

48631 and 48632—Continued.

48631. BETA VULGARIS MACROCARPA (Guss.) Moq.

"Very abundant on salty, clayey soil."

48632. BETA VULGARIS PERENNIS L.

"Spinach-beet. The leaves are used like spinach."

48633. ELAEIS GUINEENSIS Jacq. Phœnicaceæ. **African oil palm.**

From Kamerun, West Africa. From Mr. Fred Hope, Ebolwoa. Received November 19, 1919.

Variety *poissonii*. The distinguishing character of this form is the presence around the fruit of a "collar" which consists of the persistent perianth having become more accrescent and more fleshy than usual. Very little notice appears to have been taken previously of the perianth at the time when the fruit was mature, probably owing to its having been removed before the fruit was brought into the market. The fruit is obovoid or subglobose, about 3 cm. long (not including the beak, which is 1 cm. long), and somewhat constricted at the base, not ventricose as in some varieties. The woody endocarp is about 3 mm. thick. The 6-parted perianth is thick and fleshy and almost incloses the fruit. Its segments have a transverse thickening about 5 mm. from their apices. According to an analysis made at the Imperial Institute it contains "69.9 per cent of oil, equivalent to 14.8 per cent calculated on the whole fruit or 78.2 per cent calculated on the dry pulpy covering." The ordinary pulp adhering to the nuts of this form yields 27.2 per cent of oil. (Adapted from *Kew Bulletin of Miscellaneous Information*, p. 93.)

48634 to 48636. LOTUS spp. Fabaceæ.

From Weraroa, New Zealand. Presented by Mr. E. Bruce Levy, biologist, Central Development Farm. Received November 24 and 25, 1919. Quoted notes by Mr. Levy.

48634. LOTUS CORNICULATUS L.

"Bird's-foot trefoil."

An excellent fodder, considered a valuable ingredient in meadows and pastures. Native to Tasmania, Victoria, New South Wales, and South Australia. (Adapted from *Maiden, Useful Native Plants of Australia*, p. 134.)

For previous introduction, see S. P. I. No. 18371.

48635. LOTUS ULIGINOSUS Schkuhr.

"Greater bird's-foot trefoil."

A pasture plant of agricultural importance, fairly largely used in New Zealand, from 10 to 15 tons of seed being sown annually. This plant prefers a wet or swampy habitat. The seed sold in December, 1918, at about a dollar per pound. It is saved for seed mainly in the Auckland Province, but prior to the war the greater portion was imported, mainly from Germany. This seed was exported from the latter country under the name of *Lotus villosus* or *L. uliginosus*, which names are the European trade names for the *L. major* of the New Zealand seed trade. *Lotus major* is very variable with regard to certain characters, such as hairiness, and in consequence several botanical names have been given to the plant. There are apparently a good many different strains, but whether these breed true from seed and are good agricultural species or whether