

Revenue (1897) Department.

MISCELLANEOUS SERIES.

G.O., No. 1104

DATED 24th Feb. 1897

[Despatch Abstract.]

*Recording Progs Educational Departt
recording report of the work done by
the Assistant Agricultural Chemist to
the Government of India during his
recent stay at Laidupet.*

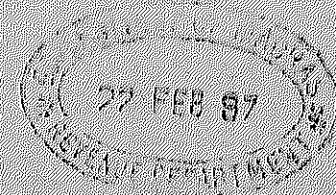
BACK PAPERS.

G.O.	No.	Department.	Date.	G.O.	No.	Department.	Date.

FURTHER PAPERS.

G.O.	No.	Department.	Date.	G.O.	No.	Department.	Date.
1168 948							

Government (1897) of Madras. EDUCATIONAL.



Recd.

Enclosures

Regd.

1897.

Spare copies

G.O., No. 89, 11th February 1897.

List

Order-wise No. 1104 of 24th Feb: 1897.
FEBRUARY.

Recorded

Copy to
23.2.97

~~Not recorded~~

24.2.97

Yes I have had at
the address at the
first of 3

Assistant Agricultural Chemist to the Government of India.

Recording report of the work done by the --- during his recent stay at Saidapet.

GOVERNMENT OF MADRAS.

EDUCATIONAL DEPARTMENT.

READ—the following paper :—

Proceedings of the Board of Revenue (Revenue Settlement, Land Records and Agriculture), dated 3rd February 1897, Mis. No. 791.

Read—the following letter from the Hon'ble Mr. D. DUNCAN, M.A., D.Sc., LL.D., Director of Public Instruction, to the Secretary to Government, Educational Department (through the Director of Agriculture, Board of Revenue), dated Madras, 27th January 1897. No. 722:—

I have the honour to submit, for the information of Government, the report of Mr. Hoare Collins, the Assistant Agricultural Chemist to the Government of India, dated 19th December 1896, of the work done by him at the College of Agriculture during his recent stay at Saidapet and the statement of the analyses performed by him, together with copies of the letters of the Acting Principal, College of Agriculture, giving cover to them.

ENCLOSURES.

Copy of letter from the Acting Principal, Madras College of Agriculture, to the Director of Public Instruction, Madras, dated 5th January 1897, No. 9.

I have the honour to herewith submit a report by Mr. Collins, Assistant Agricultural Chemist to the Government of India, on the educational work entrusted to him during his deputation at this college. It will be noticed that Mr. Collins, in addition to lecturing to Class III, gave a certain amount of instruction to Class II in the practical portion of Organic Chemistry, Intermediate. No doubt, a great deal of the work done by Mr. Collins with both classes has already been done by me, or will, during the remainder of the session, be done by me. This, however, I consider an advantage; for in a wide subject like Agriculture it is as well that students should have the opinions and learn the methods of doing certain operations of more than one teacher.

From S. HOARE COLLINS, Esq., Assistant Agricultural Chemist to the Government of India,
to the Principal, College of Agriculture, Saidapet, dated Madras, 19th December 1896.

With reference to paragraph 2 of the Proceedings of the Director of Public Instruction, Madras, No. 13823, dated 21st December 1895, I have the honour to report that during the winter term at the College of Agriculture I took the following classes:—

Class II, commencing on the 1st December and ending on the 16th December, for nine hours' work in Practical Organic Chemistry, viz.—

The properties of, and tests for, the vegetable oils, animal fats, mineral oils, essential oils, resins and hard and soft soaps.

The estimation of the acidity of oils for lubrication.

The students showed themselves intelligent in drawing conclusions from the observations actually made.

Class III, commencing on the 16th November and ending on the 19th December, for 23 lectures of one hour each on the following subjects:—

The chemistry of soils, with especial reference to—

- (1) Obtaining a good sample for analysis.
- (2) The salts removed by drainage, their detection and estimation.
- (3) The salts retained by the soil.
- (4) Rough tests (where applicable) and ordinary methods of analysis for the principal elements of plant food in a soil.
- (5) Available and total plant food, their mutual relationships and methods of analysis.
- (6) The method by which the plant obtains its food from the soil.

The analysis of food stuffs and calculation of the albumenoid ratio therefrom.

The composition of the ash of plants.

The composition of the chief dairy products, and simple methods of analysis.

The students showed intelligence in class and answered the questions in the examination with clearness.

Copy of letter from the Principal, College of Agriculture, to the Director of Public Instruction,
dated 5th January 1897, No. 10.

In continuation of my letter, No. 9, dated 5th January (submitting report by Mr. Collins on his educational work), I have the honour to herewith submit with remarks the results of two investigations carried on by Mr. Collins during his recent deputation to Saidapet.

Cotton Seed.—The Board of Revenue (Revenue Settlement, Land Records and Agriculture), desired cotton seed to be analysed. The sample supplied to Mr. Collins for analysis represented the cotton seed which is available in Madras for cattle food. Mr. Collins' analysis might well be mistaken for one of cotton cake and shows that, unless a better grade of cotton seed is available in the local market, there is not much advantage to be gained by its use on the farm. I have had no experience at Saidapet of feeding cotton seed to milking cattle, but during a recent stay of two months on the Nilgiris I saw both cows and buffaloes fed with it, and I must confess I was not impressed with the feeding value of local cotton seed. Of course, I don't pretend that an opinion expressed after such a short experience is of much value, but, taken in conjunction with the analysis now given, I think I am justified in recording my view. I may add that in America cotton seed is said to produce a white, tasteless butter.

Nitrogen in the Soil of Field No. 10.—The figure (.041 per cent.) given by Mr. Collins must be considered fair for a sandy soil.

ANALYSES made during term 16th November to 19th December 1896.

Cotton seed obtained in Saidapet bazaar as sold for cattle food—										Per cent
Moisture	..	..	..	..	..	..	..	..	..	13.39
Oil	..	..	..	..	..	..	..	..	..	11.16
Albumenoids*	..	..	..	..	..	..	..	..	..	16.62
Soluble carbo-hydrates	..	..	..	..	..	..	..	..	..	29.77
Woody fibre	..	..	..	..	..	..	..	..	..	21.85
Ash †	..	..	..	..	..	..	..	..	..	5.21
Total										100.00

Soil from field No. 10, Government Farm, Saidapet—

Nitrogen	..	..	..	..	..	..	..	..
----------	----	----	----	----	----	----	----	----

* Containing nitrogen, 2.66 per cent.

† γ = sand, 1.14 per cent.

Resolution—dated 3rd February 1897, Mis. No. 791.

Submitted to Government for information.

(True Extract.)

(Signed) R. V. SRINIVASTAR.

Secretary.

To the Secretary to Government, Educational Department.

ORDER—No. 89, Educational, dated 11th February 1897.

Recorded.

(True Extract.)

[Signature]
Secretary to Government.

To the Director of Public Instruction.
" Revenue Department.
" Board of Revenue (Revenue Settlement, Land Records and Agriculture).

When given for copying _____
When copied _____
When examined _____
When signed _____ } 189

READ AGAIN G.O., No. _____
189 _____

CURRENT No. _____

ENCLOSURES TO G. No. _____

ORDER OF GOVERNMENT A A A A A A A

LETTER OF GOVERNMENT

STATEMENT WITH DUTY

PAGES NOT FILED UP, BEING WANT FOR DISPATCH
IN ORIGINAL

N.B.—

A = Copy in full.
B = Not to be copied.
P = Copy abstract only.
Q = Copy heading only