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TAMIL NADU ARCHIVES

GOVERNMENT OF TAMIL NADU

REVENUE DEPARTMENT

G.O. No. 1186 Press.
~~B.P. No.~~ Mis.

Dated 27-7-1878. ~~197~~.

Not to be folded or roughly handled

Archives I—5,806—24-2-78.

1186
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GOVERNMENT OF MADRAS.

REVENUE DEPARTMENT.

27th July 1878, No. 1,186.

Read the following papers :—

No. 371. From C. J. LYALL, Esq., Under-Secretary to the Government of India, Department of Revenue, Agriculture, and Commerce, (Forests,) to C. G. MASTER, Esq., Secretary to the Government of Madras, Revenue Department, dated Simla, 13th July 1878, No. 683-F.

With reference to the correspondence ending with the letter from this department, No. 218-F, dated the 19th February last, as well as to Resolution, No. 37-F, dated the 8th instant, forwarding copy of despatches from and to the Secretary of State on the subject of the operations undertaken at the Royal Gardens at Kew for introducing American rubber trees into India, and the arrangements to be made for the future, I am directed to observe that no plants of the *Copaiba balsam* can be expected from England, but that plants of the *Hevea Braziliensis*, *Castilloa elastica*, and *Ceara caoutchouc*, may eventually be obtained from Ceylon and Calcutta, respectively.

No. 372. Extract from the Proceedings of the Government of India in the Department of Revenue, Agriculture, and Commerce, (Forests,) dated Simla, 8th July 1878, Circular No. 37-F.

Read the following Despatch from Her Majesty's Secretary of State for India, to the Government of India, dated 9th May 1878, No. 18.

On receipt of your Excellency's letter, No. 11, of the 22nd February last, relative to the distribution in India of the plants of the *Copaiba balsam* and of the Hevea, Ceara, and Castilloa rubber plants, a copy of it was forwarded to Sir Joseph Hooker, with a request that the wishes of your Government in this respect might be attended to.

2. I now transmit, for your information, copy of the reply* received from Sir Joseph Hooker, which contains a review of the operations undertaken at the Royal Gardens, Kew, in effecting the introduction of India rubber plants into India.

*Dated 17th April 1878.

Enclosure No. 1.

From W. T. THISELTON DYER, Esq., Assistant Director, Royal Gardens, Kew, to the Under-Secretary of State for India, dated 17th April 1878.

I am desired by Sir Joseph Hooker to acknowledge the receipt of your letter of the 6th April, transmitting an extract from a letter from the Government of India, and requesting the transmission to Ceylon of certain stocks of Heveas and Castilloas.

In replying to this letter, Sir Joseph Hooker thinks it will be convenient that I should review the whole operations of this establishment in effecting the introduction of India rubber plants into India.

1. *Hevea Braziliensis* (Para rubber).—On 4th June 1873 we received from Mr. Markham some hundreds of seeds obtained from Mr. James Collins. Of these seeds less than a dozen germinated, and six (6) of the plants so obtained were taken out by Dr. King, Superintendent of the Botanical Gardens, Calcutta, in the same year to India.

The climate of Calcutta did not prove very favorable to the Heveas, which require the conditions of growth met with in hot and moist tropical forests. It was, therefore, decided in consultation with Mr. Markham that, in the event of more Heveas being raised and sent out from Kew, they should be received at the Botanical Gardens in Ceylon, which should then be regarded as the depôt for supplying young plants to such parts of India as were found to be suitable for its growth.

On June 14th, 1876, we received from Mr. Wickham about 70,000 seeds, of which about 4 per cent. germinated.

On August 9th we despatched 1,919 plants raised from these seeds to Ceylon in 38 Wardian cases, in charge of a gardener. Of the whole consignment 90 per cent. reached Dr. Thwaites in excellent condition. All subsequent accounts have been satisfactory, and no difficulty is found in multiplying the plants by propagation to any extent.

On August 11th, 50 plants were sent to the Botanical Garden at Singapore. Owing to the delay in the payment of the freight these plants all perished.

On August 23rd, 50 plants were sent direct to Major Seaton in Burma. These reached their destination in bad condition.

On September 29th, a further supply of 100 plants was taken out to Dr. Thwaites, in charge of Mr. Duthie, Superintendent of the Botanical Garden, Saharanpur. These reached Ceylon in good order.

On June 11th, 1877, 22 plants were sent to the Botanical Garden, Singapore. The Superintendent reports that the climate appears suited to their growth.

On September 7th, 37 plants were sent to the Botanical Gardens in Mauritius, and reached their destination in good order.

On September 15th, 100 plants were again sent to Dr. Thwaites, and 50 to Calcutta, in charge of Mr. Morris, Dr. Thwaites's Assistant. Both consignments reached their destinations safely. Of those sent to Calcutta a portion was immediately despatched by Dr. King to Major Seaton, with whom they are now doing well.

It appears, therefore, that while upwards of 2,000 plants are safely established in Ceylon, smaller parcels are also growing in Burma, Calcutta, Mauritius, and Singapore. The plant is now, therefore, to be regarded as definitely established in the East Indies, and, with ordinary horticultural skill, there should be no difficulty, in the course of a few years, in raising an indefinite number of young plants.

Beyond keeping a small stock for occasional distribution, it does not appear that this establishment is called upon to take any further steps for the propagation and distribution of this plant to India.

I should add that, on November 21st, 1876, Mr. Cross reached Kew with about 1,000 young plants brought direct from South America. Only about 3 per cent. of these plants survived, and they, therefore, contributed but little to our resources for distribution.

Castilloa elastica (Rubber of Central America).—Sir Joseph Hooker has already stated, in a letter to the India Office, dated April 1st last, what has been done with respect to this kind. I quote the following passage:—

"The cuttings brought home by Mr. Cross were received on October 3rd, 1875. [The seeds (7,000) received previously failed to germinate.] Steps were immediately taken to establish and propagate them, and on August 9th, 1876, 32 healthy plants were forwarded to Dr. Thwaites, 28 of which he subsequently reported were well established in Ceylon and doing well.

On September 15th, 1877, a further consignment of 24 plants was transmitted to Dr. Thwaites, in charge of Mr. Morris."

A few plants have also been sent to Mauritius and Singapore.

The propagation of this species will, for the present, be continued at Kew, and during the ensuing summer a further small consignment will be sent to Ceylon. Cuttings do not strike so readily as those of the Hevea, and the multiplication of plants is, therefore, necessarily slower.

3. *Manihot Glaziovii* (Ceara rubber).—Mr. Cross brought to Kew on November 21st, 1876, seeds and cuttings of this plant, from which a stock of 55 individuals was eventually obtained.

On June 11th of last year, four plants were sent to Singapore, and on September, 15th, at which date our stock had increased to 300 plants of all sizes, 50 were sent to Dr. King at Calcutta, and 50 to Dr. Thwaites in Ceylon, both in charge of Mr. Morris. All the stems collected by Mr. Cross were divided between these two recipients. At the end of the year our stock amounted to about 450 plants. There will be no difficulty, therefore, in sending a supply of plants of this species to the Conservator of Forests in Madras in accordance with the wish of the Government of India. It will, however, probably be most convenient to treat Calcutta as the depôt for the Ceara rubber plants, as Ceylon must be for Heveas and Castilloas.

With respect to plants of the Copaiba balsam, nothing can be done. From the 5 (five) seeds brought to Kew by Mr. Cross, November 21st, 1876, only two plants have been raised, and these grow with excessive slowness. Nothing can, therefore, be done at present in propagating them.

Recapitulating, I have, therefore, to state that Sir Joseph Hooker is of opinion—

(1) that it is unnecessary to transmit any more Hevea plants to India, and that application should be made for them to Ceylon when required for experimental cultivation;

(2) that as the stock of Castilloas at Kew increases, further consignments should continue for the present to be made to Ceylon;

(3) that plants of the Ceara rubber may with advantage be forwarded to Madras, but that the principal stock of young plants should be sent to Calcutta, from which they can be distributed;

(4) that for the present nothing can be done, as far as Kew is concerned, with the Balsam of Copaiba.

Despatch from the Government of India, to Her Majesty's Secretary of State for India, dated 1st July 1878, No. 23.

WE have the honor to acknowledge the receipt of your Lordship's Despatch, No. 18, dated the 9th May last, forwarding copy of a letter from the Assistant Director of the Royal Gardens at Kew, which contains a review of the operations undertaken at those gardens for introducing the American rubber trees into this country, and, in reply, to express our concurrence in the proposals made therein, viz.,—

that no more plants of the *Hevea Braziliensis* need at present be sent to India or Ceylon;

that plants of *Castilloa elastica* should continue to be sent to Ceylon; and

that the Botanical Garden at Calcutta should be made the depôt for the plants of the *Ceara caoutchouc*.

2. We would beg your Lordship to convey our acknowledgments to Sir J. Hooker for the services rendered by him in connection with the rearing and despatch of these rubber plants to India.

3. With regard to the origin of the arrangements for the cultivation of the rubber tree in Ceylon, we have the honor to state that in July 1875 Dr. King, the Superintendent of the Botanical Garden, Calcutta, reported that the plants brought out by him from Kew in 1873 had not done well at the garden, and that he feared the tree would not find a congenial home in any part of Northern India. He suggested that it would probably thrive in Ceylon; and it was accordingly arranged, in communication with the Government of Ceylon, to use the Botanical Gardens there as a depôt for supplying rubber plants to British Burma and other parts of India.

Madras.	Central Provinces.	ORDER.—Ordered that a copy of the above despatches be forwarded for information to the local Governments and Administrations noted in the margin, to the Superintendent of Forest Surveys, and to the Comptroller-General.
Bombay.	British Burma.	
Bengal.	Mysore and Coorg.	
North-Western Provinces and Oudh.	Ajmere.	
	Assam.	
Punjab.	Hyderabad.	

(True Extract.)

(Signed) C. J. LYALL,
Under-Secretary to the Government of India.

No. 373. ORDER THEREON, 27th July 1878, No. 1,186.

Forests, No. 20.

COMMUNICATED to the Board of Revenue and the Conservator of Forests.

(True Extract.)

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

To the Board of Revenue.
" the Conservator of Forests.

Exd. F. R. Bantleman.

Circular No. 37 F.

Extract from the Proceedings of the Government of India in the Department of Revenue, Agriculture and Commerce,—dated Simla, the 8 July 1878.

FORESTS.

READ the following despatches from and to Her Majesty's Secretary of State for India, on the subject of the operations undertaken at the Royal Gardens at Kew for introducing American rubber trees into India, and the arrangements to be made for the future:—

No. 18, dated the 9th May 1878.

From—Her Majesty's Secretary of State for India,

To—The Government of India.

ON receipt of Your Excellency's letter No. 11 of the 22nd February last, relative to the distribution in India of the plants of the Copaiba Balsam, and of the Hevea, Ceara, and Castilloa rubber plants, a copy of it was forwarded to Sir Joseph Hooker with a request that the wishes of your Government in this respect might be attended to.

2. I now transmit, for your information, copy of the reply* received from Sir Joseph Hooker, which contains a review of the operations undertaken at the Royal Gardens, Kew, in effecting the introduction of India-rubber plants into India.

* Dated 17th April 1878.

Dated the 17th April 1878.

From—W. T. THISELTON DYER, Esq., Assistant Director, Royal Gardens, Kew,

To—The Under Secretary of State for India.

I AM desired by Sir Joseph Hooker to acknowledge the receipt of your letter of the 6th April, transmitting an extract from a letter from the Government of India, and requesting the transmission to Ceylon of certain stocks of Heveas and Castilloas.

In replying to this letter, Sir Joseph Hooker thinks it will be convenient that I should review the whole operations of this establishment in effecting the introduction of India-rubber plants into India.

1. *Hevea braziliensis.*—Para rubber. On 4th June 1873, we received from Mr. Markham some hundreds of seeds obtained from Mr. James Collins. Of these seeds less than a dozen germinated, and six (6) of the plants so obtained were taken out by Dr. King, Superintendent of the Botanical Gardens, Calcutta, in the same year to India.

The climate of Calcutta did not prove very favourable to the Heveas, which require the conditions of growth met with in hot and moist tropical forests. It was, therefore, decided in consultation with Mr. Markham that, in the event of more Heveas being raised and sent out from Kew, they should be received at the Botanical Gardens in Ceylon, which should then be regarded as the depôt for supplying young plants to such parts of India as were found to be suitable for its growth.

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It appears, therefore, that while upwards of 2,000 plants are safely established in Ceylon, smaller parcels are also growing in Burma, Calcutta, Mauritius, and Singapore. The plant is now therefore to be regarded as definitely established in the East Indies, and, with ordinary horticultural skill, there should be no difficulty, in the course of a few years, in raising an indefinite number of young plants.

Beyond keeping a small stock for occasional distribution, it does not appear that this establishment is called upon to take any further steps for the propagation and distribution of this plant to India.

I should add that, on November 21st, 1876, Mr. Cross reached Kew with about 1,000 young plants brought direct from South America. Only about 3 per cent. of these plants survived, and they therefore contributed but little to our resources for distribution.

2. *Castilloa elastica.*—Rubber of Central America. Sir Joseph Hooker has already stated, in a letter to the India Office, dated April 1st last, what has been done with respect to this kind. I quote the following passage:—

"The cuttings brought home by Mr. Cross were received on October 3rd, 1875. [The seeds (7,000) received previously failed to germinate.] Steps were immediately taken to establish and propagate them, and on August 9th, 1876, 32 healthy plants were forwarded to Dr. Thwaites, 28 of which he subsequently reported were well established in Ceylon and doing well.

"On September 15th, 1877, a further consignment of 24 plants was transmitted to Dr. Thwaites, in charge of Mr. Morris."

A few plants have also been sent to Mauritius and Singapore.

The propagation of this species will for the present be continued at Kew, and during the ensuing summer a further small consignment will be sent to Ceylon. Cuttings do not strike so readily as those of the Hevea; and the multiplication of plants is therefore necessarily slower.

3. *Manihot Glaziovii.*—Ceará rubber. Mr. Cross brought to Kew on November 21st, 1876, seeds and cuttings of this plant, from which a stock of 55 individuals was eventually obtained.

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With respect to plants of the Copaiba Balsam, nothing can be done. From the five (5) seeds brought to Kew by Mr. Cross, November 21st, 1876, only two plants have been raised, and these grow with excessive slowness. Nothing can therefore be done at present in propagating them.

Recapitulating, I have therefore to state that Sir Joseph Hooker is of opinion—

1. That it is unnecessary to transmit any more Hevea plants to India, and that application should be made for them to Ceylon when required for experimental cultivation.
2. That as the stock of Castilloas at Kew increases, further consignments should continue for the present to be made to Ceylon.
3. That plants of the Ceará rubber may with advantage be forwarded to Madras, but that the principal stock of young plants should be sent to Calcutta, from which they can be distributed.
4. That for the present nothing can be done, as far as Kew is concerned, with the Balsam of Copaiba.

No. 23, dated the 1st July 1878.

From—The Government of India,

To—Her Majesty's Secretary of State for India.

We have the honour to acknowledge the receipt of Your Lordship's despatch No. 18, dated the 9th May last, forwarding copy of a letter from the Assistant Director of the Royal

Gardens at Kew, which contains a review of the operations undertaken at those gardens for introducing the American rubber trees into this country, and, in reply, to express our concurrence in the proposals made therein, *viz.*,—

that no more plants of the *Hevea braziliensis* need at present be sent to India or Ceylon;

that plants of *Castilloa elastica* should continue to be sent to Ceylon; and that the Botanical Garden at Calcutta should be made the depôt for the plants of the *Ceará* caoutchouc.

2. We would beg Your Lordship to convey our acknowledgments to Sir J. Hooker for the services rendered by him in connection with the rearing and despatch of these rubber plants to India.

3. With regard to the origin of the arrangements for the cultivation of the rubber tree in Ceylon, we have the honour to state that in July 1875, Dr. King, the Superintendent of the Botanical Garden, Calcutta, reported that the plants brought out by him from Kew in 1873 had not done well at the garden, and that he feared the tree would not find a congenial home in any part of Northern India. He suggested that it would probably thrive in Ceylon; and it was accordingly arranged, in communication with the Government of Ceylon, to use the Botanical Gardens there as a depôt for supplying rubber plants to British Burma and other parts of India.

ORDER—

Madras.	Central Provinces.
Bombay.	British Burma.
Bengal.	Mysore and Coorg.
North-Western Provinces and Oudh.	Ajmere.
Punjab.	Assam.
	Hyderabad.

Ordered, that a copy of the above despatches be forwarded, for information, to the Local Governments and Administrations noted in the margin, to the Superintendent of Forest Surveys, and to the Comptroller General.

(True Extract.)

Under Secretary to the Government of India.

To

The Secretary to the
Government of Madras

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A 3181

Revenue 1878. Dept.

GOVERNMENT OF INDIA.

DEPARTMENT OF REVENUE,
AGRICULTURE AND COMMERCE.

FORESTS.

To

RESOLUTION.

Circular No. 37 F.

Dated Simla, the 8th July 1878.

Read 20

20

SUBJECT.

CIRCULATES copy of correspondence with the Secretary of State, relative to the introduction of American rubber trees into India.

Govt. Central Branch Press, Simla—Nos. 235 & 236 R., A. & C.—11-7-78—200.

S 26-7-78
R 26-7-78

No. 371

No. 837

1186/5

FROM

C. J. LYALL, ESQUIRE,
Under-Secretary to the Government of India,
Department of Revenue, Agriculture
and Commerce,

To

The Secretary to the
Government of Madras.

Simla dated July 1878.

Forests.

SIR,

With reference to the correspondence ending with the letter from this Department No. 218 F. dated the 19th February last, as well as to Resolution No. 37 F. dated the 8th instant, forwarding copy of despatches from and to the Secretary of State, on the subject of the operations undertaken at the Royal Gardens at Kew for introducing American rubber trees into India, and the arrangements to be made for the future, I am directed to observe

1186/6

Observe that no plants of the
Copaiba Balsam can be expected
from England, but that plants
of the Hevea brazilensis, Castilloa
elastica and Ceara caoutchouc
may eventually be obtained from
Ceylon and Calcutta respectively

I have the honour to be,
Sir,
Your most Obedt Servt,

Chas. Du Cane

Under Secretary to the Govt of India

E.B.C

20/7

Ind. 3181/78
Do 28-2-78 No 350-54.

Revenue 1878 Dept

No 3180.

From

The Govt of Madras
R.D.C.

Dated 15th
Rec'd 20th } July 1878

No 6837.

Adverting with reference to former correspondence, that no plants of the Ceara, brazilensis Castilloa elastica & Cauncanchone may eventually be obtained from Ceylon and Calcutta respectively.

Forwarded

Rev. Dept.

No 1186

1186/7

Proceedings of the Madras Government
Under date the 27 July 1878

Read the following papers

From the Government of India
Department of Revenue, Agriculture and Commerce, dated 13th and 8th July 1878 No 683 F. and No 347 F. relative to the introduction of American and other exotics into India.

Communicated to the Board of Revenue and the Conservator of Forests.

Ind
3517

4111

14 Feb to Board of Revenue &c
21 Ditto Conservator of Forests

100/-

C 25-7-78
R 26-7-78

G. D.

Relating to the institution of Grammar Schools in Virginia Counties.