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## FUNGICIDAL CONTROL OF RUST DISEASE OF BLACKGRAM : MUNG

Blackgram-*Phaseolus mungo* L. is an important pulse crop grown in the rice fallows of Tamil Nadu. There are numerous diseases which cause heavy loss of pulse crops, Rust disease of blackgram caused by *Uromyces appendiculatus* (Pers) Link is one of the serious diseases of this crop in the rice fallows. Kannaiyan *et al.* (1974) have reported that rust infection of greengram was least in Kabarkan followed by Co. 1. Fungicidal control measures are not much known for the control of this disease. An attempt was made to control this disease with fungicides and the results are reported hereunder.

A field trial was laid out in randomised block design with four replications during January - March 1973. ADT. 1 - a blackgram variety susceptible to this disease was grown. The test fungicides viz., Benlate (methyl - 1 butyl - carbamoyl 2 - Benzimidazole carbamic acid,) vitavax (2,3 - dihydro - 5 - carboxinilide - 6 methyl, 4 - Oxathiin) Thiram (Tetramethyl thiuram disulphide) E. L. 273 (2,4, dichlorophenyl & phenyl - 5 - pyrimidine methanol) and wettable sulphur were sprayed at 2g/litre of water. Sulphur dust was used at 10Kg/ha. Only one spraying was given at 45th day after sowing. The intensity of the disease was assessed 15 days after the spraying. Then plants were selected at random in each treatment and the leaves were graded into 5 different ratings from healthy to severely diseased. The disease index was calculated and arrived as given below.

$$\text{Disease index} = \frac{\text{Total sum of numerical ratings}}{\text{Total number of leaves graded} \times \text{Maximum grade}} \times 100$$

The results were found to be statistically significant.

The results have shown that all the treatments have reduced the disease incidence when compared to the untreated control. However, sulphur dust has significantly controlled the disease (11.2 per cent) followed by Benlate (13.7 per cent) and E. L. 273 (14.2 per cent). Thiram, Vitavax and Wettable sulphur have also minimised the disease when compared to the untreated control (32 per cent).

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## സംഗ്രഹം

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## REFERENCE

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