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MADRAS RECORD OFFICE.

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Revenue DEPARTMENT.

G.O. No.

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GOVERNMENT OF MADRAS.
REVENUE DEPARTMENT.

READ—the following letter from Major J. C. WALKER, Conservator of Forests, to the Secretary to Government, Revenue Department, dated Madras, 28th September 1882, No. 1127-C:—

I have the honor to submit the Deputy Conservator's Report on the Government Chinchona Plantations for 1881-82, together with the usual appendices. Owing to the late date on which the report has been received and my other duties having prevented my inspecting the plantations during the year under report, I shall not attempt to enter into any detail with regard to their management and cultivation which demands the most careful consideration and supervision. Colonel Boddome spent about two months in inspecting the plantations in April and May 1881, and submitted a special report recorded with G.O., No. 1280, dated 29th August. His Excellency the Governor visited the plantations in January 1882, in which month Dr. Bidie spent a week at Naduvatom. The Deputy Conservator in charge devoted much attention to the plantations.

2. SEASON AND RAINFALL.—The Deputy Conservator refers to unusual drought which occurred during the last three months of the official year which, succeeded as it has been by an unusually wet season, has certainly affected unfavorably the Naduvatom plantations which will form subject for comment in the current year's report.

3. RECEIPTS AND EXPENDITURE.—The receipts are entered as Rs. 5,72,003 against an expenditure of Rs. 1,13,575; but the former refer to the crop shipped in 1880-81 and are purely nominal and based on estimates, as under the present system no valuation even of the crop sent home is possible, nor has any actual adjustment hitherto been attempted. The charges require careful scrutiny, as they evinced a tendency to increase without good cause year by year, prior to the administration and control having been transferred to this department. The Deputy Conservator is giving the subject his attention.

4. PERMANENT PLANTATIONS.—There were 666,815 trees in the plantations at the close of the official year 1880-81; 38,190 trees were uprooted and 15,173 trees coppiced during 1881-82, whilst 123,904 trees were planted out during the same year, leaving the number reported as permanently established at close of the year 742,356; but this is scarcely accurate, as it is presumed that a large proportion of the trees coppiced has thrown up coppice shoots which will eventually rank as trees.

A more careful system and distinction between coppice and seedling trees in the returns appear necessary, and I have directed the Deputy Conservator's attention to the point.

Under this section of his report and No. 11, Experiments, interesting information is afforded as to the comparative effect of the wind and rain on trees of the *Chinchona succirubra* and *Chinchona pubescens*, the results of the experiments with *Chinchona Santa Fé* and *Carthagena* and the numbers of each species scraped, uprooted, coppiced and planted out in each plantation. The progress and results appear on the whole satisfactory.

The percentage of failures to renew from the stool, as exhibited in paragraph 11, is rather high, especially in unbarked plot or compartment No. XXIII, Naduvatom, and barked plot No. VIII, Wood, where they represented nearly 50 per cent. of the trees coppiced.

I question if it can be considered as proved "that coppices from barked trees have been found to grow much better than those from unbarked trees," as stated in the report for 1880-81 (*vide* G.O., No. 591, dated 6th June, paragraph 4).

It will be seen that the percentage of renewals is very irregular and local circumstances, age and health of the trees, the weather and care or the want of it in coppicing and subsequent treatment must all be carefully noted and taken into account before we can arrive at reliable conclusions.

If the repeated stripping affects injuriously the health of the trees, as it would appear only natural it must do sooner or later, it would also *prima facie* affect their vitality and power of reproduction from the stool. The subject is of vast importance and must be carefully studied.

With this object the maintaining careful records and opening of "Plantation books" in which they should be entered is very necessary and will receive immediate attention. I am, in fact, surprised to find that such books have not already been opened as I directed attention to the point in 1878.

5. UPKEEP.—This has received much attention, the whole of the plantations having been wooded several times, renovation pits opened, and portions trenched, which process is stated to have been attended with good results.

Communications and channels were maintained in good order.

6. MANURING.—The report contains details of the work done under this head which has been considerable. Cattle and stable manure, poudrette and bone-dust have all been experimented with and the results will be observed during the current year. The allotment of Rs. 1,000 is stated not to have been sufficient to admit of the importation of patent manures from England. The trees manured in previous years are reported as looking well and the bark lifting freely.

7. NURSERIES.—A very large number of seedlings was raised during the year, many thousands of *Chinchona succirubra* plants, for which there was no demand, having been uprooted and thrown away to make room for more valuable varieties.

The demand for plants by the public was in excess of the supply: 875 lb. of seed were distributed during the year, the chief demand being from Ceylon.

8. CROP.—The crop of the year was 242,052 lb. of dry bark, to which 6,997 lb. balance remaining from last year is added, making a total of 249,049 lb., the details of which will be found in the Deputy Conservator's report. The quantity is slightly less than that of 1880-81 (250,271 lb.). There is a discrepancy in the quantity entered as "balance in store" which is shown as 8,439 lb. on 31st March 1881 in last year's report and 6,997 lb. as the opening balance of the year under report. The difference 1,442 lb. is stated by Mr. Hillier, then Manager of the Chinchona Office and now Head Overseer (on probation), to have been the quantity in store at Naduvatom, whence it was included and shipped as *crop* during the past year. Six thousand nine hundred and ninety-seven pounds were actually in store at Ootacamund and may be accepted as the correct amount corresponding with that reported to the Government of India on 20th June last (*vide* G.O., No. 644, of that date):—

	LB.
The quantity shipped home during the year was	232,467
Supplied to the Medical Department, Bombay	1,000
Supplied for local sale	10,278
Balance in store on 31st March 1882	5,304
Total	249,049

The results of the first local sale held in Madras in January were very satisfactory and encouraging; 10,278 lb. of bark, two-thirds of which, *Chinchona succirubra*, having realized Rs. 15,660.

9. BUILDINGS.—The delay in the erection of the new drying shed and store-houses at Naduvatom may at any moment result in the most serious consequences. The old jail in which the bark is now dried is quite unfit for the purpose and is positively dangerous. The leakage during heavy rain is considerable and it requires constant attention and repairs to prevent damage to the bark being dried and packed.

The full amount of the allotment for these buildings has now been for some time in the hands of the Public Works Department, but the foundations are not

even yet completed. I trust that the Chief Engineer may receive instructions to take steps to ensure the completion of the work before the close of the current official year, and that a special subordinate may be deputed to supervise and urge on the work which has, I learn, been given out on contract.

READ—the following letter from H. A. GASS, Esq., Deputy Conservator of Forests, in charge of Chinchona Plantations, to the Conservator of Forests, Madras, dated Ootacamund, 6th September 1882, No. 336-C:—

I have the honor to forward the Administration Report (with ten enclosures) on the Government Chinchona Plantations in the Nilgiri District for the year 1881-82.

2. SEASON AND RAINFALL.—The rainfall at Naduvatom during the year amounted to 73.73 inches, distributed over 150 days, as against 89.70 inches in the previous year. The maximum fall occurred in July when 24.13 inches were gauged. There was no rain whatever in February 1882. The wind was very severe during the month of July, and many trees were blown down and branches and coppice shoots broken off in all directions. During the months of December, January and February strong east winds prevailed which stripped the trees of most of their foliage. There was slight frost during the month of January which, however, did no damage. The season was noticeable for the extremely dry weather experienced during the last three months of the year, when the wind and fierce rays of the sun affected the trees—young and old. On a neighbouring estate during this period the number of young plants lost was about 70 per cent.

At Dodabetta 48.71 inches of rain, spread over 136 days, were gauged against 51.09 in the previous year. The drought and wind noticed above affected this estate also, but to a somewhat less extent, although the young plantings suffered. The frosts during winter did no damage to this estate.

Appendices A and B show the monthly rainfall at the Naduvatom and Dodabetta estates for the year.

3. RECEIPTS AND EXPENDITURE.—The receipts amounted to Rs. 5,72,003 against an expenditure of Rs. 1,13,575, thus giving a net profit of Rs. 4,58,428 to Government. In the appendices will be found statements showing the detailed expenditure under each head on each plantation.

4. PERMANENT PLANTATIONS.—Towards the close of the year the effect of the wind and rain on the *Chinchona succirubra* trees both at Naduvatom and Pykara was very remarkable, and they bore a very bare and sickly appearance. The *Chinchona pubescens* hardly suffered at all, and the advisability of planting this species in belts to break the force of the wind, even on grass lands, seems worthy of consideration. The number of casualties on these estates amounted to 15,250 as per margin.

Naduvatom	8,047	In all cases the trees were coppiced when signs of decay appeared. Twenty thousand <i>Succirubra</i> plants were permanently planted out as renewals on the Wood estate, also 1,000 <i>Ledgeriana</i> which, however, were not in a very satisfactory condition at the close of the year owing to the drought, &c. In certain uprooted plots at Hooker 80,000 plants of <i>Chinchona officinalis</i> were put out which progressed remarkably well. Failures amongst <i>Calisayas</i> in Plot XV (Naduvatom) were replaced.
Hooker	2,031	Thirty-one thousand six hundred and fifty <i>Succirubra</i> trees growing on the marginally-noted grass-plots were uprooted with the object of having the land replanted with <i>Pubescens</i> and <i>Officinalis</i> (<i>vide</i> G.O., No. 1882, dated 7th December 1881). The ground has been repitted 4' x 4', and it is hoped to plant up as
Wood	5,172	
Total	15,250	

Plot No.	XVIII,
"	XIX,
"	XX,
"	XXI, and
"	XXVII of Naduvatom.

much as possible, if not the whole, during the current year. Three thousand two hundred and seventy-five *Succirubra* trees in Plot XXIII, which had been treated under the Java-slicing system, had to be coppiced, as they showed signs of dying out (a fact due probably to their not having been subsequently grassed), *vide* paragraphs 7 and 10 of Colonel Jago's letter recorded in G.O., No. 591, dated 6th June 1882, Revenue Department. Six thousand five hundred and thirty-six *Succirubra* trees in Plot II of Hooker were uprooted during the year as they were dying out.

At Dodabetta 48,900 plants were planted out as renewals during the year and progressed fairly well. The appearance of this plantation was good. Two original plants and three cuttings of *Chinchona Santa Fé* were put out in Plot VII; one of the latter died and the former made but slow progress in growth. Four Carthagena plants were also permanently put out on this estate and these succeeded well. The climate of Naduvatom suits the Carthagena variety better than that of Ootacamund, and the growth of six plants planted out there in January last was very rapid. Mr. Robert Cross, with the object of forcing seed, grafted two small plants of *Chinchona Santa Fé* on two mature *Chinchona officinalis* trees; one died and the other was not very successful. The following statement gives the number of trees in permanent plantations on 31st March 1882:—

Plantation.	Number of Trees on 31st March 1881.	Number of Trees uprooted.	Number of Trees coppiced.	Number of Plants planted out in 1881-82.	Balance on 31st March 1882.
Naduvatom ...	206,942	31,654	5,238		
Pykara { Hooker ...	165,118	6,536	2,031	4	170,054
{ Wood ...	52,203		5,301	80,000	236,551
Dodabetta ...	242,552		2,603	48,900	46,902
Total ...	666,815	38,190	15,173	128,904	288,849
					742,356

5. UPKEEP.—The whole of the plantations were mamooty-weeded several times. Renovation pits were continued and the weeds buried as usual. At Naduvatom Plot XXIII (Java-slicing plot), Plots VII and XXIII (1879 coppices) and Plot XV (young Calisaya) were dug over to a depth of one foot and the whole soil was loosened and turned over with forks. The same was done in Plots IX, VI, III and VIII at Hooker and portions of Dodabetta. The young plants and coppice shoots derived great benefit from this process and their growth was most satisfactory. Bracken fern was dug out to a great extent at Dodabetta.

Roads, drains, water-channels, &c., were kept in good order on all estates.

6. MANURE.—Large quantities of cattle-manure were collected at the sheds and kraals. The system of collecting cattle-dung from the surrounding grazing lands (as carried on in private Coffee estates) was introduced. At Naduvatom, Plots XXIV and XXV and coppiced portion of Plots VII and XXIII were manured with dung, also a portion of Plot XVIII (new pits). In G.O., No. 962, dated 21st June 1881, Government sanctioned a sum of Rs. 1,000 for experimental trials of various patent manures. The amount allotted being too small to import patent manure (guano, sulphates, &c.) from England, only local artificial manures (poudrette from the Ootacamund Municipality, crushed and steamed bones and Castor poonnac from Coimbatore were purchased), and, as it arrived too late for application within the year, could only be tried in April of this official year, and will be reported on separately in the next Administration Report. After sufficient time has elapsed, carefully-collected specimens of bark from trees treated with the several classes of manure will be submitted for analysis and comparison.

At Dodabetta stable manure was utilized and 32,345 trees in various plots were manured with it. Those manured in the previous year looked well and the bark lifted satisfactorily.

7. NURSERIES.—Three hundred thousand three hundred and sixty-five plants of the different varieties were raised during the year (*vide* Appendix J). Many thousands of *Chinchona succirubra* plants, for which there was no demand, had to be grubbed up and thrown away to make room for seedlings of the better varieties for estate purposes and for sale to the public. All the nurseries were well stocked with seedlings of *Chinchona officinalis*, *Chinchona pubescens*, and *Chinchona calisaya* var. *Ledgeriana*. A large demand has arisen for plants and seed of *Pata De Galinazo* which cannot yet be met as there is but a limited number of such trees in the estates. Eight hundred and seventy-five pounds of seed were distributed to the public during the year, the major portion of it going to Ceylon.

8. CROP.—The crop of the year consisted of 249,049 lb. of dry bark as follows (including 6,997 lb., the balance of last year):—

Naduvatom.						LB.
Natural Red Bark	...	...	...	...	...	62,202
Mossed do.	...	...	...	...	...	1,819
Renewed do.	...	...	...	...	...	6,953
Branch do.	...	...	...	...	...	31,672
Root do.	...	...	...	...	...	11,423
Scraped do.	...	...	...	...	...	12,355
Dust do.	...	...	...	...	...	1,430
Total						127,854
Natural Crown Bark	...	...	...	...	...	5,610
Mossed do.	...	...	...	...	...	4,590
Renewed do.	...	...	...	...	...	12,052
Branch do.	...	...	...	...	...	2,550
Total						24,802
Natural Pubescens Bark	...	...	...	...	...	1,938
Branch do.	...	...	...	...	...	510
Total						2,448
Natural Calisaya Bark	...	...	...	...	...	306
Branch do.	...	...	...	...	...	306
Total						612

Pykara.						LB.
Natural Red Bark	...	...	...	...	...	12,346
Mossed do.	...	...	...	...	...	3,724
Renewed do.	...	...	...	...	...	13,057
Branch do.	...	...	...	...	...	5,171
Root do.	...	...	...	...	...	4,481
Dust do.	...	...	...	...	...	306
Total						39,085
Natural Crown Bark	...	...	...	...	...	2,213
Mossed do.	...	...	...	...	...	1,806
Renewed do.	...	...	...	...	...	6,119
Branch do.	...	...	...	...	...	1,607
Dust do.	...	...	...	...	...	600
Total						12,345

Dodabetta.

						LB.
Natural Crown Bark	...	...	...	...	...	10,436½
Mossed do.	...	...	...	...	...	11,265
Renewed do.	...	...	...	...	...	16,837½
Branch do.	...	...	...	...	...	2,769
Total ...						41,308
Natural Pata Bark	...	...	...	...	...	74
Mossed do.	...	...	...	...	...	84
Renewed do.	...	...	...	...	...	185
Total ...						343
Natural Uritisinga Bark	...	...	...	...	...	57
Mossed do.	...	...	...	...	...	99
Renewed do.	...	...	...	...	...	96
Total ...						252
Grand Total ...						249,049

The above was disposed of as follows:—

Shipped to the Home Market	...	...	...	...	232,467
Supplied to the Medical Department, Bombay	...	...	...	...	1,000
Do. do. for local sale	...	...	...	...	10,278
Balance in store on 31st March 1882	...	...	...	...	5,304
Total ...					249,049

No particulars regarding the bark sent Home have reached us as yet. The results of the local sale in Madras of 100 bales of bark was very satisfactory. The price realized amounted to Rs. 15,660. During the current year it is proposed to hold two sales and place a much larger quantity of bark in the market.

9. BUILDINGS.—I regret to report that during the year no progress was made towards the erection of the new drying, &c., sheds at Naduvatom.

Two lines, consisting of 20 permanent huts, were demolished, and one line of 16 huts and additions to old lines of 6 huts, making in all 22 huts, were erected near Napier. Out of savings under this head a small room was erected near the Assistant Superintendent's quarters to serve as an office.

Two cattle-sheds were erected at Dodabetta for housing a hundred head of cattle.

10. REPAIRS.—Necessary repairs to permanent and temporary buildings and lines on all estates, and repairs to the roof of the Naduvatom and Wood drying sheds were carried out. A temporary line of cutcha huts was erected at Wood, and also cutcha bark and tool stores at Hooker.

11. EXPERIMENTS.—As stated in paragraph 4, the trees at Naduvatom experimented on under the Java scraping system had to be coppiced. This coppicing was attended with much success, the shoots appearing within a month of felling the trees, and with scarcely a failure. They made good progress during the year, and at its close some of them were 2 feet high. This success is attributable partly to the sheltered position and partly to the trees having been very young. In many instances where the trees had the appearance of being quite dead, they threw out

vigorous shoots from the stools on being cut. Of the 500 trees scraped at Dodabetta, 16 per cent. died and the remainder were looking very sickly. About a thousand trees of *Chinchona officinalis* on this estate were barked and covered with New Zealand flax. The bark renewed satisfactorily, but in point of thickness it compared unfavorably with trees which had been mossed.

The following statement gives the result of the block coppicing experiment of 1879:—

Plantations.	Plot.	Acreage.	Number of Trees coppiced.	Number of Stools which sprouted.	Number of Failure.	Remarks.
Naduvatom ...	VI	0.25	56	49	7	Barked Plot.
Do. ...	VII	4.75	2,263	2,120	143	Do.
Do. ...	XXIII	5.00	2,628	1,603	1,025	Unbarked Plot.
Total ...		10.00	4,947	3,772	1,175	
Pykara { Hooker	XI	5.00	2,226	904	1,322	Barked Plot.
	VIII	5.00	2,540	1,302	1,238	Do.
Total ...		10.00	4,766	2,206	2,560	
Dodabetta ...	XI	5.00	3,356	3,201	155	Barked Plot.
	XXVIII	5.00	2,493	2,096	397	Unbarked Plot.
Total ...		10.00	5,849	5,297	552	
Grand Total ...		30.00	15,562	11,275	4,287	

The maximum height and girth of the above was as follows on 31st March 1882:—

Estate.	Plot.	Maximum Height.	Maximum Girth.
		FEET.	INCHES.
Naduvatom ...	VI	14	10
Do. ...	VII	14	11
Do. ...	XXIII	13	9
Hooker ...	XI	12	11
Wood ...	VIII	13	11
Dodabetta ...	XI	7½	6
Do. ...	XXVIII	7	5½

12. LABOR.—The labor supply was plentiful on all estates. At Naduvatom it was more than equal to the demand, and on this account a special grant of Rs. 18,000, to meet the cost of certain uprootals, was made by Government for the purpose of giving employment to the large staff (*vide* G.O., No. 1832, dated 7th December 1881).

13. SUBORDINATES.—Mr. W. Rowson, the Assistant Superintendent of Naduvatom, was granted furlough for one year from 1st June 1881. He has since resigned. Overseer W. Wharton died in November last. The Naduvatom Writer was transferred to Dodabetta in December. The other subordinates gave satisfaction.

17TH JANUARY 1883, No. 66, REVENUE.

14. As I have very recently taken charge of the Chinchona Plantations, I am compelled to accept all the facts contained herein as offered by the subordinates.

ENCLOSURES

A.—STATEMENT showing the Rainfall at Naduvatam during the Official Year 1881-82.

Months.		Rainfall.		Number of Wet Days.	Remarks.
		IN.	C.		
April	1881 ...	0	50	2	
May	" ...	3	77	14	
June	" ...	9	87	26	
July	" ...	24	13	22	
August	" ...	17	90	28	
September	" ...	4	54	20	
October	" ...	3	55	13	
November	" ...	7	2	16	
December	" ...	1	40	4	
January	1882 ...	0	84	4	
February	" ...	...	...	...	
March	" ...	0	21	1	
Total ...		73	73	150	

OOTACAMUND,
6th September 1882.

(Signed) H. A. GASS,
Deputy Conservator of Forests.

B.—STATEMENT showing the Rainfall at Dodabetta during the Official Year 1881-82.

Months.		Rainfall.		Number of Wet Days.	Remarks.
		IN.	C.		
April	1881 ...	1	16	3	
May	" ...	13	14	18	
June	" ...	1	30	18	
July	" ...	3	24	13	
August	" ...	9	23	24	
September	" ...	3	34	17	
October	" ...	3	67	11	
November	" ...	7	69	20	
December	" ...	3	9	6	
January	1882 ...	2	58	4	
February	" ...	...	...	...	
March	" ...	0	49	2	
Total ...		48	71½	136	

OOTACAMUND,
6th September 1882.

(Signed) H. A. GASS,
Deputy Conservator of Forests.

17TH JANUARY 1883, No. 66, REVENUE.

C.—STATEMENT showing the Receipt on account of Government Chinchona Plantations on the Nilgiris for the Official Year 1881-82.

Particulars.	Sanctioned Budget Allotment for 1881-82.		Actuals for 1881-82.		Actuals for 1880-81.	
	RS.	A. P.	RS.	A. P.	RS.	A. P.
Value of Bark sent Home (£45,596-11-7d. at 1-8d. per rupee)	4,50,000	0 0	5,47,153	15 2	4,05,860	9 4
Value of Bark supplied to Madras Medical Department	3,000	0 0	...	...	...	...
Value of Bark supplied to Bombay Medical Department	3,000	0 0	1,531	2 4	2,397	15 4
Value of Bark supplied to private parties (local sale)	...	...	15,660	1 7	12,827	4 4
Sale-proceeds of Plant and Seed	8,000	0 0	6,048	1 5	13,175	4 8
Miscellaneous	...	...	1,605	1 4	...	...
Total ...	4,64,000	0 0	5,72,003	5 10	4,34,261	1 8

OOTACAMUND,
6th September 1882.

(Signed) H. A. GASS,
Deputy Conservator of Forests.

D.—STATEMENT showing Expenditure on the Government Chinchona Plantations, Nilgiris, for the Official Year 1881-82.

Particulars.	Sanctioned Budget Allotment for 1881-82.		Actuals for 1881-82.		Actuals for 1880-81.	
	RS.	A. P.	RS.	A. P.	RS.	A. P.
<i>Establishment.</i>						
Establishment ...	13,284	0 0	16,375	14 6	11,879	1 0
<i>Nurseries.</i>						
Nurseries ...	5,000	0 0	4,856	9 10	4,210	4 8
Propagation ...	...	...	470	4 0	506	2 0
<i>Building.</i>						
New ...	21,374	0 0	3,789	3 0	8,464	15 4
Repairs ...	...	...	2,489	1 9	2,902	1 0
Roads and Bridges ...	...	...	...	...	...	...
<i>Upkeep.</i>						
Weeding ...	25,425	0 0	12,853	4 9	12,621	3 3
Roads ...	...	...	1,555	3 0	1,912	8 0
Pitting and Planting ...	...	...	7,692	5 2	4,860	11 11
Tools ...	...	...	5,763	14 6	4,614	14 1
Various ...	...	...	...	...	...	...

10 17TH JANUARY 1883, No. 66, REVENUE.

D.—STATEMENT showing Expenditure on the Government Chinchona Plantations, Nilgiris, for the Official Year 1881-82—continued.

Particulars.	Sanctioned Budget Allotment for 1881-82.			Actuals for 1881-82.			Actuals for 1880-81.		
	RS.	A.	P.	RS.	A.	P.	RS.	A.	P.
<i>Manure.</i>									
Manure	7,700	0	0	6,584	6	0	4,957	6	2
<i>Collection of Crop.</i>									
Barking and Mossing	49,650	0	0	14,501	3	6	10,899	0	8
Collection of Moss and Grass				7,243	14	0	6,621	7	6
Packing				3,367	13	3	432	1	0
Drying				1,493	14	9	1,099	1	3
Storage and Carriage to Storos				2,628	1	0	2,695	1	4
Carriage to Mettupálaiyam				2,741	8	0	500	0	0
Railway and Shipping Charges				9,425	13	11	6,905	5	8
Various				7,004	10	6	7,208	6	10
<i>Miscellaneous.</i>									
Contingencies	3,100	0	0	671	4	3	533	15	6
Peons' Clothing				69	0	0	86	0	0
Firewood Plantation				1,847	13	8	763	1	3
<i>Unforeseen Charges.</i>									
Travelling Allowance and Batta	1,000	0	0	150	2	0	1,432	4	2
Miscellaneous				...	...	...	...	...	...
Total	1,26,533	0	0	1,13,575	5	4	96,105	0	7

OOTACAMUND,
6th September 1882.(Signed) H. A. GASS,
Deputy Conservator of Forests.

E.—STATEMENT showing the Expenditure in Detail on the Dodabetta Chinchona Plantations for the Official Year 1881-82.

E.—STATEMENT SHOWING THE EXPENDITURE IN DECK OF THE DOCK									
Months.	Establishment.	Nurseries.	Propagation.	BUILDINGS.		Manure.			
				New.	Repairs.				
April 1881	RS. A. P. 235 0 0	RS. A. P. 89 14 6	RS. A. P. 20 0 0	RS. A. P. ...	RS. A. P. 448 11 3	RS. A. P. 201 11 6			
May "	235 0 0	61 3 6	20 0 0	...	191 12 0	97 6 6			
June "	235 0 0	100 8 0	20 0 0	91 4 0	295 6 0	664 5 6			
July "	235 0 0	88 12 0	20 0 0	...	221 10 9	126 15 6			
August "	215 10 4	78 13 0	20 0 0	...	12 12 0	62 10 0			
September "	235 0 0	141 15 0	23 0 0	...	...	32 10 0			
October "	235 0 0	94 13 0	23 0 0	...	16 4 0	32 7 0			
November "	235 0 0	114 8 2	23 0 0	...	...	48 7 0			
December "	235 0 0	160 3 0	23 0 0	...	...	30 1 0			
January 1882	235 0 0	86 8 0	23 0 0	...	49 0 0	105 11 1			
February "	235 0 0	87 14 0	23 0 0	997 9 7	12 7 0	733 15 0			
March "	235 0 0	87 5 0	18 0 0	693 10 2	...	488 1 6			
Total ...	2,800 10 4	1,192 5 2	256 0 0	1,782 7 9	1,247 15 0	2,624 5 7			

Statement showing the Expenditure in Detail on the Government Chincona Plantations for the Official Year 1881-82—continued.

12

17TH JANUARY 1883, No. 66, REVENUE.

COLLECTION OF CROP.

Months.	Barking and Mossing.	Collecting Moss.	Packing Bark.	Rope for Mossing.	Drying Bark.	Storage of Bark.	Various.
	RS. A. P.	RS. A. P.	RS. A. P.	RS. A. P.	RS. A. P.	RS. A. P.	RS. A. P.
April 1881 ...	...	...	...	...	...	...	...
May " ...	...	...	...	...	...	...	...
June " ...	105 4 0	323 2 6	...	600 0 0	2 0 0	...	41 14 0
July " ...	309 15 0	633 15 0	...	...	18 2 0	20 0 0	18 10 0
August " ...	732 0 6	216 13 6	...	...	16 14 0	...	79 4 0
September " ...	355 8 0	694 6 0	29 11 0	...	32 8 0	24 11 0	180 15 4
October " ...	587 11 0	329 0 6	30 0 0	...	23 2 0	44 1 0	6 0 0
November " ...	538 2 6	136 0 6	14 11 0	...	28 7 0	20 0 0	9 0 0
December " ...	166 8 6	...	43 13 0	...	25 5 0	20 0 0	38 0 0
January 1882 ...	16 12 0	...	14 6 0	...	5 0 0	20 0 0	98 8 0
February " ...	...	...	...	...	...	...	...
March " ...	...	...	...	...	...	...	...
Total ...	2,811 13 6	2,333 6 0	132 9 0	600 0 0	151 6 0	148 12 0	472 3 4

Statement showing Expenditure in Detail on the Government Chincona Plantations for the Official Year 1881-82—continued.

17TH JANUARY 1883, No. 66, REVENUE.

13

Statement showing expenditure in Decatur County, Georgia.									
Months.	UPKEEP.					Contingencies.	Seed.	Total.	
	Roads and Drains.		Weeding.	Pitting, Planting, and Shading.	Various.				
	RS. A. P.	RS. A. P.	RS. A. P.	RS. A. P.	RS. A. P.				
April 1881	...	...	...	...	...	...	...	...	
April	23 14 0	676 14 0	158 4 0	215 14 0	...	...	7 0 0	2,077 3 3	
May	15 10 0	741 0 0	42 2 0	138 10 0	...	...	24 6 0	1,567 2 0	
June	14 2 0	272 12 6	73 5 0	238 0 0	20 2 0	14 7 0	2,639 4 0	2,639 4 0	
July	7 10 0	513 7 6	81 13 0	214 10 0	10 8 3	30 1 6	2,022 13 0	2,022 13 0	
August	3 8 0	445 1 6	47 5 0	128 0 0	10 8 0	64 4 0	2,089 1 10	2,089 1 10	
September	3 14 0	445 11 3	62 9 0	62 7 0	8 0 0	12 4 0	2,072 6 3	2,072 6 3	
October	11 9 6	81 13 0	35 8 0	245 9 0	9 6 0	72 3 0	2,175 3 10	2,175 3 10	
November	24 1 0	259 2 6	55 4 6	132 12 0	8 9 0	50 3 9	1,970 14 5	1,970 14 5	
December	34 14 0	101 9 0	98 15 6	151 8 0	6 3 6	7 15 6	1,595 10 6	1,595 10 6	
January 1882	73 12 0	634 15 0	...	107 7 0	9 4 0	17 13 0	1,696 0 7	1,696 0 7	
February	129 6 0	616 2 6	65 10 6	105 13 0	26 8 0	61 7 0	3,249 6 7	3,249 6 7	
March	19 1 0	751 3 6	681 2 0	118 10 0	6 7 6	63 7 0	3,161 15 8	3,161 15 8	
Total	361 5 6	5,599 12 3	1,401 14 6	1,859 4 0	115 8 3	425 7 9	26,317 1 11	26,317 1 11	

(Signed) H. A. GASS,
Deputy Conservator of Forests.

Ootacamund,
6th September 1882.

F.—STATEMENT showing the Expenditure in Detail on the Naduvatom Chinchona Plantations for the Official Year 1881-82.

Months.	Establishment.	NURSERIES.				BUILDINGS.		Total.
		Labor, &c.	Propagation.	Collection of Seed.	Postage and Packing of Seed.	New.	Repairs.	
April 1881	RS. A. P.	RS. A. P.	RS. A. P.	RS. A. P.	RS. A. P.	RS. A. P.	RS. A. P.	RS. A. P.
May "	366 0 0	85 9 5	25 6 0	7 6 0	0 12 0	...	281 13 7	766 15 0
June "	366 0 0	121 9 3	10 0 0	18 8 0	15 0 0	...	105 11 10	636 13 1
July "	383 8 0	114 8 0	10 0 0	5 14 0	12 0 0	...	2 14 6	528 12 6
August "	401 0 0	96 11 7	88 14 0	416 0 0	10 8 0	...	...	1,013 1 7
September "	401 0 0	81 12 10	10 0 0	...	16 4 0	...	...	509 0 10
October "	401 0 0	98 1 1	10 0 0	...	20 0 0	...	...	529 1 1
November "	401 0 0	108 1 8	10 0 0	...	23 6 0	...	79 1 6	621 9 2
December "	401 0 0	96 1 2	10 0 0	...	25 10 0	823 12 7	...	856 7 9
January 1882	401 0 0	89 14 2	10 0 0	1 2 0	...	558 0 2	...	1,060 0 4
February "	401 0 0	104 0 9	10 0 0	...	8 6 0	523 11 8	183 8 4	1,230 10 9
March "	401 0 0	124 3 7	10 0 0	17 0 0	...	423 11 0	...	975 14 7
Total ...	4,724 8 0	1,230 11 0	214 4 0	465 14 0	131 14 0	1,949 11 3	663 1 9	9,380 0 0

Statement showing the Expenditure in Detail on the Naduvatom Chinchona Plantations for the Official Year 1881-82—continued.

Months.	Manure.	COLLECTION OF CROP.						Total.	
		Barking and Mossing.	Collection of Moss and Grass.	Drying Bark.	Packing Bark.	Storage of Bark.	Carriage of Bark.		
		RS. A. P.	RS. A. P.	RS. A. P.	RS. A. P.	RS. A. P.	RS. A. P.	RS. A. P.	
April 1881	...	283 15 3	435 15 6	29 6 0	37 5 6	18 10 6	31 13 0	35 0 0	872 1 9
May "	...	151 13 3	...	...	15 3 6	5 1 0	34 5 6	20 12 0	227 3 3
June "	...	114 12 5	...	157 13 9	12 1 0	...	34 14 6	65 0 0	384 9 8
July "	...	79 10 4	460 9 6	677 5 0	72 4 0	...	34 1 0	...	1,323 13 10
August "	...	75 3 11	686 11 0	508 8 6	93 4 6	40 4 6	40 0 0	280 11 0	1,724 11 5
September "	...	78 10 11	843 4 0	711 12 0	119 10 6	25 0 6	40 0 0	105 2 0	1,923 7 11
October "	...	70 7 3	933 15 6	569 5 3	135 4 3	17 10 6	40 0 0	77 8 0	1,844 2 9
November "	...	175 2 9	918 11 6	384 5 6	92 6 6	31 9 0	40 0 0	70 0 0	1,712 3 3
December "	...	485 6 7	818 15 0	154 6 9	117 8 6	54 12 0	20 0 0	140 0 0	1,791 0 10
January 1882	...	301 3 8	1,037 11 9	...	85 5 6	53 0 9	28 2 0	100 0 0	1,605 7 8
February "	...	92 0 4	1,435 1 9	...	85 12 0	32 10 0	60 14 6	90 0 0	1,796 6 7
March "	...	567 6 4	755 6 6	...	91 0 6	...	20 0 0	215 0 0	1,648 13 4
Total ...		2,475 13 0	8,326 6 0	3,192 14 9	937 2 3	278 10 9	424 2 6	1,199 1 0	16,854 2 3

Statement showing the Expenditure in Detail on the Chinchona Plantations for the Official Year 1881-82—continued.

Months.	Collection of Crop.		Continu- gencies.	Peons' Clothing.	UPKEEP.				Extension of Fuel Plantations.	Grand Total.
	RS.	A. P.			Roads.	Weeding.	Pitting and Planting.	Various.		
April 1881	...	...	...	...	RS. A. P.	RS. A. P.	RS. A. P.	RS. A. P.	RS. A. P.	RS. A. P.
May	1,026	12 4	...	...	25 0 6	305 9 0	...	79 12 11	126 10 9	3,202 14 3
June	71	14 4	...	...	...	...	...	66 11 10	...	1,002 10 6
July	661	13 9	65 12 0	...	43 5 0	10 9 6	...	103 14 8	272 2 9	2,096 11 10
August	1,390	2 0	19 4 0	...	54 4 6	330 14 0	115 1 11	63 15 9	601 7 10	4,465 11 6
September	327	14 8	43 2 6	...	43 1 6	381 0 0	364 14 6	172 4 9	444 5 11	3,780 12 6
October	200	5 7	39 8 0	38 8 0	39 15 0	322 9 0	581 7 0	448 5 8	...	3,973 4 3
November	219	14 6	15 4 0	...	41 5 6	434 12 3	640 5 9	141 2 9	84 6 0	3,870 6 2
December	233	3 8	4 7 0	...	24 7 6	344 9 0	448 8 9	196 7 5	...	4,119 4 7
January 1882	147	1 6	3 4 0	...	30 6 0	445 6 0	78 3 0	118 1 4	60 0 0	3,997 1 3
February	530	11 11	45 15 0	...	38 4 0	240 1 6	280 11 9	461 12 10	...	4,428 9 2
March	286	2 7	6 0 0	...	27 0 0	29 0 6	421 8 3	159 8 7	...	3,442 0 0
Total	5,291	4 7	247 10 6	38 8 0	372 1 6	2,983 1 3	2,930 12 11	2,217 0 11	253 12 5	3,783 1 7
									1,847 13 8	42,162 7 7

OOTACANUND,
6th September 1882.

(Signed) H. A. GASS,
Deputy Conservator of Forests.

G.—STATEMENT showing the Expenditure in Detail on the Pykara Chinchona Plantations for the Official Year 1881-82.

Months.	Establish- ment.	NURSERIES.		UPKEEP.				COLLECTION OF CROP.			Total.
		Labor, &c.	Collection of Seed.	Weeding.	Roads.	Pitting and Planting.	Various.	COLLECTION OF CROP.			
								Barking and Mossing.	Collection of Moss and Grass.		
RS. A. P.	RS. A. P.	RS. A. P.	RS. A. P.	RS. A. P.	RS. A. P.	RS. A. P.	RS. A. P.	RS. A. P.	RS. A. P.	RS. A. P.	
April 1881 ...	120 0 0	117 15 1	...	9 0 0	221 2 0	461 9 3	130 6 10	86 11 6	...	1,146 12 8	
May " ...	120 0 0	96 1 9	...	63 14 3	62 14 6	339 2 6	76 3 10	86 6 0	...	844 10 10	
June " ...	120 0 0	105 12 4	...	...	37 3 0	392 12 6	78 3 0	9 5 0	...	743 3 10	
July " ...	120 0 0	119 8 11	...	225 6 0	38 8 6	302 4 9	133 0 10	1 11 0	18 4 6	958 12 6	
August " ...	120 0 0	80 8 1	...	148 9 0	62 7 0	535 0 3	245 7 5	290 6 0	250 8 6	1,732 14 3	
September " ...	120 0 0	105 5 9	...	290 2 6	67 8 0	162 8 0	125 5 9	521 4 0	627 6 0	2,019 8 0	
October " ...	120 0 0	134 2 8	...	302 2 0	66 15 0	38 1 0	89 4 9	593 10 0	644 9 3	1,988 12 8	
November " ...	120 0 0	126 8 0	...	847 0 6	62 11 6	263 11 0	136 3 9	300 2 6	176 13 0	2,033 2 3	
December " ...	98 5 4	112 12 6	...	889 14 0	96 12 0	216 2 0	182 4 7	38 8 0	...	1,634 10 5	
January 1882 ...	120 0 0	158 15 9	...	640 9 3	50 4 0	179 7 0	192 2 4	239 9 0	...	1,580 15 4	
February " ...	70 0 0	126 0 7	...	478 4 0	37 15 6	204 0 0	153 5 8	353 15 0	...	1,423 8 9	
March " ...	70 0 0	126 10 6	...	375 9 9	17 7 0	264 15 6	145 8 10	241 8 0	...	1,241 11 7	
Total ...	1,318 5 4	1,410 5 11	...	4,270 7 3	821 12 0	3,359 9 9	1,687 9 7	2,763 0 0	1,717 9 3	17,348 11 1	

Statement showing the Expenditure in Detail on the Pykara Clinchona Plantations for the Official Year 1881-82—continued.

Months.	COLLECTION OF CROPS—(Continued).					BUILDINGS.			Manure.	Grand Total.
	Drying Bark.	Packing Bark.	Storage of Bark.	Carriage of Bark.	Various.	New.	Repairs.			
RS. A. P.	RS. A. P.	RS. A. P.	RS. A. P.	RS. A. P.	RS. A. P.	RS. A. P.	RS. A. P.	RS. A. P.	RS. A. P.	RS. A. P.
April 1881	...	1 2 0	10 0 0	...	35 8 6	...	70 4 9	...	994 6 2	2,258 2 1
May "	4 1 0	...	...	...	27 1 5	...	...	...	18 9 0	894 6 3
June "	4 8 6	...	...	...	50 11 7	...	178 1 11	...	53 15 6	1,030 9 4
July "	3 4 6	...	...	35 0 0	176 2 2	...	109 1 2	...	17 6 10	1,299 11 2
August "	25 12 0	0 9 0	39 0 0	120 15 0	100 6 9	...	142 1 0	...	15 2 0	2,176 12 0
September "	57 11 0	13 0 0	28 7 0	78 5 6	193 12 4	...	52 2 8	...	9 9 5	2,452 7 11
October "	70 7 6	12 2 0	30 0 0	108 5 6	190 2 5	...	4 0 0	...	21 10 6	2,425 8 7
November "	67 2 6	18 12 0	20 0 0	122 10 0	196 11 5	...	...	...	60 6 10	2,518 13 0
December "	29 4 0	1 11 0	40 0 0	79 8 0	50 6 10	...	13 9 3	...	85 2 11	1,934 4 5
January 1882	41 15 0	0 9 0	11 9 0	12 0 0	79 0 2	...	1 4 4	...	60 3 0	1,787 7 10
February "	45 7 6	13 3 6	48 5 6	36 0 0	72 13 9	57 0 0	1 4 11	...	20 1 9	1,717 13 8
March "	35 13 0	...	10 0 0	26 0 0	68 5 3	...	6 3 0	...	127 9 6	1,515 10 4
Total ...	385 6 6	61 0 6	237 5 6	618 12 0	1,241 2 7	57 0 0	573 1 0	1,484 3 5	22,011 10 7	

OOTACAMUND,
6th September 1882.(Signed) H. A. GASS,
Deputy Conservator of Forests.

II.—STATEMENT showing in Detail the Expenditure on the Office Establishment and General Expenditure for the Official Year 1881-82.

Months.	ESTABLISHMENT.			Printing Charges.	Cost of Gunny Bags.	Carriage of Bark to Mettur-paddyam.	Railway Charges.	Shipping Charges.	Batta and Travelling Allowance.	Contingencies.	Peons' Clothing.	Total.
	Deputy Conservator's Allowance.	Permanent Establishment.	Temporary Establishment.									
April 1881	200 0 0	151 0 0	300 0 0	..	..	1,306 12 0	940 5 0	1,053 1 1	..	2 10 0	..	RS. A. P. 3,953 12 1
May "	200 0 0	151 0 0	300 0 0	..	..	..	..	..	..	31 0 0	..	682 0 0
June "	200 0 0	150 0 0	300 0 0	..	..	..	..	43 3 0	..	32 4 0	..	725 7 0
July "	200 0 0	151 0 0	300 0 0	9 8 0	..	..	..	60 4 4	78 12 0	38 1 6	..	837 9 10
August "	200 0 0	151 0 0	300 0 0	..	..	..	..	..	1 0 0	2 0 6	..	654 0 6
September "	200 0 0	151 0 0	300 0 0	68 0 0	2,895 9 0	..	..	14 11 1	0 12 0	12 6 0	..	3,642 6 1
October "	200 0 0	151 0 0	300 0 0	..	..	..	653 4 0	..	..	2 0 0	..	1,306 4 0
November "	200 0 0	151 0 0	300 0 0	7 0 0	..	..	500 2 0	42 1 8	..	54 3 0	..	1,254 6 8
December "	200 0 0	151 0 0	300 0 0	2 0 0	..	..	350 6 0	1,932 12 0	..	11 14 0	..	2,948 0 0
January 1882	200 0 0	151 0 0	300 0 0	..	..	..	234 9 0	21 0 4	..	7 0 0	30 8 0	944 1 4
February "	200 0 0	151 0 0	300 0 0	..	..	..	318 12 0	2,215 12 7	..	9 14 6	..	3,195 7 1
March "	200 0 0	151 0 0	21 6 10	..	..	1,434 12 0	927 9 0	118 0 10	69 10 0	18 4 0	..	2,940 10 8
Total ..	2,400 0 0	1,911 0 0	3,321 6 10	86 8 0	2,895 9 0	2,741 8 0	3,924 15 0	5,500 14 11	150 2 0	221 9 6	30 8 0	23,084 1 3

OOTACAMUND,
6th September 1882.(Signed) H. A. GASS,
Deputy Conservator of Forests.

I.—STATEMENT showing the Number of Chinchona Trees barked and the Quantity of Bark taken at the Government Chinchona Plantations, Naduvatom, Pykara and Dodabetta, during the Official Year 1881-82.

NADUVATAM.								HOOKER.							
Plot.	Red.		Crown.		Pubescens.		Total.	Plot.	Red.		Crown.		Total.	Plot.	Total.
	Trees.	Bark.	Trees.	Bark.	Trees.	Bark.			Trees.	Bark.	Trees.	Bark.			
I.	446	2,360	2,699	5,890	..	..	3,045	8,260	I.	..	708	2,910	6,680	2,910	7,288
II.	..	..	1,506	2,310	..	..	1,506	2,310	II.	580	2,830	910	2,333	1,490	4,863
III.	..	..	94	110	..	..	94	110	III.	461	1,922	..	..	461	1,922
IV.	..	..	483	800	..	..	483	800	IV.	..	2,353	3,765	2,353	3,765	3,765
V.	..	..	148	300	..	..	148	300	VI.	..	4,384	6,785	4,384	6,785	6,785
VI.	..	..	1,990	3,470	..	..	1,990	3,470	VII.	1,529	9,374	1,873	2,720	3,402	11,994
VII.	..	..	5,574	11,040	..	..	5,574	11,040	VIII.	2,987	14,917	..	..	2,987	14,917
VIII.	..	..	6,155	2,813	5,119	..	2,813	11,274	IX.	618	2,800	615	985	1,233	3,846
IX.	..	..	4,734	2,560	6,630	..	2,560	10,364	X.	268	1,110	1,202	2,109	1,470	3,219
X.	..	..	746	1,292	..	..	746	1,292	XI.	..	..	429	860	429	860
XI.	..	..	637	1,219	..	..	637	1,219	..	..	..	..	..	..	..
XII.	..	..	1,759	2,697	..	..	1,759	2,697	..	..	..	..	..	..	..
XIII.	..	..	1,743	2,660	..	..	1,743	2,660	..	..	..	..	..	..	..
XIV.	..	..	9,615	..	..	..	9,615	..	..	..	..	..	..	..	..
XV.	..	..	11,457	..	..	..	11,457	..	..	..	..	..	..	..	..
XVI.	..	..	90	70	..	..	90	70	..	..	..	..	..	..	..
XVII.	..	..	996	2,380	..	..	996	2,380	..	..	..	..	..	..	..
XVIII.	..	..	192	170	..	..	192	170	..	..	..	..	..	..	..
XIX.	..	..	498	600	..	..	498	600	..	..	..	..	..	..	..
XX.	..	..	154	110	..	..	154	110	..	..	..	..	..	..	..
XXI.	..	..	1,481	1,810	59	440	1,540	2,250	..	..	..	..	..	..	..
XXII.	..	..	725	1,320	67	604	792	1,924	..	..	..	..	..	..	..
XXIII.	..	..	583	720	..	..	583	28,418	..	..	..	..	..	..	..
XXIV.	11,327	53,896	..	..	308	3,636	11,635	57,526	..	..	..	..	..	..	..
XXV.	6,570	14,640	..	..	..	..	5,570	14,640	..	..	..	..	..	..	..
XXVI.	..	..	166	675	..	..	166	675	..	..	..	..	..	..	..
XXVII.	..	..	166	204	..	..	166	204	..	..	..	..	..	..	..
XXIX.	1,534	3,170	..	..	114	902	1,648	4,072	..	..	..	..	..	..	..
Total.	18,877	133,719	27,703	50,696	548	5,582	47,128	189,897	Total.	6,443	33,321	14,678	26,127	21,119	59,448

WOOD.								DODABETTA.				GRAND TOTAL.	
Plot.	Red.		Crown.		Total.		Plot.	Crown.		Trees.	Bark.	Trees.	Bark.
	Trees.	Bark.	Trees.	Bark.	Trees.	Bark.		Trees.	Bark.				
I.	..	..	265	575	265	575	I, II and III.	2,676	9,558	8,896	25,671	..	..
II.	..	..	1,480	854	1,480	854	VII.	6,735	25,144	10,585	35,467	..	..
III.	2,336	7,250	1,706	3,720	4,042	10,970	XI.	4,605	8,734	9,202	21,736	..	..
IV.	1,729	4,195	207	285	1,936	4,480	XII.	3,562	8,495	8,334	17,540	..	..
V.	1,703	8,285	..	..	1,703	8,285	XIII.	6,572	11,810	12,807	27,180	..	..
VI.	2,132	8,202	..	..	2,132	8,202	XVI.	4,521	10,738	12,045	34,404	..	..
VII.	..	6,425	..	..	..	6,425	XXXV.	3,690	7,020	12,251	39,402	..	..
VIII.	..	2,271	..	..	..	2,271	..	2,603	13,159	6,649	30,549	..	..
..	..	..	..	..	..	..	..	..	5,610	4,030	19,103	..	..
..	..	..	..	..	..	..	..	..	..	1,175	2,142	..	..
..	..	..	..	..	..	..	..	..	..	637	1,219	..	..
..	..	..	..	..	..	..	..	..	..	1,759	2,697	..	..
..	..	..	..	..	..	..	..	..	..	1,743	2,660	..	..
..	..	..	..	..	..	..	..	..	..	..	9,615	..	..
..	..	..	..	..	..	..	..	..	..	..	11,457	..	..
..	..	..	..	..	..	..	..	..	..	90	70	..	..
..	..	..	..	..	..	..	..	..	..	996	2,380	..	..
..	..	..	..	..	..	..	..	..	..	192	170	..	..
..	..	..	..	..	..	..	..	..	..	498	600	..	..
..	..	..	..	..	..	..	..	..	..	154	110	..	..
..	..	..	..	..	..	..	..	..	..	1,516	2,250	..	..
..	..	..	..	..	..	..	..	..	..	792	1,924	..	..
..	..	..	..	..	..	..	..	..	..	583	28,418	..	..
..	..	..	..	..	..	..	..	..	..	11,635	57,526	..	..
..	..	..	..	..	..	..	..	..	..	5,570	14,640	..	..
..	..	..	..	..	..	..	..	..	..	166	675	..	..
..	..	..	..	..	..	..	..	..	..	166	204	..	..
..	..	..	..	..	..	..	..	..	..	1,648	4,072	..	..
Total ..	7,900	38,108	3,032	6,250	10,932	44,358	Total ..	34,964	100,268	114,143	393,971	..	..

OOTACAMUND,
6th September 1882.

(Signed) H. A. GASS,
Deputy Conservator of Forests.

STATEMENT showing the Progress made in the Cultivation of Chinchona in the several Government Plantations in India in each of the Official years 1876-77 to 1881-82.

NILGIRI PLANTATIONS.									
Botanical Names.	Number of Acres under cultivation on the 31st March 1882.	Number of Plants raised during the year ending 31st March.						Total.	Plants in Permanent Plantation on 31st March 1882.
		1877.	1878.	1879.	1880.	1881.	1882.		
C. Succirubra	..	14,200	187,350	604,855	300,700	585,950	40,000	2,763,555	183,498
C. Officinalis	..	..	..	..	350,000	473,000	207,600	..	551,307
C. Calisaya, var. Ledgeriana	..	..	..	1,276	5,500	2,810	2,710	12,296	552
C. Calisaya, other varieties	..	..	..	..	6,600	1,537	..	8,137	..
C. Micrantha	847	..	..	..	1,000	..	..	1,000	1,874
C. Pubescens	..	6,468	..	..	4,100	24,140	50,000	84,708	..
C. Pitayensis	..	..	2,506	..	5,500	..	20	8,326	44
C. Lanceolata	..	21,540	12,070	8,320	38,000	..	..	6,000	9,613
Hybrids and others.	..	..	..	..	5,000	..	120	120	8
C. Carthagena	..	..	..	..	..	..	15	15	5
C. Santa Fé	..	..	..	..	..	..	..	..	..
Total ..	847	42,208	202,226	614,451	716,400	1,087,637	300,365	2,963,287	746,901

22nd December 1882. (Signed) C. G. DOUGLAS,
Deputy Conservator of Forests.

ORDER—dated 17th January 1883, No. 66, Revenue.

Miscellaneous.

This report, which was due in the Government office on the 10th July, was not received till the 2nd October. The Conservator did not inspect the plantations during the year under report and the Deputy Conservator remarks in paragraph 14 of his letter that, as he has but recently taken charge of them, he has been compelled to accept all the facts as offered by subordinates; the Government trust this is an over-statement.

2. As Major Walker remarks, special reports by Colonel Beddome were fully considered by Government in the year under review.*. There is the less reason on this account for a protracted review on this occasion, but it may be observed that the late Conservator's pronouncement that *Chinchona pubescens* is in fact the variety known in South America as *Pátá de Gallinazo* is not accepted by the authorities at Kew or by Dr. Trimen. The point needs to be noted because Government apparently accepted Colonel Beddome's opinion in the order just quoted; but it is unnecessary to discuss the matter here, as it is the intention of the Right Honorable the Governor in Council to arrange that Dr. Trimen shall meet Professor Lawson during the coming year, in order that definite conclusions may be arrived at in respect of this and other vexed questions regarding Chinchona hybrids, real or so called. Meanwhile, Dr. King of the Government Chinchona Plantations, Bengal, in his report for 1881-82, states that the *Pubescens* hybrid is only second as a quinine-yielder to *Ledgeriana*.

3. The total number of trees in the plantations rose from 666,815 at the close of 1880-81 to 742,356 at the close of the year under report. The plantations are reported to be in good order. The result is so far creditable to the first year of management by the Forest Department.

4. The receipts are entered at Rs. 5,72,003 and the expenditure at Rs. 1,13,575, against corresponding figures of Rs. 434,261 and Rs. 96,105 for last

year; but the figure entered for receipts refers only to crop shipped in 1880-81 instead of to crop sold or products realised in 1881-82, which Government have more than once ordered should be considered the crop of the year. The excess over the sanctioned estimate—Rs. 5,72,003 against 4,64,000—is probably due to the extensive uprooting of *Succirubras* at Naduvatam. The Government are glad to learn that the Deputy Conservator is scrutinizing the charges, but observe that that officer says nothing as to the serious discrepancy in the balance in store on the 31st March 1881. It is presumed the Conservator has satisfied himself that Mr. Hillier's explanation is correct.

5. With reference to the Conservator's remarks in paragraph 4 as to the growth of coppice from barked and unbarked trees, the Government have only to observe that their remark in the review of the report for 1880-81 was not intended to be a final pronouncement, but merely related to the facts then reported. Experiments should be persevered with. The opening of Plantation Books is a step in the right direction and they should be carefully maintained.

6. The yield of the year was 2,42,052 lb. of dry bark or 2,49,049 lb. inclusive of a balance of 6,997 lb. as against a yield of 243,896 lb. in the last year. The crop was disposed of as shown below :—

Shipped to the Home market	...	...	...	...	...	232,467
" " Bombay Medical Department	...	...	...	...	...	1,000
Disposed of by local sale	...	...	...	...	...	10,278
Balance on the 31st March 1882	...	...	...	...	...	5,304
Total ...						249,049

From the orders of Government noted in the margin it appears that the bark sent

Bark sent Home, 1881-82.				LB.
G.O., 16th May	1881, No. 771...	51,355		
" 15th July	" " 1079...	5,697		
" 2nd November	" " 1629...	44,186		
" 19th "	" " 1758...	32,414		
" 17th December	" " 1945...	23,534		
" 16th January 1882	" " 53...	15,929		
" 6th February	" " 154...	20,400		
" 21st "	" " 223...	14,521		
" 8th March	" " 271...	36,720		
Total ...				244,756

G.O., dated 29th August 1881, No. 1280.

only to be thrown away, while the further cultivation of this variety has, it is understood, been long since discontinued on the Nilgiris and the Wynaad. In this connection it may be noted that in the Bengal plantations during the year under report, no renewals were made of *Succirubra* and 161,250 trees were uprooted for the sake of their bark. *Chinchona pubescens* stood rain and wind well in the year under report, a further proof of its value; *Succirubra* meanwhile suffered greatly at Naduvatam and Pykara. Carthagena did well at Naduvatam and Dodabetta, but Santa Fé made but a slow growth on the latter estate.

8. The delay in the erection of the new buildings at Naduvatam is not understood, a final allotment having been

G.O., dated 21st December 1881, No. 1955, Revenue Department.

G.O., dated 13th February 1882, No. 397.W. review and the whole amount of estimate having long since been placed at the disposal of the Department of Public Works. The Chief Engineer will be requested to give the matter immediate and special attention.

9. The financial results of the Chinchona enterprise from its commencement to the end of the year 1881-82 are shown below :—

Receipts	...	...	...	...	...	...	RS. 26,80,782
Charges	...	...	...	...	...	...	22,53,336

leaving a net surplus of Rs. 4,27,446 at the close of that year.

10. The Secretary of State's despatch, embodied in G.O., 23rd October last, No. 1163, did not arrive in time to allow of the method of calculation therein prescribed being adopted in reviewing the figures for 1881-82.

(True Extract.)

(Signed) P. P. HUTCHINS,
Ag. Secretary to Government.

To the Conservator of Forests, Northern Circle.
Do. Southern Circle.
" Director of Agriculture.
" Superintendent, Government Central Museum.
" Board of Revenue.
" Collector of Nilgiris.
" Public Works Department.

Exd. W. H. French.

150 Copies.

Statement showing the Capital and Revenue Account of the Government Chinchona Plantations, Nilgiris, from the commencement up to the Official Year 1881-82.

Years.	RECEIPTS.					CHARGES.						
	Value of Bark supplied to the Quinologist.	Value of Bark sent to England and supplied to other Governments or Departments.	Sale of Plants, Seeds, &c.	Interest on Receipts.	Total.	Establishment including Superintendent's Salary.	Building and Plant.	Working Charges.		Interest on Charges.	Total.	
								Departmental Labor.	Convict Labor.			
1	2	3	4	5	6	7	8	9	10	11	12	
1860-61	..	..	..	..	..	..	..	4,821 15 0	..	216 15 10	4,821 15 0	
1861-62	..	..	..	..	..	..	..	23,131 15 4	..	1,257 14 9	23,131 15 4	
1862-63	..	..	..	..	..	..	..	48,390 0 0	..	3,492 1 4	49,647 14 9	
1863-64	..	..	..	..	..	..	..	53,173 9 2	..	6,614 11 11	69,892 9 1	
1864-65	..	..	..	..	..	12,726 14 7	..	59,666 12 0	..	10,697 6 8	90,726 0 10	
1865-66	..	..	2,450 0 0	..	2,450 0 0	24,444 8 11	3,700 0 0	58,887 5 0	..	15,140 7 7	98,734 9 8	
1866-67	..	..	337 12 0	..	337 12 0	25,449 14 0	3,025 0 0	62,632 0 0	48,666 10 8	16,140 7 7	1,43,267 12 1	
1868-68	..	257 8 0	1,680 0 0	110 4 0	1,808 2 5	23,803 9 10	2,600 0 0	43,295 14 4	48,666 10 8	21,687 8 5	1,42,237 4 6	
1868-69	..	..	..	128 2 5	1,721 14 7	20,087 3 1	2,030 0 0	30,636 1 0	..	21,988 3 8	1,34,992 6 2	
1869-70	1,512 6 4	..	323 14 0	209 8 3	4,975 12 8	23,783 5 4	1,650 0 0	19,163 0 0	..	37,692 8 5	80,669 3 9	
1870-71	4,364 14 8	3,479 8 6	227 1 4	510 14 7	17,214 7 8	23,730 5 4	3,000 0 0	16,143 0 0	..	40,746 7 10	71,914 1 11	
1871-72	9,542 12 8	4,388 2 1	300 9 0	1,119 14 3	13,632 1 9	17,157 5 4	850 0 0	13,160 4 9	..	43,982 10 0	73,697 10 0	
1872-73	16,806 15 8	86,417 6 3	273 4 0	2,134 4 7	22,542 1 4	12,794 0 0	550 0 0	15,091 14 0	..	50,299 0 3	75,522 14 3	
1873-74	21,136 7 0	..	2,000 0 0	4,833 12 5	59,988 10 10	12,574 0 0	568 0 0	17,417 0 0	..	56,997 8 9	86,221 0 9	
1874-75	8,576 0 0	..	2,579 3 10	5,449 8 3	13,683 0 5	16,406 8 0	1,700 0 0	27,423 0 0	..	54,577 7 11	1,00,784 7 11	
1875-76	..	60,404 7 11	2,000 0 0	8,502 15 1	67,854 0 2	17,234 0 0	1,550 0 0	44,850 3 0	..	59,112 12 9	1,118,742 14 0	
1876-77	..	1,07,878 4 0	2,579 3 10	13,856 2 7	1,18,960 6 11	8,064 5 4	6,715 8 11	56,241 10 3	..	64,456 3 7	1,34,228 0 10	
1877-78	..	3,51,746 0 6	6,469 0 2	30,554 5 11	3,71,471 3 8	8,061 5 4	4,468 13 8	53,954 10 8	..	70,496 7 10	1,44,179 3 3	
1878-79	..	3,92,217 10 1	8,136 9 2	49,945 4 0	4,30,908 9 2	10,092 0 2	10,080 14 1	63,095 0 3	..	76,984 8 10	1,66,708 13 10	
1879-80	..	4,24,323 12 8	13,462 12 4	11,983 2 11	4,89,731 13 0	10,092 0 2	11,367 0 0	72,838 15 3	..	84,036 7 3	1,80,141 7 10	
1880-81	..	3,33,295 1 3	7,653 2 9	90,813 9 6	4,18,453 8 10	11,879 1 0	6,278 4 9	90,921 2 1	..	92,142 13 2	1,80,141 7 10	
1881-82	..	5,64,236 3 11	59,730 13 3	2,80,438 12 9	6,62,703 0 2	16,373 14 6	6,278 4 9	90,921 2 1	..	92,142 13 2	2,06,718 2 6	
Total	61,939 8 4	25,78,673 12 2	59,730 13 3	2,80,438 12 9	26,80,782 14 6	3,27,502 15 1	64,970 14 6	8,71,179 4 1	1,46,000 0	0,843,283 4 2	22,63,836 5 10	

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Govt. of (1883) Madras.
REVENUE.

Issued

Recd.

Encl.

G.O., 17th January 1883, No. 66.

JANUARY.

Government Chinchona Plantations.
Report on — for 1881-82, reviewed.

Statement showing the progress made in the cultivation of Chinchona in the several Government plantations in India, in each of the official years 1876-77 to 1881-82.

Milgiri plantations.

Botanical names.	Number of acres under cultivation on the 31 st March 1882.	Number of plants raised during the year ending 31 st March						Total	Plants in permanent plantation on 31 st March 1882.
		1877	1878	1879	1880	1881	1882		
<i>C. succirubra</i> .	"	14,200	187,350	604,855	300,700	585,950	40,000	276,355	183,498.
<i>C. officinalis</i> .	"				350,000	47,300	207,500		557,307.
<i>C. calisaya</i> var. <i>edgeriana</i> .	"	"	"	1276	5500	2810	2710	122,96	552.
<i>C. calisaya</i> , other varieties }	"	"	"	"	6600	1537	"	8137	"
<i>C. micrantha</i> .	847	"	"	"	1000	"	"	1000	1874.
<i>C. pubescens</i>	"	6468	"	"	1,100	24,140	50,000	84,708	"
<i>C. pitayensis</i>	"	"	2806	"	5500	"	20	8326	44.
<i>C. laucolata</i> .	"	21,540	12,070	8,320	38,000	200	"	80,130	"
Hybrids & others.	"	"	"	"	5000	"	"	5000	7,613.
<i>C. barthagenae</i>	"	"	"	"	"	"	120	120	8.
<i>C. Santa Fe</i> .	"	"	"	"	"	"	15	15	5.
Total.	847	42,208	202,226	614,457	7,16,400	1,08,762	300,365	296,328	746,701.

ENCLOSURE No.

J.—Statement showing the Progress made in the Cultivation of Chinchona in the several Government Plantations in India in each of the Official years 1876-77 to 1881-82.

Botanical Names.	Number of Acres under cultivation on the 31st March 1882.	NILGIRI PLANTATIONS.						Total.	Plants in Permanent Plantation on 31st March 1882.
		Number of Plants raised during the ending 31st March.							
		1877.	1878.	1879.	1880.	1881.	1882.		
C. Succirubra ..	..	{ 14,200 ..	187,350 ..	604,855 1,276	{ 300,700 350,000 5,600	585,950 473,000 2,810	40,000 207,500 2,710	} 2,763,555 12,298	183,498 551,307 552
C. Officinalis ..	..	..	..	..	..	..	..	..	..
C. Calisaya, Var ..	..	..	..	..	6,600	1,537	..	18,137	..
Ledgeriana ..	..	..	..	..	..	..	..	..	..
C. Micrantha ..	847	..	..	..	1,000	..	..	1,000	1,874
C. Pubescens ..	..	6,468	..	..	4,100	24,140	50,000	84,708	..
C. Pitayensis ..	..	..	2,506	..	5,500	..	20	8,326	44
C. Lanceolata ..	..	21,540	12,070	8,320	38,000	200	..	80,130	..
Hybrids and others.	..	..	..	..	5,000	..	..	5,000	9,613
C. Carthagena ..	..	..	..	..	..	..	120	120	8
C. Santa Fé ..	..	..	..	..	..	..	15	15	5
Total ..	847	42,208	202,226	614,451	716,400	1,087,637	300,365	2,963,287	746,901

OOTACAMUND,
6th September 1882.

H. A. GASS,
Deputy Conservator of Forests.

Dear Mr. Douglas:

Could you very kindly correct this obviously wrong statement before today or at latest tomorrow that I may get this statement paper disposed of before Xmas. The columns figures transcribed do not agree. There is no officinalis as per statement on all the plantations!

Yours truly
H. A. G.

21/12/02

J.—Statement showing the Progress made in the Cultivation of Chinchona in the several Government Plantations in India in each of the Official years 1876-77 to 1881-82.

NILGIRI PLANTATIONS.										
Botanical Names.	Number of Acres under cultivation on the 31st March 1882.	Number of Plants raised during the ending 31st March.						Total.	Plants in Permanent Plantation on 31st March 1882.	
		1877.	1878.	1879.	1880.	1881.	1882.			
C. Succirubra ..	..	{ 14,200	187,350	604,855	{ 300,700 350,000 5,500	585,950 473,000 2,810	40,000 207,500 2,710	} 2,763,555 12,298	183,498 551,307 552	
C. Officinalis ..	..	..	..	1,278	..	..	..		..	..
C. Calisaya, Var. } ..	..	..	..	..	6,800	1,537	..		18,137	..
Ledgeriana } ..	..	..	..	..	..	..	..	..	..	
C. Micrantha ..	847	..	..	..	1,000	..	..	1,000	1,874	
C. Pubescens ..	..	6,468	..	..	4,100	24,140	50,000	84,708	..	
C. Pitayensis ..	..	..	2,506	..	5,500	..	20	8,326	44	
C. Lanceolata ..	..	..	..	..	38,000	200	..	80,130	..	
Hybrids and others.	..	21,540	12,070	8,320	5,000	..	..	5,000	9,613	
C. Carthagena ..	..	..	..	..	..	..	120	120	8	
C. Santa Fé ..	..	..	..	..	..	..	15	15	5	
Total ..	847	42,208	202,226	614,451	716,400	1,087,637	300,365	2,963,287	746,901	

OOTACAMUND,
6th September 1882.

H. A. GASS,
Deputy Conservator of Forests.

Resim (1882) Defor

No 5534

From

The Conservator of
Forests.

Dated 28th Sept

Draper 30 "

Received 2nd October

1882

No 1127

Enclosures 11

Submitting the Defor
Conservator's Administ
Report on the Government
Plantations
for 1881-82. together with
the results of inquiries

25-12-82 R. 16-1-83

83

D. O. Form No. 105.

Office of Conservator of Forests,
MADRAS.

D. O.

Dear Sir,
I am pleased to receive
your letter of the 28th Sept
and in reply to inform you
that the same has been
forwarded to the
Government for their
consideration. I am
also pleased to hear that
you are making progress
in the work of the
Plantations. I am,
Sir, very truly,
Your obedient servant,
The Conservator of Forests.

Enclosure No. 10

An Administration Report
of the Bank of the
Philippines for the year 1881-82

Q.O 17-1-83 p. 56

Appendix J

Statement showing the
progress made in the
cultivation of banana
plantations in the
Philippines

Statement showing the progress made in the Cultivation of Cinchona in the several Government plantations in India in each of the Official years 1876-77 to 1881-82.

3)
Nijer plantations.

Botanical names.	Number of plants raised during the year ending 31st March.						Total.	Plants taken in 1882.
	1877	1878	1879	1880	1881	1882.		
<i>C. succulabra</i>	14200	18780	66425	300700	385750	40000	1276555	18349
<i>C. officinalis</i>	122	35	1574	20000	20000	207500	227500	54207
<i>C. calycina</i>	-	-	127	277	225	270	679	58
<i>C. longiana</i>	-	-	-	-	150	-	150	-
<i>C. lucida</i>	217	-	-	1000	-	-	1000	1871
<i>C. pubescens</i>	1448	-	-	1100	24440	50000	54508	-
<i>C. delavensis</i>	-	2206	-	2500	-	20	8326	10
<i>C. lanceolata</i>	21540	12070	8220	38000	200	-	80130	-
<i>C. hybridata</i>	-	-	-	5000	-	-	5000	4
<i>C. carthagenia</i>	-	-	-	-	-	-	-	-
<i>C. pauciflora</i>	-	-	-	-	120	-	120	-
	-	-	-	-	-	15	15	-
Total.	847	12206	20221	311670	71440	107137	302365	29132

Office of the Conservator of Forests

H. J. Cam.

Secretary of the Forest Department

Statement showing the numbers of Cinchona Trees barked during the Official year 1881-82.

Neddivattam

Not.	Red.		Crown.		Pubescens.		Total.		Plas.	Red.	
	Tree.	Bark No.	Tree.	Bark No.	Tree.	Bark No.	Tree.	Bark No.		Tree.	Bark No.
I.	146	2360	2599	5890	..	..	3045	8250	I.	..	708
II.	..	..	1506	2310	..	..	1506	2310	II.	580	2530
III.	..	..	94	110	..	..	94	110	III.	461	1922
IV.	..	..	483	800	..	..	483	800	IV.	..	..
V.	..	..	148	300	..	..	148	300	V.	..	..
VI.	..	..	1990	3470	..	..	1990	3470	VI.	1529	9274
VII.	..	..	5574	11040	..	..	5574	11040	VII.	2987	14917
VIII.	..	6155	2813	5119	..	..	2813	11274	VIII.	613	2860
IX.	..	1734	2560	5630	..	..	2560	10364	IX.	268	1110
X.	..	..	746	1292	..	..	746	1292	X.	..	..
XI.	..	..	637	1219	..	..	637	1219	XI.	..	..
XII.	..	..	1759	2697	..	..	1759	2697	..	..	..
XIII.	..	..	1743	2660	..	..	1743	2660	..	..	..
XIV.	..	9615	..	..	..	..	..	9615	..	..	..
XV.	..	11457	..	..	..	..	..	11457	..	..	..
XVI.	..	..	90	70	..	..	90	70	..	..	..
XVII.	..	..	996	2380	..	..	996	2380	..	..	..
XVIII.	..	..	192	170	..	..	192	170	..	..	..
XIX.	..	..	498	600	..	..	498	600	..	..	..
XX.	..	..	154	110	..	..	154	110	..	..	..
XXI.	..	..	1481	1810	59	440	1540	2250	..	..	..
XXII.	..	..	725	1320	67	604	792	1924	..	..	..
XXIII.	..	27698	583	720	..	..	583	28418	..	..	..
XXIV.	11327	53890	..	..	308	3636	11635	57526	..	..	..
XXV.	5570	14640	..	..	..	..	5570	14640	..	..	..
XXVI.	..	..	166	675	..	..	166	675	..	..	..
XXVII.	..	..	166	204	..	..	166	204	..	..	..
XXIX.	1534	3170	..	..	114	902	1648	4072	..	..	..
Total.	13877	133719	27703	51596	548	5582	47128	189897	Total.	6443	33321

Office of Dy. Conservator of Forests
Colacamund
September 1882.

Statement Showing in Detail the Expenditure in the Office of the
Expenditure for the Official year 1881-82.

Months	Establishment	Printing Cost of Charges	Carriage of Bark to Charges	Railway Shipping	Conti- nences	Clothing	Pens	Total
April 1881	200	151	1306 12	940 8	1053 11	2 10	3953 12 1	
May	200	151	433	433	31	32 4	182	
June	200	150	60 4 4	78 12	38 1 6	837 9 12		
July	200	151	1	2	2	654 2 6		
August	200	151	11 11 1	12	12 6	3642 6 1		
September	200	151	153 4	2	2	1306 4		
October	200	151	500 2	42 1 8	54 3	1254 6		
November	200	151	350 6	1932 12	11 14	2948		
December	200	151	234 9	21 4	7	944 1		
January 1882	200	151	318 12	2215 12 7	9 14 6	3195 7		
February	200	151	1434 12	927 9	118 10	69 10	2940 10	
March	200	151	21 6 10	221 9 6	30 8	23084 1		

Office of Dy. Commr. of Forests

Attest: 6 September 1882

H. J. ...

Deputy Commissioner of Forests

The Administration of
 the Land Revenue
 for the year 1881-82

The following showing the
 various items of
 expenditure for the year 1881-82

Statement showing the Expenditure in Detail on the Hyderabad Revenue
 for the Official year 1881-82.

Months	Establishment	Nurseries	Upkeep	Collection of Seed	Planting Various	Barking Collection and mowing with grass	Total			
April	120	117 15 1	22 1 2	9	461 9 3	130 6 10	86 11 1	1146 12 8		
May	120	96 1 9	13 14 3	133 14 3	339 2 6	76 3 10	86 6	844 10 10		
June	120	105 12 4	"	"	392 12 6	78 3	9 5	743 3 10		
July	120	119 8 11	22 5 6	225 6	302 4 9	133 10	1 11	18 4 6	958 12 6	
August	120	80 8 1	14 8 9	148 9	535 3	245 7 5	290 6	250 8 6	1732 14 3	
September	120	165 5 9	240 2 6	240 2 6	162 8	125 5 9	4	627 6	2019 8	
October	120	134 2 8	302 2	302 2	86 15	38 1	89 4 9	573 10	644 9 3	1958 12 8
November	120	126 8	847	847	263 11 5	136 3 9	300 2 6	176 13	2033 2 3	
December	98 5 4	112 12 6	889 14	889 14	96 12 2	216 2	182 4 7	38 8	1634 10 5	
January	120	158 15 9	610 9 3	610 9 3	50 4	179 7	192 2 4	239 9	1580 15 4	
February	70	126 7	478 4	478 4	37 15 6	204	153 5 8	353 15	1423 8 9	
March	70	126 10 6	375 9 9	375 9 9	17 7	264 15 6	145 8 10	241 8	1241 11 7	
Total	1318 5 4	1410 5 11	4270 7 3	4270 7 3	3353 9 9	1687 9 7	2763	1717 9 3	17348 11 1	

Statement Showing the Expenditure in Detail on the Rykharu Chinchamar Plantation
for the Official year 1881-82. (Continued)

Months	Collection of crop (continued)					Buildings		Grant
	Drying Bark	Packing Bark	Storage Bark	Various Bark	Repairs	New	Repairs	
April 1881	1	2	10	35.8.6	70 4 9	994 6 2	2258 2 1	
May	1	"	"	27 1 5	"	18 9 4	894 8 3	
June	4 8 6	"	"	50 11 7	"	178 1 11	53 5 6	1030 9 4
July	3 4 8	"	35	176 2 2	"	109 1 2	17 6 10	1299 11 2
August	25 12	9	39	120 15	"	112 1	15 2	2176 12
September	57 11	13	28 7	78 5 6	"	52 2 8	9 9 5	2452 7 11
October	70 7 6	12 2	30	108 5 6	"	4	21 10 6	2425 8 7
November	17 2 6	18 12	20	122 10	"	4	80 6 10	2518 13
December	29 4	1 11	40	79 8	"	13 9 3	85 2 11	1934 4 5
January 1882	41 15	9	11 9 4	12	"	1 4 4	60 3	1787 7 10
February	45 7 6	13 3 6	48 5 6	36	"	1 4 11	20 1 9	1717 13 8
March	35 13	"	10	26	"	6 3	127 9 6	1515 10 4
Total	385 6 6	61	237 5 6	618 12	1241 2 7	57	1484 3 5	22011 10 7

Office of Dy. Commr. of Forests

Madras, September 15/82

Dy. Commissioner of Forests

The Administration
Report of the Bank.^{er} of
Plattsburgh for the
year 1881-82

Statement showing the
Amount of Expenditure
on Pyhara Grant: Admin. Plan
tation for the yea. 1881-82

[illegible]

47248	"	1230	"	214	"	4	"	465	"	181	"	11	64	"	3	66	"	10	"	187
-------	---	------	---	-----	---	---	---	-----	---	-----	---	----	----	---	---	----	---	----	---	-----

Total

Total	47248	a.	1230	11	a.	214	4	a.	465	11	a.	191	11	a.	1969	11	a.	3	662	1	a.	97580
-------	-------	----	------	----	----	-----	---	----	-----	----	----	-----	----	----	------	----	----	---	-----	---	----	-------

Statement Showing the Expenditure in Detail on the Additional Plantations for the Official year 1881-82. (Continued).

Months

Months	1881	Amount Banking Collections and of various Drying		Packing Bark	Storage	Bark	of Bark	Total
		Notes	Grass					
April	1881	283 15 3	435 15 6	29 6	37 5 6	18 10 6	31 13	35
May		151 13 3	"	"	15 3 6	6 1	34 8 6	20 12
June		114 12 5	"	157 13 9	12 1	"	34 14 6	65
July		79 10 4	460 9 6	677 5	72 4	"	34 1	"
August		73 3 11	586 11	508 8 6	93 4 6	40 4 6	280 11	172 4 11 3
September		78 10 11	843 4	711 12	119 10 6	25	40	125 2
October		70 7 3	233 5 5	569 5 3	135 4 3	17 10 2	40	177 8
November		175 2 9	318 11 6	384 5 6	92 8 6	31 9	40	70
December		485 6 7	318 15	154 6 9	117 8 6	54 12	20	140
January	1882	301 3 8	1037 11 9	"	85 5 6	53	28 2	108
February		92 4	1435 1 9	"	85 12	32 10	60 14 6	90
March		567 6 4	755 6 6	"	91 6	"	20	25
Total		2475 13	8326 6	3132 11 9	957 2 3	278 10 9	424 2 1	1179 1

Statement Showing the Expenditure in Detail on the Clinchman Plantations for the Official year 1881-82 (Continued).

Months

Months	1881	Collection	Crops	Lumber	Provisions	Various	Clothing	Roads	Wedding	Upkeep	Pitting	Various	Fuel	Plantations	Extension	Grand
April	1881	1026 12 4	"	"	"	"	"	25	6	305 9	"	79 12 11	126 10 9	3202 14 3	"	"
May		71 14 4	"	"	"	"	"	"	"	"	"	86 11 10	"	1002 10 6	"	"
June		661 13 9	65 12	"	"	"	"	"	"	79 10 6	"	103 14 8	272 2 9	2096 11 10	"	"
July		1390 2	19 4	"	"	"	"	43 5	"	10 9 6	"	63 15 9	601 7 10	4465 11 6	"	"
August		327 14 8	43 2 6	"	"	"	"	54 4 6	384 14	115 1 11	172 4 9	444 5 11	3780 12 6	"	"	"
September		250 5 7	39 8	"	"	"	"	48 1 6	381	"	364 14 6	448 5 8	"	3973 4 3	"	"
October		219 14 6	15 4	"	"	"	"	39 15	322 9	581 7	141 2 9	84 6	3870 6 2	"	"	"
November		233 3 8	4 7	"	"	"	"	41 5 6	434 12 3	640 5 9	196 7 5	"	4119 4 7	"	"	"
December		147 1 6	3 4	"	"	"	"	24 7 6	344 9	448 8 9	118 1 4	60	3927 1 3	"	"	"
January	1882	530 11 11	45 15	"	"	"	"	30 6	445 1	78 3	461 12 10	"	4428 9 2	"	"	"
February		286 2 7	6	"	"	"	"	38 4	240 1 6	280 11 9	159 8 7	"	3442	"	"	"
March		195 3 9	5 2	"	"	"	"	27	"	29	421 8 3	204 14 5	258 12 5	3783 1 7	"	"
Total		5291 4 7	247 10 6	38 8	"	372 1 6	2983 1 3	2930 12 11	2217	"	1847 13 8	42162 7 7	"	"	"	"

Office of Dy. Commr. of Forests
 18th September 1882.

H. J. Carr.

Dy. Commissioner of Forests

The Administration
 Report of the Legislature
 for the year
 1881-82

State of New York
 Department of Education
 Albany, N. Y.
 1882

Statement showing the Expenditure in detail on the School and other Educational Purposes for the year

Month.	Salaries & Teachers' Expenses	Buildings	Materials
April 1881	235.00	89.14	20.00
May "	235.00	61.36	20.00
June "	235.00	100.80	20.00
July "	235.00	88.12	20.00
August "	215.10	78.13	20.00
September "	235.00	141.15	23.00
October "	235.00	94.13	23.00
November "	235.00	114.82	23.00
December "	235.00	160.30	23.00
January 1882	235.00	86.90	23.00
February "	235.00	57.14	23.00
March "	235.00	67.50	18.00
		693.10	145.16

Statement showing the Expenditure in detail on the Fort Churchill Plantations for the official year 1881-82.

Months	Collection of Prop.			
	Bark	Collecting	Planting	Various
April 1881	...	...	...	...
May "	...	...	...	...
June "	1654.	3232.6	...	...
July "	3995.	6335.0	...	...
August "	7322.6	21613.6	...	...
September "	3558.0	6446.0	...	...
October "	5871.0	3290.6	...	...
November "	5382.6	1360.6	...	...
December "	1668.6	...	...	...
January 1882	1612.0	...	...	...
February "	...	...	...	...
March "	...	...	...	...
Total	28113.6	23336.0	13290.0	600.0

Statement showing the Expenditure in detail on the Fort Churchill Plantations for the official year 1881-82.

Months	W. H. Prop.		Contract	
	Roads & Grains	Planting and Shading	Various	Seed
April 1881	2314.	67614.	1584.0	21514.0
May "	1510.	741.	422.0	13810.
June "	142.	27212.6	735.	2382.
July "	710.	5737.6	8713.	24410.
August "	38.	4451.6	475.0	128.
September "	314.	44511.3	629.0	62.7
October "	119.6	8713.0	358.0	2459.
November "	241.	2592.6	554.6	13212.
December "	344.	1019.	9815.6	1578.
January 1882	7312.	69415.0	...	1077.
February "	129.6	6162.6	6510.6	10513.
March "	19.1	7573.6	6812.0	11810.
Total	36156.5599	123140146.1859	401158.3	425792637114.

Office of W. H. Proprietor of Fort Churchill
Potomac, Md. September 1882

W. H. Proprietor
Potomac, Md.

Statement showing
the amount of
the grant to the
plantation for the year 1881-82

Appendix E

Statement showing
the amount of
the grant to the
plantation for the year 1881-82

Enclosure No. 1
The Administration
part of the grant to the
plantation for the year 1881-82

Appendix D
Statement showing
the amount of
the grant to the
plantation for the year 1881-82

Statement showing the Receipts and Expenditure of the Government of Chinchona Plantations for the Official year 1881-82.

Particulars		Budget for 1881-82	Actual for 1880-81
Salaries	Salaries	10000	10000
Refugees	Refugees	2000	2000
Building	Building	21071	21071
Up. Work.	Up. Work.	25425	25425
Manures	Manures	7700	7700
Collection of Barks	Collection of Barks	19680	19680
Miscellaneous	Miscellaneous	3100	3100
Unforeseen	Unforeseen	1000	1000
Total		126537	126537

Statement showing the receipt and account of Government Chinchona Plantations for the Official year 1881-82.

Particulars	Budget for 1881-82	Actual for 1880-81
Value of Bark sent Home (£45,596-11-7) at 1-8 per lb. per	45000	45000
Value of Bark supplied to Hoardas Medical Department	3000	3000
Value of Bark supplied to Bombay Medical Department	3000	3000
Value of Bark supplied to Private Parties (Local Sale)	8000	8000
Value of Proceeds of Plant and Seed	15312	15312
Miscellaneous	15312	15312
Total		45000

Office of Dy. Commr. of Forests
 Hyderabad
 Deputy Commissioner of Forests

Copied from No. 3
 Administration Rep.
 of the Govt. (Hort. Plant.)
 Hilgros for the year 1881-82

Statement Showing the Rainfall at Dodaletta
 during the Official year 1881-82.

Months		Rainfall			Remarks
		Inches	Cent	Number of wet days	
April	1881	1	16	3	
May	"	13	14	18	
June	"	1	30	18	
July	"	3	2 1/2	13	
August	"	9	23	24	
September	"	3	34	17	
October	"	3	67	11	
November	"	7	69	20	
December	"	3	9	6	
January	1882	2	58	1	
February	"	"	"	"	
March	"	"	49	2	
Total		48	7 1/2	136	

Appendix C
 Statement showing
 the amount of receipt
 and disbursement of Govt. (Hort.)
 Plantations Hilgros for
 the year 1881-82

Office of Dy. Commr of Forest
 Co. to command
 1 September 1882

H. G. S.
 Dy. Conservator of Forest

Enclosure No. 2
 The Administration
 part of the Govt. of
 Madras Budget for
 the year 1881-82

(6)
 Statement Showing the Rainfall at Neddisuttam
 during the Official Year 1881-82

Months		Rainfall inches	Number of wet days	Remarks
April	1881	50	2	
May	"	3	77	14
June	"	9	87	26
July	"	24	13	22
August	"	17	90	28
September	"	4	54	20
October	"	3	55	13
November	"	7	2	16
December	"	1	40	4
January	1882	"	84	4
February	"	"	"	"
March	"	"	21	1
Total		73	73	150

Appendix B
 Statement Showing
 Amount of Rain-fall
 during the year 1881-82

Office of Dy. Commr. of Forests
 Coimbatore
 September 1882.

H. G. S.
 Dy. Conservator of Forests.

Enclosure No 1

Administration Report
of the Hindu Khind & Co. Ltd.
Malgro for the year 1881-82

7
K. 5534

Appendix A.
Statement showing
Amount of Rainfall
during 1881/82

Office of Government
Chinchora Department
No 336
C
Dated 6 September 1882

21.9.82

From

The Conservator of Forests
in charge Chinchora Plantations

To
The Conservator of Forests
Madras.

Sir,

I have the honor
to forward the Administration
Report (with 10 enclosures)
on the Government Chinchora
Plantations in the Malgosi
District for the years 1881-82.
Season and Rainfall

The rainfall at Meddewatham
during the year amounted
to 73.73 inches distributed
over 150 days as against
89.70 inches in the previous
year. The maximum fall
occurred in July when
24.13 inches were gauged.
There was no rain whatever
in February 1882. The wind
was very severe during the
month of July and many
trees

trees were blown down and
branches and coffee shoots
broken off in all directions.
During the months of December
January and February strong
East Winds prevailed which
stripped the trees of most
of their foliage. There
was slight frost during
the month of January
which however did no
damage. The season was
noticeable for the extremely
dry weather experienced
during the last three months
of the year, when the wind
brought fierce rays of the sun
affected the trees young
and old. On a neighbouring
estate during this period
the number of young
plants lost was about
seventy per cent.

At Sodabetta 48.71
inches of rain spread over
136 days, were gauged against
51.09 in the previous year.
The drought and wind
noticed

65
noticed above, affected
this estate also, but to
a somewhat less extent,
although the young plan-
tings suffered. The frost
during winter did no da-
mage to this estate.

Appendices A and
B, show the monthly rain-
fall at the Meddewattam
and Sodabetta Estates
for the year.

3 Receipts and
Expenditure. The Receipts
amounted to Rs 572,003
against an expenditure
of Rs 113,575 thus giving
a net profit of Rs 458,428
to Government. In the

Appendices will be
found statements show-
ing the detailed expen-
diture under each
head on each plantation.

4 Permanent Plantations
Towards the close of the
year the effect of the
wind

minut and pain on the
C. Succubra trees both
 at Neddawattum and
 Pykora, and they bore
 a very bare and sickly
 appearance. The *C. Pubescens*
 hardly suffered at all
 and the advisability
 of planting this species
 in belts to break the
 force of the wind, even
 on grass lands, seems
 worthy of consideration.

The number of *Casualties*
 on these estates amounted
 to 15,250 as per margin.

Neddawattum	8047
Hooker	2631
Wood	<u>5172</u>
	<u>15250</u>

In all cases the trees were
 capped when signs
 of decay appeared.

Twenty thousand *Succu-*
-rubra plants were
 permanently planted
 out as renewals on the
 Wood Estate, also 1000
Lodigerium which how-
 ever were not in a
 very

Plot no XVIII
 - " - XIX
 - " - XX
 - " - XXI
 2 - " - XXVII
 of Neddawattum

very satisfactory condition
 at the close of the year,
 owing to the drought &c
 the certain uprooted plots
 at Hooker eighty thousand
 plants of *C. officinalis*
 were put out which
 progressed remarkably
 well. Failures amongst
C. leucogon in Plot XV
 (Neddawattum) were replaced.

Thirty-one thousand
 six hundred and fifty
Succubra trees growing
 on the marginally noted
 grass plots were uprooted
 with the object of having
 the land replanted with
Pubescens and *Officinalis*,
 (vide G.O. no 1882 dated
 7th December 1887). The ground
 has been refitted 4' x 4'
 and it is hoped to plant
 up as much as possible,
 if not the whole during
 the current year. There
 thousand two hundred
 and seventy-five *Succubra*
 trees in Plot XXIII, which
 had

had been treated under
the saw slicing system
had to be coppiced, as they
showed signs of dying
out (a fact due probably
to their not having been
subsequently grazed).
More paras and 10 of
Colonel Jago's letter
recorded in G. O. P.
59, dated 6 June 1882
R. D. Six thousand five
hundred and thirty-six
Succinobea trees in Plot II
of Hooker were uprooted
during the year as they
were dying out.

At Dodabatta 48,900
plants were planted out,
as renewals during the
year and progressed
fairly well. The appearance
of this plantation was
good. Two original
plants and three cuttings
of *C. Santa Fe* were put
out in Plot VII - one of
the latter died and the
former

former made but slow
progress in growth.
Four *Carthagena* plants
were also permanently
put out on this estate
and these succeeded
fairly well. The climate
of Medowattam suits
the *Carthagena* variety
better than that of
Otaconund and
the growth of six plants
planted out there in
January last was very
rapid. Mr. Robert
Cross with the object
of forcing seed, graft-
ed two small plants
of *C. Santa Fe* on two
of *C. officinalis*
trees, one died and the
other was not very suc-
cessful. The following state-
ment gives the number
of trees in Permarvit
Plantations on 31st
March

March 1882.

Plantation	No. of trees on 31 st March 1882.	No. of trees uprooted	No. of trees cut down	No. of plants cut out 1881/2	Balance on 31 st March 1882.
Nedduvattam	206,942	31,654	5,238	4	170,054
Pykotta {	165,118	6,536	2,031	8000	236,551
	52,203	"	5,301	"	46,902
Dodabetta	242,552	"	2,603	48900	288,849
Total	666,815	38,190	15,173	128904	742356

5 Upkeep. The whole of the Plantations were overgrown - weeded several times. Renovation pits were continued and the weeds burned as usual. At Nedduvattam Plot XXIII (Java showing plot) Plot VII and XXIII (1879 Coppices) and Plot XV (young change) were dug over to a depth

depth of one foot and the whole soil was loosened and turned over with forks. The same was done in Plots IX, VI, III and VIII at Pykotta and portions of Dodabetta. The young plants and coffee shoots derived great benefit from this process and their growth was most satisfactory. Bracken fern was dug out to a great extent at Dodabetta.

Roads, drains water channels etc were kept in good order on all estates.

6 Manure. Large quantities of cattle manure were collected at the sheds and kraals. The system of collecting cattle dung from the surrounding

surrounding grazing
lands (as carried on
in private Coffer Estates)
was introduced. At
ate downattam Plots XXIV
and XXV and Copied
portion of plots VII and
XXIII were manured
with dung, also a por-
tion of plot XVIII (New
Pits). In G.O. No 962
dated 21st June 1887
Government sanctioned
a sum of Rs 1000 for
experimental trials of
various Patent Manures.
The amount allotted
being too small to
import patent manure
(Guano, Sulphate, &c)
from England, only local
artificial manures,
(Poudrette from the
Citacornand Municipality,
crushed and steamed
bones and Carter Ponnac
from

73
from Coimbatore were
purchased) and as it
arrived too late for
application within the
year, could only be tried
in April of the Official
year, and will be
reported on separately -
arrived in the next Ad-
-ministration Report.
After sufficient time
has elapsed, Careful
collected specimens
of bark from trees
treated with the several
classes of manure will
be submitted for analysis
and comparison.
At Sodabetta
stable manure was
utilized and 32,345
trees in various plots
were manured with
it. Those manured in
the previous year looked
well and the bark lifted
satisfactorily.

7. Nurseries

Three hundred thousand
three hundred and sixty
five plants of the different
varieties were raised
during the year vide
appendix J. Many
thousands of *C. Succirabra*
plants for which there
was no demand had
to be grubbed up and
thrown away to make
room for seedlings of
the better varieties for
estate purposes and
for sale to the public.
All the nurseries were
well stocked with
seedlings of *C. officinalis*
C. pubescens and *C. Calanga*
and *Lagerstrœmia*. A
large demand has arisen
for plants and seeds of
C. Patu de Galinazo which
cannot yet be met as
there is but a limited
number of such trees in
the

(75)
the estates. 875 lbs of
seed were distributed
to the public during
the year, the major
portion of it going to
Ceylon.

8 Crop. The
crop of the year consis-
-ted of 2,49,049 lbs
of dry bark as follows
(including 6994 lbs. the
balance of last year).

Nedduattam	
Natural Red Bark	62,202 ^{lbs}
Inseed —	1,819
Renewed —	6,953
Branch —	31,672
Root —	11,423
Scraped —	12,355
Dust —	1,430
Total 127,854	
Natural Crown bark	
Inseed —	4,590
Renewed —	12,052
Branch —	2,550
Total 24,802	
Natural Pubescens	
bark	1938 ^{lbs}
Branch —	510
Total 2448	
Natural	

Natural Cakanga bark — 306
 Branch — 306
Total 612

Pykora

Natural Red Bark 12,346
 Insured — 3,724
 Renewed — 13,057
 Branch — 5,171
 Root — 4,481
 Dust — 306
Total 39,085

Natural Crown bark 2,213
 Insured — 1,806
 Renewed — 6,119
 Branch — 1,607
 Dust — 600
Total 12,345

Godalutka

Natural Crown bark 10,436½
 Insured — 11,265
 Renewed — 16,837½
 Branch — 2,769
Total 41,308

Natural Peta Bark 74
 Insured — 84
 Renewed — 185
Total 343

Natural Watanga bark 57
 Insured — 99
 Renewed — 96
Total 252

Grand Total 249,049½

Me

the quantity of bark taken at the Government Cinchona Plantations. Teddirattum, Pyhara and Dodabetta

No.		Wood.				Ded. Sta		Grand Total.		Remarks.		
own.	Total.	Red.	Crown	Total.	own.	Total.	Trus	Barth	Trus	Barth	Trus	Barth
Barth	Trus	Barth	Trus	Barth	Trus	Barth	Trus	Barth	Trus	Barth	Trus	Barth
6550	2910	7288	I	265	575	265	575	IXVIII	267	2558	8896	25671
2333	1490	4863	II	1480	854	1670	854	3150	VII	273	3514	10585
..	461	1922	III	2336	7250	1706	3720	11042	XI	460	8734	9202
3765	2353	3765	IV	1729	4195	207	285	1936	XII	350	8195	8334
6785	4384	6785	V	1703	8285	..	..	1703	XIII	652	11810	12807
2720	3402	11974	VI	2132	8202	..	..	2132	XVI	152	10738	12045
..	2987	14917	VII	..	6425	..	..	..	XXXV	369	7020	12251
985	1233	3845	VIII	..	2271	..	..	..	..	260	3159	6649
2109	14	3219	..	..	..	..	..	..	..	..	5810	4030
850	427	850	..	..	..	..	..	..	..	..	..	1175
..	..	..	..	..	..	..	..	..	..	..	..	2142
..	..	..	..	..	..	..	..	..	..	..	..	1219
..	..	..	..	..	..	..	..	..	..	..	..	2697
..	..	..	..	..	..	..	..	..	..	..	..	2660
..	..	..	..	..	..	..	..	..	..	..	..	9615
..	..	..	..	..	..	..	..	..	..	..	..	11457
..	..	..	..	..	..	..	..	..	..	..	..	70
..	..	..	..	..	..	..	..	..	..	..	..	2380
..	..	..	..	..	..	..	..	..	..	..	..	170
..	..	..	..	..	..	..	..	..	..	..	..	600
..	..	..	..	..	..	..	..	..	..	..	..	110
..	..	..	..	..	..	..	..	..	..	..	..	2250
..	..	..	..	..	..	..	..	..	..	..	..	1924
..	..	..	..	..	..	..	..	..	..	..	..	28418
..	..	..	..	..	..	..	..	..	..	..	..	57526
..	..	..	..	..	..	..	..	..	..	..	..	14640
..	..	..	..	..	..	..	..	..	..	..	..	675
..	..	..	..	..	..	..	..	..	..	..	..	204
..	..	..	..	..	..	..	..	..	..	..	..	4072
26127	2119	89448	Total	7900	38108	3032	6250	10932	11358	Total	3496	2268
											14143	393971

H. O. Carr

Wm. A. Carr

H. O. Glass.
Deputy Conservator of Forests.

Enclosure 1
 Chief Administration Report
 of the Gorkha (Himalayan) Plantations
 for the official year
 1881-82

Appendix I
 Statement showing the
 quantity of bark taken during
 the year 1881-82

72
 The above was disposed
 of as follows:

Shipped to the Home Market 232,467
 Supplied to the Trade
 Cal. & the Bombay - 1,000
 or for trial etc 10,278
 Balance in store on
 31st March 1882 5,304
Total 249,049

No particulars regarding
 the bark sent Home
 have reached us as
 yet.

The results of the local
 Sale in Madras of
 100 bales of bark was
 very satisfactory.
 The price realized was
 amounted to Rs 15660.
 During the current
 year it is proposed
 to hold 2 sales and
 place a much larger
 quantity of bark in
 the market.

9. Buildings.

I regret to report that during the year no progress was made towards the erection of the new drying &c. shed at Meddewattam.

Two lines consisting of 20 permanent huts were demolished and one line of 16 huts and additions to old lines of 6 huts making in all 22 huts, were erected near Napier. Out of savings under this head a small room was erected near the Asst. Superintendent's quarters to serve as an office.

Two cattle sheds were erected at Doddabetta for housing a hundred head of cattle.

10. Repairs.

Necessary repairs to permanent and temporary buildings

buildings and hives on all estates and repairs to the roof of the Meddewattam and Wood Drying sheds were carried out. A temporary line of Catcher huts was erected at Wood and also Catcher bark and tool stores at Hooker.

11. Experiments.

As stated in para 4 the trees at Reddewattam experimented on under the Java scraping system had to be coppiced. This coppicing was attended with much success, the shoots appearing within a month of felling the trees and with scarcely a failure. They made good progress during the year and at its close some of them were

2 feet high. This success is attributable partly to the sheltered position and partly to the trees having been very young. In many instances where the trees had the appearance of being quite dead, they threw out vigorous shoots from the stools on being cut. Of the 500 trees scraped at Doddabetta 16 per cent died and the remainder were looking very sickly. About a thousand trees of *C. officinalis* on this estate were barked and covered with New Zealand flax. The bark renewed satisfactorily but in point of thickness it compared unfavorably with trees which had been barked.

The following statement gives

gives the result of the block coppicing experiment of 1879.

Plantations	Plot	acres	Number of trees Copped	Number of stools left	No. of feet	Remarks
Neddiattam	VI	0.25	56	49	7	Barked Plot
do	VII	4.75	2263	2120	143	do
do	XXIII	5.81	2628	1603	1025	Unbarked Plot
		10.00	4947	3772	1175	
Pykara { Hooker	XI	5.00	2226	914	1322	Barked Plot
	VIII	5.00	2540	1302	1238	do
		10.00	4766	2206	2560	
Doddabetta	XI	5.00	3356	3201	155	Barked Plot
	XXVIII	5.00	2493	2096	397	Unbarked Plot
	Total	10.00	5849	5297	552	
Grand Total		30.00	15562	11275	4287	

The maximum height and girth of the above was as follows on 31st March 1882.

Estate	Plot	Maximum height	Maximum girth
Neddiattam	VI	14 feet	10 inches
do	VII	14 - -	11 - -
do	XXIII	13 - -	9 - -
Hooker	XI	12 - -	11 - -
Hooker	VIII	13 - -	11 - -
Doddabetta	XI	7 1/2 - -	6 - -
do	XXVIII	7 - -	5 1/2 - -

Labor

12 Labor. The labor supply was plentiful on all estates. At Meddewattam it was more than equal to the demand and on this account a special grant of Rs 18,000 to meet the cost of certain uprootals, was made by Government for the purpose of giving employment to the large staff (vide G. O. No. 1882 dated 7 December 1881).

13 Subordinates. Mr. H. Rowan, the Asst. Superintendent of Meddewattam, was granted furlough for one year from 1st June 1881. He has since resigned.

Overseer W. Wharton died in November last. The Meddewattam writer was transferred to Kodabatta in December.

The

83
The other subordinates gave satisfaction.

14 As I have very recently taken charge of the Chinchona plantations I am compelled to accept all the facts contained herein as offered by the subordinates.

I have the honor to be
Sir
Your most obdt servant

H. Glass.
Sr Conservator of Forests
in charge

Chinchona (1882) Depositions

From

The Conservator of Forests
in charge Chinchona

To

The Conservator of Forests
Madras

Dated 6
Sept 19 } September 1882
Recd.

No. 336

In

Rev: 5534/82

Subject

Forwarding the
Administration Report
on the Government Chinchona
Plantations, the year
for the year 1881-82.

C. O. Form No. 63.

No. 1127

OFFICE OF CONSERVATOR OF FORESTS.

Madras 28th Sept 1882.

FROM

Major J. Campbell Walker,
THE CONSERVATOR OF FORESTS,

TO

THE Secretary to Government

Rev. Department.

SIR,

Enclosures.

//

I have the honor to submit
the Deputy-conservator's Report on the
Government Chinchona Plantations
for 1881-82 together with the usual
appendices. Owing to the late date on
which the Report has been received
and my other duties having prevent-
ed my inspecting the Plantations
during the year under Report, I shall
not attempt to enter into any detail
with regard to their management
and cultivation which demands
the

the most careful consideration and supervision. Colonel Beddome spent about two months in inspecting the Plantations in April and May-1881 and submitted a special Report recorded with G. O. No. 1280 - dated 29th August. His Excellency - the Governor visited the Plantations in January-1882 in which month Dr. Bidie spent a week at Neddivallam. The Deputy Conservator in Charge devoted much attention to the Plantations.

Season and Rainfall:-

2. The Deputy Conservator refers to unusual drought which occurred during the last three months of the official year which succeeded as it has been by an unusually wet Season

(8)
Season has certainly affected unfavorably the Neddivallam Plantations which will form subject for comment in the current year's report.

Receipts and Expenditure:-

3. The Receipts are entered as Rs. 5,72,003 against an expenditure of Rs. 1,13,575; but the former refer to the Crop shipped in 1880-81 and are purely nominal and based on estimates, as under the present system no valuation even of the crop sent home is possible nor has any actual adjustment hitherto been attempted. The charges require careful scrutiny, as they have a tendency to increase without good cause year by year, prior to the administration and control having been transferred to this Department.

The Deputy Conservator is giving the subject his attention.

Permanent Plantations:-

4. There were 6,66,815 trees in the Plantations at the close of the official year 1880-81, 38,190 trees were uprooted and 15,173 trees coppiced during 1881-82 whilst 1,28,904 trees were planted out during the same year leaving the number reported as permanently established at close of the year 7,42,356. But this is scarcely accurate, as it is presumed that a large proportion of the trees coppiced has thrown up coppice shoots which will eventually rank as trees.

A more careful system and distinction between Coppice and seedling trees in the returns appear necessary and

51
and I have directed the Deputy Conservator's attention to the point.

Under this section of his report and No. 11, Experiments, interesting information is afforded as to the comparative effect of the wind and rain on trees of the Chinchona Laccinulva and Chinchona Pubescens, the results of the experiments with Chinchona Santa Fe and Cacthagena and the numbers of each species scraped, uprooted, coppiced and planted out in each plantation. The progress & results appear on the whole satisfactory.

The percentage of failures to renew from the stool as exhibited in para 11 is rather high especially in unbarred plot or Compartment No. XV III Neddivattani and barred plot

No. VIII Wood where they represented -
nearly 50 per cent of the trees coppiced.

I question if it can be considered as proved "that Coppices from bar Red trees have been found to grow much better than those from unbar Red trees" as stated in the Report for 1880-81 (vide L. G. No. 591 dated 6th June para 4).

It will be seen that the percentage of renewals is very irregular and local circumstances, age and health of the trees, the weather and care or the want of it in coppicing and subsequent treatment must all be carefully noted and taken into account before we can arrive at reliable conclusions.

If the repeated stripping -
affects injuriously the health of the trees
as

93
as it would appear only natural -
it must do sooner or later; it would
also prima facie affect their vitality
and power of reproduction from the
stool. The subject is of vast importance
and must be carefully studied.

With this object the maintaining
careful records and opening of -
"Plantation books" in which they
should be entered is very necessary
and will receive immediate
attention. I am in fact surprised
to find that such books have not
already been opened as I directed
attention to the point in 1878.

Our Recd :-

5. This has received much
attention, the whole of the Plantations
having been weeded several times,
renovation

renovation pits opened, and portions
trenched, which process is stated to
have been attended with good re-
sults.

Communications and channels
were maintained in good order.

Manuring:-

6. The Report contains details
of the work done under this head ~
which has been considerable. Battle
and stable manure, pondrette ~
and bone dust have all been experi-
mented with and the results will be
observed during the current year.

The allotment of Rs. 1,000 is stated not
to have been sufficient to admit of
the importation of patent manures from
England. The trees manured in pre-
vious years are reported as looking
well

well and the bark lifting freely. 95

Nurseries:-

7. A very large number of seedlings
was raised during the year, many
thousands of Colinchona Luccinulera
plants, for which there was no demand,
having been uprooted and thrown
away to make room for more valuable
varieties.

The demand for plants by the
public was in excess of the supply ~
875 lbs of seed were distributed during
the year, the chief demand being from
Beylon.

Crop:-

8. The crop of the year was lbs. ~
242,052 of dry bark to which lbs. 6,997
balance remaining from last year is
added making a total of lbs. 249,049.

the

The details of which will be found in the Deputy Conservator's Report.

The quantity is slightly less than that of 1880-81 (lbs. 250,271). There is a discrepancy in the quantity entered as "balance in store" which is shown as lbs. 8439 on 31st March 1881 in the last year's Report and lbs 6997 as the opening balance of the year under report.

The difference lbs. 1442 is stated by Mr. Hillier then manager of the Behinchona Office and now Head-Overseer (on probation) to have been the quantity in store at Keddavattam, whence it was included and shipped as crop during the past year. lbs. 6997 was actually in store at Colacama and may be accepted as the correct amount corresponding with that reported

97
reported to the Government of India on 28th June last, under G. S. No. 644 of that date.

The quantity shipped home during the year was.	lbs. 2,32,467
Supplied to the Medical & Charitable, Bombay	1,000
Supplied for local sale	10,278
Balance in store on 31 st March 1882	5,304
Total lbs.	249,049

The results of the first local sale held in Madras in January were very satisfactory and encouraging, lbs. 10,278 of bark, two thirds of which Lehinchona Succirubra, having realized Rs. 15,660.

Buildings:-

9. The delay in the erection of the new drying shed and store houses at Keddavattam may at any moment result in the most serious.

serious consequences. The old jail
in which the bark is now dried is
quite unfit for the purpose and is
positively dangerous. The leakage
during heavy rain is considerable
and it requires constant attention
and repairs to prevent damage to the
bark being dried and packed.

The full amount of the allot-
ment for these buildings has now
been for some time in the hands of
the Public Works Department but
the foundations are not even yet
completed. I trust that the Chief En-
gineer may receive instructions to
take steps to ensure the completion
of the work before the close of the
current fiscal year and that a
special subordinate may be
deputed

deputed to supervise and urge on
the work which has, I learn, been
given out on contract.

I have the honor to be

Sir

Your most obedient servant

Hamphreys Walter Major
Conservator of Forests

E. J. M.

G.O. 6. 6. 82 no 591

G. O. Form No. 71.

Revenue 1832-83 Dep. 1/2

FOREST DEPARTMENT.

No 5534

From

THE CONSERVATOR OF FORESTS,

To

THE Secretary to Govt.
Rev. Dep. 44.

Dated

Despatched

Received

28th } September 1882.
2nd } Oct^r

No. 1127
C

Enclosures //

Subject.

Submitting the by
Conservator's Report on
the Govt. Chirac
Plantations for 1881-82
together with the usual
Appendix.

2/10/82
W

REVENUE DEPARTMENT.

Le 66 of 17. 1. 83.

PROCEEDINGS OF THE MADRAS GOVERNMENT.

Read the following letter from the
Conservator of Forests, 1882
(Cons. no 5534
in full
with all enclosures)

This report, which was due in the
Govt. Office on the 10th July, was
not received till the 2nd October.
The Conservator did not misplace
the plantations during the year under
report. The O. S. Cons. remarks in
para 14 of his letter that, as he has
but recently taken charge of them, he
has been compelled to accept all
the facts as offered by subordinates,
the Govt. must think this is an overstatement.

2. as Major Baker
remarks, special reports by Colonel
Biddons were fully considered
of Govt. in the year under review.
There is no less reason for any
a protracted review on this occasion,
but it may be observed that
the late Conservator's pronouncement
that Ch. Pubescens is in fact

G.O. 29th August 1881 no 1280

It is necessary the Governor also visited
the plantations in Aug. 1882.

113
The variety known in S. America
as Patá de Gallinazo, is not
accepted by the authorities at
Kew or by Dr. Trimen. The point
needs to be noted because Govt. apparently
accepted Col. Braddone's
opinion in the order just quoted,
but it is unnecessary to discuss
the matter here as it is the intention
of the Right Hon. the Govt. in Council
to arrange that Dr. Trimen shall meet
Professor Lawson during the coming
year in order that definite conclusions
may be arrived at in respect of
this rather vexed question regarding
Ch. hybrids, real or so called. ^{Manuabala}
Dr. King of the Govt. ^{Ch. Plantations,} ~~Gardens~~ ^{Bengal,}
in his report for 1881-82 states
that the Pubescent hybrid is only
second as a quinine-fever to
Kedgriana.

3. The total number
of trees in the plantations rose from
666.815 at the close of 1880-81
to 722.256 at the close of 1881-82.

105
year under report. The plantations
are reported to be in good order. The
result is so far creditable to the
past year of management by the
Forest Deptt.

4. The receipts are
entered at Rs. 5.72.003 & the
expenditure at Rs. 1.13.5/5 against
corresponding figures of Rs.
4.34.261 and Rs. 96.05 for
last year, but the figure entered for
receipts refers only to crops shipped
in 1880.81 instead of to crops
or products realised
sold, in 1881.82, which Govt. have
more than once ordered should
be considered the crop of the year.
The excess over the sanctioned
estimate - Rs. 5.72.003 against
4.64.000 - is probably due to the
extensive uprooting of Succumbra
at Nadiwattam. The Govt. are glad
to learn that the Dy. Commr. is
continuing the charges, but
observes that that officer says
nothing as to the serious discrepancy
in the balance in store on the

31st March 81. It is presumed the Conservator has satisfied himself that that Mr. Billiers's explanation is correct.

5. With reference to the Cons^r's remarks in para 4 as to the growth of coppice from barked & unbarked trees the Govt. has only to observe that their remarks in the review of the report for 1880. 81 was not intended to be a final pronouncement, but merely related to the facts then reported. Experiments should be pursued with the opening of Plantation Books is a step in the right direction & they should be carefully maintained.

6. The yield of the year was 2,42,052 lbs of dry bark, or 2,49,049 lbs inclusive of a balance of 6997 lbs, as against a yield of 2,43,896 lbs in the last year. The crop was disposed of as shown below:-

Shipped to the Home Market	2,32,467
" " Bombay Medial Disp ^y	1,000
Disposed of by local sale	10,278
Balance on the 31 st March 82	5,304
	<u>2,49,049</u>

Bark sent home 1881-82.

C. O. William	1881	51,355
" 15 July	" 1049	5,694
" 2 nd Nov	" 1629	14,156
" 19 Dec	" 1158	32,414
" 14 Dec	" 1945	23,534
" 16 January 1882	53	15,929
" 8 Feb	" 154	20,100
" 21 Feb	" 223	14,521
" 8 March	" 211	36,420
		<u>244,756</u>

From the orders of Govt. noted in the margin it appears that the bark sent home in the year was 244,756 lbs. The Conservator should explain the discrepancy between this figure & that given by him, 2,32,467.

[Signature]



187

22/10

he

607

2

1940

Pres. copy Dec. 10-2-83. } 1-1-^{To} The Conservators of Forests N.C. }
 } 4-4 " " S.C. }
 } 11-11-¹ Director of Agriculture }
 } 3-3-¹ Supdt. Genl. Central Museum }
 } 21-21-¹ Board of Revenue }
 } 3-3-¹ }
 } 21-21-¹ Collector of Wilgins }
 } 5-5-¹ }

Print soon
17-1-83

c. 23-12-82 R. 16-1-83

post