## THE JOURNAL

OF

## Che Madras Agricultural Students' Union.

Vol. IV.

May 1916.

No. 5.

N. B.-Contributors are requested to send in their contributions written legibly in ink on one side of the paper only.—Editor.

## Editorial Notes.

We congratulate M. R. Ry., Rai Bahadur K. Ranga Achariar Avergal, for his book on 'Elementary Botany' which is just to hand. This may be said to be the first of its kind—A Botany book for Indian students with plenty of Indian examples. Text-books of Botany there are many but they all have a foreign air about them because the bulk of the illustrations and quoted specimens are foreign. The student or the teacher has to find out the nearest Indian representative and try his best to read the Text into the specimens before him.

The present book enables the Indian student to study the subject with the help of specimens which he

constantly finds about him, in the kitchen, in the house garden or in the mute companions of his evening rambles.

The advantage of this cannot be over-Elementary estimated when it is remembered that it is the Botany. first specimens one studies, that produce the most lasting impressions. These form the nuclii round which the information acquired during later years, tends to gather and build up the students' knowledge of the The always-available spiny-fruited Tribulus which rudely attracts our attention as we walk over fields. the Dolichos, the Pumpkin and the Plantain—the everyday inmates of an Indian kitchen—the medicinal plants of every day use such as the Melia and Gynandropsis the sacred lotus and the dear old Banyan are all laid under contribution to illustrate the various chapters of the book. The diagrams, the illustrations and the micro-photographs have nothing to be desired, the last, in particular, are so well done that one would imagine seeing the sections themselves and not their reproduction on paper. glossary and the index giving the tamil and the telugu names of the plants dealt with, greatly add to the usefullness of the book. The-get up is good and the book is available from the Superintendent Govt. Press at the low price of Rs. 2/-. We hope that the book will soon command the wide popularity which it richly deserves.

The Bombay Department has recently come into line with other Provincial Depts. in India, by recognising its arrangements for teaching. It will be remembered that

a splendid building has recently been constructed on the most modern lines. The course given at Poona is different from that at any other Provincial College in that the College is affiliated to the University of Bombay, while it differs also in that its standard is possibly higher and its numbers are certainly larger than anywhere else.

The new regulations, which we have been permitted to see by the kindness of Dr. Harold Mann, who no doubt is largely responsible for the proposed changes, deal with the examination for the degree of Bachelor in Agriculture, and contain much that is of interest to us at Coimbatore. The regulations, it may be said, are not as yet approved by the Govt. of Bombay, but have been already accepted by the University.

Firstly, the intending student must as a test of general education, have done a year's work after passing his Matriculation, or have passed the Previous Examination of the University, or of course, some examination recognised as equal to it. There are two examinations in the course, the first—the Intermediate examination in Agriculture, which cannot be taken until two terms have been kept at a recognized school or College, that is at Poona. This consists of four subjects, (i) Agriculture and Geology combined, (ii) Chemistry (iii) Botany (iv) Mathematics and Physics. The Agriculture is not excessive, as it deals, according to the syllabus, with tillage, and the questions involved in the handling and use of implements of all kinds, for cultivation. Geology is much more

advanced than here, and has always been made rather a feature of the Poona course.

This passed, and it may be noted, that science graduates who have taken Chemistry and Botany as their subjects, are excused this examination, the student proceeds to two years work for the Degree, during which time he is to be unhampered by University Examinations. This course is noticeable for the fact that it includes an optional subject. Agriculture (including Vety. Science), Chemistry of Agriculture, Agricultural Botany, and Plant Pests and Diseases are the four compulsory subjects besides which a student must take an optional. This may be selected from the following five:—

- (a) Agricultural Economics etc.
- (b) Stock Breeding
- (c) Advanced Botany
- (d) Ag. Chemistry
- (e) Adv. Entomology

as in syllabus

This is the novelty, and a most attractive novelty it at first seems to be. Instead of forcing all the students through one gate, each student has the opportunity to devote himself to his own special inclination, while all are taught sufficient to ensure that they shall qualify for an Agricultural Degree.

On close examination, the criticism may be made that all the subjects are not of the same value, and it will be difficult to keep the standard the same. Unless this is done, it will soon be found that one is easier than the other and the entries for that subject will be high. This will entail difficulties in the appointment of the men afterwards. Indeed this will happen always, for it will be difficult to dispose of say three advanced Chemistry men, when the Mycologist or the Entomologist is calling for recruits. The first optional seems open to objection, as being rather a mixture of economics and engineering, the connexion between the two being through land development, largely in Bombay, a matter of bunding, well sinking and water lifting, all engineering problems.

The times allotted for the various subjects are not given, but a knowledge of the relative importance of the subject may be gained from the marks allotted to them in the examination. Agriculture etc., gets 500, 300 in Papers and 200 in Practicals, the optional subject gets 400, 300 of which is for papers and 100 for practical. Each of the others gets 100 for papers, and 100 for practicals except Plant Pests etc., in which only 50 is allotted for the practical examination. This is, we think, sound: the optional subject counts at least as much as any two other subjects except Agriculture, to which it is just inferior.

The standard is fixed at 45 per cent., of the total for a pass, and at 66 per cent for 1st class, with minima slightly below this in the separate subjects. The details of the scheme seem to have been carefully worked out. In Agriculture, for instance, we note that besides their cultivation sheets, students have to submit to the examiner, the notes of their tours, all the notebooks deal-

ing with their practical work, and a plotted survey and level book dealing with at least 200 acres of land, and gradient of at least a mile in length. Space does not permit of further examples, but we feel from a perusal of the scheme that it has the merit of being comprehensive, and at the same time sufficiently elastic to permit of individuality. We shall be glad to learn how it succeeds.

## A visit to Anakapalle.

It is not exactly the time of the year to see or rather feel Anakapalle at its best, as though there is a good breeze most of the time, the sun is very hot. There are many changes noticeable in the Farm, which is now in a subcircle, under the control of M. R. Ry., D. Balakrishna Murti, the acting Assistant Director. He was manager in charge when a previous visit was paid, and it is to his energy that much of the lay out of the farm and its present improvement is due. The most striking thing about the land, is the enormous possibility of irrigation that there is. and the very slight and feeble way in which this possibility is being exploited. It is enough to make a Coimbatorean tear his hair to see a well which costs complete, only 500/-. and supplies more sweet water than can be lifted by a 9 H. P engine and 3 inch pump. The installation of this engine has led to the filling up of some five or six other small wells, from which water was lifted by the picottah,-the mhote being practically unknown in these parts,-and the value of the land thus brought into cultivation will, it is calculated more than repay the cost of the installation. There is little doubt that there are many situations in this Vizagapatam District where such wells could be sunk with equal or greater success.