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GENERAL BODY MEETING
NOTICE.

The Annual General Body Meeting of the Madras Agricultural Students' Union is tentatively proposed to be held in the first week of December 1961. The Agenda for the meeting is as follows:—

- (1) Presentation and adoption of the Annual Report.
- (2) Presentation and adoption of the Auditor's Report.
- (3) Adoption of Budget estimate for 1961-'62.
- (4) Election of Office-bearers for the year 1961-'62.

Nomination for the post of the Vice-President, Editor and the Secretary will be received by the Secretary upto 4 p. m. on 31st October, 1961. Nominations are to be sent duly proposed and seconded in sealed and superscribed covers. Valid nominations will be announced in the October, 1961 issue of the Journal. Postal votes from mofussil members should be sent in sealed and superscribed covers to the Secretary before 20th November, 1961.

N. B:— Resident Members will vote on the day of the General Body Meeting as in previous years. TO VOTERS

Coimbatore-3, }
7th October, 1961. } generally

M. Bagavandoss,
Secretary, M. A. S. U.

THE MADRAS AGRICULTURAL STUDENTS' UNION,
BALLOT PAPER.
(For use by mofussil members)

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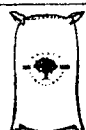
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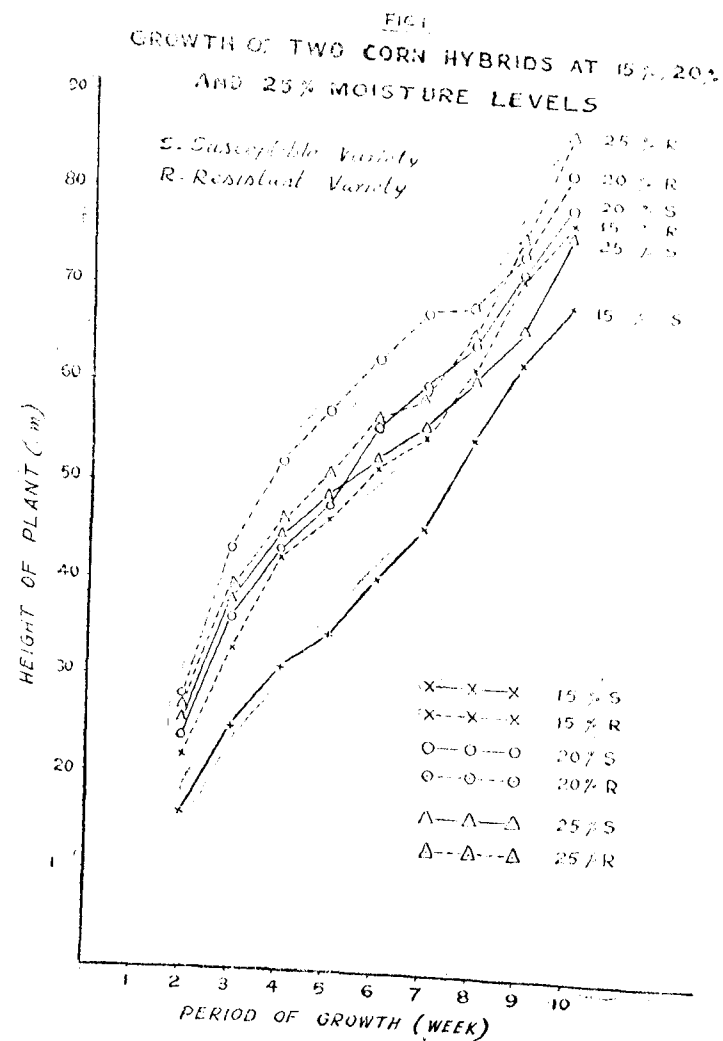
production and they have to be provided with all the knowledge of the latest improved techniques in agriculture to formulate policies for the development of the villages in their jurisdiction and also to help them in the day-to-day administration programme for stepping up agricultural production. In Madras State alone we have the colossal task of supplying enough information to the 12,000 Panchayats in 16,000 villages.

The difficulties confronting the farmers are many and varied. Their needs and problems appear to be ever on the increase. The farmers look to have tailored prescriptions and solutions and these in a hurry and at the right time. The agricultural information material given through radio, films, press, posters, leaflets, folders, etc., have to be appropriate for the agricultural regions suiting to the needs of the farmers, their crops, the agricultural problems and the seasonal conditions. The importance and magnitude of the problem are

as per the formula given by Helmerie and Pfeifer (1954). Ten ml. of the appropriate solutions were added to the petri-dishes two to three times during the period of seven days of the experiment. Seeds were set on filter paper kept in petri-dishes of 10 cm. diameter after sterilisation and D-mannitol solution added. The seeds were covered with another filter paper and the dishes closed with lids and kept in the germinator at 25°C. On the seventh day the number of seeds germinated and length of coleoptile were recorded. Forty to 100 seeds in each variety were used for the test.

Further investigations were carried out by growing the plants in pots at 15%, 20% and 25% moisture levels. Corn seeds were planted at uniform depths of one inch below soil

25% moisture level, the difference is greatest and approaches near significance (Table 2). Hence it appears that early emergence and quick rate of growth up to a period of four weeks might be a criterion to distinguish the drought resistant type from a susceptible one and a moisture level of 25% or more might be suitable for the test.



It was suggested by Nightingale and Farnham (1936) that water deficit interferes with protein synthesis in plants. Clements (1937) (quoted by Kramer 1949) found a high level of nitrogen metabolism in plants that were grown with deficient soil moisture. Black (1957) has also pointed out that the nitrate content of plants is high under conditions of drought. The data obtained from this preliminary study indicate that there is an increase in nitrogen content as the soil moisture stress becomes greater and the resistant variety has slightly increased nitrogen content.

Osmotic pressure of cell sap: The freezing point depression and osmotic pressure of cell sap from tops of the two corn hybrids grown at 15%, 20% and 25% moisture levels and sampled when ten weeks old are given in Table 5. The results show that there is

TABLE 1.
Average coleoptile length and percentage germination of two corn hybrids at three levels of atmospheric tensions compared with distilled water (control).

Experiment	Variety	Atmospheric Tension of Mannitol Solutions									
		0									

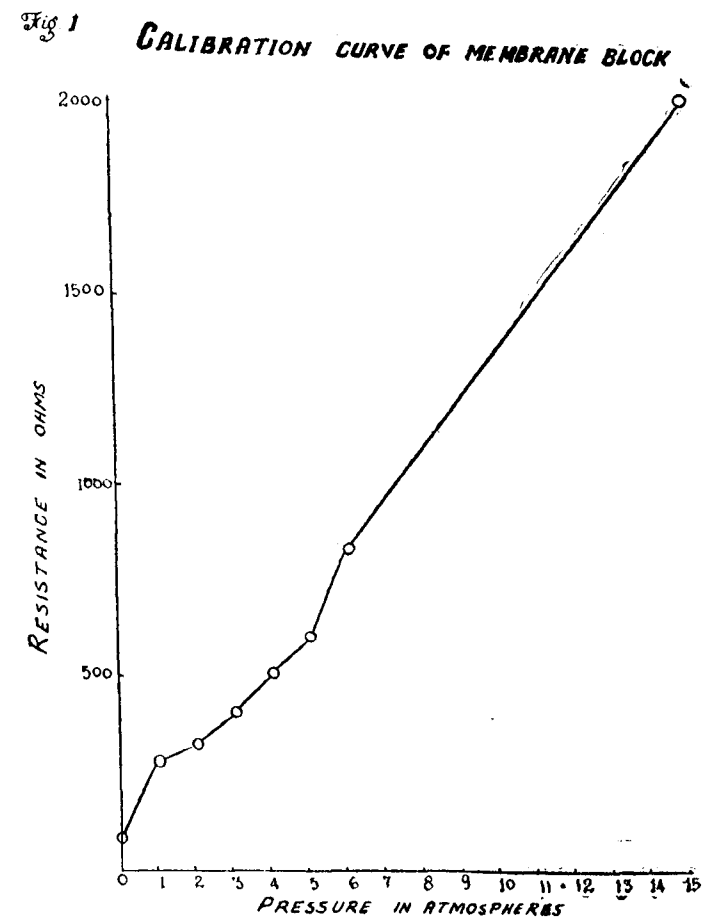
TABLE 4.

Soluble protein nitrogen content in tops of two corn varieties grown at 15%, 20% and 25% moisture levels.

Treatments	Nitrogen content at three stages of crop growth %		
	5 weeks	7 weeks	10 weeks
15% S	0.0574	0.0139	0.0748

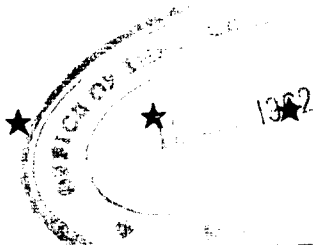
porous medium having a pore-size distribution such that it could gradually release moisture over the 0-15 atmospheres range would undoubtedly produce more satisfactory results (Haise & Kelley 1946).

Materials and methods: Cellophane membrane invariably used in pressure plate apparatus was used as an enclosing material for the electrodes. The casing and the electrodes used in nylon blocks were found quite suitable for use in the assemblage of the electrodes inside the membrane which was folded 4 times to make a thin layer separating the electrodes.



in due course leads to considerable attack on the fruits. So, under the auspices of the Vegetable Research Scheme, financed by the Indian Council of Agricultural Research, observations were made on the degree of incidence of these pests on the shoots in about eighteen types grown under the horticultural investigations and an account of the same is given below.

Sl. No.	H. Nos.	Popular Names	Percentage of incidence on the shoots
1.	H. 189	Bhendi red I	Nil
2.	H. 350	Bhendi red II	Nil
3.	H. 358	Red wonder I	



PESTICIDES OF MOMENTOUS IMPORTANCE.

COTTON DUST

COTTON SPRAY

COTTON EMULSION