

Agro Advisory Service for Rice
ICAR - National Rice Research Institute, Cuttack – 753006

Strategies for Second Fortnight of July 2020

Precautionary measures to be followed under Covid-19 situations:

Under the pandemic situation of Corona Virus, farmers are advised not to employ many laborers to harvest the crop or any other farm operations. Always keep at least 2 meters' distance between two workers use masks and wash hand regularly with soap.

Weather forecast:

Normal rainfall has been predicted during the next fortnight in the coastal belt of Odisha.

Direct Seeded Rice

- In semi deep/deep water areas where direct seeding has been done 'beushening' may be done after accumulation of sufficient water (at least 7-10 cm standing water) in the field where herbicide was not applied for weed control. 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 14 kg of urea/acre as top dressing.
- In upland areas, first manual weeding or mechanical weeding by operating finger weeder may be done wherever herbicide has not been applied. After weeding, apply 12 kg of urea as top dressing.

Transplanted rice

- Nursery sowing should be completed by end of 2nd fort night of July if not completed.
- Prepare seed beds of 1.2 m width, 10 cm high of convenient length. In-between two beds keep well defined irrigation/drainage channel of 30 cm width. About 320 m² areas are required to raise seedlings for transplanting of one-acre main crop.
- Use seed rate of 12-16kg/acre for HYV depending on test weight of seeds, for hybrids use 5-6 kg/acre.

- Mechanical separation by dipping rice seeds in 2% salt solution (20 g common salt in 1 litre of water) helps not only selection of high-density seeds but also removal of floating weed seeds.
- Complete the seed treatment with Carbendazim 50 WP at 1.5 g/kg of seed for wet treatment or 2 g/kg of seed for dry treatment. In blast endemic area, seed should be treated with *Trichoderma viride* @10g/Kg of seeds.
- Sow the seeds uniformly in the nursery bed at a density of 30-40 g/m² nursery area for HYV, for hybrids maintain seed density 15-20 g/m² nursery.
- Apply 2 quintal for 320 sq m of nursery area along with application of 4 kg each of nitrogen, phosphorus and potash (i.e., Urea 9kg, 25kg SSP, 6.7 kg MOP or 9kg DAP, 6.7 kg MOP and 5 kg urea).
- To control weeds in rice nursery apply Pyrazosulfuron ethyl @ 80 g/acre at 0-3 DAS or spray Bispyribac Sodium @120 ml/acre at 15DAS (when weeds are at 2-4 leaves stage).
- If infestation of thrips is noticed in rice nursery, spray NSKE (Azadirachtin) @ 800 ml/acre or Lambda-cyhalothrin 5 % EC @ 100 ml/acre or Thiamethoxam 25 % WG @ 40g /acre.
- Spray Mancozeb 63% + Carbendazim 12% @ 2.5 g per litre of water (if brown spot , blast symptom observed) and spray combi product of Trifloxistrobin + Tebuconazole (75WP) @ 0.4g per ml of water or Combi product of Azoxystrobin+Difenconazole 325 SC@ 1 ml/L in blast endemic areas) in the nursery.
- In root-knot nematode endemic areas, Phorate @ 1g/sq. m is to be applied after 5 DAS.
- If infestation of seedling blight is noticed, apply Propiconazole (Tilt) @ 1 ml/ 1litre of water.
- For transplanting by using mechanical transplanter, prepared mat nursery. To do this, a polythin sheet can be spread over the soil and a wooden frame of 24x40 cm² has to be kept over it. Cover 2/3rd of the frame with powered soil. About 125 grams of seed to be sown per tray. Cover the seeds with 1/4th of powered soil and irrigate the field in every alternate day. After 15-20 days the nursery would be ready for transplanting. About 32 such mats will be needed for one acre of land.

- Main field land preparation should be done by puddling the field twice at 7-10 days' intervals and land leveling for uniform crop stand. Apply 0.8 t/acre of well decomposed FYM before first puddling.
- Dhaincha crop grown in the main field should be incorporated in the field at the time of land preparation. The ideal age of dhaincha crop for *in situ* green manuring is 40-45 days after sowing.
- For high yielding varieties apply 4 kg of urea, 44 kg of DAP and 33 kg of MOP or 22 kg of urea, 125 kg of SSP and 33kg MOP as basal dose at the time last puddling. In sandy soil apply 4 kg of urea, 44 kg of DAP and 16.5 kg of MOP or 22 kg of urea, 125 kg of SSP and 16.5 kg MOP as basal dose.
- For hybrids, apply 6 kg of urea, 52 kg of DAP and 30 kg of MOP or 26 kg of urea, 150 kg of SSP and 30kg MOP as basal dose at the time of final puddling.
- In zinc deficient areas apply Zinc Sulphate @ 10 kg/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 20x15 cm, use 2-3 seedlings per hill for high yielding varieties. For hybrids use only 1-2 seedling per hill.
- In Brown Plant Hopper (BPH) endemic areas, skip one row after every 8-10 rows during transplanting.
- 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 2-3leaf stage of weed) or spray Penoxulam + Cyhalofop butyl (Vivaya) @ 900ml/acre at 15-20 days after transplanting.
- In early transplanted rice, if problem of yellow stem borer is noticed, farmers can go for neem seed kernel based insecticide like Azadirachtin 0.15% @ 1 lit/acre. If not controlled spray insecticide like Chlorantraniliprole 0.4% GR @ 4kg/acre or Chlorantraniliprole 18.5% SC 60 ml/acre mixed with 200 litre of water for yellow stem borer.