





## Rice blast FUNGUS - (Pyricularia oryzae)

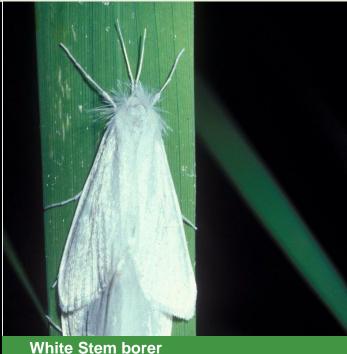
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- Rounded to spindle shaped lesions on leaves, with brown borders and greyish centres
- Infected nodes turns black and breaks easily
- Few, no seeds, or whiteheads when neck is infected



**Brown spot** FUNGUS - (Bipolaris miyabanus)

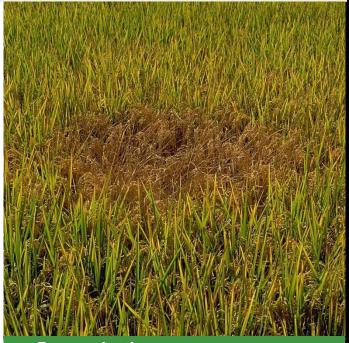
- Brown, circular/oval lesions on seedlings, turning light brown with reddish borders on older leaves
- Lesions are often surrounded by a brown or yellow-brown halo
- Grains can be black



INSECT – (Scirpophaga innotata)

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- Holes on stem; insect frass;
- central shoots of tillers are dry (dead hearts)
- Discoloured panicles; reduced plant vigour



Brown planthopper INSECT – (Nilaparvata lugens)

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Circular patches of yellow/brown, dry plants; when plants are tapped many small winged insects may be seen

**B**plantwise







Leaf scald FUNGUS – (*Microdochium oryzae*)

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- Brown/red lesions at the leaf tip and edges, merging to form dry areas with a scalded appearance
- Sometimes lesions are zonate with alternating light tan and dark brown patterns
- infected florets are light to dark, reddish-brown



Stem rot FUNGUS – (Sclerotium oryzae)

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- Brown/black lesions on outer leaf sheath, near water line
- Lesions enlarge and sheath becomes rotten; can cause lodging, unfilled panicles and chalky grains



Bakanae FUNGUS – (Fusarium fujikuroi)

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- Seedlings abnormally tall, may also be thin and yellow/green
- Fewer tillers and leaves are dry



Army cut worm INSECT – (Spodoptera litura)

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- Brown/black caterpillar, feeds on leaves and stem
- Seedlings cut at base
- Leaf surfaces skeletonised, entire plant eaten