. See *A. sativa*.  
 slender. See *A. barbata*.  
*Oenothera clavaeformis*, 319415.  
*missouriensis*, 323726.  
*serrulata*, 323727.  
 Okra. See *Hibiscus esculentus*.  
*Olea chrysophylla*, 323548.  
 Olive, Russian. See *Elaeagnus  
 angustifolia*.  
 Onion. See *Allium cepa*.  
*Onobrychis eriophora*, 319053, 319054.  
*stenorrhiza*, 319055–319057.  
*transcaucasica*, 318601.  
*vicifolia*, 318602–318606, 319058–  
 319062, 319713, 319824.  
*Operculina* sp., 319371.  
*Opizia stolonifera*, 323631.  
 Orach, garden. See *Atriplex  
 hortensis*.  
 Orange, hardy. See *Poncirus  
 trifoliata*.  
*Orbignya barbosiana*, 318704.  
*Ornithopus compressus*, 319063,  
 319064.  
*Oryza sativa*, 318642–318644, 318645,  
 318646, 318841, 318842, 319192,  
 319492–319523, 319539, 319699,  
 319700–319704, 321142–321383,  
 321645–321651.  
*sativa* var. *erythroceros*, 321652.  
*sativa* var. *vulgaris*, 321653.  
*Oryzopsis holciformis*, 321407, 324261.  
*miliacea*, 319065.  
 sp., 321583.  
*Osmanthus aurantiacus* var.  
*thunbergii*, 323943.  
*Osmunda asiatica*, 320403.  
*japonica*, 320404.  
*Oxypetalum coeruleum*, 323630.  
*Pachyrhizus erosus*, 319372.  
*tuberosus*, 323549.  
*Pachystima myrsinites*, 323728–  
 323730.  
*Panicum brevifolium*, 320984.  
*coloratum*, 319485.  
*maximum*, 318812, 319486, 320047.  
*miliaceum*, 318751.  
*turgidum*, 321408.  
 sp., 320985.  
*Parnassia alpicola*, 318573.  
 Pea. See *Pisum sativum*.  
 Peach. See *Prunus persica*.  
 Peanut. See *Arachis* spp.\*  
 Pear, birchleaf. See *Pyrus  
 betulaeifolia*.  
 callery. See *P. calleryana*.  
 common. See *P. communis*.  
*Pectinaria saxatilis*, 318502.  
*Pedicularis crenulata*, 323731.  
*Pennisetum leonis*, 320986.  
*spicatum*, 318904, 321409.  
*squamulatum*, 319196.  
*subangustum*, 320987.  
*typhoides*, 320154.  
 sp., 321087.  
*Penstemon albidus*, 323732.  
*alpinus*, 323733.

*Penstemon*—Continued

- angustifolius*, 323734.  
*auriberbis*, 323735, 323736.  
*barbatus* ssp. *torreyi*, 323737.  
*bridgesii*, 323738—323741.  
*buckleyi*, 323742.  
*caespitosus*, 323743, 323744.  
*clutei*, 323746.  
*comarrhenus*, 323747.  
*crandallii* ssp. *glabrescens*, 323748.  
*eatonii*, 323749—323755.  
*eatonii* ssp. *undosus*, 323756.  
*fremontii*, 323757.  
*glaber*, 323758.  
*havardii*, 323759.  
*laricifolius* ssp. *exilifolius*, 323760, 323761.  
*leiophyllus*, 323762, 323763.  
*linarioides*, 323764—323766.  
*linarioides* ssp. *compactifolius*, 323745, 323767.  
*mensarum*, 323768.  
*oosterhoutii*, 323769—323772.  
*palmeri*, 323773—323776.  
*scariosus*, 323777, 323778.  
*secundiflorus*, 323779, 323780.  
*strictus*, 323781—323794.  
*unilateralis*, 323795.  
*utahensis*, 323796—323798.  
*virens*, 323799.  
*watsonii*, 323800, 323801.  
*whippleanus*, 323802.  
 sp., 323803—323855.
- Penstemon*, *palmeri*. See *Penstemon palmeri*.  
*Peponia vogelii*, 319698.  
*Peraphyllum ramosissimum*, 323856, 323857.  
*Periandra dulcis*, 322569.  
*heterophylla*, 322570.  
*Phalaris aquatica*, 319066—319074, 321410.  
*arundinacea*, 319825.  
*canariensis*, 322734.  
*coerulescens*, 318840, 319075.  
*Phaseolus acutifolius*, 319438—319446.  
*acutifolius* var. *latifolius*, 319550, 319551, 321637, 321638.  
*adenanthus*, 319448, 320988.  
*angularis*, 318469, 322571—322574.  
*atropurpureus*, 318685, 322575—322581.  
*aureus*, 321115, 323282, 323293, 323321.  
*bracteatus*, 322582—322585.  
*calcaratus*, 318470.  
*caracalla*, 322586—322590.  
*coccineus*, 319449, 321088.  
*lathyroides*, 322591—322594.  
*metcalfei*, 319450, 319451.  
*mungo*, 323294—323303.  
*panduratus*, 322595—322599.  
*strobilophorus*, 319452, 319453.  
*vulgaris*, 318691—318703, 319552—319690, 319705—319707, 319861,

*Phaseolus*—Continued

- 319862, 319870—319872, 320968—320971, 321034—321037, 321089—321094, 321116—321123, 321131—321135, 321639, 321727, 324243—324245.  
 sp., 319447, 322600, 323430.  
*Philadelphus microphyllus*, 323858.  
*tenuifolius*, 319314.  
*Phleum nodosum*, 319076—319078.  
*pratense*, 319079, 319080, 320559, 321682.  
*subulatum*, 321411.  
*Phlox* sp., 323859, 323860.  
*Phormium colensoi*, 323431.  
*Physalis* sp., 321584.  
*Phytolacca acinosa*, 323511.  
*Picea abies*, 319173, 320955, 322753, 322754, 324137, 324294.  
*bicolor* var. *reflexa*, 324138.  
*jezoensis*, 322755—322757.  
*koyamai*, 318655.  
*obovata*, 320956, 322758.  
*orientalis*, 324295, 324296.  
*pungens*, 324297.  
*Picris echioides*, 319408.  
*hieracioides*, 319393.  
*japonica*, 319412.  
*Pieris japonica*, 320533, 323479.  
*Pieris*, Japanese. See *Pieris japonica*.  
 Pigeon-pea. See *Cajanus cajan*.  
 Pigeonwings, Asian. See *Clitoria ternata*.  
 Pimento. See *Capsicum annum*.  
 Pine. See *Pinus eldarica*.  
 Japanese red. See *P. densiflora*.  
 Korean. See *P. koraiensis*.  
 limber. See *P. flexilis*.  
 scotch. See *P. sylvestris*.  
 stone. See *P. pumila*.  
 Swiss, stone. See *P. cembra*.  
 white-barked. See *P. bungeana*.  
*Pinellia ternata*, 319262.  
*Pinus bungeana*, 320528.  
*cembra*, 320957.  
*cembra* f. *columnaris*, 324298.  
*densiflora*, 319315.  
*eldarica*, 318709.  
*flexilis*, 323861, 323862.  
*koraiensis*, 320529, 324299.  
*pumila*, 320530, 322759, 322760, 324300, 324301.  
*sibirica*, 322761.  
*strobis* f. *prostrata*, 318834.  
*sylvestris*, 324302.  
*Pistachia atlantica*, 320466.  
 Pistachio, Mount Atlas. See *Pistachia atlantica*.  
*Pisum sativum*, 318434, 319373—319376, 320972, 320973, 324246.  
*Platanus wrightii*, 323863, 323864.  
 sp., 319179.  
*Pleopeltis ussuriensis*, 319263.  
 Plum, cherry. See *Prunus cerasifera* var. *divaricata*.

## Plum—Continued

- common. See *P. domestica*.  
 Japanese. See *P. salicina*.  
*Poa bulbosa*, 319081.  
*Poinsettia* sp., 319877.  
*Poiretia tetraphylla*, 322601.  
 Pokeberry, India. See *Phytolacca acinosa*.  
*Polygonatum inflatum*, 319316.  
*involutum*, 319317.  
*lasianthum*, 318574.  
*Polystichum standishii*, 319264.  
*tripteron*, 320405, 320406.  
 Pomegranate. See *Punica granatum*.  
*Poncirus trifoliata*, 319830–319838.  
*Pontederia* sp., 323311.  
 Popular, Japanese. See *Populus maximowiczii*.  
*Populus canescens*, 323333.  
*fremontii* var. *wislizeni*, 323865.  
*maximowiczii*, 319318.  
 Potato. See *Solanum tuberosum*.  
*Potentilla* (hybrid), 323616.  
*anserina*, 323866.  
*fruticosa*, 323867–323869.  
 sp., 323870, 323871, 323872.  
*Poterium sanguisorba*, 319084, 319085.  
 Privet, European. See *Ligustrum vulgare*.  
 Syrian. See *Fontanesia phillyraeoides*.  
*Protea gaguedi*, 321095.  
*Prunus avium*, 318795–318797, 318918, 318919, 319852, 324000, 324001.  
*cerasifera* var. *divaricata*, 324002–324010, 324165, 324166.  
*domestica*, 318798, 318799, 318862, 318920, 318921, 323307, 323308, 324011, 324012.  
*fruticosa*, 324013.  
*mandshurica*, 324014–324018.  
*persica*, 319152–319161, 324019, 324078, 324254–324257.  
*salicina*, 324020.  
*spinosa*, 323873, 324021, 324022, 324167.  
*vulgaris*, 324023.  
 sp., 322283, 322284, 324024, 324025.  
*Psoralea bituminosa*, 319082, 319083.  
*Ptelea trifoliata*, 323874, 323875.  
*Pterocarya pterocarpa*, 323334.  
*Pueraria montana*, 320048, 320049.  
 Pumpkin. See *Cucurbita pepo*.  
*Punica granatum*, 318627–318630, 319151.  
*Purshia tridentata*, 323876–323879.  
*Pyracantha coccinea*, 319842, 324168–324170.  
 sp., 318411–318414.  
*Pyrola japonica*, 318575.  
*Pyrrrosia hastata*, 319265.  
*linearifolia*, 320407.  
*Pyrus betulaeifolia*, 322707.  
*calleryana*, 318407, 318408,

## Pyrus—Continued

- 318871–318873, 322708.  
*communis*, 318446, 318835–318839, 318866–318870, 322034–322036, 322285, 322286, 323309, 323618, 323619, 324026–324050, 324120, 324124–324135, 324171, 324172.  
*elaeagnifolia*, 324173–324179.  
*ussuraiensis* var. *hondoensis*, 318874.  
 sp., 322709–322711, 324051–324053, 324121, 324180.  
*Quercus gambelii*, 323880–323883.  
*ilex* var. *gramuntia*, 323948.  
*turbinella*, 323884.  
 Quince. See *Cydonia oblonga*.  
 Ragi. See *Eleusine coracana*.  
 Rape, bird. See *Brassica campestris*.  
 winter. See *B. napus*.  
 Redcedar, eastern. See *Juniperus virginiana*.  
 Retinospora, sawara. See *Chamaecyparis pisifera*.  
*Reussia rotundifolia*, 323312.  
*Rhododendron* (hybrid), 319909–320033.  
*brachycarpum* var. *roseum*, 319319.  
*chrysanthum*, 319320.  
*culmicolum*, 318596.  
*flavum*, 324054.  
*gaultheriifolium*, 318597.  
*hirsutum*, 321683.  
*japonicum*, 318657.  
*kiusianum*, 318658.  
*linearifolium* var. *macrosepalum*, 319903.  
*luteum*, 324055.  
*mucronatum* var. *ripense*, 319904.  
*pulchrum* var. *maxwellii*, 320395.  
*pulchrum* var. *tebotan*, 319905.  
*reticulatum*, 318656.  
*tsusiophyllum*, 323443.  
*yakusimanum*, 319197.  
*yedoense*, 319906.  
*yedoense* var. *poukhanense*, 318576, 319321, 319907, 319908.  
*yelliottii*, 318598, 318599.  
 Rhododendron, garland. See *Rhododendron hirsutum*.  
*Rhus trilobata*, 323885–323887.  
*trilobata* var. *simplicifolia*, 323888.  
*Rhynchosia discolor*, 319454.  
*minima*, 319487, 322614, 322615.  
*phaseoloides*, 322616, 322617.  
*pycnostachya*, 320989.  
*sennaarensis*, 319488.  
*violacea*, 320990.  
 sp., 322618–322625.  
 Rhynchosia, crabseye. See *Rhynchosia phaseoloides*.  
*Ribes alpinum*, 323335.  
*aureum*, 324056.  
*ceruum*, 323889.

**Ribes**—Continued

*odoratum*, 323890.  
sp., 323891.

Rice. See *Oryza sativa*.

*Ricinus communis*, 318471, 318510,  
319378, 323304, 323589–323591.

*Rodgersia podophylla*, 318577.

*Romneya trichocalyx*, 323612.

*Rosa acicularis*, 323892.

*canina*, 324057.

*ecae*, 318494.

*multiflora*, 320862–320864.

*persica*, 318495.

*wichuriana*, 318578.

sp., 318496, 323620, 323893–  
323897.

Rose, cliff. See *Cowania mexicana*.

dog. See *Rosa canina*.

eca. See *R. ecae*.

Japanese. See *R. multiflora*.

Persian. See *R. persica*.

*Rubus* sp., 324058, 324059.

Rye. See *Secale cereale*.

mountain. See *S. montanum*.

*Saccharum* (hybrid), 317904, 318448–

318462, 318617–318623, 318634–

318636, 318758–318794, 319455–

319458, 320531, 323198–323231,

323232, 324233, 323245–323252,

323944–323946.

Safflower. See *Carthamus tinctorius*.

Sainfoin. See *Onobrychis vicifolia*.

*Salix alba*, 323336.

*chaenomeloides*, 319322.

*graciliglans*, 318579.

*koreensis*, 318580, 319323.

sp., 323898.

*Salvia regia*, 323899.

*Sambucus coerulea*, 323900.

*nigra* f. *aurea*, 323432.

*racemosa*, 323901.

sp., 323902–323904.

*Sanguisorba hakusanensis*, 318581.

*magnolia*, 319086–319093.

*muricata*, 319094–319102.

*Saxifraga fortunei*, 319324.

*Scabiosa orientalis*, 324060.

*Scilla chinensis*, 318582.

Scorpiontail. See *Scorpiurus* spp.\*

*Scorpiurus subvillosus*, 319103–319115.

*vermiculatus*, 319116–319118.

Scurf-pea. See *Psoralea bituminosa*.

Seakale, common. See *Crambe*  
*maritima*.

*Secale ancestrale*, 318650.

*cereale*, 321643, 321868, 323353–  
323387, 323433, 323449–323457.

*montanum*, 318651.

*Securigera securidaca*, 318509.

*Sedum album*, 319225.

*atratum*, 319226.

*erubescens* var. *japonicum*,  
319325, 320401.

*hispanicum*, 319227.

*leveilleanum*, 319259, 319260.

**Sedum**—Continued

*polytrichoides*, 319266.

*populifolium*, 319228.

*roseum*, 319229.

*rotundifolium*, 319267.

*rubens*, 319230.

*spectabile*, 319268.

*stenopetalum*, 319231.

*telephium*, 319234.

*telephium* ssp. *fabaria*, 319232.

*telephium* ssp. *telephium*, 319233.

*viviparum*, 319269.

sp., 318583.

*Selaginella involvens*, 318584.

Senna. See *Cassia* spp.\*

siamese. See *C. siamea*.

Serviceberry. See *Amelanchier*

*alnifolia* and *A. utahensis*.

Service tree. See *Sorbus domestica*.

Sesame. See *Sesamum indicum*.

*Sesamum indicum*, 318472, 319379–

319381, 320958–320967, 321096,

321136, 323305, 323306, 323528,

323529.

*Sesbania bispinosa*, 321746.

*exasperata*, 322626, 322627.

*grandiflora*, 318813.

*punicea*, 322628.

*sesban*, 322629.

*speciosa*, 321747.

sp., 322630, 323243.

*Setaria italica*, 318752.

*sphacelata*, 319489.

*trinervia*, 321672.

*Shepherdia canadensis*, 323905, 323906.

*rotundifolia*, 323907–323913.

Shrub-althea. See *Hibiscus syriacus*.

*Skimmia japonica*, 323326–323328.

Skimmia, Japanese. See *Skimmia*  
*japonica*.

Smoke tree. See *Cotinus coggygria*.

*Solanum* (hybrid), 320334–320339.

*acaule*, 320272–320278.

*acaule* var. *aemulans*, 320279,  
320280.

*andreaeanum*, 320345.

*berthaultii*, 320257.

*brachistotrichum*, 318437, 318438,

320265.

*calvescens*, 318439.

*chacoense*, 320281–320294.

*chancayense*, 321601.

*colombianum*, 320346.

*commersonii*, 320266, 320267.

*commersonii* f. *malmeanum*,  
320268, 320269.

*fernandezianum*, 320270.

*gourlayi*, 320340, 320341.

*infundibuliforme*, 320295.

*jalcae*, 320258.

*juzepczukii*, 321602.

*kurtzianum*, 320271, 320296,  
320297.

*leptophyes*, 320298–320301.

*mammosum*, 318503.

**Solanum**—Continued

- marinasense*, 320259.  
*medians*, 320260, 320261, 321603.  
*megistacrolobum*, 320302, 320303.  
*melongena*, 320500–320512,  
 321017, 321018, 323322–323324.  
*microdontum*, 320304–320310,  
 321604.  
*oplocense*, 318440, 318441, 320322.  
*phureja*, 320347–320394.  
*polyadenium*, 320342.  
*raphanifolium*, 320262.  
*sambucinum*, 318442–318444.  
*sanctae-rosae*, 320323–320325.  
*simplicifolium* var.  
*trimerophyllum*, 320311–320321.  
*sparsipilum*, 320263, 320264,  
 321605.  
*stoloniferum*, 320343.  
*tuberosum*, 318593, 319180–  
 319183, 319198, 319423–319436,  
 319848, 319849, 319873–319892,  
 320035–320044, 320051, 320326,  
 320513, 320514, 321606–321625.  
*vallis-mexicae*, 318445.  
*venturii*, 320327, 320328.  
*vernei*, 320329–320332, 320333.  
*verrucosum*, 320344.  
 sp., 319854, 319855, 320515,  
 321626, 321627.
- Sorbus aucuparia*, 324061.  
*domestica*, 324181.
- Sorghum bicolor*, 318491–318493,  
 318687, 318753, 318754, 318905–  
 318916, 321097–321102, 321137–  
 321139, 321674.  
 sp., 318688, 318689, 318755.
- Soybean. See *Glycine max*.
- Spelt. See *Triticum spelta*.
- Spinach. See *Spinacia oleracea*.
- Spinacia oleracea*, 319220, 321019,  
 321020.
- Spiraea fritschiana*, 319326.  
*prunifolia* f. *simpliciflora*, 319327.  
*salicifolia*, 318585.
- Spiranthes sinensis*, 318586.
- Spirea, willowleaf. See *Spiraea salicifolia*.
- Spruce, Norway. See *Picea abies*.  
 Oriental. See *P. orientalis*.  
 Siberian. See *P. obovata*.  
 yeddo. See *P. jezoensis*.
- Squash. See *Cucurbita maxima*.
- Stanleya pinnata*, 323914.
- Stapelia parvipunctata*, 318504.
- Stipa joannis*, 322287.  
*juncea*, 319119–319124.  
*lagascae*, 319125–319127.  
 sp., 321585–321591.
- Stipagrostis obtusa*, 321412.
- Stizolobium aterrimum*, 322631.  
*deeringianum*, 322632.  
 sp., 322633.
- Stonecrop, popular. See *Sedum populifolium*.

**Stonecrop**—Continued

- roseroot. See *S. roseum*.  
 white. See *S. album*.
- Strawberry tree. See *Arbutus unedo*.
- Streptocarpus nobilis*, 318505.
- Streptopus streptopoides*, 320899.
- Stylosanthes capitata*, 322634.  
*erecta*, 320991.  
*fruticosa*, 321413.  
*gracilis*, 319490, 322635–322640.  
*guyanensis*, 322641–322642,  
 324247, 324248.  
*humilis*, 322643–322645, 324249–  
 324253.  
*montevideensis*, 322646.  
 sp., 322647–322658.
- Sugarcane. See *Saccharum* (hybrid).
- Sulla. See *Hedysarum coronarium*.
- Sunflower. See *Helianthus annuus*.
- Sunnhemp. See *Crotalaria juncea*.
- Sweetpotato. See *Ipomoea batatas*.
- Symphoricarpos longiflorus*, 323915.  
 sp., 323916.
- Symphytum officinale*, 319409.
- Syringa amurensis*, 318587, 319826.  
*reflexa*, 319827.
- Tagetes filifolia*, 319207.  
 sp., 319208–319211.
- Tamarix* sp., 323917.
- Taxus cuspidata*, 319328.
- Tea. See *Camellia sinensis*.
- Tecoma stans*, 321636.  
 sp., 319382.
- Teff. See *Eragrostis tef*.
- Tephrosia brevipes*, 322659, 322660.  
*candida*, 322661.  
*elegans*, 318814.  
*leptostachya*, 322662.  
*noctiflora*, 318817.  
*purpurea*, 318815, 318816.
- Teramnus uncinatus*, 321388, 322663–  
 322671.  
*volubilis*, 322672.  
 sp., 322673.
- Tetragonolobus siliquosus*, 319128–  
 319129.
- Thalictrum actaeifolium*, 318588.  
*flavum*, 319410.  
*lucidum*, 319397.  
*uchiyamai*, 318589.
- Thespesia danis*, 319167.
- Thlaspi perfoliatum*, 319411.
- Thuarea involuta*, 318746.
- Thuja occidentalis*, 323337, 323338.  
*orientalis*, 324097.  
*orientalis* f. *beverleyensis*, 324119.  
*orientalis* f. *juniperoides*, 324098.
- Timothy, common. See *Phleum pratense*.
- Tobacco. See *Nicotiana tabacum*.
- Tomato. See *Lycopersicon esculentum*.
- Trefoil. See *Lotus peregrinus*.  
 birdsfoot. See *L. corniculatus*.
- Trevia nudiflora*, 322281.



*Trichachne* sp., 321592.  
*Trichomanes* sp., 320408.  
*Trifolium* (hybrid), 324262, 324263.  
     *alexandrinum*, 322674-322676,  
     323512.  
     *burchellianum* var. *johnstonii*,  
     321103.  
     *cheranganiense*, 322697.  
     *cherleri*, 319130.  
     *fragiferum*, 318473-318476,  
     319131, 319828.  
     *glomeratum*, 319132, 319133.  
     *hirtum*, 319134, 323259, 323260.  
     *lugardii*, 322698.  
     *lupinaster*, 318590, 319829.  
     *michelianum*, 324264, 324265.  
     *nigrescens*, 324266-324278.  
     *nigrescens* ssp. *meneghinianum*,  
     324279-324285.  
     *physodes*, 318477.  
     *pratense*, 318478-318480, 318887-  
     318896, 319135, 319136.  
     *repens*, 318481-318488, 319137-  
     319139, 322699.  
     *ruesselianum*, 319491, 322700.  
     *semipilosum*, 320050, 322701.  
     *steudneri*, 322702.  
     *subterraneum*, 319140-319146,  
     323261-323264, 324286-324287.  
     *tembense*, 322703.  
     *usambarensis*, 322704.  
     sp., 318489, 318490, 319147.  
*Trigonella arabica*, 321414.  
*Tripsacum laxum*, 321632.  
     sp., 321593-321600.  
 Triticale. See *Triticum* × *Secale*.  
*Triticum* (hybrid), 320250-320256,  
     323434.  
     *aestivum*, 318511, 318670, 318671,  
     319853, 319856, 319857, 320097-  
     320111, 320112-320128, 320129-  
     320145, 320184, 320185-320188,  
     320189-320195, 320479-320492,  
     320552-320555, 321644, 321699-  
     321707, 321728-321742, 321869-  
     321875, 321876-322031, 322037-  
     322231, 322233-322280, 322696,  
     323093, 323342-324347, 323388-  
     323400, 323408-323419, 323458-  
     323478, 323606-323610, 323632-  
     323649, 324070-324075, 324151-  
     324158.  
     *dicoccum*, 319868, 319869, 323435,  
     324076.  
     *durum*, 321743-321745, 322716,  
     322735-322742.  
     *macha*, 323436.  
     *monococcum*, 323437.  
     × *Secale*, 321708.  
     *spelta*, 323438.  
     *sphaerococcum*, 323439.  
     *turgidum* var. *speciosum*, 323440.  
     sp., 320244-320249.  
 Trumpetbush, Florida. See *Tecoma*  
*stans*.

*Tsuga canadensis*, 324303.  
     *canadensis* f. *gracilis*, 324304.  
 Tulip tree. See *Liriodendron*  
*tulipifera*.  
 Urd. See *Phaseolus mungo*.  
*Vaccinium oxycoccus*, 321021.  
     *uliginosum*, 321022.  
     *vitis-idaea*, 318624-318626,  
     320534, 321023.  
     sp., 324062.  
*Valeriana dageletiana*, 318591.  
 Velvetbean. See *Stizolobium*  
*aterrimum*.  
     deering. See *S. deeringianum*.  
*Vernonia abyssinica*, 320083-320088.  
     *armerioides*, 320146.  
     *cinerea*, 318818.  
     *colorata*, 318819.  
     *hoffmanniana*, 321665.  
     *incompta*, 321666.  
     *luembensis*, 321667.  
     *purpurea*, 321668.  
     *shirensis*, 320147, 322705.  
     sp., 320082, 320089-320096,  
     320148-320153, 321104, 321105,  
     321654-321664, 321669, 321684.  
 Vetch. See *Vicia* spp.\*  
*Viburnum coriaceum*, 318666.  
     *erubescens*, 318667.  
     *grandiflorum*, 323191.  
     *incarnum*, 318865.  
     *koreanum*, 319329.  
     *stellulatum*, 318668.  
*Vicia angustifolia*, 320537.  
     *caroliniana*, 320540.  
     *disperma*, 317905.  
     *fabia*, 319896-319902.  
     *gigantea*, 320542.  
     *pannonica*, 317906.  
     *sativa*, 320538, 322677.  
     *sepium*, 320543.  
     *tetrasperma*, 320539.  
     sp., 320541.  
*Vigna luteola*, 322678-322680.  
     *sesquipedalis*, 324149, 324150.  
     *sinensis*, 318820, 318821, 319383,  
     319384, 320992, 321106, 321107,  
     321124, 321140, 321141, 321640,  
     323325, 324139-324148.  
     *vevillata*, 322681.  
     sp., 322682.  
*Viola chaerophylloides*, 318592.  
     *variegata*, 319270, 319271.  
     sp., 324063.  
 Violet. See *Viola variegata*.  
*Vitis longii* var. *microsperma*, 318684.  
     *thunbergii*, 318875-318878.  
     *vinifera*, 319148, 319149, 319199-  
     319205, 323441.  
     sp., 318879-318884, 318917,  
     323244, 323420, 323621.  
 Walnut, Persian. See *Juglans regia*.  
 Watermelon. See *Citrullus lanatus*.  
*Weigela florida*, 319330.  
     *subsessilis*, 319331, 320900.

- Wheat. See *Triticum* spp.\*  
 durum. See *T. durum*.
- Wildergamot. See *Monarda fistulosa*.
- Willow, white. See *Salix alba*.
- Wintercreeper. See *Euonymus fortunei* var. *radicans*.
- Wisteria* sp., 320901-320910.
- Woodsia polystichoides* var. *nudiuscula*, 320409.
- Yam-bean. See *Pachyrhizus* spp.\*
- Yang tao. See *Actinidia chinensis*.
- Yew, Japanese. See *Taxus cuspidata*.
- Yucca baccata*, 323918, 323919.  
*glauca*, 323920.  
*harrimanniae*, 323921-323923.  
 sp., 323924-323929.
- Yulan. See *Magnolia denudata*.
- Zauschneria garrettii*, 323930.
- Zea mays*, 318690, 318728, 319184-319191, 319418-319422, 320061-320076, 321038, 321039, 321108-321111.
- Zehneria* sp., 319708.
- Zinnia grandiflora*, 323931.  
*linearis*, 319385.
- Zizyphus jujuba*, 320078.
- Zornia brasiliensis*, 321415, 322683, 322684.  
*diphylla*, 321416, 322685-322687.  
 sp., 321417, 322688.
- Zoysia japonica*, 324184, 324175, 324186.