M.R.O. 14—10,000—21-4-22.

MADRAS RECORD OFFICE.

Government of Madras.

Revenue DEPARTMENT.

G.O. No. 2268. Press Mis.

277.278

Dated 22-10-1862

Not to be folded or roughly handled

Proceedings of the Madras Government, Revenue Department, 22nd October 1862.

No. 277. Read the following letter from W. G. McIVOR, Esq., Superintendent Government Gardens, Ootacamund, to J. D. SIM, Esq., Secretary to Government, Revenue Department, dated Ootacamund, 2nd August 1861, No. 75:—

SIR,

1. With reference to the Order of Government No. 1,508, dated the 29th July 1861, and the correspondence accompanying it, with reference to the introduction of the Chinchona plants from Java, I have the honor to solicit the favor of your being good enough to bring to the notice of Government, that the value of the species and the correctness of the names given to some of these plants in Java is at present involved in much doubt and uncertainty.

2. In a letter which I had the honor to address on the 18th ultimo, to the Private Secretary to His Excellency the Governor, I mentioned, "that the bark (and specimens of the leaves "and flowers) of the Chinchona, called by the Dutch Lucumeafolia, have recently been forwarded "from Java to Mr. Howard for analysis. The bark has proved to be worthless, and the species "to be one of no value, and is now named Chinchona Pahudiana."

3. Although these remarks are forwarded on private information, it is of such a nature as will not admit of doubt as to their correctness. Moreover, I see that the information which I received has since been confirmed by the public notice of the plant by J. E. Howard, Esq., in the proceedings of the Linnean Society of the 2nd May 1861, and also in the Gardener's Chronicle and Agricultural Gazette of May 25th, as a new species but one of little value, except as a Botanical specimen the flowers being very ornamental.

4. This species was first called "Ovata" by Hasskarl and since "Lucumeafolia" by Dr. Junghuhn, and now named Pahudiana by Howard in honor of the Governor General of Java. It is very probable that Dr. Junghuhn was not aware of the result of Howard's analysis and investigation at the date of the correspondence recorded in the Proceedings of Government. I observe that a large number of this species has been very liberally offered by the Governor General of Java, and I consider it my duty to give this brief but plain statement of the facts connected with this plant so far as I have been able to ascertain them, in order to enable your Honorable Government to decide as to whether it is advisable or otherwise to incur the cost of introducing and cultivating this species.

5. The Chinchona Calisaya, of which from 50 to 100 plants are also liberally offered, is a species of undoubted value, and its introduction may be worthy of consideration. However, we already possess six plants of this species, in very fine health, and 50 or 60 more are expected from Kew in October, we have also every reason to expect a large supply of seeds from Peru, but we cannot possess too many plants of this valuable species—seeds of this species from Java would be very desirable, as their transit would cost little.

6. The third species they have in Java named Lancifolia is also very valuable, but none of this is offered, and it is questionable if they could be spared, as fourteen is given as the total number of plants in Java. This (the Lancifolia) is only a variety of the Condamenia, which grows on high and exposed situations. I learn from Mr. Markham that he has made arrangements with Mr. Spruce for the extensive introduction of seeds of the Condamenia, and I am informed that I may expect the seeds to reach me in November.

7. The other species in Java, Chinchona Lanceolata is *very doubtful*, but no analysis has been made of it, as they have, as I believe, only a few (45) plants.

8. I enclose for the information of Government, a report on the number and condition of our Chinchona plants taken on the 9th July; since that time about 400 more seedlings have come up.

9. I also beg to enclose copy of hints for the treatment of plants in Wardian cases; which may prove useful to the gentleman entrusted with the importation of the plants from Java, the treatment there described has been practised here for many years with the best results.

Proceedings of the Madras Government, Revenue Department, 22nd October 1862.

Report on the number and condition of the Chinchona plants in the Government Gardens at Ootacamund on the 9th July 1861.

Names.	Number.	Remarks.
Chinchona Succirubra, or Red Bark...	1,204	The imported plants are in a very healthy and flourishing condition, the leaves on some of the Red bark plants, measuring 11X7 inches. Average growth of the month 1½ inches, height of largest plants from 2 feet 4 inches to 2 feet 7 inches. The first of the seedlings are 4¼ inches high and furnished with from 2 to 3 pairs of branches, some of the leaves measure 2½ x 1¼ inches. Average growth of the month 1¼ inches. More seedlings are coming up daily.
Chinchona Calisaya, Calisaya Bark...	6	
Chinchona Nitida, genuine Grey Bark.	714	
Chinchona Micrantha Var Provinciana.....	802	
Chinchona Micrantha Var Pata de Gallinazo...	36	
Species without name.....	211	
Total.....	2,973	

Government Gardens, Ootacamund,
9th July 1861.

(Signed) W. G. McIVOR,
Supt. Botanical Gardens.

Hints on packing and conveying plants in Wardian Cases.

The cases to be furnished with a false bottom, raised about 2 or 3 inches above the true bottom by bars of wood of the thickness required, being nailed on the underside ; through this false bottom holes are bored at regular distances, over these holes let a few broken pieces of pot be placed, and over this a layer of moss. The case being filled with soil to within 2 or 3 inches of the level of the glass, and the plants carefully planted pretty close together, so as to allow of a case containing 35 or 50 plants according to their size.

The best sort of soil, I believe, to be formed of equal parts of leaf mould, turfy loam, and sand, these should be mixed in a dry state—and if possible spread out and exposed to the action of the sun, for a few days prior to being put into the cases.

During the voyage the plants should have plenty of light and air, *in fine weather*, one side of the case being left open for two or three hours morning and evening. The soil being every three or four days turned up on the surface to the depth of about ½ inch, with a small pointed stick, and always kept *rough* (*never smooth*) on the surface.

The object of this is to allow the air to circulate among the soil, and this circulation of air is also facilated by the false bottom. This is perhaps one of the most important things to be attended to in transporting plants in Wardian Cases, as the action of air on the soil keeps the roots in fine condition and *entirely prevents* the formation of mildew and damp which so frequently proves fatal to the roots of plants in Wardian Cases. The plants should have water when the surface becomes decidedly dry, but they should not be *soaked* with water, the proper amount of moisture to preserve roots in a healthy state, is only what the soil can retain in its cavities by the force of attraction. The principal object of the false bottom is to allow any excess of water to drain off into a place where it cannot *sour* the soil, and yet not to be lost, for as the soil becomes dry abave the water, it will be attracted to it. The true bottom of the cases should be water, tight, and in stormy and bad weather, the cases should be shut up tight, to prevent the possibility of salt water getting to the plants, but should this happen which it ought not to do, the only means of preserving the plants, is immediately to wash them whith fresh water.

Ootacamund,
22nd July 1861.

(Signed) W. G. McIVOR,
Supt. Botanical Gardens.

No. 278. ORDER THEREON, 22nd October 1862, No. 2,260.

Ordered to be recorded, with reference to Government Order No. 2,259 of this day's date.

(Signed) P. P. HUTCHINS,
Acting Deputy Secretary to Government.

R 29th July/62 Nos 407/408

Virginia Letter to England
Filed 23rd Oct. No. 5 of 1862

Recd 1862 dekth
Rec. of Govt for Oct/62
No. 1906.

From
Sec. Supt. of
Govt Gardens
Botanic

Dated 2d
Rec'd 6th
Sept.
1862
No. 75.

Transd. d/ 6th Aug/62 Cr 1935.

Giving an Account of the
Imports of a variety of Birds
and Plants in June and Sub
-mitting a Report on the
number and Condition of
Exotic Plants in Calcutta
-mund as taken on the 30th
June 1861

No. 2260. 22nd Oct/62

Letter Order

Nos 277 & 278.

No. 2260
Ordered to be recorded
with reference to G.O. No. 2259
of this days date.

JP

Fort St. George
22nd Oct. 1862