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TAMIL NADU ARCHIVES

GOVERNMENT OF TAMIL NADU

Revenue DEPARTMENT

G.O. No. / B.P.-No.	654	Press. / Mis.
Dated	17. 2. 1879	197-.

Not to be folded or roughly handled

GOVERNMENT F MADRAS.

PUBLIC DEPARTMENT.

1st February 1879, No. 143.

Report on Tasar Silk.

Read the following paper:—

No. 1. *From the Chief Secretary to the Government of Bombay, to the Acting Chief Secretary to Government, dated Bombay Castle, 23rd January* 1879, *No* 162.

In continuation of my letter, No. 985, dated the 28th March 1877, I am directed to forward herewith ten copies of Major Coussmaker's account of his experiments in Tasar Sericulture during the past year.

ENCLOSURE No. 1.

From Major G. COUSSMAKER, Assistant Superintendent, Revenue Survey, to the Secretary to Government, General Department, dated Jangaon, Ahmednagar, 10th January 1879, No. 1.

Tasar Sericulture.

I have the honor to submit, for the information of Government, the following account of my experiments in Tasar Sericulture during the past year:—

1. As mentioned in my last report, dated 1st May 1877, when I left Poona on famine relief duty, I gave over every thing connected with the subject to Mr. Woodrow, the Superintendent of the Government Botanical Gardens, Ganesh-Khind, including the cash account of Rupees 874-7-6. In December 1877 I was transferred from the Dharwar to the Poona Revenue Survey, and on my return to the station of Poona in July 1878, for the monsoon recess, I resumed charge of the experiments. The cash balance then amounted to Rupees 421-5-3.

2. My former experiments, as well as those conducted by Mr. Woodrow, had proved that it was a mistake to attempt to rear these worms on twigs, either those cut from roadside trees, or from those which had received some care and attention in a garden; and that the plan most likely to succeed was to feed them on shrubs in localities where they could be protected from their enemies, and, if need be, from unfavorable weather. With this view I began to collect young plants.

3. I had noticed in 1876 that the tasar worm throve well on *Lagerstræmia Indica*, an ornamental shrub, fairly abundant in the cantonment of Poona; this is a plant which throws up a good many suckers during the monsoon, and I soon got a few plants together. I took a house which was well supplied with shade and water, and my gardener managed to collect 172 plants between December and July, many of them only a few inches high, but some were large enough to be of use. There were also in the ground six bushes, and my first care, when I came in from the districts, was to cut them all back to the hard wood, and apply to their roots a fair amount of manure. The consequence was that as soon as the rain commenced the plants shot most freely into leaf.

4. Mr. Woodrow had not been able to save any seed cocoons, but I had found three female cocoons in the districts, and the Marathi woman, who had been my chief assistant in looking after these worms before, had collected twelve. I also had several moths from these cocoons, and found, as I had noticed before, that there was no difficulty in getting an abundant supply of fertile eggs. Hardly any females were wasted; it was only necessary to put them out overnight on any bush, and it was almost a certainty to find them paired at daybreak. I found that it was not necessary to tether them; they rarely moved from the twig on which I placed them. As fast as the young worms hatched out, I put the trays containing them among the leaves of the plants, and in a few hours they commenced feeding. The weather was every thing I could desire, showery with a few breaks of fine weather; the bushes were full of young shoots, and the worms throve as I have never seen them thrive before. I tied bamboo screens together and covered over the plants as they stood in the open. The worms changed their skins at intervals of 4—5 days, instead of 5—8, as had been the case when I reared them in-doors on gathered food, and they spun their cocoons in 28—35 days, instead of 40—50, as I had noted before. The moths came out of these cocoons in 27—30 days, and their eggs proved fertile, producing caterpillars which grew as fast and as large as the first. The only difference that I observed was that the "cement" of the cocoons of the later crops was less uniformly white; this may have been due to the changes

in the weather or the quality of the leaf, this monsoon.

5. The Lagerstræmia bush proved feet high, after being fed off quite bare fortnight, and the same batch of worms examining the cages, a few accidents occu

6. I enclosed an old *Carissa carand* bamboo screens and liberated 50 worms t a little larger than those of the Lagerstro seemed to thrive a little better on this bu quickly, and did not yield another supply

7. I put six worms on to a young it, pruned it, nor manured it. It had a both. They grew very large and healthy of some of the same batch feeding on La any that I had gathered from off the oth

8. I let the majority of the motha is quite ready to go and look for suitabl for more than 100 worms at a time in made at bringing them up elsewhere, u other enemies carried them off, and I ha continued to rear a few at a time, changin The result of the experiments which I m or without screens over them, gave the young shoots were eaten down by the cat stræmia ever sprouted again, and it was prevented me rearing many more worms.

9. From the single experiment I ha Zizyphus seems to grow very fast, princi but as I only had one tree in my compou

10. I baked some of the cocoons gat to Mr. Wardle, asking him to give me an all the burst and injured cocoons cleaned, had on hand, to the Alliance Mills in Bo seed cocoons for next year's experiments.

11. I have got together a good m *stræmia Indica*, 10 *Lagerstræmia parvif* rooted and in leaf; also 136 *Carissa c* seedlings; there are besides 3 Zizyphus take care of these during my eight mon ments under better auspices.

12. The past season has been cultivating them to a small extent at D under him then, came to him lately and had seen several. He happened to be collect within 3 hours. He came back with had been taking them into Poona for sale, already found many more casually this year

13. During the four months of the monsoon I spent Rupees 136-8-9 in forming the plantations I have enumerated in paragraph 11 and in protecting the worms while feeding. I have still 284-12-6 left out of the money placed at my disposal in 1875, and a detailed account of this expenditure has been submitted as usual to the Accountant-General.

bs having been eaten off three and four times

it food; it flushed so quickly that a plant, 2 and repotted, was again in thick leaf in a gain. In changing the plants and in daily 100 worms yielded 71 cocoons.

had neither been pruned nor manured, with the course of a month, I gathered 31 cocoons, much harder and yellower. The caterpillars mpletely stript it, but the tree did not recover he whole monsoon.

ujuba tree in my garden, but neither enclosed of leaf and flower on it, and the worms ate every stage of their existence a little ahead . Five cocoons were spun here, larger than

or as soon as the male has left her, the female deposit her eggs on. I had not enough food mpound, and almost every attempt which I by the screens, failed. Crows, squirrels, and single cocoon; but in my own compound, I om one tree to another as I found it expedient. d me plainly that plants in the ground with table food; that it mattered not whether the or cut off by the pruning shears. The Lager- very limited supply of food which I had that

oned, Carissa does not seem to recover quickly. he extremities of its long straggling branches, d not be sure about its usual habit of growth.

n each of these three trees, and sent them home on the qualities of the respective fibres. I had them, together with those which Mr. Woodrow e converted into yarn. I have kept some fifty

ts for next season's experiments—353 *Lager- Conocarpus latifolia*, plants and cuttings all 135 *Zizyphus jujuba*, 105 *Pentaptera tomentosa* n the compound; and if my gardener will but once from Poona, I hope to resume my experi-

avorable for tasar worms. Mr. Lyle, who was in 1876, tells me that some of the men who were him whether he wanted any more cocoons as they th spot and sent a man to see how many he could 300, and said that he had heard that some people to the native physicians. I myself have s this year in the districts than I usually do.

No. 2.

ORDER THEREON, 1st February 1879, No. 143.

Communicated to the Revenue Department in continuation of G.O, dated 12th April 1877, No. 489.

(True Extract.)

C. G. MASTER,
Acting Chief Secretary.

To the Revenue Department, with eight copies of Report.

Exd. F. R. Bantleman.

Revenue Department
No 1
Govt. of India.

PUBLIC.

To

THE REVENUE DEPARTMENT.

Dated February 1st.

Rec'd

Read. Rec'd.

G. O., 1st February 1879, No. 113.

FEBRUARY.
Nos. 1-2.

Report on Tasar Silk.—Letter from the Bombay Government forwarding ten copies of Major Cossmann's account of his experiments in Tasar Sericulture during the past year, communicated to the Revenue Department.

No 454
Communicated to the Board of Revenue.
17th Febry 1879

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