



भा.कृ.अनु.प – राष्ट्रीय चावल अनुसंधान संस्थान

ICAR - National Rice Research Institute
(An ISO 9001: 2015 Certified Institute)

Cuttack-753 006, Odisha, India



Agro-Advisory Service

Strategies for Second Fortnight of January 2023

1. Winter Rice

- ❖ Paddy grains after threshing need to be sun dried to 14% moisture for consumption purpose and for seed purpose it should be dried to 12% moisture for better shelf life. Pack grains of 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.
- ❖ 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.
- ❖ Farmers are advised not to burn the rice straw in the field.

2. Dry Season Rice

2.1 Transplanted rice

- ❖ Complete the sowing of seeds in the wet nursery beds of 120 cm wide, 10 cm height and of convenient length. Maintain a channels of 30 cm width in between two beds for facilitating irrigation and drainage water. About 320 m² nursery areas are required for transplanting in one-acre main field.

- ❖ Seed treatment should be done with Carbendazim 50 WP @ 1.5 g/kg of seed **or** *Trichoderma* formulation @ 10 g /kg of seed.
- ❖ For production of healthy seedlings, apply 5:5:5 g of N: P 2O 5: K 2O along with 0.5 kg of FYM and 0.5 g Zn as basal dose per one square meter nursery.
- ❖ 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 @ 80 g/ acre at 3-5 days after sowing (DAS) **or** Bispyribac sodium @ 120 ml/ acre at 10-12 DAS (**or** at 2-3 leaf stage of weeds) in 140 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 m²). 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 litre 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- cyhalothrin 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 40EC @ 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.
- ❖ Transplant 3-5 week old seedlings in well puddled soil at a spacing of 15 cm ×15 cm with 3-4 seedlings per hill at shallow depth.

- ❖ In bacterial blight endemic areas, dip the seedling roots in 0.1% Plantomycin solution before transplanting for 30 minutes.
- ❖ Apply (DAP 44 kg + MOP 22 kg) or (Urea 22 kg + SSP 125 kg + MOP 22 kg) as basal dose during final puddling.
- ❖ Farmers those have already completed transplanting, apply granular herbicide Bensulfuron-methyl + Pretilachlor @ 4 kg/ acre at 5-8 days after transplanting. Mix the granular herbicide with 4 kg of sand/ acre and broadcast it uniformly in the field **or** spray Pyrazosulfuron-ethyl 10 WP @ 80 g/acre in 140 litres of water at 3-5 days after transplanting **or** spray Bispyribac sodium @ 120 ml/acre at 10-15 DAT or 2-3 leaf stage of weeds in 140 litres of water.
- ❖ In just transplanted field put 3 pheromone traps with 5mg lure/acre in the rice field for monitoring of the yellow stem borer and leaf folder. Whenever the number of male moths/trap reaches 4 or 5, spray Azadiractin 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 @ 10kg/acre mixing with sand at 1:1 ratio **or** spray Chlorantraniliprole 18.5% SC @ 60 ml/acre in 200 litre of water.
- ❖ If infestation of Bakanae disease is noticed, spray, Carbendazim 50WP @ 200g per acre in 200 litre of water and repeat the spray at 7-10 days' interval.

2.2. Wet Direct Seeded Rice

- ❖ Maintain only a thin film of water for proper establishment and early growth of seedlings.
- ❖ If pre-emergence herbicides were not applied, to control weeds apply early post-emergent ready mix Bensulfuron-methyl + Pretilachlor granular herbicide @ 4 kg/acre mixed with 4 kg of sand at 5-10 DAS **or** spray Bispyribac sodium @ 120 ml/acre at 10-12 DAS or 2-3 leaf stage of weeds **or**, Penoxsulum 1.02% + Cyhalofop-butyl 5.1% @ 800ml/acre at 15-20 DAS in 140 litres of water.

- ❖ Top dress 24 kg of urea per acre after weeding at tillering stage (20-25 DAS).
- ❖ Monitoring should continue for stem borer. Whenever the number of male moths/trap reaches 4 or 5 spray Azadiractin 0.15% neem seed kernel based EC formulation@ 800 ml/acre **or** Chlorantraniliprole 4% GR @ 4 kg/acre may be applied mixing with sand at 1:1 ratio **or** spray Chlorantraniliprole 18.5% SC @ 60 ml/acre in 200 litres of water.
- ❖ If infestation of blast disease is noticed, spray Carbendazim 50 WP @ 200g/ acre in 200 litres of water **or** Trifloxystrobin 25% + Tebuconazole 50% @ 80 g per acre in 200 litres of water **or** Edifenphos 50 EC @ 200 ml/acre in 200 litres of water.
- ❖ 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
