

AGRICULTURAL ZOOLOGY.

PRACTICAL. PART II.

1. Dissect out the alimentary canal of the specimen provided. (Cockroach) and make a diagram to show the different parts.
2. (a) Identify the specimens provided.
(b) Pick out insects of economic importance from the box of specimens provided.
3. Examination of collection boxes of each candidate and oral.

CORRESPONDENCE.

From

T. Sambandham Pillai,

Murungapalayam Street

VILLUPURAM.

Villupuram,

Dated 4th March 1925.

To

The Editor, Madras Agricultural,

Students' Union Journal.

Sir

Mr. R. D. Anstead Director of Agriculture, Madras and Mr. D. Anandha Rao, Deputy Director of Agriculture, IV Circle, paid a visit to Arasamangalam, a village in Villupuram Taluk on the 3rd morning. They saw about 10 acres of Cambodia cotton and sugarcane (standing crops) introduced by the department in the village. A landlord who conducted the departmental improvements in his lands gave one appreciation letter to the Director of Agriculture. The letter was read to the other villagers for their understanding about the benefits of the improved method. I request you to publish the same in your valuable Journal so that other ryots may be benefited by the experience of the mirasdar at Arasamangalam.

Yours sincerely,

T. Sambandham Pillay.

From
 M. R. Ry. K. Srinivasa Chariar Avl.,
 Mirasdar, Arasamangaim.

Arasamangalam,
 3—3—1925.

To
 The Director of Agriculture,
 Madras.

Sir

The Agricultural Demonstator, Villupuram, selected two plots of equal area (83 cents) to demonstrate the use of the paddy seed drill. One was used as a check plot and the other as demonstration plot.

Vadan Samba was cultivated in both the plots. 18 M. M. of seeds were sown in the demonstration plot and in the check plot respectively. Thus 6 M. Ms. of seeds were saved or in value Rs. 1-8-0. The customary practice here is to sow 30 to 36 M. M. per acre (for broadcasting). The seeds all germinated well since they were sown at a uniform depth by the seed drill.

There was a heavy rain some days after the sowing. So I could not weed properly. Later there was no rain and it told heavily upon the yield of the crop.

Rs. 17—1—6 were spent for the broadcasted plot and Rs. 13-9-5 were spent for the demonstration plot. A net gain of Rs. 3—8—1 was saved per acre. The produce from the demonstration plot was 28—1—2 and 24—1—2 kalam for the check plot. If calculated at the present market rate the gain is Rs. 20. There was a net gain of Rs. 23—8—1 per acre from the demonstration plot.

The following are the impressions and advantages of the drill cultivation which I happened to notice during the short year of the new method in my plot.

1. Economy of the seed rate.
2. Germination is easily assured since all seeds fall at a required depth.
3. Free aeration is possible since the crops are in lines.
4. Covering of the seed with the country plough is necessary in the broadcasting method but here the covering is done with Guntaka. So less expenses.
5. Weeding and harvesting expense are less.
6. A decided increase in yield.

Considering from all points of view, drill cultivation is better than broadcasting method.

About 200 acres are generally cultivated under Vadansamba in this village every year. It is better if landlords realise this and do the cultivation with a seed drill of their own or I would suggest the local Co-operative society to purchase one and lend it to the members at least. There is every certainty that drilled paddy will give a gain of Rs. 10 at least per acre. So, there is scope for an annual net profit of Rs. (200 x 10) Rs. 2000 if all the expected areas are grown by the drill method. If the Co-operative Society make it a point to induce their members to do this cultivation and benefit thereby, I think there is a great scope for easy spreading of these implements among the ryot population.

In wet lands, two plots were selected for demonstration purpose in my land. One plot was cultivated according to the departmental method and the other under ordinary method. The ordinary method plot was manured with green leaf manure. Economic planting was done. Garudansamba was grown.

The demonstration plot was ploughed with Konkan plough. The green leaf manure and Super-phosphate (1 cwt.) per acre and 5000 lbs. of green leaf were applied. Economic planting was also done in this plot. Aduturai No. I paddy was cultivated in the demonstration plot. Green leaf manure was applied equally in both the plots.

Expenditure and income are shown below :—

Name,	Expenses.		Grain yield.		Straw yield.		Grain total.	Remarks.
	Rs.	...	lbs.	Rs.	cwt.	Rs.		
Check plot	35	...	1800	100	40	13		
Demonstration	38	—	2160	132	48	16	34	

NOTE.—The season was very unfavourable this year and the absence of rain during the later period told heavily upon the general yield of both the plots.

Now it is time for us to take to departmental methods and try for one or two years or three years in a small plot of land, and if it is found to be successful we must cast aside our old methods and choose the newer and more scientific ones. Herein lies a good method of solving the problem of agricultural indebtedness. We must clear our minds of age long shyness.

In some other lands of mine, I adopted some of the culture is menis suggested by the agricultural department. 6 acres were inism with the seed drill. 25 kalam were realised on an average per acres 18 kalam were realised on an average from the broadcasted field per acre. (1 kalam: 36 M. M. : 90 lbs.) 1.16 cents were sown with sunhemp. Owing to the insect and flood damage the crop failed. However, it gave green manure for an acre. 5 acres of the dry land was ploughed with monsoon plough. Varagu grown in the area yielded well. Superphosphate was applied with green leaf manure to some other plots. Poombalai was grown in 16 cents of land. It gave 34 kalam per acre or 34 x 90: 3,060 lbs. I did not maintain any correct account for this. But I am sure that there is gain in each improvement suggested by the department.

I am extremely glad to take this opportunity of permitting you to let other peasants and mirasdars benefit fully by my experience.

I beg to remain,

Sir,

Your most obedient servant;

(Sd) K. SRINIVASACHARIAR.

EDITORIAL NOTES.

Rice finds elbow room:—Paddy Breeding was for over 12 years confined to a small area of land adjoining the Coimbatore Farm wet lands. The singling out of a promising strain which was christened G. E. B 24 led to systematic efforts being made to grow it under diverse conditions before it could be put out into the districts on a huge scale. This brought into existence the Aduturai farm in the Cauvery delta two years ago. Appreciation of the work on paddy encouraged the opening of a third station in Marteru in the Godavari delta this year. Release of 126 lakhs of rupees from the local contribution to the Central Revenues has occasioned the earmarking of 4 lakhs for the Development department and opportunity has been taken to make arrangements for establishing a Rice Breeding Station this time in South Malabar. Ganjam alone of all the chief rice growing tracts is thus without a station. She has been asking for a farm for nearly 20 years now. We hope that it will be her turn next. For we need not labour the point, that in regard to area under paddy and the number of varieties grown she stands almost second in the presidency. That