38641 and 38642—Contd. (Quoted notes by Capt. H. R. Lemly.)

38641. PASSIFLORA MALIFORMIS L.

"*Curuba.* A vine, bearing fruit, yellow when ripe, saffron-colored pulp. To be eaten with cream and sugar.

"This *Curuba* flourishes at this altitude, 9,000 feet, and a constant temperature of about 60° F. in the shade. It ought to grow in the United States."

38642. PASSIFLORA LIGULARIS JUSS.

"*Granadilla.* Fruit of the passion vine; greenish yellow when ripe."

38643. MEDICAGO SATIVA L. Fabaceæ. **Alfalfa.**

From Tripoli, Africa. Presented by Dr. F. Franceschi, Bogliasco, Genoa, Italy. Received June 25, 1914.

"Var. *khobezy.* This variety grows larger and yields more foliage than the ordinary type. It appears to be very common and the seed costs twice as much. Experiments made at the Agricultural School of Portici have shown that it is rather tender and will be fit only for Florida and southern California, perhaps also for breeding purposes." (*Franceschi.*)

38644. PLUKENETIA CONOPHORA Muell. Arg. Euphorbiaceæ.

From Victoria, Kamerun, German West Africa. Presented by the experiment station. Received June 27, 1914.

Another oil fruit which springs from the creeping plant which is cultivated everywhere in the Ossidinge district in the fields among maize and can be obtained in great quantity was sent in to us also by Dr. Mansfield, district magistrate. Prof. Gilg determined the fruit as *Plukenetia conophora.* The thin-shelled nut, about the size of a walnut, contains a firm, round, hard, oily kernel, loose in the shell. The kernel as well as the oil contains no harmful substance, as various experiments with animals show; it is used by the natives as a cooking oil. It belongs also, like the linseed oil (to which it is very similar in other ways), to the drying oils. It will be very valuable as a substitute for linseed oil, which is rising in price from year to year and which is a raw product for linoleum and varnish making. The kernels without the shells weigh 4 to 5 grams. The native name of the plant is *Ngart.* The fatty residue contains 7.3 grams nitrogen—45.6 per cent protein. The investigation of the oil gives the following data:

Specification.	Ngart oil.	Linseed oils.
Oil content of the kernels, per cent	53.8	.....
Specific weight of the oil at 17.5° C	—0.934	0.930 to 0.934
Congealing point of oil °C	—33	—16 to —20
Iodin number of the oil	177.3	170 to 202
Iodin number of the free fatty acids	187.4	190 to 210
Saponification number	192	188 to 195
Refraction exponent at 17.5° C	—1.4830	.....

(Adapted from *Krause and Diesselhorst, Tropenpflanzer, vol. 13, p. 282, 1909.*)