

4263. LIPPIA NODIFLORA.**Lippia.**

From Cairo, Egypt. Received through Messrs. Lathrop and Fairchild (No. 332), December 28, 1899.

"According to Ascherson and Schweinfurth the Lippia is a native of Egypt. It has probably been used for lawn purposes for a great many years.

"It is a low, creeping plant of the Verbena family, with broad, flat, obovate leaves of a deep green color. The creeping stems throw out roots wherever they come in contact with the earth, and form thick mats of herbage. It is well known that in regions with climatic conditions similar to those of Egypt, grass lawns are generally very difficult to maintain. Although there are several substitutes for lawn grasses, none that I have seen are as good as Lippia. Owing to its rapid growth, the plant can be mown closely, and to a layman the lawn effects resemble closely those produced by English lawn grasses.

"In order to plant a lawn with Lippia the ground is prepared as it would be for the reception of grass seed. A mass of old Lippia is dug from some neighboring lawn or field. The native gardener cuts off or breaks off two or three long cuttings of the plant, makes a hole with a pointed stick in the soft earth, thrusts the cuttings, doubled up, into the hole and packs the earth securely about them. These cuttings are placed about 4 to 6 inches apart, quite irregularly over the field. They are given plenty of water, being sprinkled every day until well started. In winter in Egypt the lawns made of this Lippia are watered every four to five days, while in summer they are kept green by daily waterings. Every twenty days the lawns are gone over with a scythe and in this way kept quite closely mown. There is no evident reason why a lawn mower would not answer the purpose better than a scythe.

"Lawns of Lippia will last five to six years without renewing. Whenever a patch gets old or is injured by the shade of some tree, it is very easily repaired by setting new cuttings.

"While, according to the statement of Mr. Colombo of the Gizeh Gardens, no grasses form in Cairo a real sod, this plant produces a permanent sod lasting five to six years.

"The Lippia deserves a thorough trial as a lawn plant in southern California, Arizona, Texas, and Florida. Just what degree of hardiness it will show remains to be seen. It is not exposed to a temperature below freezing here in Cairo, except at extremely long intervals. Whether it is injured then or not I have been unable to ascertain. Although, during the hottest part of the summer, the lawns of Lippia wear a much less vigorous look than they do in winter, yet, from the fact that they are able to withstand the extreme heat and dryness of the Egyptian summer, it is evident that the plant is well suited for hot dry climates. It is to be hoped this will prove a valuable new lawn plant for the parks and gardens of the South." (*Fairchild.*)

It is well to note that this plant is already quite commonly introduced, especially in the Southern States. It occurs in low, moist situations from North Carolina to Florida, Texas, and Missouri, and is also present in California. So far as known it has not been utilized as a lawn plant in this country, although it is recognized as having some value as a sand-binder on the South Atlantic and Gulf coasts. Distributed.

4264. MANIHOT GLAZIOVII.**Ceara rubber.**

Presented by Rear-Admiral Crowninshield, Chief of the Bureau of Navigation. Received October 13, 1899.

"Ceara rubber occupies the second rank and it would undoubtedly be equal to Para rubber if the sap were collected by some method so that it would not include so much foreign stuff. Ceara rubber is very elastic, dry, and not sticky unless it is impure, but when impure the loss in bulk amounts often to 25 per cent. It is derived from a euphorbiaceous tree, *Manihot glaziovii*, which is native in the Provinces of Rio de Janeiro and Ceara. The tree grows to a height of about 30 feet with a round head. It has 3- to 7-lobed gray-green leaves, in shape and size resembling those of the castor bean plant. The trees may be tapped for rubber when they are 3 years old, or when the stem diameter attains 4 or 5 inches. The rubber collector first scrapes the loose dirt and stones away from under the tree and then covers the ground with broad leaves in order to catch the dripping sap. He then strips the bark from the trunk to a height of 4 to 5 feet, making a number of spiral incisions. The thick viscid milk flows from these incisions. Some of it runs down to the ground, but most of it remains on the trunk. It requires a good many days to dry completely. It is then broken off in long string-like pieces, which are rolled together in a ball or are simply packed in sacks. The product is then ready for market without further preparation." (*Semmler.*) Distributed.