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(1) Number of pages 4 4

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(3) Initials of the Reference

MADRAS RECORD OFFICE.

Government of Madras.

[illegible] DEPARTMENT.

G.O. No. 491 Press Mis.

Dated 19-3-1878.

[illegible] to be folded or roughly handled

GOVERNMENT OF MADRAS.

REVENUE DEPARTMENT.

19th March 1878, No. 421.

Read the following paper :—

No. 196. Despatch from the Most Honorable the Secretary of State for India.

Revenue (Forests), No. 4.

INDIA OFFICE, LONDON, 7th February 1878.

MY LORD DUKE,—Herewith is forwarded, for your Grace's information, extract from a letter from Mr. Clements Markham reporting the progress made by Mr. Cross in his mission to Buenaventura to collect plants of the "Calisaya de Santa Fe" bearing Cinchona, for which purpose he was employed in July last with instructions to forward the collection of plants he might make to the care of the Superintendent of the Royal Botanical Gardens at Kew, on his arrival at Southampton, whence they will be transmitted to India. He was also instructed to draw up a report on the habitat of this species of Cinchona, copies of which will also be sent out.

2. Mr. Cross is expected to return to England about March next, and it is, therefore, probable that the plants will have to be taken care of at Kew until the hot season is over, so as to be sent out to India in August or September. A further communication will, however, be made to your Government on the subject on the arrival of Mr. Cross in this country.

I have, &c.,
(Signed) SALISBURY.

To His Excellency the Most Noble
The Governor in Council, Fort St. George.

ENCLOSURE No. 1.

EXTRACT of letter from Mr. Markham, dated December 9th, 1877.

MR. CROSS made a most remarkable journey in search of the Calisaya de Santa Fe, having found it necessary to penetrate into the valley of the Caqueta or Jopura, one of the great northern tributaries of the Amazon, the upper part of which has never been explored.* Thus Mr. Cross had to traverse all the Andœan chains before he reached the banks of the Caqueta. There he made a good collection of the valuable species and brought it to Popayan after traversing vast distances and encountering difficulties such as those only who have themselves penetrated to the eastern slopes of the Andes can form a conception.

* The map accompanying Mr. Cross's report on the Pitayo Cinchona (1868) shows the country he has now traversed and the sources of the Caqueta.

On the 22nd of October he arrived at Popayan with the plants in good condition. I considered it desirable that plants of the *Cinchona cordifolia* (hard Carthayena bark) should also be obtained. Mr. Cross left Popayan on October 26th for Paniquita or Sylvia,† to make a collection of this kind, remaining at one or other of these places to establish the plants until the beginning of next January. He will set out, with his whole collection, on his very difficult journey homewards in January, and may be expected early in March or somewhat later in the probable event of detentions. It is, therefore, likely that the plants will have to be taken care of at Kew until the hot season is over, so as to be sent out to India in August or September.

† See map with Report of 1865.

The Colombian species should be cultivated on the Nilgiri Hills, the *Cinchona cordifolia* requiring much the same climate as the Pitayo kind, which is already introduced. The plants should, therefore, be sent by the most direct route to the Nilgiri plantations. Mr. Cross will furnish much new information in addition to what was collected from the researches of Mutis and Karsten and embodied in my pamphlet of 1867.

No. 197. ORDER THEREON, 19th March 1878, No. 421.

Miscellaneous.

COMMUNICATED to Commissioner, Nilgiris.

2. The Government learn with satisfaction of the measures that have been taken to procure this valuable variety of the *C. Calisaya*, the introduction of which they were about to recommend.

(True Extract.)

(Signed) C. G. MASTER,
Secretary to Government.

To the Commissioner of the Nilgiris.
„ the Board of Revenue.

Exd. F. R. Bantleman.

Govt. of [1878] Madras.

REVENUE.

To

THE COMMISSIONER OF THE NILGIRIS,

&c., &c., &c.

Dated March 19th.

Read.

Encl.

G.O., 19th *March* 1878, No. 421.

M A R C H.

Nos. 196-197.

Plants of the C. Calisaya de Santa Fe.—Communicating to the Commissioner, Nilgiris Despatch from the Secretary of State forwarding with remarks extract from a letter from Mr. C. Markham reporting the progress made by Mr. Cross in collecting — at Buenaventura.

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Extract of Letter from Mr. Markham,
dated December 9th 1877.

Mr. Cross made a most remarkable journey in search of the Calisaya de Santa Fé, having found it necessary to penetrate into the valley of the Caqueta or Japurá one of the great northern tributaries of the Amazon, the upper part of which has never been explored. Thus Mr. Cross had to traverse all the Andean chains before he reached the banks of the Caqueta. There he made a good collection of the valuable species and

+ The map accompanying Mr. Cross's Report on the Pitayo Chinchona (1876) shows the country he has now traversed, and the sources of the Caqueta

The Under Secretary
of State of India

and brought it to Popayan after traversing vast distances, and encountering difficulties such as those only who have themselves penetrated to the eastern slopes of the Andes can form a conception.

On the 22d of October he arrived at Popayan with the plants in good condition. I considered it desirable that plants of the Cinchona cordifolia (Red Carthagena bark) should also be obtained. Mr. Cross left Popayan on October 26th for Pancguita or Lyfna* to make a collection of this kind, remaining at one or other of these places to establish the plants until the beginning of next January. He will set out, with his whole collection, on his very difficult journey homewards in January, and may be expected early in March, or somewhat later in the probable event of detentions. It is therefore likely that the plants will have to be taken care of at Kew until the hot season is over, so as to be sent out to India in August or September.

* see map with Report of 1865

The Colombian species should be cultivated on the Nilgiri Hills, the C. cordifolia requiring much the same climate as the Pitayo kind which is already introduced. The plants should therefore be sent by the most direct route to the Nilgiri plantations. Mr. Cross will furnish much new information in addition to what was collected from the researches of Mutis and Karsten and embodied in my pamphlet of 1867.

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No 15

Extract of Letter from
Mr Markham, dated 9th Dec. 1877

Referred to in Revenue (Forests)
Letter to Madras, No 4.
dated 7th Feby 1878.

India Office
Rec'd 19 March /78 No 421

India Office, London.
7th February, 1878.

Revenue (Forests)

No. 4.

No 196

My Lord Duke,

1. Herewith is forwarded for your Grace's information extract from a letter from Mr. Clements Markham reporting the progress made by Mr. Cross in his mission to Buenaventura to collect plants of the "Calisaya "de Santa Fé" bearing Cinchona, for which purpose he was employed in July last with instructions

To/
His Excellency
The Most Noble
The Governor in Council.
Fort Saint George.

instructions to forward the collection of plants he might make to the care of the Superintendent of the Royal Botanical Gardens at Kew, on his arrival at Southampton, whence they will be transmitted to India.

He was also instructed to draw up a Report on the habitat of this species of Cinchona, copie of which will also be sent out.

2.- Mr. Cross is expected to return to England about March next, and it is therefore probable that the plants will have to be taken care of at Kew until the hot season is over, so as

as to be sent out to India in August or September. A further communication will, however, be made to your Government on the subject on the arrival of Mr. Cross in this Country.

I have the honor to be

My Lord Duke

Your Grace's most obedient

humble Servant

Sabine

No 114.

Revenue (Forests)
7th Febr. 1878.

The
Secretary of State for India
No. 4.

Ded. 421 - 19 March 1878

Received 3d March 1878.

Encl.

Forwarding with remarks extract from a letter from Mr C. Markham reporting the progress made by Mr Cross in collecting plants of the "Calisaya de Santa Fe" at Buenaventura

No 196

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Rev. Dept.
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No. 421.

Proceedings of the Madras Government under date the 19 March 1878.

Read the following Despatch from Secy: of State for India, dated 7th February 1878 No. 4.

Abstract. Forwarding with remarks extract from a letter from Mr. C. Markham reporting the progress made by Mr. Cross in collecting plants of the "Calisaya de Santa Fe" at Buenaventura for which purpose he was employed in July last with instructions to forward the collection of plants he might make to the care of the Supt. of the Royal Botanical Gardens

Note. It is submitted that this despatch & enclosure might advantageously be printed in full

Buenaventura

Gardens at Kew on his arrival at Southampton, whence they will be transmitted to India.

Communicated to Commissioner Kilgiris.

2. H.M. Govt: learn with satisfaction of the measures that have been taken to procure this valuable variety of the C. Calisaya the introduction of which they were about to recommend.

1873

3 To the Commissioners of the
14. the Board of Revenue

Nilgiris Dy 21 Mar

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Regarding C. Calisaya
de Santa Fé.

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