

41712 to 41717—Continued.

41715. CITRUS LIMETTA AROMATICA Wester. Rutaceæ.

A spiny shrub, with rather slender, willowy, drooping branches and sharp spines; young growth light green, of pleasant and distinct odor when bruised; leaves 7.5 to 10 centimeters long, 3.5 to 5 centimeters broad, dull green above; petioles 6 to 19 millimeters long with a narrow wing margin; flowers solitary or in cymes of four, terminal or axillary, 28 to 35 millimeters across; calyx rather large, petals four to five, white with a trace of purple on the outside; style not distinct, as in *Citrus aurantium*, but rather similar to that of *Citrus medica*; fruit 5 centimeters long, 4 to 4.5 centimeters across, roundish to roundish oblong; skin thin, smooth, lemon yellow, pulp pale green, juicy, sharply acid, sometimes almost bitter; juice cells long, slender, and pointed; seeds very numerous, small, and plump, polyembryonic. This form seems to be fairly well distributed, and material has been propagated at Lamao from such distinct points as Mindoro, Palawan, and Bangued. Unquestionably a lime, it is quite distinct from the ordinary lime in habit and in the aromatic tender foliage, in the purplish petaled flowers, which are larger than those of the lime, and in the greater number of stamens. (Adapted from the *Philippine Agricultural Review*, first quarter, 1915, pp. 25 and 26.)

41716. CITRUS MEDICA L. Rutaceæ.

Citron.

41717. CITRUS MEDICA ODORATA Wester. Rutaceæ.

Tihi-tihi. A small thorny shrub, seldom exceeding 2.5 meters in height, with sharp, stout spines; young growth bright green; leaves 7.5 to 11 centimeters long, 4.3 to 6.5 centimeters broad, elliptical, rather thick and leathery, serrate, of distinct fragrance; base rounded; apex notched; petioles very short, 4 to 6 millimeters long, not winged; flowers one to four in axillary compressed cymes, sessile, rarely exceeding 38 millimeters in diameter; petals four to five, fleshy, white, with a tinge of purple on the outside; fruit 60 to 65 millimeters long, 7 to 10 centimeters in transverse diameter, weighing 300 to 475 grams, oblate, with a shallow basal cavity, and sometimes a mammilate apex, more or less ridged longitudinally, fairly smooth, clear lemon yellow; lenticels scattered, depressed; oil cells large, equal or a trifle raised; skin rather thick; pulp grayish, rather dry, sharply acid, of lemon flavor; juice cells long and slender; seeds many, sometimes 125 in a single fruit, short, broad, and flattened. The *tihi-tihi* is a rare plant found in cultivation in Cebu and Bohol; one plant has been seen in Misamis, Mindanao. The plant is very precocious, fruiting as early as the third year from seed, ever-bearing, and the fruit is used by the Filipinos in washing the hair. It is not eaten and is of no commercial importance. The *tihi-tihi* differs from the citron in its green, tender, highly aromatic growth, the leaves having been found to contain 0.6 per cent essential oil, as analyzed by the Bureau of Science. The fruit is strikingly different from the citron. (Adapted from the *Philippine Agricultural Review*, first quarter, 1915, pp. 22 and 23.)

41718 to 41721.

From Chungking, China. Presented by Mr. E. Widler. Received January 8, 1916. Quoted notes by Mr. Widler.

41718. CITRUS SINENSIS (L.) Osbeck. Rutaceæ.

Orange.

"Large orange. This orange grows plentifully in Szechwan, is about 11 inches in circumference, of very good flavor, contains a small number of seeds, has a very thin skin and practically no pith."