

Educational (1898) Department.

ORDINARY PRINTED.

G.O., No. 132.

DATED 2. 3. 98.

INDEXED.



[Despatch Abstract.]

Asst. Agricultural Chemist to the Govt of India

Recording report on the analytical work performed
by Mr. S. H. Collins, —, during his ^{recent} deputation at
the College of Agriculture, Serampore.

BACK PAPERS.

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

FURTHER PAPERS.

G.O.	No.	Department.	Date.	G.O.	No.	Department.	Date.
72	618/98						

Government {1898} of Madras. EDUCATIONAL.

Recd.

Regd.

} 1898.

Enclosures

Spare copies

G.O., No. 132, 2nd March 1898.

MARCH.

Assistant Agricultural Chemist to the Government of India.

Recording report on the analytical work performed by Mr. S. H. Collins, —, during his recent deputation at the College of Agriculture, Saidapet.

GOVERNMENT OF MADRAS.

EDUCATIONAL DEPARTMENT.

Read—the following paper :—

Endorsement, in the Revenue Department, No. 419, dated 19th February 1898.

Read—the following paper :—

Proceedings of the Board of Revenue (Revenue Settlement, Land Records and Agriculture), Mis. No. 802, dated 5th February 1898.

Read—the following letter from D. DUNCAN, Esq., 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, 21st January 1898, No. 443 :—

I have the honour to submit, for the information of Government, the report of Mr. S. H. Collins, the Assistant Agricultural Chemist to the Government of India, No. 7, dated 7th January 1898, on his work at the College of Agriculture during his recent stay at Saidapet, together with copies of the letters of the Principal of the College, Nos. 19 and 20, dated 7th idem, explaining the advantages which the college derived from Mr. Collins' lectures and demonstrations.

ENCLOSURES.

From S. H. COLLINS, Esq., Assistant Agricultural Chemist to the Government of India, to the Principal, Agricultural College, Saidapet, dated Madras, 17th December 1897, No. 7.

I have the honour to report that, during the winter term at the Agricultural College, I took the following classes :—

Class I* between 17th November and 17th December, 19 † lectures in agricultural chemistry, viz.—

Food stuffs, their composition, analysis and feeding value.

Manures and manurial residues and available plant food.

Composition of Indian soils.

„ „ dairy products.

The students showed themselves intelligent in class and answered the examination with clearness.

Class II between the 22nd November and the 15th December, 13 ‡ hours practical organic chemistry, viz., the properties and tests of the oils, fats, soaps, &c.

Most of the students showed themselves fairly intelligent.

* Class III.

† 17.

‡ 15.

(Signed) W. KEESS.

From W. KEESS, Esq., M.A., M.R.A.C., Acting Principal, Madras College of Agriculture, to the Director of Public Instruction, dated Saidapet, 7th January 1898, No. 19.

I have the honour to submit a report by Mr. S. H. Collins on the teaching done by him at this college during his recent deputation to Saidapet.

2. Mr. Collins commenced work on the 17th November 1897 and, owing to the early date on which the Christmas holidays commenced, finished it on 17th December 1897. Owing to illness he was absent for five days on casual leave. His lectures to class III therefore decreased from 23 (November—December 1896) to 17. His work, however, with class II increased from 9 hours to 15 hours owing to more time being given him each week. Mr. Collins also held an examination for class III.

3. No doubt Mr. Collins has lectured and held practical classes on portions of the college work, which have been done or will be done by me. But this I consider an advantage for students who hear only one lecture on a subject of great range are apt to take a very narrow view of it.

From W. KEESS, Esq., M.A., M.R.A.C., Acting Principal, Madras College of Agriculture, to the Director of Public Instruction, dated Saidapet, 7th January 1898, No. 20.

I have the honour to submit the accompanying report on the analytical work performed by Mr. S. H. Collins, Assistant Agricultural Chemist to the Government of India, during his recent deputation to Saidapet. For reasons explained in my letter, No. 19, dated 7th January 1898, Mr. Collins could not do as much as he did during previous years.

2. Bassia cake has more than once been used on the farm as manure. The results obtained never came up to expectation. I accordingly got some of the students of class III to analyse a sample and they found a comparatively low percentage of nitrogen in the cake. This of course explained the poor results mentioned above. In order to check the students' work, I requested Mr. Collins to analyse a sample, and he found only 1.84 per cent. of nitrogen in it. The students' results were thus shown to be correct. It is evident Bassia cake is much inferior as manure to many other cakes. The latter, though much higher in price than Bassia cake, are more economical in the long run. In future, I shall analyse all cakes offered for manure before purchasing them.

3. The great value as a nitrogenous manure of tannery refuse has repeatedly been demonstrated on the farm. Mr. Collins analysed a sample and found—

	Per cent.
Water	75.74
Nitrogen	2.44

The figures speak for themselves.

4. I have for many years observed that the rations of green fodder worked out too high when calculated from the figures given in the analyses of corresponding English fodders. I always attributed this to Indian green fodders containing a smaller percentage of water and therefore a larger percentage of solid matter than similar English ones. Mr. Collins, however, proved that our chulam at the stage when it is fed to the farm cattle contains 80.24 per cent. of moisture—the same amount as English fodders. As my original assumption turns out to be incorrect, one of the two following explanations can account for the phenomenon :—

First, the solid ingredients of the fodder here are more digestible than they are in Europe; or

Second, Nellore cattle have exceptionally good digestions.

Here the matter rests at present. I may add, however, that the analyses of cholam given in Dr. Leathers' recently issued "Final Report" would, if applicable to Saidapet cholam, enable rations of green fodders to be correctly calculated, there can be no doubt that the whole question of Indian green fodders requires to be scientifically investigated.

5. I desire to acknowledge the assistance I have derived from Mr. Collins during the three short periods of his deputation to Saidapet.

Resolution—Mis. No. 802, dated 5th February 1898.

Submitted for the information of Government.

(True Copies and Extract.)

(Signed) L. E. BUCKLEY,
Famine Secretary.

To the Secretary to Government, Revenue Department.

Endorsement—No. 419, Revenue, dated 19th February 1898.

Transferred to the Educational Department.

(Signed) N. E. MARJORIBANKS,
Ag. Under Secretary to Government.

To the Educational Department.

ORDER—No. 132, Educational, dated 2nd March 1898.

Recorded.

(True Extract.)

H. TREMENHEERE,
Ag. Secretary to Government.

To the Director of Public Instruction.
" Revenue Department.
" Board of Revenue (Revenue Settlement).

Exd. P. Seetharam.

Revenue (1898) Department.

Seey

Order no 132² 2-3-98.
P.S.

CURRENT No. 1168

Recorded.

1/3
25/2/98

To the S.D. 5
Rev. Sett. 6
Bdy. Rev. (R.S.) 10
Despd
11-3-98

Dist

Endorsement P. No. 419
Order

Transferred to
the Educational Department

M. Marjoribanks

As under Secy to Govt

Fort St. George
19th Feb. 1898

The Educational Dept.

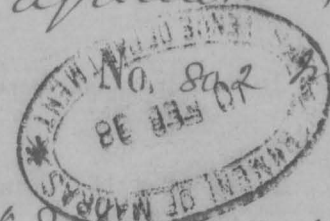
Prm-8
18

22-2-98

Last year's indexes were sent
the Pres. Secy to Govt. 1104 of
4-2-97 could not be early

Prm-8
18

From
The Board of Revenue,
Department of Revenue
Settlement, Land Revenue
and Agriculture, Madras



Dated 5th February 1898.

Received 10 -

Registered 11 -

Enclosures 3.

Spare copies.

SUBJECT.

Submitting for the information
of Government letter from the
Director of Public Instruction,
submitting report on the analy-
tical work performed by
Mr. Collins, Assistant Agri-
cultural Chemist to the
Government of India, during
his deputation at the College
of Agriculture, Saidapet.

BACK PAPERS.

G.O.	No.	Department.	Date.
	2868		18-7-96
	4140		21-10-96
		Research	

FURTHER PAPERS.

G.O.	No.	Department.	Date.
	9142		

892. 11-2-97 8/67
151: 19-3-96. 2/10
and 2/10

First copy sent to Press.

Returned for signature

Despatched in print.

READ AGAIN G.O., No.
182

Number of copies required. { Order complete. 45
Letter only.
Order complete with Letter.

Of these, only 3 copies for signature.

CURRENT NO.

253 with all enclosures — A.

ENCLOSURES TO G. No.

ORDER OF GOVERNMENT

A.

LETTER OF GOVERNMENT.

STATEMENT WITH DITTO

PAPERS NOT FILED UP, BRING MEANS FOR DESTROY IN ORIGINAL.

N.B.—

A = Print in full.
B = to be printed.
P = not abstract only.
C = int heading only.