

# ICAR - National Rice Research Institute, Cuttack 753 006

## Agro Advisory Service for Rice

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

### Strategies for 2nd Fortnight of October 2020

The present overcast weather condition and intermittent rains due to low pressure will favor incidence of numbers of diseases and pests in paddy field. In addition to this, lowering of temperature may favor incidences of post flowering diseases like false smut. So, farmers are requested to be vigilant and take action immediately for the followings.

- If infestation of **Brown Plant Hopper (BPH)** exceeds economic threshold level (ETL) (5-10 hoppers/hill), it is advised to alter the micro-climate of the rice plant by alternate wetting and drying technique (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/acre or Acephate 75% SP @ 400 g/acre. Use 200 litres of water per acre for spraying. Farmers should use only insecticides recommended for BPH at recommended dose only.
- In **Gall Midge** affected areas, application of Thiamethoxam 25% WG @ 40 gm/acre or Fipronil 5% SC @ 400ml/acre or Chloropyrifos 20EC @ 500 ml/acre could be used to manage the pest.
- 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 (T. japonicum/T.chilonis) (20000 eggs/acre). Five such releases are made at every 7-10 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 ltr/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 litres of water per acre for spraying.

The present condition is highly favorable for Blast, Sheath blight, Bacterial blight and Bacterial leaf streak diseases. Monitoring should be done for incidence of Blast, Sheath Blight, Bacterial Leaf Blight (BLB), Bacterial Leaf Streak (BLS) and Sheath rot in rice. If warranted, adopt the following control measures:

- **Bacterial blight / leaf streak:** Spray with Plantomycin @ 200 gm in 200 liters of water per acre or Streptocycline (30gm) + Copper oxychloride 200 gm in 200 liters of water per acre twice at an interval of 8 days, or spray Kasugamycin 600 ml + Streptocyclin 30 gm or Bacterianasak 40 gm per acre in 200 litres of water.

- **Blast:** Spraying of Tebuconazole 50%+ Trifloxystrobin 25% (Nativo 75 WG) @ 80gm in 200 litres of water per acre, may be done 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 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.
- **False smut:** Spray with Copper hydroxide 77% @ 2 g or Tebuconazole 25% @ 2 ml per litre of water twice at boot leaf stage and 50% flowering stage and drain out water from the field after grain formation.

Spraying or dusting of above plant protection chemicals should be done in a clear weather condition and be avoided in rainy days. Farmers are advised to download and use “**riceXpert**” mobile app (available in Google play store) regarding entire aspects of paddy cultivation.