

**33784 and 33785—Continued.****33785.** *PASSIFLORA* sp.**Passion fruit.**

"A species which has all the aspect of smilax."

**33786 and 33787. CYMBOPOGON spp.**

From Trivandrum, Travancore, southern India. Presented by Mr. N. Kunjan Pillai, Director of Agriculture, Travancore, southern India. Received April 1, 1912. Numbered June 20, 1912.

Roots of the following; quoted notes by Mr. Pillai:

**33786.** *CYMBOPOGON CITRATUS* (DC.) Stapf.**Citronella grass.***(Andropogon citratus DC.)*

This species and the next have been listed in previous numbers of these inventories as *Andropogon citratus* and *A. nardus*, respectively, but recent students of grasses, and especially Stapf, who has published a monograph of the oil grasses, recognize the two as belonging to the distinct genus *Cymbopogon*.

"A grass yielding oil in a fairly large quantity. It is locally known as *Sambarapulla*, being used for flavoring buttermilk. This grass is more common in Ceylon and along the east coast. In the interior of Travancore it occurs not in abundance. There is reason to believe that the grass came from Ceylon, because near Cape Comorin and up to a place called Arakkanikulam the grass occurs in abundance. Another peculiarity is that, while I have never seen this grass in flower in Ceylon either under cultivation or in a native condition, it flowers freely amidst the bowlders of Arakkanikulam on either side of the main road and also near the cape in Maruthuvamala. This I think is due to its transport into a hotter locality. The bowlders get heated and the grass lying between gets 'forced,' as plants are in the hothouses in other countries. When I saw the grass the last time it was getting a disease corresponding to the black rust of cholam (maize). The pest was just beginning. The plants which I have selected are free. This grass is mixed with other andropogons and distilled. The industry is in the hands of the uneducated and no sorting of varieties is done, because knowledge is absent."

**33787.** *CYMBOPOGON NARDUS* (L.) Rendle.**Citronella grass.***(Andropogon nardus L.)*

"A grass very common all over Travancore, except at great elevations and very near the seacoast. In soft alluvial loam and under careful cultivation this grass grows to a height of 6 or 8 feet. This grass can be very easily identified by a light magenta tinge from the bottom upward. The spikes are short and the leaves are narrow. It is locally known as *Chukku-Nari-Pullu* (the grass smelling like *Zinziber officinale*).

"In Travancore I do not know of many places where this grass is taken up for cultivation. It is collected from the jungle by women getting between 4 and 5 chuckrums (2 to 3 annas) a day. A monster vessel of copper is installed as a primitive vat. In one day 1½ bottles of oil could be obtained. The prices vary from 3 to 6 rupees for a bottle of 24 ounces.

"Mr. A. F. Sanderson, the then Deputy Conservator of Forests, and Mr. Miller, a manager of the Vellanad Plumbago Mines, made an attempt to open an estate of oil-grass. They went on for some time unmindful of the outside talk and collected a fair quantity of oil, but the business was dropped because it was taken up only as a side industry of test. Other beginnings were made which were but short-lived. One hundredweight of leaves is said to yield about 3 ounces of oil. The pure oil is thin, colorless, and strong, with a citronlike flavor.