

Government of Madras.

Revenue DEPARTMENT.

G.O. No. 1614 Press
Mis.

231-232.

Dated 22. 10. 1870 19

Not to be folded or roughly handled

*Proceedings of the Madras Government, Revenue Department,
22nd October 1870.*

No. 231. Read the following letter from J. BROUGHTON, Esq., Government
Quinologist, to the Acting Secretary to Government, Revenue Depart-
ment, Fort Saint George, dated Octacamund, 11th October 1870 :—

REFERRING to G. O., No. 1,517, of 7th instant, which directs me to make an
analysis of calisaya bark from Bengal, I am enabled to report as follows :—

I.—Calisaya bark grown at an altitude of 2,000 feet.—This bark greatly
resembled the yellow bark imported from Bolivia, but its longitudinal markings
were less clearly developed. Its analysis gave the following numbers, expressing
the contents in 100 parts of dried bark :—

Total alkaloids	...	...	...	...	...	...	...	...	...	6.17
Quinine...	...	...	...	...	...	...	...	...	...	4.55
Cinchonine and cinchonidine	...	...	...	...	...	...	...	...	...	1.62
Crystallized pure quinine sulphate obtained	...	...	...	...	...	...	...	...	...	4.18
Crystallized cinchonidine sulphate obtained	...	...	...	...	...	...	...	...	...	0.30

II.—Calisaya bark grown at an altitude of 3,500 feet.—This bark was younger,
but of the same general appearance as the foregoing. Its analysis gave—

Total alkaloids	...	...	...	...	...	...	...	...	...	3.26
Quinine	...	...	...	...	...	...	...	...	...	2.58
Cinchonine and cinchonidine	...	...	...	...	...	...	...	...	...	0.68
Quinine sulphate obtained crystallized	...	...	...	...	...	...	...	...	...	2.37
Cinchonidine sulphate obtained crystallized	...	...	...	...	...	...	...	...	...	0.12

2. The above numbers show that the bark possesses the most excellent
qualities. Its total yield of alkaloids is large, and consists mainly of quinine and
cinchonine, as is the case with the finest yellow barks of the English market. The
comparatively small yield of cinchonidine renders this bark an admirable source
of pure quinine sulphate, as the ordinarily tedious separation of the cinchonidine
is greatly simplified by the small amount of the latter. Specimen No. I. is far
richer in quinine than is usually the case with even the finest samples of the
Bolivian calisaya.

3. If the rate of growth of this bark is at all rapid, its cultivation ought
certainly be pushed at the expense of the *C. Succirubra*, whose yield (according
to the samples I received on a former occasion) is certainly less valuable than that
of the admirable kind which forms the subject of this report.

No. 232. ORDER THEREON, 22nd October 1870, No. 1,614.

Miscellaneous.

ORDERED that Mr. Broughton's report
be transmitted to the Government of
Bengal.

(True Extract.)

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

To J. Broughton, Esq.
,, the Commissioner of the Neilgherries.

Ed. F. R. Bantleman.

PROCEEDINGS of the MADRAS GOVERNMENT.

Under date the 29th Oct. 1870.

Read the following letter from the

Govt. Zoologist.

Reporting the result of
his analysis of the palisaya
bark from Bengal. H.E. 11th Oct. 1870

Ordered that Mr.
Broughton's report be
transmitted to the
Govt. of Bengal.
H.E.

Stu.

1. To J. Broughton Esq. for all
the Commission of the
H.E.

[Signature]

GOVT. OF 1870

REVENUE.

J. BROUGHTON, Esq.

to
to
to

Dated October, 22nd.

Recd.

Encl.

G. O., 22nd October 1870, No. 1,614.

OCTOBER.

Nos. 231-232.

Calcutta bark from Bengal.—Mr. Broughton's report on the result of his analysis, ordered to be transmitted to the Government of Bengal.