

## RICE VARIETY TRIAL 1931-31.

### Introduction.

The immediate possibilities of pure line selection in rice are nowhere near exhausted. In the past selections have been made at the I.C.T.A. farm from the popular local variety - Kalyaman, the three outstanding pure line selections being No.29, No.38 and No.11. The present experiment was designed by Prof. Wood and Mr. Paterson to test the performance of these three pure lines, the original variety Kalyaman and two other varieties No. 4 and No.7.

### Description of Pure Lines and Varieties.

Kalyaman Special - a very popular variety. White - Relatively long, thin cylindrical grain. Has a tendency to break on husking. The average dimensions of the paddy run to  $10\frac{1}{2}$  - 11 m.m. in length,  $2\frac{3}{4}$  - 3 mm in width and about 2 m.m. in thickness. There is no dark red pigment either in the husk or the cuticle surrounding the kernel.

No.29 - White rice. Very much like Kalyaman, though not quite so long. Doesn't break. As paddy it is  $9\frac{3}{4}$  - 10 m.m. long, 3 m.m. wide and  $2\frac{1}{4}$  -  $2\frac{1}{2}$  m.m. thick. The husk is a shade darker and a very small percentage of the grains have red cuticle, indicating that the selection is by no means quite pure. It is early maturing and yields well. Its performance in previous years has been reported very favourably (vide the cultivation sheets).

No.38 - White rice. Same colour as Kalyaman but a shade longer and wider. 11 to  $11\frac{1}{2}$  m.m. by  $3\frac{1}{2}$  m.m. by  $2\frac{1}{2}$  m.m.

No.11 - Has a very distinct appearance. Much shorter and stouter than Kalyaman. The average dimensions of the paddy run to 8 m.m. in length,  $3\frac{1}{2}$  m.m. in width and 2 m.m. in thickness. Dark red pigment is contained only in the husk and not in the cuticle surrounding

the kernel. This selection is supposed to have originated from a solitary short plant in a field of Kalyaman rice.

No.4 - Very much like No.38. It appears to be a mixture of different strains. Some have white husks and white grains, some white husks and red grains and a very small proportion red husks and red grains. The white paddy is about  $11-11\frac{1}{2}$  mm long, 3 m.m.wide and  $2\frac{1}{2}$  m.m. thick. The red paddy on the other hand is about 9 m.m. long, 3 m.m. wide and 2 m.m.thick.

No.7 - An awned variety with red cuticle covering the kernel. Very late maturing. Grows to a considerable height, about  $6\frac{1}{2}$  feet. Has all the undesirable qualities. Worthless from the millers point of view. The dimensions are 8 m.m. long, 4 m.m. wide and 3 m.m. thick. The awn is on the average 25 m.m. long but there is a great deal of variation.