

(1) Number of copies 8
(2) Date of receipt 11-6-38
(3) Initials of the Referencer [Signature]

MADRAS RECORD OFFICE.

Government of Madras.

[Signature] DEPARTMENT.

G.O. No.	<u>1270</u>	Press Mis.
Dated	<u>22-3-18</u>	

Not to be folded or roughly handled

A5

B5

A4

B4

A3

No. 307. Read the following letter from the Government Quinologist, to the Acting Secretary to Government, Revenue Department, Fort Saint George, dated Ootacamund, 14th July 1871 :—

REFERRING to G. O. No. 1,067 of 15th June 1871, I have the honour to state the results of the analyses of two specimens of red bark from Mahableshwar, in order that they may be communicated to the Government of Bombay.

2. The specimens of bark differed in appearance from most of the India grown bark of *C. Succirubra* by having a thicker corky envelope which had partially scaled off its surface in many places, and thus altering its aspect. This was more especially the case with the elder bark. The analyses are given in percentages of dry bark :—

<i>No. I.—C. Succirubra bark, four years old.</i>		Per Cent.
Total alkaloids...	...	5.95
Quinine ...	...	1.06
Quinidine and other alkaloids...	...	4.89
Sulphate of quinine obtained crystallized ...	...	0.75
„ quinidine and cinchonidine ...	...	3.16
<i>No. II.—C. Succirubra bark, three years old.</i>		
Total alkaloids ...	...	5.34
Quinine ...	...	0.67
Quinidine and other alkaloids ...	...	4.57
Sulphate of quinine obtained crystallized ...	...	0.39
„ quinidine and cinchonidine ...	...	2.48

Hence in gross yield of alkaloid these barks are of good quality, the elder being of course the better. They bear all the marks of being grown at a lower elevation than those of the Nilgiri plantations. It will be observed that they contain little quinine. The most remarkable quality of the barks is, that they contain but little cinchonidine compared to the usual yield of red barks; that alkaloid being nearly entirely replaced by quinidine, an alkaloid of somewhat greater value, and not hitherto found in any large quantity in Indian barks. Hence after the quinine is removed a solution of the sulphates rotates the plane of polarization of a polarized beam to the right. The occurrence of this alkaloid is a circumstance of much interest. Cinchonine is also present, and is excluded from the above statement of crystalline sulphates.

*Proceedings of the Madras Government, Revenue Department,
22nd July 1871.*

No. 308.

ORDER THEREON, 22nd July 1871, No. 1,290.

Miscellaneous.

ORDERED to be communicated to
the Government of Bombay, in continu-
ation of letter from this department,
dated 15th June 1871, No. 1,068.

(True Extract.)

(Signed)

W. HUDLESTON,

Secretary to Government.

To the Government Quinologist.
.. the Commissioner of the Nilgiris.

From

From: Mr John Broughton
Government Quinologist

To: D. F. Carmichael Esq.
Acting Secretary to Govt
Revenue Department
Fort Saint George

Sir,
Referring to G. O. N^o 106 of
J^y 15th June 1871. I have the honor
to state the results of the analysis
of two specimens of Red Earth
from Mahableshwar, in order
that they may be communicated
to the Government of Bombay.

2. The specimens of *Bark* differed in appearance from most of the India grown bark of *C. S. cerifera* by having a thicker cork envelope, which had partially scaled off its surface in many places and thus altering its aspect. This was more especially the case with

with the elder bark. The analyses
are given in per centages of dry bark.

N^o I. *C. Succirubra* bark 4 years old.

Total alkaloids 5.95 per cent

Quinine 1.06

Quinidine and other alkaloids 4.89

Sulphate of quinine obtained
crystallized } 0.75

— " — quinidine & Cinchonidine 3.16

N^o II. *C. Succirubra* bark 3 years old.

Total alkaloids 5.34

Quinine 0.64

Quinidine & other alkaloids 4.57

Sulphate of quinine obtained
crystallized } 0.39

— " — quinidine & Cinchonidine 2.48

Hence in gross yield of alkaloid
these barks are of good quality,
the elder being of course the bet-
ter. They bear all the marks
of being grown at a lower eleva-
tion than those of the Kilgerry
plantations. It will be ob-
served that they contain little
quinine. The most remarkable
quality

quality of the barks is that they
contain but little cinchonidine
compared to the usual yield of
Red Barks, that alkaloid being
nearly entirely replaced by quin-
idine, an alkaloid of somewhat
greater value, and not hitherto
found in any large quantity in In-
dian barks. Hence after the qui-
nine is removed, a solution of the
sulphates rotates the plane of polari-
zation of a polarized beam to the
right. The occurrence of this al-
kaloid is a circumstance of much
interest. Cinchonine is also pre-
sent and is excluded from the
above statement of crystalline
sulphates.

I have the honor to be
Sir,
Your most Obedt. Servt.

John Coughton.

Govt. Quinologist

1875-1900 to 199-201

Recd 1871 Oct 2
From No 2267

The God: Lovelyst
H. C. C. C. C. C.

To The Association to Oppose
Pro-Slavery Measures
Washington

March 14th } Lady Byron
Dec 17th }

Reanalysis

Amelanchier canadensis.

MS A.9.2.90-299 July 1871

1870-1871

Ms. 1290

Added to the Comm.

inclosed to the Govt of Bombay
in continuation of letter from
the Dept with dated 15th June
1871. No 1063.

223 July 1971

to the first Quadrant of section 26
Twp 34 N. R. 10 W.