

Research Notes

**COMPARATIVE EFFICACY OF CERTAIN FUNGICIDES IN THE CONTROL OF SHEATH ROT OF RICE**

Sheath rot of rice caused by *Sarocladium oryzae* (Sawada) W. Gams & D. Hawksw, has gained much importance as a serious disease during recent years in many parts of India including Kerala (Agnihotrudu, 1973; Amin, et al., 1974; Nair and Sathiarajan, 1975). A study was, undertaken to assess the comparative efficacy of six fungicides in the control of this disease.

There were seven treatments including the control and they were replicated four times. The plot size was 24.3 sq.m and the agronomic and manurial practices adopted were as per the Package of Practices Recommendations (Anon., 1976 a). The fungicides were sprayed twice, 40 and 65 days after transplanting. The per cent of plants infected and the intensity of infection were recorded adopting the standard evaluation system for rice diseases (Anon. 1976 b). The crop was harvested plotwise and yield recorded. The data on the incidence and intensity of disease and yield are presented in Table 1 .

The results showed that the fungicidal treatments significantly reduced the incidence and intensity of sheath rot disease. The data on the disease intensity clearly indicate that all the fungicides were effective and there were significant differences among them. Bavistin was found to be the best followed by H. M. P. M. B. C., Aureofungin and Difolatan. There was no significant difference between the other two fungicides. With regard to the percentage of infection again Bavistin was the best followed by Dithane z-78, H. M. P. M. B. C, Aureofungin, Hinosan and Difolatan. It is evident from the results that Bavistin and H. M. P. M. B. C. both belonging to the benzimidazole group and having systemic activity, were superior in controlling the disease.

സംഗ്രഹം

നെല്ലിനെ ബാധിയ്ക്കുന്ന പോള അഴുകൽ എന്ന കുമിൾ രോഗത്തെ നിയന്ത്രിക്കുവാൻ ഏകദേശം 24.3 ച.മീ. വലിപ്പമുള്ള പ്ലോട്ടുകൾ ഉപയോഗിച്ച് ഏകദേശം 40 മുതൽ 65 ദിവസം വരെ പ്ലോട്ടുകളിൽ ഫണ്ടിസിംഗ് ചെയ്തു. പ്ലോട്ടുകളിൽ രോഗബാധിതമായ പ്ലാന്റുകളുടെ ശതമാനം രോഗബാധിതതയുടെ തീവ്രത എന്നിവ രേഖപ്പെടുത്തി. നിയന്ത്രിക്കാനുള്ള പ്ലോട്ടുകളിൽ കൃഷി ചെയ്ത് വിളവെടുത്തു. രോഗബാധിതതയുടെ തീവ്രതയുടെയും വിളവ് എന്നിവയുടെയും വിവരങ്ങൾ പട്ടികയിൽ നൽകിയിട്ടുണ്ട്.

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Table 1

Effect of different fungicides on the incidence of sheath rot disease and yield in rice

Treatments	Conc. %	Average disease inten- sity	% infe- ction	Calculated yield kg/ha	Increase in yield over control, kg/ha	Increase in yield, %
T <sub>1</sub> Bavistin (2-methoxycarbamoylbenzimidazole)	0.1	0.293	5.15	1269	139	12.3
T <sub>2</sub> H. M. P. M. B. C. (methyl-2-benzimidazolecarbamate)	0.1	0.356	5.45	1415	285	25.2
T <sub>3</sub> Aureofungin-Sol (Heptane antibiotic)	0.01	0.360	5.90	1233	103	9.1
T <sub>4</sub> Difolatan (Cis-N-1-1, 2, 3, tetra- chloroethyl thio-4-cyclohexene 1, 2, dicarboximide)	0.15	0.391	6.20	1289	159	14.0
T <sub>5</sub> Hinosan (O-ethyl-S. S. diphenyl-di- thiophosphate)	0.1	0.405	6.03	1203	73	6.4
T <sub>6</sub> Dithane Z-78 (Zinc ethylene bis di- thiocarbamate)	0.4	0.411	5.27	1377	247	21.0
T <sub>7</sub> Control - No spray	..	0.517	8.85	1130	..	..

C. D. (P=0.05) for

1. Disease intensity 0.0273
2. Per cent infection 0.0670
3. Yield N. S.

### References

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