Agro Advisory Service for Rice
ICAR - National Rice Research Institute, Cuttack753006

Follow the COVID-19 guide lines as per the ministry of health and family welfare

Strategies for 1st Fortnight of October 2020

The present overcast weather condition and intermittent rains will favor incidence of numbers of diseases and pests in paddy field. So, farmers are requested to be vigilant and take action immediately for the followings.

- There may be chances of infestation of Yellow Stem Borer, Leaf folder, Brown Plant Hopper (BPH) and, White-backed Plant Hopper (WBPH), gall midge, thrips and whorl maggot.

  The Economic Threshold Level (ETL) for these pests is as follows:
  - Yellow Stem Borer: 1 to 2 moths or one egg mass/m^2. Eight pheromone traps/ha may also be placed in the field for monitoring of the yellow stem borer and observe for the number of male moths/trap/day reaching 4 or 5.
  - Leaf folder: 2 Fully damaged leaves (FDL) with larva/hill
  - BPH: 5-10 hoppers/hill
  - WBPH: 5-10 hoppers/hill
  - Gall midge: 1 gall/m^2 or 10% Silver shoot

- If the insect pest population is above ETL, apply any one of the following insecticides

- Yellow Stem Borer and leaf folder: Once the infestation is noticed, apply egg parasitoids *Trichogramma japonicum*/*T. chilonis* @ 20000 parasitized eggs/acre and 4 to 5 such releases are made at weekly interval or Azadirachtin 0.15% w/w (minimum) neem seed based EC formulation @ 800ml/acre or Chlorantraniliprole 0.4GR @ 4 kg/acre or Chlorantraniliprole 18.5% SC @ 60ml/acre.

- BPH/WBPH: For management of BPH/WBPH, it is advised to alter the micro-climate of the rice field by alternate wetting and drying technique. If problem still persists, spray Triflumezopyrim 10 SC@ 94 ml/acre or Pymetrozine 50% WG @ 120 g/acre or Dinotefuran 20 % SG @ 80 g/acre or Imidacloprid 17.8% SL @ 50 ml/acre or Acephate 75% SP @ 400 g/acre. Use only insecticides recommended by CIB&RC at recommended dose only.

- In Gall midge affected areas, apply Thiamethoxam 25% WG @ 40 g/acre or Fipronil 5% SC @ 400 ml/acre or Chlorpyriphos 20 EC @ 500 ml/acre to manage the pest.

- If infestation of thrips is noticed in rice nursery or main field, spray NSKE (Azadirachtin) @ 800 ml/acre or Lambda-cyhyalothrin 5 % EC @ 100 ml/acre or Thiamethoxam 25 % WG @

40g /acre

- In whorl maggot infested fields, apply Chlorpyrifos 20.00% EC @ 500 ml/acre or Fipronil 5.00% SC @ 400 ml/acre or Thiamethoxam 25.00% WG @40 gm/acre.

- 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 leaf blight /streak: Spray with Plantomycin @ 200gm in 200 liters of water per acre or Streptocycline (30gm) + Copper oxychloride 200gm 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 litre 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 in reducing the incidence of disease.
- Sheath blight: Spray with effective fungicides like Propiconazole 25% (Tilt) @ 1ml/litre, (Rhizocin 3L, or Sheathmar 3L) @ 2ml/ 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.

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