



## **Eco-friendly management of rice sheath rot disease by phylloplane microflora**

I. YESU RAJA\* AND P. MAHALAKSHMI

Department of Plant Pathology, Agricultural College and Research Institute, MADURAI (T.N.) INDIA

**Abstract :** The micro-organisms isolated from the phylloplane of rice were *Aspergillus flavus*, *Aspergillus niger*, *Aspergillus glaucus*, *Penicillium* sp., *Curvularia* sp., *Cladosporium* sp., *Pseudomonas fluorescens* and *Bacillus subtilis*. Among these, *P. fluorescens* exhibited the maximum inhibition on the mycelial growth and sporulation of *S. oryzae* followed by *B. subtilis*, *A. flavus*, *A. niger* and *Cladosporium* sp. In pot culture, spraying of *P. fluorescens* ( $10^9$ cfu/ml) was the most effective in reducing the disease intensity by 68.56 per cent followed by *B. subtilis* ( $10^9$  cfu/ml), *A. flavus* ( $2 \times 10^4$  spores/ml), *A. niger* ( $2 \times 10^4$  spores/ml) and *Cladosporium* sp. ( $2 \times 10^4$  spores/ml) which recorded 63.07, 44.42, 42.23 and 40.40 per cent disease reduction, respectively.

**Key Words :** Eco-friendly management, Phylloplane microflora, Rice sheath rot

**View Point Article :** Raja, I. Yesu and Mahalakshmi, P. (2014). Eco-friendly management of rice sheath rot disease by phylloplane microflora. *Internat. J. agric. Sci.*, **10** (2): 519-523.

**Article History :** Received : 06.10.2012; Revised : 24.03.2014; Accepted : 09.04.2014