M.R.O. 1—77,008—8-3-37.

(1) Number of pages 22

(2) Date of repair 9. 8. 38

(3) Initials of the Referencer

MADRAS RECORD OFFICE.

Government of Madras.

Revenue DEPARTMENT.

G.O. No. 1146 Press ~~Mis.~~

Dated 19-10-1882.

Not to be folded or roughly handled

REVENUE DEPARTMENT.

TO THE MOST HONORABLE
THE SECRETARY OF STATE FOR INDIA.

My Lord Marquis,

With reference to Despatch No. 26 of 1882, dated the 9th May, from the Government of India, and in view of contemplated experiments with different varieties of Chinchona on the Nílgiri plateau and at various elevations below it, we have the honor to request that your Lordship will be good enough to cause this Government also to be supplied, in the quantities and in the manner suggested in the enclosure to the above mentioned despatch, with the varieties of Chinchona seed and bark required by Dr. King, Superintendent, Royal Botanical Gardens, and in charge of Chinchona cultivation in Bengal.

Miscellaneous.

G.O., 3rd August 1882, No. 806.

We have the honor to be,
My Lord Marquis,
Your Lordship's most obedient, humble servants,

(Signed) M. E. GRANT DUFF.
(„) ~~FRED. ROBERTS.~~
(„) ~~DAVID F. CARMICHAEL.~~
(„) H. E. SULLIVAN.

Fort St. George,
8 November 1882.

Exd. W. H. French.

FORT SAINT GEORGE.

REVENUE (1882) *DEPARTMENT.*

(Copy.)

LETTER to the Most Honorable the Secretary of State for India.

Dated 8th November,

No. 25 of 1882.

Requesting to be also supplied with Chinchona seed and bark of the varieties of *Zamba Morada* and *Verde*, which is required by Dr. King, Superintendent, Royal Botanical Gardens, and in charge of Chinchona cultivation, Bengal, in the quantities and in the manner suggested by India Government in their despatch to Secretary of State on the subject.

GOVERNMENT OF MADRAS.

REVENUE DEPARTMENT.

READ—the following letter from E. N. BAKER, Esq., Officiating Under Secretary to the Government of Bengal, Financial Department, (Agriculture), to the Secretary to the Government of India, Home Department, dated Darjeeling, 6th September 1882, No. 1615 T-F :—

I am directed to acknowledge the receipt of your endorsement No. 341, dated 5th ultimo, forwarding copy of a letter from Mr. Roberts of Galle, Ceylon, in which he offers to supply Government with seeds of the *Chinchona Calisaya Morada* at the rate of Rs. 500 per ounce.

2. In reply, I am directed to draw your attention to the correspondence ending with your endorsement No. 204, dated the 9th May last, from which it will be seen that, at the request of this Government, the Secretary of State has already been asked to procure a supply of the kind of seed offered by Mr. Roberts; moreover the price asked by that gentleman seems high, the seed in question being procurable in London at 10£ per ounce. The Lieutenant-Governor, therefore, does not recommend that any of the seed offered by Mr. Roberts should be purchased on behalf of Government.

No. 410.

Copy, with copy of the papers marginally noted, forwarded to the Government of Madras for information, in continuation of endorsement No. 340, dated 5th ultimo.

Medical Proceedings, Feb. 1882, No. 60-62.
Medical Proceedings, May 1882, No. 24-26.

(By order.)

(Signed) F. C. DAUKES,
Under Secy. to the Govt. of India.

SIMLA,
22*nd September* 1882.

ENCLOSURES.

Extract from a letter from Messrs. THOMAS CHRISTY and CO., to the Secretary to the Government of India, Revenue and Agricultural Department, dated London, 20th January 1882.

I enclose you herewith a sample of "Chinchona" seed which I have received from Bolivia, having, with the assistance of friends who trade direct with that country, opened communication with the largest grower of "Chinchona." His plantations join the woods from which Mr. Ledger's men took the seed which has been named after him. I also enclose you translation of a letter received yesterday from him, which I think will prove of interest to the Director of your Chinchona Plantations. Should you desire to purchase Chinchona seed from me, I shall be glad to execute any orders for any special varieties that you may name. The leaves of the different varieties of trees I have deposited with Mr. E. M. Holmes, Curator of the Museum of the Pharmaceutical Society in London, and I am asking for specimens of the bark of the different trees, so that I can deposit at Calcutta, as well as in London and Colombo, specimens for reference.

* * * *

CHINCHONA SEED.

Translation of letter received 19*th January* 1882, *by Mr. T. CHRISTY.*

I can now advise you that the seeds that are sent you proceed from trees of "Calisaya," similar to those of which I left you samples of the bark. I cannot tell you exactly if they

proceed exclusively from either the "Morada," "Zamba Morada," and "Verde," but it is probable that the greater part is of the latter, and that it is mixed with the other kinds, as the "Verde" is the one which most abounds. As to choice quality among these several classes, you may take it that they are more or less equal. "Morada" and "Zamba Morada" produce more quinine, but the "Verde" recoups me, as it possesses alkaloid in smaller quantities, but bark in larger, so that you can classify it as equal to the others in value.

The Chinchona, called "Ledgeriana," is just the same as those which are represented by the samples of bark which I left with you, the only thing different being that these samples are from cultivated trees, which contain twice as much quinine as the wild trees from the woods, which Mr. Ledger classifies as "Roja Morada" and "Naranjada;" but these significations vary only according to the districts from which the bark is cut. With the best faith you can dispose of the seed as being the very best which exists among "Calisayas," and, if necessary, state that it is "Ledgeriana," which is identical with these "Calisayas."

From analysis given there is no doubt that the alkaloids are very greatly increased by cultivating the trees, as in the wild state the bark scarcely ever gives more than three to four per cent. of quinine, whereas the cultivated trees yield 9 to 10 per cent.

I have ordered some seed to be collected from the wild trees in the woods, and it shall be sent you with the next shipment.

From F. C. DAUKES, Esq., Under Secretary to the Government of India, to the Secretary to the Government of Bengal, dated Fort William, the 24th February 1882, No. 84.

I am directed to forward the accompanying extract from a letter from Messrs. Thomas Christy and Company, together with the Chinchona seed therein referred to, and to request that, with the permission of His Honor the Lieutenant-Governor, Dr. King may be instructed to cause the seed to be sown and to report the result for the information of the Government of India. I am also to request that Dr. King may be invited to submit any remarks which he may desire to make on the subject of the extract generally, and upon the offer of Messrs. Christy and Company to execute orders for the supply of Chinchona seed.

Letter from W. D. BLYTH, Esq., Under Secretary to the Government of Bengal, Financial Department, to the Officiating Secretary to the Government of India, Home Department, dated Calcutta, 14th April 1882, No. 91.

With reference to your letter, No. 84, dated the 24th February last, forwarding copies of papers regarding the offer of Messrs. Chiristy and Co. of London, to supply Chinchona seeds from South America, and enclosing a sample packet of seed, I am directed to submit a copy of a letter* from the Superintendent, Botanical Gardens, and to request that, with the permission of His Excellency the Governor-General in Council, the varieties of seed and bark therein asked for may be supplied to Dr. King in the manner suggested.

* No. 38C, dated 4th April 1882.

Letter from GEORGE KING, Esq., M. B., Superintendent, Royal Botanical Garden, Calcutta, and in charge of Chinchona Cultivation in Bengal, to the Secretary to the Government of Bengal, Financial Department, dated Royal Botanical Garden, Howrah, 4th April 1882, No. 38 C—S. P. B.

I have the honor to acknowledge receipt of your memorandum marginally noted, forwarding copies of correspondence about the offer to Messrs. Christy and Co. of London, to supply Chinchona seeds from South America, and enclosing a sample packet of seed.

No. 57, Financial Department, Agriculture, dated 6th March 1882.

2. As it will take some time to decide absolutely that the seed sent by Messrs. Christy is that of true *Chinchona Ledgeriana*, I write at present to say that it is so like the seed of that species as raised in the Government Plantation at Mungpoo, that I think it would be well to ask Messrs. Christy to supply me with four pounds of it. I should like also to be supplied with a sample of the bark referred to in Messrs. Christy's letter as being that of the trees from which the seed was obtained.

3. It would also be desirable to ask Messrs. Christy to send me two pounds each of the seed of the varieties of *Chinchona Calisaya* referred to by their correspondent under the names of *Morada*, *Zamba Morada* and *Verde*, each variety being kept carefully separate. Samples of *Morada* and *Zamba Morada* bark would also be of great use. The bark samples should weigh not less than one pound.

4. As Chinchona seed is very perishable, I would suggest that the consignments I have asked for should be sent to me by post by the directest possible route.

Letter from the Government of India, Home Department, Public (Medical), to the Most Honorable the Marquis of Hartington, Her Majesty's Secretary of State for India, dated Simla, 9th May 1882, No. 26.

We have the honor to forward the accompanying copy of letter from the Government of Bengal, and to request that Your Lordship will be good enough to cause Dr. King, Superintendent, Royal Botanical Garden, Calcutta, and in charge of Chinchona cultivation in Bengal, to be supplied, in the manner suggested, with the varieties of Chinchona seed and bark required by him.

2. A copy of the correspondence, referred to in Dr. King's letter, is enclosed.

LIST OF ENCLOSURES.

1. From Government of Bengal, No. 91, dated 14th April 1882, and enclosure.
2. Extract from a letter from Messrs. Thomas Christy and Co., to the Secretary to the Government of India, Revenue and Agricultural Department, dated 20th January 1882, and enclosure.
3. To Government of Bengal, No. 84, dated 24th February 1882.

ORDER—dated 19th October 1882, No. 1146, Revenue.

Miscellaneous.

The Government resolve to request the Most Honorable the Secretary of State to supply them also with the varieties of Chinchona seed and bark, the supply of which to the Government of Bengal was requested by Despatch No. 26 of 1882 from the Government of India.

(True Extract)

(Signed) E. F. WEBSTER,
Secretary to Government.

Exd. W H. French.

40 Copies.

ceed offered by Mr. Robert should be purchased on behalf of Government.,

I have the honor to be,
Sir,
Your most obedt: servant
(Sd) E. A. Baker
Offg: Under Secy: to the Govt: of Bengal.

No. 1405

Copy, with copy of the papers marginally noted forwarded to the Government of Madras for information, in continuation of endorsement No. 340, dated 5th ultimo.,

Home Department
(Medical)
Dated Simla, the 22 Septr: 1882.

By Order,
F. Brooke
Under Secy: to the Govt: of India

x Medical Progs: Feby: 1882. Nos. 60/62
x Medl: Progs: May 1882. Nos. 24/26.

1/10/2
2/10/2

8.v. 18.8.82 No 2694 Mis
18.9.82 No 3058 Mis

REVENUE (1882) DEPARTMENT.

No.

From The Govt of India
Home Department

Dated 22nd September
Recd. 23rd October

No. 410. Enc: 1

SUBJECT.

Forwarding Copy of Letter
& Enclosure for information respecting
Seeds of the Cinchona Calisaya
Morada.

Govt
1882

I

23 P 12

Extract from a letter from MESSRS. THOMAS CHRISTY AND COMPANY, *to the Secretary to the Government of India, Revenue and Agricultural Department,—dated London, 20th January 1882.*

I ENCLOSE you herewith a sample of "cinchona" seed which I have received from Bolivia, having, with the assistance of friends who trade direct with that country, opened communication with the largest grower of "cinchona." His plantations join the woods from which Mr. Ledger's men took the seed which has been named after him. I also enclose you translation of a letter received yesterday from him, which I think will prove of interest to the Director of your Cinchona Plantations. Should you desire to purchase cinchona seed from me, I shall be glad to execute any orders for any special varieties that you may name. The leaves of the different varieties of trees I have deposited with Mr. E. M. Holmes, Curator of the Museum of the Pharmaceutical Society in London, and I am asking for specimens of the bark of the different trees, so that I can deposit at Calcutta, as well as in London and Colombo, specimens for reference.

* * * *

CINCHONA SEED.

Translation of letter received 19th January 1882 *by Mr.* T. CHRISTY.

I CAN now advise you that the seeds that are sent you proceed from trees of "Calisaya," similar to those of which I left you samples of the bark. I cannot tell you exactly if they proceed exclusively from either the "Morada," "Zamba Morada," and "Verde," but it is probable that the greater part is of the latter, and that it is mixed with the other kinds, as the "Verde" is the one which most abounds. As to choice quality among these several classes, you may take it that they are more or less equal. "Morada" and "Zamba Morada" produce more quinine, but the "Verde" recoups me, as it possesses alkaloid in smaller quantities, but bark in larger, so that you can classify it as equal to the others in value.

The cinchona, called "Ledgeriana," is just the same as those which are represented by the samples of bark which I left with you, the only thing different being that these samples are from cultivated trees, which contain twice as much quinine as the wild trees from the woods, which Mr. Ledger classifies as "Roja Morada" and "Naranjada;" but these significations vary only according to the districts from which the bark is cut. With the best faith you can dispose of the seed as being the very best which exists among "Calisayas," and, if necessary, state that it is "Ledgeriana," which is identical with these "Calisayas."

From analysis given there is no doubt that the alkaloids are very greatly increased by cultivating the trees, as in the wild state the bark scarcely ever gives more than three to four per cent. of quinine, whereas the cultivated trees yield 9 to 10 per cent.

I have ordered some seed to be collected from the wild trees in the woods, and it shall be sent you with the next shipment.

Govt. Central Branch Press, Simla,—No. 124 H. D.—4-5-82.—82.

14-10-82
17-10-82.

15

3 S P

E

No. 84, dated Fort William, the 24th February 1882.

From—F. C. DAUKES, Esq., Under Secretary to the Government of India,

To—The Secretary to the Government of Bengal.

I AM directed to forward the accompanying extract from a letter from Messrs. Thomas Christy and Company, together with the cinchona seed therein referred to, and to request that, with the permission of His Honour the Lieutenant-Governor, Dr. King may be instructed to cause the seed to be sown and to report the result for the information of the Government of India. I am also to request that Dr. King may be invited to submit any remarks which he may desire to make on the subject of the extract generally, and upon the offer of Messrs. Christy and Company to execute orders for the supply of cinchona seed.

Govt. C. B. Press. Simla, No. 124 H. D.—4-5-82—28.

No. 91, dated Calcutta, the 14th April 1882.

From—W. D. BLYTH, Esq., Under Secretary to the Government of Bengal, Financial Department,

To—The Officiating Secretary to the Government of India, Home Department.

WITH reference to your letter No. 84, dated the 24th February last, forwarding copies of papers regarding the offer of Messrs. Christy and Co., of London, to supply cinchona seeds from South America, and enclosing a sampl packet of seed, I am directed to submit a copy of a letter* from the Superintendent, Botanical Gardens, and to request that, with the permission of His Excellency the Governor General in Council, the varieties of seed and bark therein asked for may be supplied to Dr. King in the manner suggested.

* No. 38 C, dated 4th April 1882.

No. 38 C—S. P. B., dated Royal Botanical Garden, Howrah, the 4th April 1882.

From—GEORGE KING, Esq., M. B., Superintendent, Royal Botanical Garden, Calcutta, and in charge of Cinchona Cultivation in Bengal,

To—The Secretary to the Government of Bengal, Financial Department.

I HAVE the honour to acknowledge receipt of your memorandum marginally noted, forwarding copies of correspondence about the offer of Messrs. Christy and Co., of London, to supply cinchona seeds from South America, and enclosing a sample packet of seed.

No. 57 Financial Department, Agriculture, dated 6th March 1882.

2. As it will take some time to decide absolutely that the seed sent by Messrs. Christy is that of true *Cinchona Ledgeriana*, I write at present to say that it is so like the seed of that species as raised in the Government Plantation at Mungpoo, that I think it would be well to ask Messrs. Christy to supply me with four pounds of it. I should like also to be supplied with a sample of the bark referred to in Messrs. Christy's letter as being that of the trees from which the seed was obtained.

3. It would also be desirable to ask Messrs. Christy to send me two pounds each of the seed of the varieties of *Cinchona Calisaya* referred to by their correspondent under the names of *Morada*, *Zamba Morada*, and *Verde*, each variety being kept carefully separate. Samples of *Morada* and *Zamba Morada* bark would also be of great use. The bark samples should weigh not less than one pound.

4. As cinchona seed is very perishable, I would suggest that the consignments I have asked for should be sent to me by post by the directest possible route.

Govt. Central Branch Press, Simla....No. 124, H. D.—4-5-82.—28.

No. 26 of 1882.

GOVERNMENT OF INDIA.

HOME DEPARTMENT.

PUBLIC.
Medical.

To

THE RIGHT HONOURABLE THE MARQUIS OF HARTINGTON,
Her Majesty's Secretary of State for India.

Simla, the 9th May 1882.

MY LORD MARQUIS,

WE have the honour to forward the accompanying copy of a letter from the Government of Bengal, and to request that Your Lordship will be good enough to cause Dr. King, Superintendent, Royal Botanical Garden, Calcutta, and in charge of Cinchona Cultivation in Bengal, to be supplied, in the manner suggested, with the varieties of Cinchona seed and bark required by him.

2. A copy of the correspondence, referred to in Dr. King's letter, is enclosed.

We have the honour to be,

MY LORD MARQUIS,

Your Lordship's most obedient, humble Servants,

RIPON.

D. M. STEWART.

J. GIBBS.

T. F. WILSON.

C. P. ILBERT.

T. C. HOPE.

LIST OF ENCLOSURES.

From Government of Bengal, No. 91, dated 14th April 1882, and enclosure.

Extract from a letter from Messrs. Thomas Christy & Co., to the Secretary to the Government of India, Revenue and Agricultural Department, dated 20th January 1882, and enclosure.

To Government of Bengal, No. 84, dated 24th February 1882.

1882.

GOVERNMENT OF INDIA.

HOME DEPARTMENT.

PUBLIC.
Medical.

No. 26, DATED SIMLA, THE 9TH MAY 1882.

(Copy.)

LETTER TO HER MAJESTY'S SECRETARY OF STATE FOR INDIA.

SUBJECT.

Forwards certain papers, and requests that the varieties of Cinchona seed and bark asked for by Dr. King may be supplied.

Govt. C. B. Press, Simla.—No. 124 H. D.—4-5-82.—28.

5538

From The Govt. of India, Home Department.
Dated the 22nd Sept. 1882.

R ORDERS.

The Govt. of India forward for information copy of a letter from the Govt. of Bengal declining to buy Chinchona seed from Mr. Roberts of Galle.

This Govt. has recently also declined to buy from Mr. Roberts on the grounds that his price is prohibitive & the quality of his seed inferior.

The document might be lodged but attention is solicited to the enclosures.

G.O. mis: No 3058 d/- 18th Sept. 1882

Dr. King, Supdt. Botanical Garden Calcutta has moved his Govt. to move the Govt of India to move the Secy. of State to ask Hess^rs Christy of London to send out 2 lbs seed of Ch: Morada (this was what Mr Roberts offered)
Ch: Lamba Morada
Ch: Verde
with specimens of bark of the 2nd varieties

Desp: No 26 of 1882 from Govt. India.

It is suggested Govt. may wish to be supplied with similar seed & specimens & in that case the order & draft over leaf might be passed. The order in the form adopted by this way see the last mail of their communication.

Ans.

No 114 b of 19 October 1882

order

The Govt. resolve to request Her Most Hon: The Secy. of State to supply them also with the varieties of chinchona seed & bark, the supply of which to the Govt. of Bengal was requested by despatch no 26 of 1882 from the Govt. of India.

12.10.82.

No 25

To The Most Hon: The Secretary of State for India

My Lord Marquis,

With reference to despatch no 26 of 1882 dated the 9th May from the Govt. of India in view of contemplated experiments with different varieties of Chinchona on the Nilgiri plateau & at various elevations below it, we have the honour to request that your Lordship will be good enough to supply this Govt. also with the quantities in the manner suggested in the enclosure to the above mentioned despatch with the varieties of specimens of chinchona seed & bark required by Dr. King Supt. Royal Botanical Gardens & in charge of Chinchona cultivation in Bengal.

12.10.82.

C 14-10-82.

328 FOR ORDERS.

The Most Hon: the Secretary of State for India in Council.

G.O. 3rd August 1882. No: 866.

& Cannot

Print. 19/10/82

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D.29

13/10

Fort St George. 3 8th November 1883

Desp. 8 Nov/82