

Agro Advisory Service for Rice
ICAR - National Rice Research Institute, Cuttack 753 006

Please follow Covid-19 guide lines as per the Ministry of Health and Family Welfare for any agricultural operations

Strategies for 1st Fortnight of November 2020

- Harvest those crops which have reached at 80% of maturity. After threshing, paddy grains need to be sun-dried to 14% moisture for consumption purpose and for seed purpose it should be dried to 12% moisture for better self-life.
- For safe storage of paddy/rice, use Super Grain Bag which is helpful for retaining the quality, texture, colors, aroma, fragrance and taste of the commodities for longer period of time and process, dry and pack paddy varieties separately without mixing for better price of the produce.
- Or, store the harvested paddy in a safer place (properly stacked with suitable cover) to avoid damage due to untimely rain.
- Soon after noticing the infestation of the stored grain, take up fumigation by using Aluminium phosphide (Do not use in dwelling houses) tablets @ of 3 tablets / ton grain (total 9 gm of tablets) in fairly air tight containers or by covering with thick tarpaulin leaving no gaps. The tablets should be wrapped in cotton pouches before placing them in the stacks, which helps to discard the remnants after completing the fumigation. All the corners of plastic cover should be plastered with 6-inch-thick layer of mud/ sand snake/ adhesive tapes to prevent leakage of gas. Minimum exposure period is for about 7-10 days.

There may be chances of infestation of Brown Plant Hopper (BPH), White-backed Plant Hopper (WBPH), Green leaf hopper (GLH), Gundhi bug in long duration varieties of rice or very late planted rice and ear cutting caterpillar in matured/harvested crop kept in the field.

- If infestation of Brown Plant Hopper exceeds ETL (5-10 hoppers/hill), it is advised to alter the micro-climate of the rice plant by alternate wetting and drying (Water should not stand in field for long time). If problem still persists, spray Azadirachtin 0.15% w/w (minimum) neem seed kernel based EC formulation @ 600-800 ml/acre or Triflumezopyrim 10SC @ 94 ml/Acre or Pymetrozine 50% WG @ 120 g/acre or Dinotefuran 20% SG @ 80g /acre or Imidacloprid 17.8% SL @ 50 ml/Ac or Acephate 75% SP @ 400 g/Ac. Use 200 litre of water per acre.
- Three pheromone traps/acre may be installed in the field for monitoring of yellow stem borer and leaf folder and whenever the number of male moths/trap/night reaches three, farmers can go for using Tricho-Cards (18000-20000 eggs/acre), three such releases are made at every ten days interval or till egg masses/moth activity is not seen whichever is earlier. If dead heart is noticed, then Neem seed kernel based E.C. insecticides with Azadirachtin 0.15% (min.) @ 1 litre/acre or chemical insecticides like Chlorantraniliprole 0.4% GR @ 4 kg/acre or Chlorantraniliprole 18.5% SC @ 60 ml formulation/acre for yellow stem borer. Use 200 litre of water per acre during spraying.
- If infestation of GLH is noticed, use Azadirachtin 5 % w/w @ 80 ml/acre or Imidacloprid 17.8 SL @ 50ml/acre or Thiamethoxam 25WG @ 40g/acre or Acephate 75% SP 400 gram/acre or Fipronil 0.3% GR 10kg/acre. Use 200 liter of water.

Due to low night temperature and high humidity there may be chances of high incidence of False Smut and Neck/Panicle blast in late maturing rice varieties. For effective management, the following fungicides may be applied.

- **False smut:** Spraying of Copper Hydroxide 77WP @ 2g/litre of water at pre-flowering stage or spraying of Chlorothalonil 75 WP @ 2g/litre of water or Tebuconazole 250EC @ 1ml/litre of water during flowering stage will reduce false smut disease.
- **Neck/Panicle Blast:** If there is 1- 2 % neck infection Spray Tebuconazole 50%+ Trifloxystrobin 25% (Nativo 75 WG) @ 80gm in 200 litres of water per acre, for controlling the disease. Isoprothiolane (Fugione 40 EC @300 ml/Acre) or Aureofungin sol 25 gm/acre. Otherwise, spraying of leaf extracts of Bael (25 g fresh leaves) or Tulsi (25 g fresh leaves) or Neem (200 g fresh leaves) per litre of water can help reduce the incidence of disease.
- **Sheath rot:** If there is sheath rot infection spray Hexaconazole 5EC @ 2ml /litre of water or Propiconazole 25% @ 1ml/litre of water or Thifluzamide 24SC @ 1ml /litre of water.
- **Sheath blight:** Spray with effective fungicides like Propiconazole 25% (Tilt) @ 1ml/litre, (Rhizocin 3L, or Sheathmar 3L) @ 2 ml/ litre of water) or Tebuconazole 50%+ Trifloxystrobin 25% (Nativo 75 WG) @ 0.4g/litre or Contaf 5 EC (Hexaconazole 5EC) @ 2ml/ litre of water or Thifluzamide 24SC @ 1ml/ litre of water