



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 First Fortnight of January 2024

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. Place Aluminium phosphide 6% tablet @ One tablet (12 gm) per burrow 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

- ❖ 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 m² 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.
- ❖ 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 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 (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 120 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 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-cyhalothrin 5 % EC @ 200 ml/acre **or** Thiamethoxam 25 % WG @ 40g /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.
- ❖ Transplant 3-5 week old seedlings in well puddled soil at a spacing of 15cm x 15cm 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

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) @ 80 g/acre at 3-5 days after sowing (DAS) in 120 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 (Nomine Gold) @ 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 22 kg of MOP per acre as basal dose at the time of puddling.

Farmers are advised to download and use NRRI developed **rice Xpert** mobile App (available in Google Play store) for getting information on all aspects of rice cultivation
