

# **Eco-friendly Approaches for the Management of Sheath Rot (*Sarocladium oryzae*, (Sawada)) in Rice**

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## **ABSTRACT**

Fungicide/antibiotic resistance is an increasing problem leading to increased incidence of certain diseases like sheath rot in rice which has assumed as a major disease in all rice growing areas of world. Present investigation revealed that out of eighteen rice genotypes, Masuri was found resistant to *Sarocladium oryzae* while NTP-98B and NTP-98A were found moderately resistant. Jaya, TN-1, GR-6, GR-4, IR-66, IR-50, IR-28, IR-20 and CR-138-928 were highly susceptible to sheath rot. Seed bacterization and seed treatment with fungal biocides inhibited the growth of the *S. oryzae*. Among bacterial biocides *Pseudomonas fluorescens* and fungal biocides *Trichoderma viride* under *in vitro* and *Bacillus subtilis*, *P. fluorescens* and *T. viride* under *in vivo* conditions were found most effective in controlling *S. oryzae* the causal agent of sheath rot disease of rice.

Key words: Disease incidence, Genotypes, *Pseudomonas fluorescens*, *Trichoderma viride*, Rice.