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**FIELD EVALUATION OF FUNGICIDES AGAINST *CORTICIUMSASAKII*
(SHIRAI) MATSUMOTO. CAUSING SHEATH BLIGHT ON RICE**

Sheath blight of rice, though considered to be a minor disease has become one of the most common and destructive diseases in KeraSa State. Eventhough some attempts have been made to study the sheath blight disease not much work has been done on its control. Keeping in view the importance of the disease to the rice growers, studies were undertaken at the Ri ' Research Sub Station, Kayamkulam, Kerala during the second crop season 1975-76 to evaluate the efficacy of some proprietary fungicides in controlling the disease under field conditions.

The experiment was conducted in randomised replicated plots of" size 4×3 m. The variety Annapurna was planted at a spacing of 20×15 cm. Farmyard Manure to supply 20 kg N/ha was applied basally. Ammonium sulphate to supply 100 kg N/ha was given in two split doses subsequently. The fungicides used are presented in Table 1.

Table 1

Name of fungicides	Active ingredient	
Hinosan	O-ethyl S. S. dephenyl-dithio phosphate. 50% E C.	0.05
Dithane Z.78	Zinc- ethylene bis dithiocarbonate 75% W. P.	0.15
Dithane M. 45	Zinc- Manganese ethylene bis dithio carbanate 75% W. P.	0.15
Fytolan	Copper oxychloride 50% W. P.	0.10
Difolatan	N- (1, 1, 2, 2-tetra chloroethyl) sulphenylcis-4-cyclohexane-1, 2-dicarboximide. 80% W.P	0.08
Ziride	Zinc dimethyl dithiocarbamate 80% W, P.	0.16
Aureofungin Sof.	N-methyl P-aminoacetophenone and mycosamine. 100%	25 ppm.

Three sprayings were given at tea days interval starting from 21st day after transplanting. The infection was recorded at heading stage by observation of the lesion area on sheath from ten hills per plot selected at random. The intensity of disease development was recorded based on the seven infection grades formed according to the per cent area of sheath infected Viz. 1 (no infection), 2 (upto 5%), 3 (6-20%), 4 (21-35%), 5 (36-50%), 6 (51-65%) and 7 (above 66%). The disease index for each plot was computed using the formula reported by Kustwah and Chand (1971): Disease index : Sum of all numerical rotting/Total number of hills x 100/7 where 7 = rating of maximal disease category. The per cent efficiency of each fungicide over the control was worked out by the formula: Percent efficiency — Disease index in control - disease index in treatment/Disease index in control x 100. The plot-wise grain yield data were also recorded.

Table 2

Mean intensity of disease infection and grain yield.

Treatments	Disease Index	Per cent efficiency over control	grain yield in kg/ha.	Per cent efficiency over control
Hinosan	10.2	74.2	1667	23.3
Dithane Z 78	22.1	44.2	1367	1.2
Dithane M. 45	20.7	47.7	1417	4.8
Aureofungin. sol.	20.6	47.9	1267	(-) 6.2
Fytolan	21.5	40.6	1542	14.2
Difolatan	21.7	45.2	1624	20.4
Ziride	31.0	21.7	1500	11.1
Control (without fungicidal treatments)	39.6		1350	
F. Test.	Not sig.		Not sig.	

The results are presented in Table 2. Treatment effects were not statistically significant. However from the observations on the intensity of disease infection and grain yield it may be seen that hinosan is comparatively

better than all the other fungicides tested on a per cent efficiency basis (Table 2). Trials conducted at **IRRI**, Philippines showed that **hinosan** is effective in controlling the rice sheath blight (Anon. 1973.)

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