

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 August, 2022

Please follow COVID-19 guidelines of the Ministry of Health and Family Welfare, Govt. of India/Odisha, while doing any agricultural operations.

Dry Direct Seeded Rice

- In semi deep/deep water areas, where direct seeding has been done and herbicide was not applied for weed control, 'beushening' may be done after accumulation of sufficient water (at least 7-10 cm standing water) in the field. After 'beushening' apply 18 kg of urea/acre as top dressing
- In rainfed shallow lowland areas where direct seeding has been done and herbicide has not applied to control weeds, 'beushening' may be done after accumulation of sufficient water (at least 7-10 cm standing water). After 'beushening' apply 36 kg of urea/acre as top dressing.

Transplanted Rice

- ❖ If Bakane disease is observed in the nursery, uproot the infected plants and spray Carbendazim 12% + Mancozeb 63% WP @ 2.5 g/l of water.
- If infestation of thrips is notice in rice nursery, spray NSKE (Azadirachtin) @ 800 ml/acre or Lambda-Cyhyalothrin 5% EC @ 100 ml/acre or Thiamethoxam 25 % WG @ 40g /acre.
- In root-knot nematode and stem borer endemic areas, Carbofuran granules @ 3g/sq.m or Phorate @ 1g/sq. m or Diazinon @ 1g/sq.m in nursery area is to be applied 5 days after sowing.
- In case of seedling blight disease appearance, apply Propiconazole @ 1 ml/ litre of water.
- ❖ If leaf blast is observed in rice nursery, spray Tebuconazole 50% + Trifloxystrobin 25% WG @ 0.4 g or Isoprothiolane 40EC @ 1.5 ml per litre of water. Repeat the spray at 7-10 days interval.
- ❖ In-case of brown spot, spray Propiconazole 25EC @ 1ml or Mancozeb 75WP or Carbendazim 64% + Mancozeb 8% 75WP @ 1.5g per litre of water.

- ❖ In-case of rice Tungro, manage green leaf hopper by spraying Imidacloprid 17.8 SL @ 0.25 ml or Thiamethoxam 25WG @ 0.2 g per litre of water.
- ★ Keep 3 pheromone traps /acre of rice nursery for monitoring the stem borer and leaf folder infestation. Whenever the number of male moths/trap reaches 4 or 5 apply Azadirachtin 0.15% EC @ 800 ml/acre or Chlorantraniliprole 0.4% GR @ 4kg/acre mixing with sand at 1:1 ratio or spray Chlorantraniliprole 18.5% SC @ 60 ml/acre in 200 litres of water or Cartap hydrochloride 4G @ 10kg/acre.
- ❖ In-case of case worm, spray Indoxacarb 15.8% EC @ 80 ml/acre or Flubendiamide 39.35% SC @ 20ml/acre.
- Main field land preparation should be done by puddling the field twice at 7-10 days intervals and land levelling for uniform crop stand. About 0.8 t/ acre of well decomposed FYM may be applied before first puddling.
- Incorporate the *dhaincha* green manuring crop at the time of initial puddling of main field.
- Transplanting of rice must be completed by first fortnight of August.
- ❖ For high yielding varieties apply 35 kg of DAP + 27 kg of MOP or 18 kg of urea +100 kg of SSP + 27 kg MOP per acre as basal dose at the time last puddling. In sandy soil apply 35kg of DAP and 13.5 kg of MOP or 18 kg of urea +100kg of SSP + 13.5kg of MOP per acre as basal dose.
- ❖ For hybrids, apply 53 kg of DAP + 27 kg of MOP or 26 kg of urea +150 kg of SSP + 27 kg MOP as basal dose at the time of final puddling.
- ❖ In zinc deficient areas. apply Zinc Sulphate @ 10 kg/acre or zinc-EDTA @ 6kg/acre (once in two years) at the time of final land preparation.
- ❖ In boron deficient soil apply Borax @ 2kg/acre at the time of final land preparation.
- ❖ Transplanting of 25-30 days old seedlings should be done at a spacing of 20 x15 cm at shallow depth, use only 2-3 seedlings per hill for high yielding varieties. For hybrids use 1-2 seedling per hill.
- ❖ To control weeds, apply granular herbicide Bensulfuron methyl 0.6% + Pretilachlor 6% GR @ 4 kg/acre mixed with 4kg of sand within 5 10 days after transplanting or Bispyribac sodium 10% SC @ 120ml/acre in 8 tanks of 16 litre capacity sprayer at 8-10 days after emergence of weeds (or when the weeds are at 2-3 leaf stage).
- ❖ In early transplanted rice, if problem of thrips is noticed, farmers can go for neem seed kernel based insecticide like Azadirachtin 0.15% @ 1 lit/acre or spray Lambda-cyhalothrin 5% EC @ 100ml/acre or Thiamethoxam 25 % WG @ 40 g/acre in 200 litre of water.

- ❖ In Brown Plant Hopper (BPH) endemic areas, skip a row after each 8-10 rows of transplanting.
- ❖ In stem borer endemic areas, release egg parasitoid *Trichogrammaja ponicum* @ 40000 eggs /acre (3 cards /acre) for 3 times.
- ❖ Fix light trap @1/acre to attract and trap/kill adults of stem borer and leaf folder.
- ❖ Keep 3 pheromone traps /acre of rice field for monitoring the stem borer and leaf folder infestations. Whenever the number of male moths/trap reaches 4 or 5, apply Azadirachtin 0.15% EC @ 800 ml/acre or, Chlorantraniliprole 0.4% GR @ 4kg/acre mixing with sand at 1:1 ratio or, spray Chlorantraniliprole 18.5% SC @ 60 ml/acre in 200 litres of water or, Cartap hydrochloride 4G @ 10kg/acre or, Flubendiamide 20 WG 50g/acre in 200 litres of water.
- ❖ Whenever two folded leaves/ hill observed, then to control leaf folder, spray Chlorantraniliprole 18.5% SC @ 60 ml/acre or, Flubendiamide 20 WG 50g/acre or, Cartap50 WP@ 400 g/acre or, Quinalphos 25 EC640 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 crop.

Advisory for prevailing moisture stress in rice field due to scanty rainfall and non-availability of kenal irrigation water

- Apply top dressing of fertilizers either in transplanted or direct seeded rice if there is sufficient soil moisture in the field otherwise farmers are advised to postpone the top dressing of fertilizers in the rice field till the sufficient soil moisture is attained either by rainfall or irrigation water.
- ❖ For delayed transplanting by using the old age seedling farmers are advised to use up to 25-30 days old seedlings of early or medium early varieties and 45-50 days old seedling of long duration varieties. Transplant the old seedling in puddled soil in strait at shallow depth at a closer spacing of 15 x15 cm with 4-5 seedlings per hill.
- Under prolonged dry spell, if irrigation water is available apply a shallow depth of water to maintain the soil at saturation during the maximum tillering stage of the rice crop.
- Do not spray herbicides in rice field to control weeds when there is no sufficient soil moisture.
- In case, if the nutrient deficiency symptoms (yellowing) and browning of leaf tips appear in rice nursery, apply foliar spray of mixed solution of 0.5% zinc sulphate + 2.5 % urea.
