

# **Agro Advisory Service for Rice**

## **ICAR - National Rice Research Institute, Cuttack - 753006**

### **Strategies for Second Fortnight of August 2020**

#### **Please maintain Covid-19 guidelines during agricultural operations**

##### **Flood management**

Due to continuous heavy and erratic rainfall it is expected that rice areas may be affected by flashflood and submergence. The farmers are advised to go for the following measures to sustain the rice crop.

- Farmers are advised to drain out the excess water from their field.
- If farmers have transplanted '*Swarna sub1*' at least two weeks prior to flashflood, the crop will regenerate even if there is submergence for two weeks. Under that situation, farmers can go for spraying of clean water to remove the dust and silts sticking to the rice leaves.
- If flood water ceases from the standing rice crop in few days of submergence and there is mortality of some hills, farmers are advised to go for gap filling by using tillers, separated from the existing hills.
- If crop mortality is more than 50%, farmers are advised to go for re-transplanting with the available aged seedlings with closer spacing and 4-5 seedlings per hill.
- If the crop is totally damaged, farmers are advised to arrange seeds of short duration rice varieties which mature in less than 100 days and grow seedlings by Dapog method (mat nursery) and transplanting should be completed by first week of September.
- After cessation of flashflood, there is a chance of outbreak of diseases like bacterial blight, sheath blight and infestation of swarming caterpillar in the survived rice fields.
- If there is infection of bacterial blight/bacterial leaf streak, spray Copper hydroxide 1.5-2.0 gm per litre of water or Plantomycin 1g in combination with Copper oxychloride 1g per litre of water.

- If there is infection of sheath blight, on appearance of diseases in 1-2 tiller, spray Tebuconazole 50% + Trifloxystrobin 25% WG @ 0.4 g or Propiconazole 75% @ 1ml per litre of water or Hexaconazole 50% @ 2ml per litre of water. Repeat the spray at 7-10 days' interval.
- If there is outbreak of swarming caterpillar, spray Chloropyriphos 20EC 2.5 ml/ litre on the rice field bunds.

### **Direct Seeded Rice**

- In rainfed shallow lowland areas where direct seeding has been done and herbicide has not been applied to control weeds, 'beushening' may be done after accumulation of sufficient water (at least 7-10 cm standing water). After 'beushening' apply 14 kg of urea/acre as top dressing.
- In timely sown direct seeded rice, apply 14kg urea/acre as top dressing during active tillering stage of rice crop.
- After transplanting, place 4 pheromone traps /acre in the field for monitoring of stem borer and whenever the number of male moths/trap reaches 4-5, egg parasitoid, *Trichogramma japonicum* @ 20000 parasitized eggs/acre; five such releases may be made at weekly interval. If dead heart is noticed, apply insecticide like Chlorantraniliprole 0.4 G @ 4 kg/acre mixing with 4 kg of dry sand or Chlorantraniliprole 18.5% SC 60 ml/acre in 200 liters of water.

### **Transplanted rice**

- Apply herbicide Bensulfuron methyl + pretilachlor (Londax power/Eraze strong) @ 4kg/acre mixed with 4 kg of dry sand at 3-7 days after transplanting as an alternate to manual weeding or spray Bispyribac Sodium 10 SC @120ml/acre at 10-12 days after transplanting (or 2-3 leaf stage of weed) or spray Penoxulam + Cyhalofop butyl (Vivaya) @ 900ml/acre at 15-20 days after transplanting.
- In Zinc deficient soil, if Zinc Sulphate has not been applied during final land preparation, spray Zn-EDTA @ 0.5 g/litre of water at 30 and 45 days after transplanting.

- Undertake gap filling with aged seedlings in order to maintain a plant population of 33 hills per m<sup>2</sup>.
- In shallow lowland transplanted rice at active tillering stage go for first top dressing of fertilizer with 24 kg of urea +13.5 kg of MOP per acre.
- After transplanting, place 4 pheromone traps /acre in the field for monitoring of stem borer and whenever the number of male moths/trap reaches 4-5, egg parasitoid, *Trichogramma japonicum* @ 20000 parasitized eggs/acre; five such releases may be made at weekly interval. If dead heart is noticed, apply insecticide like Chlorantraniliprole 0.4 G @ 4 kg/acre mixing with 4 kg of dry sand or Chlorantraniliprole 18.5% SC 60 ml/acre in 200 liters of water.
- If problem of sheath blight is noticed in early transplanted rice, spray Azoxystrobin 18.2% + Difenoconazole 11.4% SC @ 1 ml/litre or Validamycin 3 L@ 2 ml/litre of water.
- In case of incidence of bacterial blight/bacterial leaf streak, spray Copper hydroxide 1.5-2.0 gm per litre of water or Plantomycin 1g in combination with Copper oxychloride 1g per litre of water.

