

**53592 and 53593.**

From Allahabad, United Provinces, India. Seeds collected by Dr. L. A. Kenoyer and Winfield Dudgeon, Ewing Christian College. Received May 27, 1921. Quoted notes by Mr. Dudgeon.

**53592.** *VALLARIS HEYNEI* Spreng. Apocynaceæ.

"A twining shrub in pioneer places throughout India. Collected at Dharassu, upper (Himalayan) Ganges Valley, June 1, 1920. Adapted to a climate similar to that of Virginia."

A climbing shrub with white, fragrant flowers, three-fourths of an inch across, in axillary drooping cymes. The oblong, pointed fruits are 6 inches long. Native to the Sutlej Valley and throughout India, ascending to 5,000 feet. It is often cultivated in gardens. (Adapted from *Collett, Flora Simlensis, p. 311.*)

**53593.** *ZIZIPHUS XYLOPYRUS* (Retz.) Willd. Rhamnaceæ.

"A small thorny tree characteristic in thorn forests pioneer to monsoon-deciduous forests of peninsular India. Collected at Shivpuri (Sipri), Gwalior State, India, April 2, 1921."

A straggling shrub or, in favorable situations, a tree, with smooth leaves covered beneath with white or yellowish tomentum. The yellowish white to brownish wood is hard and tough, easily worked, and durable, and is used for cart-building and other purposes. The bark is used for tanning; the young shoots, leaves, and fruits serve as fodder for cattle and goats. The hard dry fruit is charred and makes a black dye for leather. The edible kernels are inclosed two to three in a large, thick, hard stone. Native to India and dry hot places in Ceylon. (Adapted from *Cooke, Flora of Bombay, vol. 1, p. 242*, and *Brandis, Forest Flora of India, p. 90.*)

**53594. ANNONA CHERIMOLA Mill. Annonaceæ. Cherimoya.**

From Buenos Aires, Argentina. Seeds presented by D. S. Bullock, agricultural trade commissioner, United States Department of Agriculture, American Legation. Received June 18, 1921.

"Seeds of the *cherimoya* from Salta, Argentina." (*Bullock.*)

A tree 15 to 25 feet high, native to Ecuador and Peru. The fruit, considered by many people to be the most delicious of tropical dessert fruits, is light green, thin skinned, somewhat oval, with white, juicy, melting flesh of subacid delicate flavor suggestive of the pineapple and banana. Numerous black seeds are embedded in the flesh. Analysis of the fruit in Hawaii shows percentages as follows: Total solids, 33.81; ash, 0.66; acids, 0.06; protein, 1.83; total sugars, 18.41; fat, 0.14; fiber, 4.29.

Seedlings bear the third or fourth year and produce at least a dozen good fruits. A tree in Madeira is said to have produced 300 fruits in one season. (Adapted from *Popenoc, Manual of Tropical and Subtropical Fruits, p. 161.*)

For previous introduction, see S. P. I. No. 52375.

**53595 to 53606. ZEA MAYS L. Poaceæ. Corn.**

From Buenos Aires, Argentina. Seeds presented by D. S. Bullock. Received May 18, 1921. Quoted notes by Mr. Bullock.

**53595.** "1920 harvest."

**53596.** "1921 harvest."

**53597.** "*Maiz amarillo viejo*, 1920 harvest. From Luis Dreyfus & Co."

**53598.** "*Maiz colorado*, 1921 harvest. From Luis Dreyfus & Co."

**53599.** "*Maiz morocho*, 1920 harvest. From Luis Dreyfus & Co."

**53600.** "*Maiz colorado viejo*, 1920 harvest. From Luis Dreyfus & Co."

**53601.** "*Maiz amarillo*, 1920 harvest. From Grain Exchange of Buenos Aires."