

## Effect of blast disease on seed vigor parameters in rice

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**ABSTRACT :** Blast (*Magnaporthe oryza*) is considered as one of the most important biotic stresses limiting rice production. In the recent years due to uncertain climatic factors blast is affecting even the popular landraces known to be resistant over a period of time. Though disease affect all the parts of a plant, this study the focuses on the effect of the disease on seed germination and growth rate. The pool consists 85 varieties, among which 38 released varieties, 43 landraces and four check varieties (Tadukan and Tetep- Resistant checks, HR-12 and CO-39 susceptible). The experiment was laid out in CompletelyRandomized Design (CRD) with three replications. Results showed that 12 varieties found with the minimal influence of blast disease. Five varieties-BI-33, Sannamullu, Mysursanna, Ugibhatta and Jeerigesanna were susceptible under field condition but found with minimum losses in germination and seedling growth test. Therefore, the results of the experiment clearly indicated that minimum to moderate influence can be observed by blast disease during germination and seedling growth stages.

**Key Words:** Rice (*Oryza sativa* L.), blast (*Magnaporthe oryzae*), germination, germplasm seedling growth stages, varieties.