

Rice blast (252)

Summary

- Worldwide distribution. On rice and wild grasses. An important disease.
- Spots oval or diamond-shaped, 5-15 mm, with whitish-grey centres and dark brown borders, merging, killing the leaves. Rots of leaf sheath, stem and panicles. Plants killed until tillering stage.
- Spread of spores in irrigation water and by wind.
- Cultural control: sow to avoid flowering at wettest times; avoid overlapping crops; split N applications; space plants to maximise air flow; collect and burn trash after harvest. Use chemicals at heading stage.
- Chemical control: Seed/field treatment: mancozeb, captan (protectants); azoles, strobilurins (eradicants).



Photo 1. Diamond-shaped spots on the leaves of rice leaves caused by blast, *Magnaporthe oryzae*.

Common Name

Rice blast

Scientific Name

Magnaporthe oryzae. Previously, *Magnaporthe grisea*. *Pyricularia oryzae* is the asexual name.

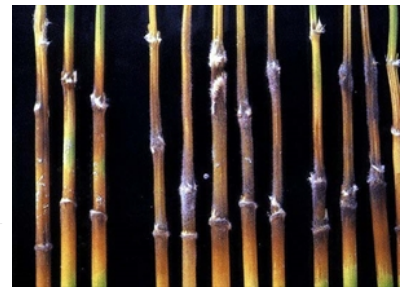


Photo 2. Infections at the nodes of stems below the neck, caused by blast, *Magnaporthe oryzae*. The infections occur beneath the flower head and can lead to death of the stem.

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Information from BugwoodWiki (2014) *Magnaporthe oryzae*. (https://wiki.bugwood.org/Magnaporthe_oryzae); and Blast (various articles). Rice Knowledge Bank. IRRI. (<http://www.knowledgebank.irri.org/search-results?gsquery=blast>); and Meng Q *et al.* (2019) Proteomics of rice - *Magnaporthe oryzae* interaction: what have we learned so far? *Front. Plant Sci* 29. (<https://www.frontiersin.org/articles/10.3389/fpls.2019.01383/full>); and (with Photo 2) CABI *Magnaporthe oryzae* (rice blast disease) (2019) Invasive Species Compendium. (<https://www.cabi.org/isc/datasheet/46103>); and from TeBeest DOC (2012) Rice blast. The Health Instructor. (<https://www.apsnet.org/edcenter/diseases/fungalasco/pdlessons/Pages/RiceBlast.aspx>). Photo 1 IRRI Rice Knowledge Bank.

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