51206 and 51207—Continued.

not flower until it is 7 or 8 years old, hence the belief that it flowers only once every century and the popular name "century plant."

A long dry season and a light rainy one are essential for the best growth of this plant; while warm, clear, dry weather, with bright sunshine, is required to dry and bleach the fiber. The thick and pulpy leaves of the maguey render it capable of withstanding long droughts which would be disastrous to most other economic plants. The most essential step in maguey cultivation is the selection of a well-drained soil. Shallow, rocky, limestone soils and soils formed by the disintegration of coral rock are best suited for maguey growing.

The fiber is large, inflexible, slightly yellowish, and of a great tenacity. This latter quality renders it very valuable in all cases where sudden strains are anticipated, while its lack of elasticity prevents it from being used to advantage in power transmission. In the United States it is largely used for the manufacture of binder twine, fodder yarns, and various other cordage purposes. In the Philippine Islands carefully selected young leaves are cleaned by the same process used in cleaning pineapple leaves; the fiber thus obtained is very fine and silky and is used for making cloth, fine handkerchiefs, and other articles. (Adapted from *Philippine Agricultural Review, vol. 3, p. 424.*)

For previous introduction, see S. P. I. No. 33508.

51207. CROTALARIA USARAMOENSIS Baker f. Fabaceæ.

A tall herb, native to German East Africa and allied to *C. lanceolata* E. Mey. from which it differs in its broader and shorter leaflets, which are glabrous above and strigose pubescent below. The racemes are 15 to 25 centimeters long.

In Buitenzorg the grayish fiber is not so smooth and silky as that of *Hibiscus cannabinus*, but that does not necessarily mean that it is not suitable for the spinning of yarn. The same is the case with sunn hemp (*Crotalaria juncea*), which in British India is more highly esteemed than Deccan hemp (*Hibiscus cannabinus*). A great drawback is that the total quantity of fiber obtained up to the present differs very materially in strength and ordinarily is not very strong. How this will be influenced by different climatic and cultural conditions and soil can be determined only by making tests elsewhere, which is strongly recommended.

The practical utility of the fiber can be determined only by spinning and weaving tests. Adequate specimens are available for these tests, but unfortunately tests can not be carried out on account of the difficulty in exporting.

The leaves are used as a green manure and as cattle feed. Analyses made by Dr. A. W. K. de Jong, of the Agricultural Chemical Laboratory, give the following percentages for fresh and dry leaves, respectively: Albumin, 5.3 and 26.7; nitrogen, 0.87 and 4.27; fat, 1.4 and 7.0; starch 1.9 and 9.6; crude fiber, 4.0 and 20.1; crude ash, 0.9 and 4.5. The water content of the fresh leaves was 80.1 per cent and their nutritive value 34.4 per cent.

The roots and stems will perhaps be suitable for the manufacture of paper, where the transportation facilities are favorable. The wood which remains after the removal of the fiber is very thin and smooth, but burns well and without smoke and is much in demand by the inland