

MADRAS RECORD OFFICE.

Government of Madras.

Revenue DEPARTMENT.

G.O. No. 84	Press Mis.
<i>Hea-165</i>	
Dated 11 - 1 - 18 61.	

Not to be folded or roughly handled

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*Proceedings of the Madras Government, Revenue Department,
11th January 1861.*

No. 164. Read the following letter from Mr. C. R. MARKHAM, to J. D. SIM, Esq.,
Acting Secretary to Government, Revenue Department, Fort Saint George, dated
Ootacamund, 30th December 1860 :—

SIR,

1. With reference to an article in the "Madras Daily Times," mentioned in an order received by Mr. McIvor, to report upon the state of the Cinchona plants, I consider it right to address the following remarks to you, for the information of the Governor in Council. I am told that the article in question, which has attracted the notice of the Government, is intended to convey the idea that the service upon which I am employed will end in failure; and I address the following remarks to you, in order to give the Government the assurance that, humanly speaking, it is scarcely possible that such can be the result of the experiment, the conduct of which has been entrusted to me.

2. When I was appointed to perform this service, I took measures to procure plants and seeds of the three most valuable kinds of Cinchona bark, known in commerce; namely, the *Calisaya* or yellow bark, the grey or Crown bark, and the red bark.

3. The trees yielding these three barks grow in regions separated by many hundreds of miles from each other. I undertook to procure the *Calisaya* species myself, and entrusted the collection of the other species to Agents thoroughly qualified for the work.

4. The Government is aware, from my report, dated June 1860, that, after much difficulty, I succeeded in embarking upwards of 400 *Calisaya* plants in good condition, at the Peruvian port of Islay, a considerably larger number than was collected by M. Hasskarl, for the Dutch Government. Unfortunately no steamer was provided in the Pacific to convey the collection by a direct route to India; and it became necessary to take it by the circuitous route of the West Indies and the overland journey to Calicut. The extreme heat of the Red Sea must have done the plants much injury; as at the time they were in England, they were seen by Mr. Veitch, and by the foreman at Kew Gardens, who considered them to be in excellent condition. In my report, dated October 20th 1860, I stated that, on the arrival of the plants at Ootacamund, the roots were all decayed; but that Mr. McIvor had obtained 207 green cuttings, and 125 wood cuttings, from which, all decayed parts which were visible, had previously been carefully removed. I added that 50 of the green cuttings had already begun to show signs of growth, as well as ten of the wood cuttings.

5. I regret to say that the strong hopes which we then entertained, have been disappointed. The green cuttings, subsequently, went off, as well as many of the wood cuttings; and Mr. McIvor considers that they must have been all more or less tainted by decay. A few of the wood cuttings are still alive and green, and some of them may eventually grow, though I scarcely think it probable.

6. But my object in writing this letter is to give the Government the assurance that the success of this very difficult and important experiment does not depend on the plants which have already arrived; and that disappointment, in one or more instances, is a very different thing from the entire failure of the attempt to introduce these inestimable plants into India.

7. With regard to the *Calisaya* species, in the event of our losing all the plants now at Ootacamund, such a calamity will by no means involve failure. I left *Calisaya* species. 17 young *Calisaya* plants at Kew Gardens, and Sir William Hooker has succeeded in procuring 4 or 5 *Calisaya* plants raised from seeds formerly transmitted by Dr. Weddell, from which he has struck cuttings; so that next year a second supply of Cinchona plants of the *Calisaya* species will be forwarded to India. I have also taken measures to procure a supply of *Calisaya* seeds from Peru, and if my Agent should fail me, I am acquainted with others, residing on the spot, whose services I shall be able to obtain, to collect and transmit seeds, next season. Thus, it will be seen, that the successful introduction of the *Calisaya* species is not dependant on the plants which have already arrived: and the same remark is equally applicable to the species yielding grey and red bark.

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11th January 1861.

8. I employed an Agent to procure seeds and plants yielding the grey or Crown bark of commerce, who has succeeded in performing that service, and his collection has already arrived at Bombay. The grey barks sell at a high price, and are much used in the form of decoctions and infusions. Of the plants yielding this bark, 56 arrived at Southampton last October, 8 of which were dead, and were left at Kew Gardens, and the remainder "being good strong plants and apparently well rooted,"* were forwarded to India. These plants arrived at Bombay on the 15th of December, having been delayed very much, from some cause as yet unaccounted for. I am sorry to have to report that, on their arrival, all except 6 were found to be quite dead; and that those which retain life are reported to be in a precarious state. But as with the Calisaya species, so with those yielding the grey or Crown bark, one disappointment is very far from involving the failure of the experiment.

9. A box of seeds of the grey bark species is now on its way from Bombay, and I have no doubt that Mr. McIvor will be successful in rearing them. A portion of these seeds will be transmitted to the Government Gardens in Ceylon. Seeds have also been sent to the islands of Jamaica and Trinidad, where they will be raised in the hill districts; and from thence, if the seeds now on their way to Ootacamund should fail, (which there is no reason to expect) young plants will hereafter be forwarded to India. Cuttings also may possibly be struck from the two plants left at Kew.

10. The species yielding the red bark of commerce, which is only second in value to Calisaya, and which, according to the latest market prices in London, is now more esteemed than any other species, will also be introduced into this Presidency. I engaged the services of an Agent to collect plants and seeds (of the *Cinchona Condaminea* and of the species yielding red bark), who is well known as a Botanist, and is eminently qualified, in all respects, for the undertaking. No tidings have yet arrived of the approach of his collection; but 15 cases of plants and a supply of seeds may now be expected in India, by every mail. Portions of the seeds of these species, also, will be left at Jamaica, Trinidad, and Kew Gardens, so as to ensure the experiment from possible failure.

11. It will be seen, by the above remarks, that one or two disappointments were from the first anticipated, but that so many precautions have been taken to prevent the entire failure of this most important experiment, as to render it, so far as human means can avail, almost impossible. The successful propagation of the Cinchona, from any plants or seeds which arrive in a healthy condition at Ootacamund, is ensured by the skill and experience of Mr. McIvor.

12. I remain at Ootacamund until the arrival of the Cinchona seeds now on their way from Bombay. I shall then return to Bombay, by way of Coorg and Wainád, previous to my departure for England: and from Bombay I shall have the honor of transmitting to you, for the information of the Governor in Council, a copy of the final report which it will be my duty to address to the Under Secretary of State for India; after having examined the hill Districts of the Neilgherries, Pulneys, Wainád, Coorg and Mahabaleshwur.

P. S.—The seeds of the *Chirimoya* (the most delicious fruit in Peru); of the *aji*, a species of *Capsicum* new to India; and of the *schinus molle*, an ornamental tree, which I brought from South America, are coming up very well. The climates of Kalhutti and of Bangalore seem well adapted to the growth of the *Chirimoya*.

No. 165.

ORDER THEREON, 11th January 1861, No. 84.

The Governor in Council has perused the above report with much concern. He was led by Mr. Markham's previous communication to believe that the present experiment had been quite successful and regrets to find that that conclusion was premature.

(Signed) J. D. SIM,
Acting Secretary to Government.

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Fort St. George
11th January 1861

Copy to Mr. Markham Diff. 11

Received 1861 Report
and for day.

No. 23

From Mr. W. H. Harkness

Jan 30 1860

Dec 4 1861

which appears
with reference to an
article in the Indian
Daily Times mentioned
in an order received
by Mr. Archer to report
upon the state of the
Cinchona plants.

No 164 5165

No 87 11 January
Kew on Outen

Copy to letter to C
d/12 March 61. No 35

388/65