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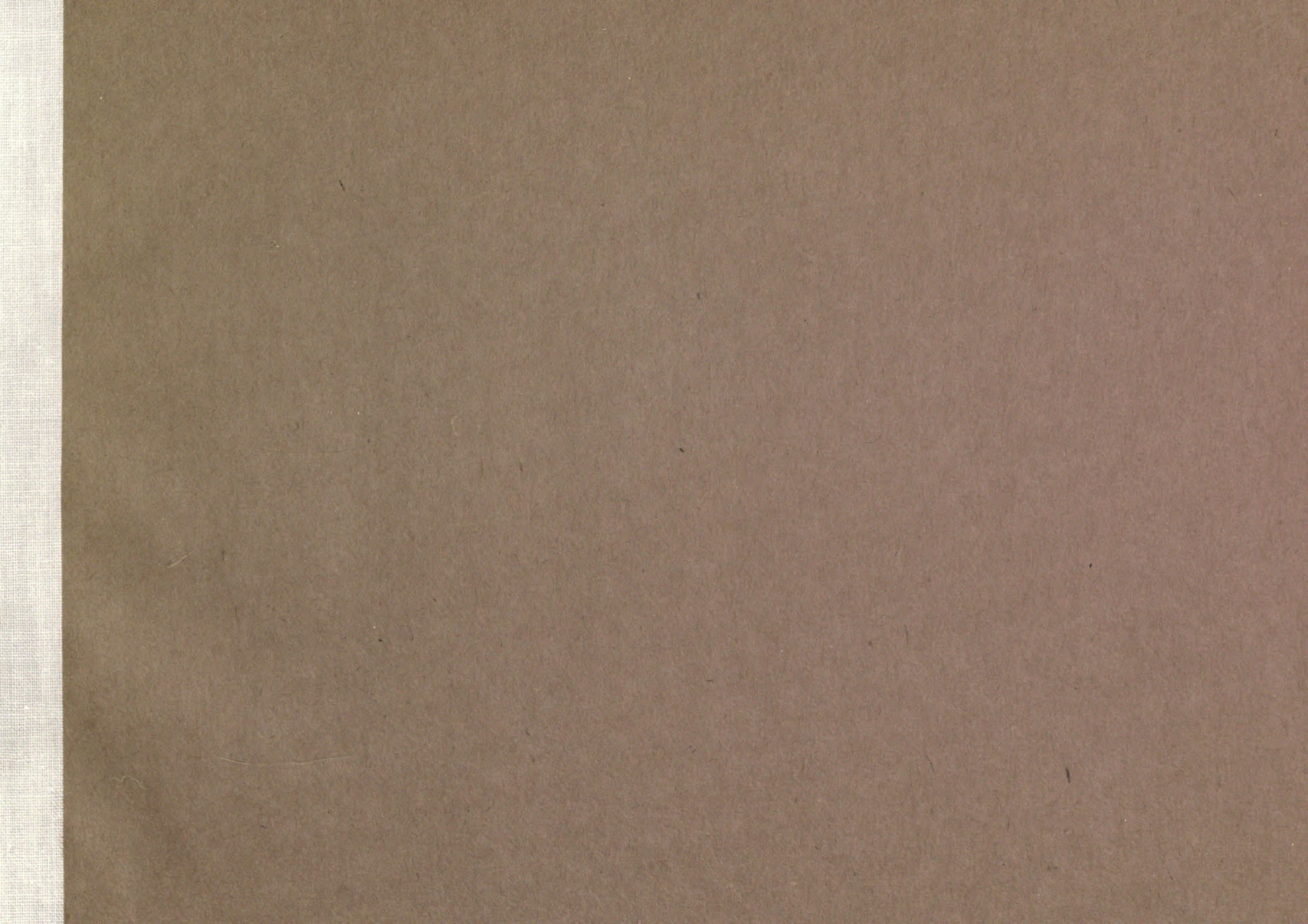


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# AGAVE-FIBRES

OF

# NETHERLANDS-INDIA



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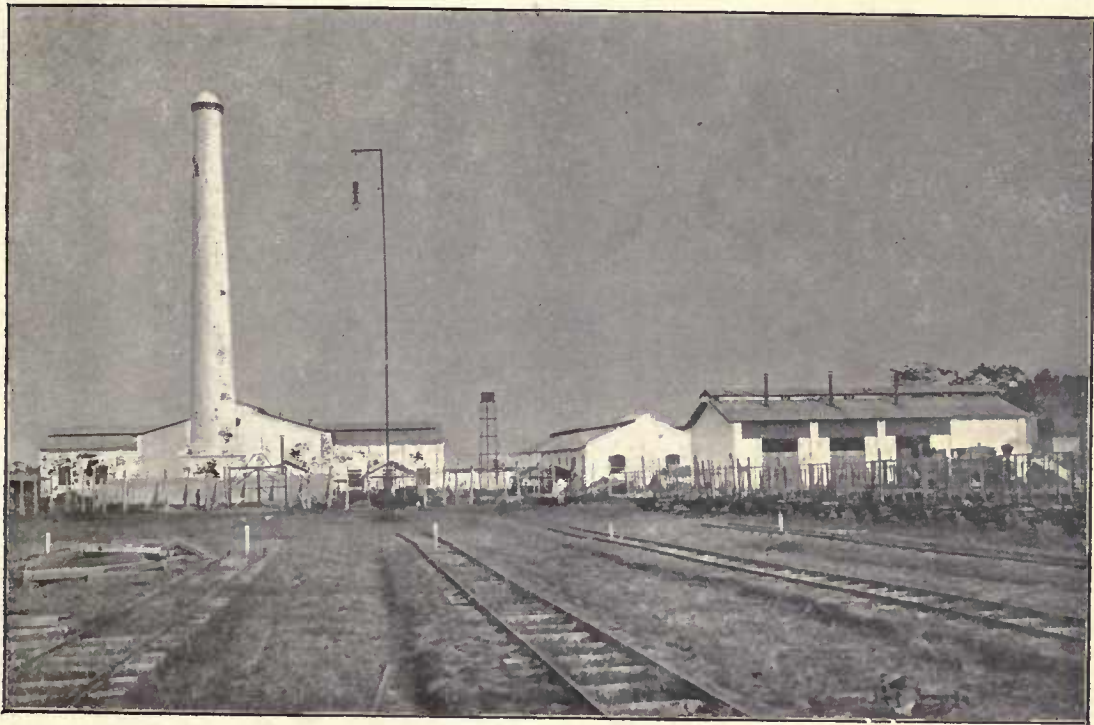
*Dutch East Indies*

DIVISION OF INDUSTRY AND COMMERCE

DEPARTMENT OF AGRICULTURE INDUSTRY AND COMMERCE  
BUITENZORG JAVA.







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## AGAVE-FIBRES OF NETHERLANDS-EAST-INDIA.

**Distribution in Netherlands-East-India.** A great many different species of agave and other fibre-producing plants of the same order can be found in Netherlands-East-India growing wild. It is no wonder that the natives have for many years known the valuable properties of the fibres of the leaves of these plants; they are prepared by them in the most primitive way.

**Cultivation.** The fibre, obtained by the natives, is mostly short, insufficiently cleaned and coloured. Owing to this the product never would have become an export-article of much importance had not the European planters in Neth.-East-India applied themselves to the cultivation of these fibres. This change took place in the beginning of this century and the number of agave-plantations rapidly increased when in the years 1903 to 1905 the prices were extraordinarily high, but after the last mentioned year the price declined, and for that reason the planters did not make the profits they anticipated and the cultivation progressed but slowly.

There were in the beginning of 1911 some 37 European estates representing 15,309 acres under agave cultivation in Java, of which there were to be found in:

East-Java	19 estates	representing	9,396 acres,
Central-Java	18	„	„ 5,913 „

and some 681 acres of this plant cultivated by the natives.

**Agave Cantala and Agave Rigida var. Sisalana.** Two species of agave are principally planted, between which there is rather a great difference; namely **Agave Cantala** and **Agave Rigida var. Sisalana**.

The Agave Cantala, which seems to be a native of Java and grows very luxuriously, yields a fibre, that shows very important differences compared with the real Sisal-hemp, the fibre of the Agave Rigida var. Sisalana.

The Cantala-fibre is much thinner, more brilliant white and more flexible than the Sisal-fibre, and owing to these properties it is suitable for spinning-purposes, for which the coarser Sisal-hemp is less suitable. Owing to this, the foreign markets pay more for the carefully prepared Java Cantala-fibre than for the Sisal-fibre.

**Cultivation and preparation.** Relative to the cultivation of these agaves but very little can be said, as they need little care and grow well on ground which is less suitable for other cultivated plants.

The preparation of the fibre by the natives is done, as already mentioned above, in a very primitive way, namely by drawing the agave-leaves, which are usually beaten soft with a stone or a piece of wood, through a simple scraping apparatus.

The fibre obtained in this way is however usually short and the colour, as well as the cleaning, often leaves much to be desired.

The fibre prepared by the natives is principally used in this country itself, and only small quantities are exported.

On the estates which are under European supervision, the preparation of the fibre is done in a less primitive way, and at present a general use is made of fibre-extracting machines. On





A PLANTATION OF AGAVE RIGIDA VAR. SISALANA.

small estates an improved model of the raspador, originally from Mexico is generally used, and on larger estates a general use is made of the machines of Krupp, Boeken, Priëto, etc., which can work some tenthousand leaves a day.

The fibre as delivered by these machines, is sometimes brushed, after having been dried and assorted according to colour, which process is specially required by some markets.

On some estates where during certain periods of the year the drying in the air goes on too slowly, the product is submerged in tanks filled with water as soon as it leaves the machine. In these tanks the fibre undergoes a kind of retting by which the organic substances, which by slow drying would cause discolouring, are dissected and so become harmless.

**Packing.** The Java-fibre is packed in gunny bags and shipped in bales weighing 50 to 100 K. G, which are bound by iron bands. Iron is very often substituted by bamboo as the corroding of the iron, causes the quality of the fibre to suffer.

**Waste.** The waste from the manufacture consisting of broken fibres etc., is a material suitable for the stuffing of cushions of carriages and valuable for the manufacture of stronger kinds of paper. This waste is partly sold in the country and partly exported to Europe.

**Uses.** It is generally known that the Sisal-hemp is of much importance as a material for rope-manufacture, and in this respect a competitor of the other kinds of rope-fibres such as Manila-hemp, New-Zealand-flax, and Mauritius-hemp.

The Sisal-hemp, whether or not mixed with Manila-hemp, is being used more and more in the manufacture of rope, for which, until recent years, Manila-hemp and New-Zealand-flax were mainly used.



The finer kinds of agave-fibres are suitable for the manufacture of tissues which have to answer high requirements of strength, and the Java-Cantala especially has, on account of its cleanness, whiteness, high brilliancy, fineness and flexibility, an unlimited future as a rawmaterial for the weaving-industry.

The real Sisal-hemp, on the contrary, is not sufficiently useful for the spinning of tissues.

**Exports.** The export of agave-fibres from Netherlands<sup>2</sup>-East-India has only in recent years grown in importance as a result of the fact, that larger estates which were laid out since 1904, gradually began to produce. The export of this article during 1913 amounted to more than 8700 tons, against 6000 tons for 1912, and 2000 tons for 1911.

The principal countries of destination for the Java product are the United States of America, the Netherlands, France, Great Britain, Germany and Japan.

During the years 1912 and 1913 the total export from Java amounted to (in tons of 1000 K.G.):

Countries of Destination,	1912.	1913.
Netherlands and } Netherlands f/t }	1,086	1,249
Germany	98	262
Great Britain	188	484
France	275	
Other European countries	13	
United States of America	4,375	6,557
Japan	96	196
Total	6,131 tons	8,748 tons.



A PLANTATION OF AGAVE CANTALA.





The principal ports of export are Sourabaya and Samarang, from which ports the shipments in 1912 and 1913 amounted to (in tons of 1000 K.G.):

	1912.	1913.
Sourabaya	5,883	8,188
Samarang	248	253

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