

**Research Article**

## **Host Range and Survival Studies of *Pyricularia grisea* Causing Blast Disease of Rice**

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### **Abstract**

*Pyricularia grisea* causing blast disease of rice a highly variable pathogen, is known to infect various crops and weeds. The studies on host range showed that it did not cause infection on *Triticum aestivum*, *Hordeum vulgare* and *Avena sativa*. However, the weeds viz. *Echinochloa crusgalli*, *Echinochloa colonum*, *Arachne racemosa*, *Dactyloctenium aegyptiacum*, *Cyperus difformis* and *Cyperus iria* were found to be susceptible to *P. grisea* and typical blast symptoms were observed. The investigations on survival revealed that infected crop residue and infected seeds both served as source of survival for *P. grisea* but infected crop residue was found to show higher survival rate of *P. grisea* i.e 37.1-60.4 per cent as compared to infected seed under different treatments where survival varied between 3.73- 38.2 per cent. This, signified that infected crop residue can serve as more efficient source for overwintering inoculum as compared to seed. These findings will be helpful for devising effective management strategies for blast disease of rice.

**Key words:** Crops, infected grains and straw, *Pyricularia grisea*, weeds

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