

ଭା.କୃ.ଅନୁ.ପ. - ଜାତୀୟ ଧାନ ଗବେଷଣା ଅନୁଷ୍ଠାନ भा.कृ.अनु.प – राष्ट्रीय चावल अनुसंधान संस्थान ICAR - National Rice Research Institute (An ISO 9001: 2015 Certified Institute) Cuttack – 753 006, Odisha, India



# <u>Agro-Advisory Service</u>

#### **Strategies for Second Fortnight of December 2022**

### **1.** Winter rice

- Complete the harvesting of winter rice either manually by sickle or reaper or by using combine harvester at the earliest. Paddy grains need to be sun dried to 14% moisture content for consumption purpose and for seed purpose it should be dried to 12% moisture for better shelf-life. Pack each variety separately without mixing for better price of the produce.
- Use 'Super Grain Bag' for safe storage of paddy/rice for longer period of time or store the harvested paddy in properly bagged and stacked with suitable cover for safe storage.
- Soon after noticing the infestation of the stored grain insect pest, 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. All the corners of plastic cover should be plastered with 6-inch thick layer of mud/ adhesive tapes to prevent leakage of gas. Minimum exposure period is for about 7-10 days.
- If Rodent problem is noticed, locate the rodent burrow in the crop field and surrounding areas. Seal the burrows with clay muds properly. Next day observe the opening of sealed burrows. Place Aluminium phosphide 6% tablet with cotton clothes @ One tablet (12 gm) in opened burrows only and seal the burrow with mud which will kill the rodents.
- Farmers are advised not to burn the rice straw in the field.

### 2. Dry season rice

### 2.1 Transplanted rice

Procured/arrange good quality seeds of varieties CR Dhan 601, IR 64, Chandan, Lalat, Imroved Lalat, Naveen, CR Dhan 311, CR Dhan 310, Khandagiri, Bina Dhan 11, CR Dhan 205, CR Dhan 206, MTU 1010, Parijat, Satabdi, Luna Sankhi (for coastal saline areas). For wet direct seeded rice preferably use varieties like Naveen, Satabdi, Improved Lalat and CR Dhan 203. Prepare the wet nursery seed beds in puddled soil of 120 cm wide, 10 cm height and of convenient length with 30 cm gap in between two beds. About

320 m<sup>2</sup> nursery areas are required for transplanting one acre main field.

- Seed treatment should be done with Carbendazim 50 WP @ 1.5 g/kg of seed or *Trichoderma* formulation @ 10 g of /kg of seed. In case of non-availability of Carbendazim 50 WP following fungicides can be used for seed treatment. Captan 50% (Cap gold / Captara) or Thiram 75% (Thiram 75 / Thirox) @ 3 g per kg of seed.
- Trichoderma dust formulation collected from reputed agencies/shops can also be used for seed treatment @ 10 g/kg of seeds.
- During cool winter days to protect the rice nursery from cold injury, apply a thin layer of well decomposed FYM after sowing of seeds in wet bed to keep the bed relatively warm. Preferably use bore well water for irrigation at evening and drain out the cold water at morning to maintain the soil temperature favourable for growth. In severe cold affected areas use polythene cover at night time.
- ✤ For production of healthy seedlings, apply 5:5:5 g of N : P2O5 : K2O along with 0.5 kg of FYM and 0.5 g Zn per mt<sup>2</sup> as basal dose.
- Irrigation water should be applied in furrows to maintain saturated condition in the surface soil of nursery bed. Standing water to a depth of 2-3 cm should be maintained at least for 2-3 days before uprooting of seedlings.
- In heavy weed infestation area, to control weeds in nursery, spray Pyrazosulfuron- ethyl 10% WP (Sathe) @ 80 g/acre at 3-5 days after sowing (DAS) or Bispyribac sodium (Nominegold) @ 120 ml/acre at 10-12 DAS (or at 2-3 leaf stage of weeds) in 130 litres of water.
- ✤ In nursery, where stem borer infestation is expected to notice, installation of pheromone traps with Scirpholure is recommended (at least 3 per nursery of 200 m<sup>2</sup>). When the number of male moths/trap reaches 4 or 5, spray Azadirachtin 0.15% neem seed kernel based EC formulation @ 800 ml/acre or broadcast granular insecticide Chlorantraniliprole 4% GR @ 4 kg/ acre or Cartap hydrochloride 4G @ 10 kg/acre mixing with sand at 1:1 ratio or spray Chlorantraniliprole 18.5% SC @60 ml/acre in 200 liters of water.
- ✤ If infestation of Thrips is noticed in rice nursery, spray Azadirachtin 0.15% neem seed kernel based EC formulation @ 800 ml/acre or lambda-cyhyalothrin 5% EC @ 200 ml/acre or Thiamethoxam 25 % WG @ 40 g /acre.
- In-case of Leaf blast infestation, spray Tebuconazole 50% + Trifloxystrobin 25% WG @ 80 g/acre or Isoprothiolane 40 EC @ 300 ml/acre in 200 litres of water. Repeat the spray at 7-10 days' interval.
- If infestation of seedling blight is noticed, spray Carbendazim @ 400 g/acre or Propiconazole @ 200 g/acre in 200 litre of water.
- Complete the preparatory tillage of main rice field for timely transplanting.

# 2.2 Wet direct seeded rice

- Complete the sowing of pre-germinated treated seeds in puddled soil either broadcasting or by using drum seeder.
- Maintain only a thin film of water for proper establishment and early growth of seedlings.
- To control weeds, spray Pyrazosulfuron-ethyl 10%WP (Sathe) @ 80g/acre at 3-5 days after sowing (DAS) in 130 litres of water when there is thin film of soil moisture or broadcast ready mix Bensulfuron methyl + Pretilachlor granular herbicide mixed with 4 kg of sand or spray Bispyribac sodium (Nominegold) @ 120 ml/acre at 10-12 DAS or 2-3 leaf stage of weeds in 120 litres of water.
- ✤ Apply 44 kg of DAP and 33 kg of MOP per acre as basal dose at the time of puddling.
- Farmers are advised to download and use NRRI developed riceXpert mobile App (available in Google Play store) for getting information on all aspects of rice cultivation.

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