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MADRAS RECORD OFFICE.

Government of Madras.

12 DEPARTMENT.

G.O. No. 1370 Press / Mis.

Dated 23.5. 19 38.

Not to be folded or roughly handled

A5 B5 A4 B4 A3

No. 207. 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 older bark. The analyses are given in per-centages of *dry* bark :—

	Per Cent.
No. I.—C. Succirubra bark, four years old.	
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
No. II.—C. Succirubra bark, three years old.	
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 continuation 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.

Lieut. F. R. Bartleman.

14th July 1871.

From

Mr John Brompleton
Government Zoologist

To

D. F. Carmichael Esq.
Actg Secretary to Govt
Revenue Department
Fort Saint George

Sir

Referring to G.O. No. 1062
of 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 Earth
differed in appearance from most
of the India green earths of lo-
cality by having a thicker coa-
envelope, which had partially
cealed off its surface in many
places and thus altering its appe
This was more especially the case
with

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

No. 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

No. II. C. Succirubra bark 3 years old.

Total alkaloids	5.34
Quinine	0.67
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 better. They bear all the marks of being grown at a lower elevation than those of the Nilgherry 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.

I have the honor to be
Sir,
Your most Obed. Serv.

John Broughton.
Govt. Quinologist

Rec'd 1871 Dep't
From, No. 2267
The Gov't Zoologist
Ootacamund

To, The Secretary to Govt.
Rev. Department
Fort St George

Dated 14th } July 1871
Rec'd 17th }

Result of analyses
of Cinchona bark from
Mahableshwar.

No. 1290 - 22nd July 71

W. Ridsdel

Lr 1290

Ordered to be communi-
:nicated to the Govt of Bombay
in continuation of letter from
this Dep't dated 15th June
1871, No 1068.

22nd July 1871

for the Govt Zoologist Rec'd 26
Comm'r of Salines &c

Zoology etc pp 199-201

pp 207-208