

In order to complete the investigation, a supply of the latex of the same tree from which the rubber had been prepared was obtained from Singapore. The aqueous portion of this latex, after separating the rubber, was found to contain a quantity of the *l*-methylinosite, amounting to 0.46 per cent. of the total latex. The presence of this carbohydrate has also been proved in fine hard Para rubber from South America.

The results of this investigation are of considerable practical interest as showing that in the analysis of rubber prepared by the Brazilian method (or by any method which leads to the inclusion in the rubber of all the solid constituents of the latex) it will be necessary to take into account the possibility of other substances besides resin being extracted from the rubber on treatment with hot acetone.

A preliminary note on the results of this investigation has been communicated to the Chemical Society of London, by Dr. S. S. Pickles and Mr. B. W. Whitefeild, of the Scientific and Technical Department of the Imperial Institute.—(*Bulletin of the Imperial Institute*, April, 1912.)

PARA RUBBER IN ST. LUCIA.

Ten thousand seeds of Para Rubber (*Hevea brasiliensis*) were obtained from Ceylon and arrived in October. Some of them were distributed to purchasers and the remainder were sown at the Experimental Station nursery. Only 10 per cent. of the whole consignment germinated. At the station 780 plants were raised and some of the number will be reserved for planting in a plot. About 600 will be available for distribution.

Para rubber planting in St. Lucia is at present only on experimental lines, but the trees planted in 1908-09 appear to be making very satisfactory growth, and some interest in the cultivation is developing. A more extended trial is desirable, to test the suitability of different soils and localities for the successful cultivation of this tree.

Experiments have been carried out to test the hardiness of Para rubber plants for distribution in the Island, when they are packed, with the view of reducing the bulk in and therefore the cost of transporting parcels of them, at the same time ensuring that they shall arrive at the various estates in sound condition. The trial was carried out as follows: Twelve plants were lifted from the seed beds, the tops cut back leaving the plants a little over a foot in length and all the leaves were removed. The soil was then shaken from the roots leaving them quite bare. The plants were then divided into two bundles and wrapped up in banana trash, which had previously been thoroughly soaked in water; each bundle containing six plants. One bundle was placed in a dry close potting shed, the temperature of which often reached 95° F., and the other bundle was placed in the Office.

After eight days the plants were examined and found to be in a fresh and healthy condition. The plants placed in the potting shed had been badly gnawed by rats, but were otherwise healthy. The whole twelve were then planted out in the ordinary way, and no special attention or treatment given to them. The plants commenced to grow readily with one exception, and this was the plant that had almost been denuded of bark by rats.

The results are very satisfactory, inasmuch as they prove that Para plants can be sent to any estate in the Island, packed in the way described, without fear of permanent injury, or loss, provided that they receive proper attention upon arrival at their destination. (*Report on the Botanic Station and Experiment Plots, St. Lucia, 1910-11*)

RUBBER IN THE SEYCHELLES.

The following extracts are taken from the Report of the Gurator (M. Dupont) on the Botanic Station, Seychelles, for 1911.

The total number of trees now in Seychelles is estimated at 70,585, of which 4,511 have reached tappable size. The tapping experiments on Hevea trees were continued. Several kinds of tapping knives were tried, but it was found that successful tapping depended more on the skill of the operator than on the instrument employed. The Barrydo knife proved a less dangerous implement in the hands of inexperienced tappers than either the Bowman—Northway or the Eagle knife, both of which produce deep wounds. The "half-herring-bone" method of tapping was used in most cases on the "opposite quarters" system, *i. e.*, one-quarter of the surface of the bark of the tree is tapped during one year, and it takes four years to tap the whole tree before beginning on renewed bark. The full spiral system was adopted in one set of experiments where trees were overcrowded, and although the death of few trees may follow this drastic method, the Curator considers that the greater yield obtained when prices are high fully compensates for this loss. He also suggests that in Seychelles it may be better to tap by this method for three months during the rainy season, when young trees can withstand the effects of serious wounds, than to employ any other method which would necessitate extending the tapping period into the dry season to obtain the same quantity of rubber.

Five-and-six-years-old trees were in one instance tapped by the full spiral method for five or six months, without any apparent check to the growth of the trees or to the fulfilment of their natural functions.