



# ICAR-National Rice Research Institute

(An ISO 9001:2015 Certified Institute)

Cuttack-753006, Odisha, India

## Agro-Advisory Service



### Strategies for First Fortnight of October 2024

- ❖ In late transplanted rice, apply second top dressing of fertilizer at Panicle Initiation stage (50-55 DAT) @ 17.5 kg of urea per acre whereas in sandy soil apply 17.5 kg of urea +13 kg of MOP per acre.
- ❖ To control leaf folder, whenever two folded leaves/hill are observed, spray Chlorantraniliprole 18.5% SC @ 60 ml/acre or Tetraniliprole 200 SC @ 100 – 120 ml/acre or Flubendiamide 20WG 50 g/acre. Use 200 litres of water per acre for spraying.
- ❖ In case of infestation of Swarming caterpillar/Case worm/ Hispa, spray Chlorpyrifos 20 EC @ 400 ml/ acre or Phenthoate 50 % EC @ 400 ml/acre or Triazophos 40% EC @ 500 ml/ acre. Use 200 litres of water per acre for spraying.
- ❖ In case of Gall midge infestation, spray Fipronil 05 % SC @400-600 ml/Acre or Lambda-cyhalothrin 05 % EC @ 100 ml/acre or Chlorpyrifos 20 EC @ 500 ml/ acre Carbosulfan 25% EC @ 400 ml/ acre or apply Cartap hydrochloride 4G @ 10 kg/acre or Carbofuran 3G @ 10 kg/acre.
- ❖ If population of Brown Planthopper (BPH) exceeds ETL (5-10 hoppers/hill), it is advised to alter the micro-climate of the rice field by alternate wetting and drying technique (water should not stand in the field for long time). 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** Flonicamid 50% WG 60 g/acre. Use insecticides recommended for BPH at specified dose only. Avoid using nitrogenous fertilizers during infestation of BPH.
- ❖ On appearance of sheath blight disease in 1-2 tiller, spray Propiconazole 25 EC @ 200 ml/acre **or** Hexaconazole 5EC @ 400 ml/acre **or** Validamycin 3L @ 400 ml/acre **or** Tebuconazole 50% + Trifloxystrobin 25% (Nativo 75WG) @ 80 g/acre. Repeat the spray at 7-10 days interval. Use 200 litre of water to make the solution for one-acre area.
- ❖ In case of presence of Bacterial blight/Bacterial leaf streak disease, stop top dressing of nitrogenous fertilizers (Urea/DAP). If possible, drain out water where water stagnation condition prevailed. Apply Streptomycin sulphate (9%) + Tetracycline hydrochloride (1%) @ 120 g/acre and Copper oxychloride @ 200 g/acre in 200 litre of water. Spray should be done in the early morning or afternoon.
- ❖ In case of leaf blast incidence, spray Tebuconazole 50%+Trifloxystrobin 25% (Nativo 75 WG) @ 80 g/acre **or** Carbendazim 50 WP @ 400 g/acre of water may be done for controlling the disease. Alternatively, 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. Also, biocontrol agent like *Trichoderma viride* (minimum 10<sup>6</sup> CFU) @ 2 kg/acre can be used. Use 200 litre of water to make the solution for one-acre area.
- ❖ False smut: Spray Copperhydroxide 77% (Kocide101) @ 400 g/acre or Tebuconazole 25% (Folicur) @ 400 g/acre at boot leaf stage. Repeat the spraying at seven days interval for effective control of false smut.

- ❖ Farmers are advised to download and use NRRI-developed **riceXpert** mobile App (available in Google Play store) for all aspects of rice cultivation.
- ❖ Wherever rice has not been grown due to moisture stress, farmers are advised to grow short duration pre *rabi* crops like Amaranths, Ragi, Horse gram, Green gram, Black gram, Cowpea, Sweet potato and Sesame in upland/medium lands utilizing the available soil moisture in the field.

### **Contingent Agro-advisory for areas received heavy rainfall or deficit rainfall**

- ❖ Where excess rainfall occurred drain out the excess water from rice fields wherever possible.
- ❖ The present condition (cloudy sky, high humidity, intermittent rainfall with high day temperature (e.g., Kalagandi, Nuapara) but low night temperature) is highly favourable for incidence of many diseases like Bacterial Blight, Bacterial Leaf Streak, Leaf Blast etc. So, keep vigil on your field. Apply 1 g Plantomycin + 20 g Copper Oxochloride in 10 litres of water for bacterial diseases. If leaf blast is observed in rice field, spray Tebuconazole 50% + Trifloxystrobin 25% WG @ 2 g/5 ltr of water or Isoprothiolane 40 EC @ 1.5 ml per litre of water. Repeat the spray at 7-10 days interval.

### **Water and disease management:**

- ❖ **Sundargarh and Deogarh:** Paddy needs 0.5 inch of water from transplanting to tillering. From then onwards, keep 2 inches of water in the field till grain formation. In early sown paddy at 21 DAS apply 8 kg N/ac.
- ❖ **Mayurbhanj and Keonjhar:** Farmers are advised to maintain 3-5 cm of water level in the paddy field. Spraying of insecticides can be applied in the field. The smartphone holders can get location specific weather information from Mausam, Meghdoot and Damini apps.
  - Panicle initiation is a critical stage for irrigation. Provide irrigation if field is dry.
  - Top dressing of urea into the paddy field can be done.
  - Remove weeds from the field. Water level should be maintained in the field.
  - For the incidence of Sheath blight diseases, spray Propiconazole 25 EC @ 200 ml/acre **or** Hexaconazole 5EC @ 400 ml/acre **or** Validamycin 3L @ 400 ml/acre **or** Tebuconazole 50% + Trifloxystrobin 25% (Nativo 75WG) @ 80 g/acre. Repeat the spray at 7-10 days interval. Use 200 litre of water to make the solution for one-acre area.  
For the incidence of bacterial blight, spray Streptomycin sulphate (9%) + Tetracycline hydrochloride (1%) @ 120 g/acre and Copper oxochloride @ 200 g/acre in 200 litre of water.
  - For the blast disease management, foliar spray in main field with Tricyclazole 75 WP @ 120 gm or Tebuconazole 50%+Trifloxystrobin 25% @ 80 g/acre is recommended.
  - Apply Propiconazole 25 EC @ 1 ml/ltr of water for managing brown spot disease.  
Apply Carbofuran @ 30 kg/ha if stem borer attack is seen.
- ❖ **Balasore, Bhadrak & Jajpur:**
  - If paddy crop is affected by submergence don't apply N fertilizer immediately.
  - If infestation of leaf folder and stem borer increase after the rain, apply spray Chlorantraniliprole 18.5% SC @ 60 ml/acre or Tetraniliprole 200 SC @ 100 – 120 ml/acre or Flubendiamide 20WG 50 g/acre.
  - Monitor the activity of YSB by making frequent visit to field by installing Pheromone and Light Trap.

- Incidence of BLB and Bacterial Leaf Streak disease are noticed in some areas, spray Copper oxychloride @ 500gm along with Plantomycin @ 200gm/acre, Soil application of additional dose of MOP 12.5 kg/acre recommended.

#### ❖ **Cuttack, Ganjam, Jagatsingpur, Kendrapada, Puri, Nayagarh & Khorda**

##### **Bacterial Leaf Blight**

There is a chance of Bacterial Leaf Blight disease infestation in paddy. If noticed, spray Copper Hydroxide 53.8% DF @ 600-gram/acre or 200-gram Plantomycin along with Copper Oxy Chloride 50% WP @ 600-gram/acre.

##### **Brown plant hopper**

There is a chance of BPH infestation in paddy. If >10/hill noticed, spray Pymetrozine 50% WG @ 120 g/acre or Dinotefuran 20 % SG @ 80 g/acre or Flonicamid 50 % WG @ 60- gram/acre or Triflumezopyrim 10% SC @ 100 ml / acre at the base of the plant.

#### ❖ **Kandhamal, Gajapati, Rayagada**

- In Zinc deficient soil, if Zinc sulphate (ZnSO<sub>4</sub>) has not been applied during final land preparation, spray Zn-EDTA @ 0.5 g/liter of water at 30 and 45 days after transplanting of rice
- Blast disease may arise due to alternate wetting and drying, sheath rot and sheath blight disease after rain may occur
- Withhold application of Nitrogen fertilizers and pesticides to control blast disease. Weeding should be done in rice crop to reduce the crop-weed competition.

#### ❖ **Koraput, Nawarangpur, Malkangiri, Angul, Dhenkanal**

- Apply 35 kg urea/acre for high yielding varieties and 42 kg of urea/acre for hybrids at tillering stage.
- Current weather may favour blast disease in rice. To control it spray Tebuconazole 50% + Trifloxystrobin 25% WG @ 0.4 g/litre of water or Tricyclazole 45% + Hexaconazole 10% WG @ 1 g/litre of water.
- There is a chance of stem borer and leaf folder infestation. If found in field then spray Chlorantraniliprole 18.5% SC @ 0.3 ml/litre of water or Flubendiamide 20% WG @ 0.25 g/litre of water.
- To control bacterial leaf blight spray Copper oxychloride 50% WP @ 3 g and Streptomycin + Tetracycline (90+10) @ 0.15 g/litre of water when sky becomes clear.

#### ❖ **Jharsuguda, Sambalpur, Balangir, Sonapur, Baragarh, Boudh**

- For better plant growth, farmers are advised to maintain 5cm of water in paddy field and make bund to store extra water of the field.
- Past weather condition is favourable for various insect attack (stem borer, leaf folder etc.) in Paddy fields so, its regular monitoring should be advised. If attack observed, then spraying of Rynaxypyr 18.5% SC @ 0.3ml or Cartap Hydrochloride 50 SP @ 1.25-1.5 g per liter of water should be advised under clear weather condition.

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