

*Proceedings of the Madras Government, Revenue Department,
5th August 1870.*

No. 71. From J. BROUGHTON, Esq., Government Quinologist, Ootacamund, to the Acting Secretary to Government, Revenue Department, Fort Saint George, dated Ootacamund, 2nd August 1870.

In accordance with G. O. No. 921 of 22nd June 1870, I have the honour to report on three samples of Cinchona bark grown on the Mahableshwar Hills, which were forwarded to me for that purpose by the Government of Bombay.

I.—Calisaya bark, three and-a-half years old.—This bark was of tolerably good appearance, though rather thin. It gave an analysis in per-centages of dry bark:—

	Per Cent.
Total alkaloids	2.61
Quinine	0.77
Cinchonidine and cinchonine	1.84
Crystalline sulphates quinine obtained	0.15
do. cinchonidine do.	1.46

This bark thus possesses some of the excellencies generally attaching to the yellow bark, and can be scarcely said to be a source of quinine. It does not appear desirable to extend the cultivation of this variety at Mahableshwar.

II.—Bark of C. Succirubra, three and-a-half years old, of tolerably good appearance.—It gave an analysis:—

	Per Cent.
Total alkaloids	4.00
Quinine	0.50
Cinchonidine and cinchonine	3.50
Crystalline sulphates quinine obtained	0.36
do. cinchonidine do.	2.47

This bark has all the characters of a red bark grown at too low an elevation to allow of a satisfactory development of its respective alkaloids.

III.—Bark of C. Succirubra, six years old.—This specimen was of moderately good appearance, but thinner than is usual at the age stated. Its analysis gave:—

	Per Cent.
Total alkaloids	6.03
Quinine	1.17
Cinchonidine and cinchonine	4.86
Sulphate quinine obtained crystallized	0.70
do. cinchonidine do.	2.90

The total yield of alkaloids obtained in this instance is good, but the defect of the bark is that even the cinchonidine is obtained in the form of a crystalline sulphate only, with great difficulty. This is also most probably a

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consequence of the elevation of its site of growth being too low. The bark was also richer in cinchonine than is usual in the red barks of Indian growth.

The examinations of the above barks lead me to the opinion that, as an article of export, Cinchona barks grown on the Mahableshwar Hills cannot compete with that grown on the Neilgherries or at Darjeeling. But I am quite of opinion that red barks similar to that sent will be found a suitable source of a perfectly effective febrifuge for local use.

(True Copy.)

H. E. STOKES,
Secretary to Government.

F. R. Bantleman

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REVENUE DEPARTMENT.
OOTACAMUND,
5th August 1870.

No. 72.

No. 1,170.

To

THE SECRETARY TO THE GOVERNMENT OF BOMBAY.

Miscellaneous.

SIR,—In reply to your letter, dated 4th June 1870, No. 1,289, I am directed to forward the enclosed communication from Mr. Broughton, the Government Quinologist, containing the result of his analysis of the bark forwarded to him by your Government.

I have the honour to be,

Sir,

Your most obedient Servant,

(Signed) R. A. DALYELL,
Acting Secretary to Government.

Exd. F. R. Bantleman.

No. 1170

The Secretary to the Govt of Bombay.

Lu,

In reply to your letter
dated 4th June 1840, No. 1289,
I am directed to forward the
enclosed communication from
Mr. Broughton, the Government
Quinologist, containing the
result of his analysis of
the bark forwarded to him
by your Government.

$$\frac{2h}{m}$$

3 *Chrysomelidae*

Count. of 1870; 200,000,000.

REVENUE.

THE SECRETARY TO THE GOVERNMENT OF BOMBAY.

Dated August, 5th.

Recd.

Rect.

G. O., 5th August 1870, No. 1, 170

AUGUST.
No. 72.

FORWARDING a communication from the Government Quinologist, containing the result of his analysis of the Cinchona bark forwarded to him by the Bombay Government.