

Management of Blast Disease of Rice (*Magnaportha grisea*)

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Leaf blast

Collar blast

Node blast

Neck blast



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The Blast disease of rice is endemic in northeastern states. It is caused by *Magnaportha grisea*. This disease affects the crop at all the growth stages viz; nursery, tillering and flowering. The yield loss ranges from 36-50 % depending upon the variety and environmental conditions.

Symptoms: -

On the leaf, symptoms appear as elliptical with more or less pointed ends resembling a spindle. Initially, they appear as small greyish dots of pin-head size that finally enlarge into a spindle shaped spot of about one centimeter long and 0.5 cm broad. Such spots have brown margin with grey centre. When numerous spots occur on leaves it results in the death and drying of the plant. The node blast symptoms appear as black patches on infected nodes and all parts above the infected node die. The panicle blast or neck blast attack results in improper grain filling, poor milling recovery and also chaffy ear heads similar to the damage of white ears by stem borer.

Management: -

(I) Cultural control: -

1. Proper field sanitation and destruction of weed hosts must be done.

2. Seed treatment must be done with Tricyclazole @ 2g or Carbendazim @ 2g/kg of seed before sowing.

3. Blast resistant varieties must be used for planting eg Bhalum 1, Bhalum 2

4. Higher levels of nitrogenous fertilizer must be avoided because

(i) It favours the disease

(ii) Nitrogen should be applied at 40-60 kg/ ha for upland and 50-60 kg/ha for lowland in three equal split doses at

. One week after sowing or transplanting

. Tillering

. Panicle initiation stage

(II) Chemical control:-

1. When initial spots of the disease is seen, spraying with blasticides like Tricyclazole 75 WP @ 0.06% or Carbendazim 50 WP @ 2 gm / lt or Kasugamycin 2 lt @ 0.2% should be done to prevent further spread of the disease.

2. Stickers like Triton or Sandovit @ 1% should be used with the spray to prevent washing off the fungicide due to rainfall.