

56445. HYDNOCARPUS ALPINA Wight.
Flacourtiaceæ.

From Orleans, France. Seeds presented by Edmond Versin, St. Jean le Blanc. Received January 18, 1923.

Introduced for study because of its close relationship to *Taraktogenos kurzii*, the source of the genuine chaulmoogra oil.

A large tree 70 to 100 feet in height, with very variable leaves (red when young and deep green when old), up to 7 inches in length and 2½ inches in width, and dioecious flowers in axillary racemes. The fruit is globose, about the size of an apple, with a brown hairy surface. The seeds yield an oil which is used as fuel, and the wood is employed for general carpentry. The tree is native to the Nilghiri Hills in southern India. (Adapted from Watt, *Dictionary of the Economic Products of India*, vol. 4, p. 308, and Hooker, *Flora of British India*, vol. 1, p. 197.)

56446 to 56449.

From Cuenca, Ecuador. Seeds presented by Dr. Federico Malo. Received February 9, 1923. Quoted notes by Doctor Malo.

56446. MEDICAGO SATIVA L. Fabaceæ. **Alfalfa.**
“(Guanando, Province of Chimborazo. November, 1922.) A celebrated variety.”

56447 to 56449. ZEA MAYS L. Poaceæ. **Corn.**

56447. “(Vicinity of Valle, Province of Azuay.) *Maiz blanco*, the largest and best variety of this region.”

56448. “*Maiz jesuita*. A variety of the quality of *Maiz blanco*, but with pink kernels. From this the natives make ‘mote,’ the best one of their favorite dishes.”

56449. “(Azogues, Province of Canar, and Province of Azuay. December, 1922.) *Maiz zhima*, a very resistant variety with pearl-colored kernels.”

56450 and 56451.

From Elstree, Herts, England. Seed presented by Vicary Gibbs, Aldenham House Gardens. Received February 8, 1923.

56450. COTONEASTER FRIGIDA Wall. Malaceæ.

Variety *vicarii*. This is an improved form with deep-green leaves, grayish beneath, and large clusters of rich-red berries which are larger and brighter than those of the typical species.

56451. PYRACANTHA GIBBSII A. Jackson. Malaceæ. **Firethorn.**

A fine ornamental evergreen bush, vigorous and hardy, native to Hupeli and Szechwan, China. It becomes 12 to 14 feet high, is nearly spineless, and in the autumn bears large clusters of scarlet berries which contrast admirably with the glossy dark-green foliage.

For previous introduction, see S. P. I. No. 52938.

56452. CASSIA BREWSTERI F. Muell.
Cæsalpiniaceæ.

From Brisbane, Queensland. Seeds presented by E. W. Bick, curator, Brisbane Botanic Gardens. Received February 14, 1923.

A shrub or small tree found in hilly pastures and on river banks in northern Queensland. It becomes 30 or 40 feet high and bears yellow flowers in axillary clusters 3 to 6 inches long. The thick pods are often a foot in length. The pale-yellow close-grained wood is prettily marked. (Adapted from Bailey, *Queensland Flora*, pt. 2, p. 455.)

56453 to 56456. ACER spp. **Aceraceæ.**
Maple.

From Darjiling, India. Seeds presented by G. H. Cave, curator, Lloyd Botanic Gardens. Received January 8, 1923.

56453. ACER CAUDATUM Wall.

A large tree with dark-gray bark and 5-lobed red-stemmed leaves 2½ to 5 inches long. The shiny, compact, moderately hard wood is white with a faint pink tinge. This maple is found in the temperate Himalayas at altitudes of 7,000 to 11,000 feet.

56454. ACER HOOKERI Miquel.

A tree 40 to 50 feet high with deeply fissured brown bark, native to the Sikkim Himalayas at altitudes of 8,000 to 10,000 feet. The oval leaves are not lobed and, though usually green, are sometimes copper colored. The wood is gray, with small pores and very numerous fine red medullary rays.

For previous introduction, see S. P. I. No. 47630.

56455. ACER PECTINATUM Wall.

A small maple closely related to *Acer caudatum*, from which it differs chiefly in foliage characters. It is common in the Sikkim Himalayas at altitudes of 8,000 to 12,000 feet.

56456. ACER SIKKIMENSE Miquel.

A small tree with thin gray bark, native to the eastern temperate Himalayas at altitudes of 7,000 to 9,000 feet. The leaves are undivided and up to 6 inches in length. The wood is a shining gray with distinct annual rings, with numerous fine medullary rays.

56457. DENDROCALAMUS SIKKIMENSIS
Gamble. Poaceæ. **Bamboo.**

From Sibpur, Calcutta, India. Seeds obtained from the Royal Botanic Garden, Sibpur, and presented by E. M. Ehrhorn, Division of Plant Inspection, Honolulu, Hawaii. Received January 17, 1923.

A beautiful tufted bamboo native to Sikkim, India, where the dark-green culms reach a height of 60 feet or more and a diameter of 5 to 7 inches. The species is easily distinguished by its large reddish brown, globular flower heads and densely velvety stem sheath. The long narrow leaves are said to be poisonous, and from the stems are made the ‘‘chun-gas,’’ or native buckets, used for carrying water and milk and for churning. (Adapted from *Annals of the Royal Botanic Garden*, vol. 7, p. 82.)

For previous introduction, see S. P. I. No. 55815.

56458. TRIFOLIUM JOHNSTONI Oliver.
Fabaceæ. **Clover.**

From Kilossa, Tanganyika Territory, East Africa. Seeds presented by Capt. Charles M. F. Swynnerton, Kilossa, through Dr. H. L. Shantz, Bureau of Plant Industry. Received January 17, 1923.

“At high altitudes in East Africa clover is one of the prominent forage plants. It grows where the temperature probably never exceeds 85° F. and where for the greater part of the year it is much below this point. However, no frosts occur in the region.” (Shantz.)

A smooth perennial clover with the habit of white clover (*Trifolium repens*), found at an altitude of 10,000 feet on Kilimanjaro, Tanganyika Territory. The leaves are long stemmed, with membranous leaflets and globose flower heads about an inch in diameter. (Adapted from *Transactions of the Linnean Society*, 2d ser., vol. 2, p. 331.)