The Brazilian plant is variable in habit, and the Cartagena or Colombian variety is distinct and of less commercial value.

R. DERRY.

Mr. R. H. True (Bureau of Plant Industry of the U. S. Department of Agriculture) has been supplied with the following information from the American Consul at Cartagena regarding the cultivation of Ipecacuanha, and this we publish from the "Oil Paint and Drug Reporter" Ipecac, a trailing plant thrives best in clay soil along the banks of rivers. While it requires a great deal of moisture, it cannot live under water, and consequently in Colombia it is found in its best development in regions where the rainfall is abundant, but where the rivers do not overflow.

The Sinu River is the ideal region for ipecac. The plant is found in abundance from near the head-waters of this river . . . The growth extends to a distance of several miles on each side of the river and also to the more important tributaries of the Sinu, the Esmeralds, Verde and Manso rivers. In regions where the water is excessive, such as the valleys of the Atrato, the plant though found, has a poor growth and is of an inferior quality. In gathering ipecac the whole plant is up-rooted and the thin and soft rootlets are thrown away, and these discarded rootlets serve as a means of reproduction, becoming in a year well-developed plants having valuable roots of their own. The present demand for ipecac is good, for the average price in Cartagena is about \$1.80 per lb. and \$2.20 per lb. can be obtained in some of the foreign markets for the dry roots. The European demand is especially strong. France paying from 10c. to 20c. more than can be obtained in the United States. The total shipment of ipecac from this port during the calendar year 1910 amounted to 14,181 kilos. The area from which Cartagena ipecac is derived is very extensive and somewhat scattered, though by far the most important region is that of the Sinu River and its tributaries. It is thought that the land actually covered by the plant must embrace several hundred square miles, though any attempt at an accurate estimate would be useless. A relatively small amount of Cartagena ipecac comes from the Atrato, and it is of inferior quality. In addition to the two regions mentioned, there is still another, nearer than either of them to Cartagena, called San Onafre. Ipecac is not an object of cultivation in Columbia, though there is no reason why it should not be, except the fact that it is found wild in such abundance."

(The Chemist and Druggist, Feb. 24, 1912, p. 78).

CALABAR BEAN.

(Physostigma Venenosum).

A plant allied to the runner-beans (Phaseolus) and native of Nigeria and the Congo where it is used as an ordeal, but owing to its poisonous properties the production has been discouraged.

The drug, which is obtained from the ripe seed, has been recognized in different Pharmacopæias for many years as a valuable poison and for external use in cases of Myöpia. Quite recently a further chemical examination by the Wellcome Chemical Research Laboratories has resulted in the isolation of a new alkaloid which will doubtless add to the value of the plant although the demand may be limited.

R. D.

COCAINE.

(Erythroxylon Coca.)

In the Agricultural Bulletin of the Straits Settlements and Federated Malay States page 336 vol. VII. there is an account of this plant as grown in the Botanic Gardens Singapore and a report from the Imperial Institute on a sample of dried leaves submitted by the late Mr. Machado for analysis and valuation. The colour of the leaves was not quite good but "the percentage of alkaloids present was equal to the average amount found in commercial supplies of Coca leaves from other sources." Planters are also cautioned that the demand is small and that leaves would be over-produced if extensively cultivated.

At the present time the price is high and leaves from the East appear to be exported from Java only. The plant is exceptionally hardy and is grown as a hedge-plant in the Singapore Gardens. There would be a great saving in handling and freight if anyone cared to try the production of Cocaine instead of exporting leaves.

R. D.

The Production of Cocaine in Peru.

This subject receives attention in a recent number of *The Engineer*, in an article which is reproduced in *Peru To-day* for September 1911: In introducing the article, the latter publication points out the importance of the cocaine industry in Peru; this is shown by the circumstance that the value of the annual production of the drug is £2,500,000. A great part of this is exported, while most of the rest

is consumed by the native Indians.

The account in *The Engineer* states that the processes employed in Peru for the extraction of cocaine from the leaves of the cocaplant (Erythroxylum Coca) are crude, owing to the fact that the treatment takes place in the interior, on account of the expense of transport of the leaves; the extent of this expense is illustrated by the fact that 200lb. of coca leaves are required for the manufacture of 1lb. of cocaine. Doubtless, improved means of communication will bring the manufacture nearer the coast, and then better methods will be employed.