

INSECT PEST AND DISEASE MANAGEMENT OF RICE



Krishi Vigyan Kendra
Lohit District
Arunachal Pradesh

Introduction: Our agriculture faces two major challenges:-

- the production of sufficient food to feed the growing population, and
- about 18% of crop losses are caused due to insect pests and diseases.

The major insect pests and disease of rice commonly observed in Lohit district are given below:-

INSECT PESTS -

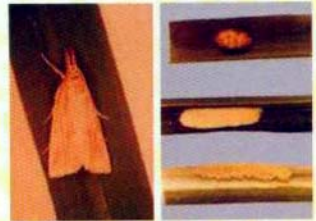
*** Yellow Stemborer**

Symptoms:

White ears-plants produce white ears at early stage devoid of grain.

Control Measures

- Removal and destruction of stubbles at the time of the first ploughing.
- Ploughing and flooding the field is also effective in killing the larvae.
- Clipping tips of seedlings before transplanting.
- Seedling root deep treatment in chlorpyrifos 20 EC @ 1ml/liter of water for over night.
- Spray endosulfan 35 EC @ 2ml/liter or monocrotophos 36EC @ 2ml/liter or chlorpyrifos 20 EC @ 1ml/liter of water at 45 DAT.



Adults, pupa, larvae and egg

*** Gundhi bug**

Symptoms:

Developing grains in the milky stage causes incompletely filled panicles or panicles with empty grains.

Control Measures

- Using light traps, collection of adults with nets and destroying the weeds to remove alternate hosts.
- Apply carbaryl 5 % or malathion 5 % dust @ 25kg/ha.



Adults

*** Leaf folder**

Symptoms:

Whitish Streaks appear on the leaves.

Control Measures

- Removal of weeds from field and cleaning of bunds.



larvae

Whitish streak

- Light trapping.
- Spray endosulfan 35 EC @ 2ml/liter or monocrotophos 36 EC @ 2ml/liter or chlorpyriphos 20 EC @ ml/liter of water at 45 DAT.

DISEASES –

Rice Blast

* Symptoms:

Leaves symptoms first appear as small flecks. In older leaves they remain Circular but on young leaves they enlarge up to a cm (Spindle shaped).



Control Measures

- Seed treatment with Agrosan GN or carbendazim @ 2g/kg seed.
- Spray Bavistin @ 1g/litre of water.
- Spray Dithane Z-78 @ 2.5g/litre of water.

Sheath blight

* Symptoms:

Lesions on sheath of lower leaves near the water line.



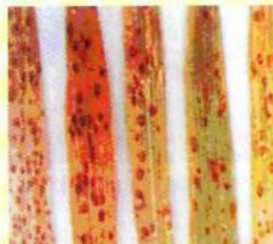
Control Measures

- Spot spraying of carbendazim 1g/litre of water
- Drain-off excess water, avoid flooding and delay and reduce top dressing of nitrogen fertilizers to check.

Brown spot

* Symptoms:

Leaves spots vary in size and shape from minute dots to circular, eye-shaped or oval lesions.



Control Measures

- Seed treatment with Agrosan GN or carbendazim @ 2g/kg seed.
- Spray mancozeb @ 2.5 g or carbendazim @ 1g/liter of water or Dithane Z-78 @ 2g/litre of water.

* **Bacterial leaf blight**

Symptoms:

Yellow to straw coloured stripes with wavy margin, generally on both edges of the leaf, rarely on one edge.



Control Measures

- Spray mancozeb 2.5 g or carbendazim 1 g/liter of water.

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