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

Strategies for second Fortnight of July 2018

Direct Seeded Rice:

- ➤ In semi deep and deep water areas 'beushening' may be done after accumulation of sufficient water (at least 7 10 cm standing water) in the fields where weeding has not done in broad casted direct seeded rice and 1st top dressing of nitrogen may be done with 18 kg urea/acre.
- In rain fed shallow lowland areas where direct seeding has been done and early post emergence herbicides have not been applied, 'beushening' may be done in a broadcasted crop and 2, 4-D Sodium salt 80 WP @ 0.5 kg/ acre may be applied for controlling non grassy and broad leaf weeds in line sown crops. One third of nitrogen (14 kg urea/acre) may be applied as 1st top dressing.
- ➤ In Upland areas, first manual weeding or mechanical weeding by operating finger weeder may be done wherever herbicides has not been applied at the time of sowing and apply one third of nitrogen (12 kg urea/acre) as 1st top dressing.

Transplanted Rice

- Nursery sowing should be completed by end of the 2nd fortnight of July if not yet completed.
- Wet bed nursery should be prepared and sown with pre germinated rice seeds. About 320 m² area nursery beds should be sown with 18 20 kg of seeds by puddling and leveling the soil and 4 kg each of nitrogen, P₂O₅ and K₂O/acre of nursery bed should be applied at the time of nursery sowing.
- ➤ If SRI method is followed use only one seedling of 8-12 day old seedlings per hill for transplanting with a spacing of 25 cm x 25 cm.
- ➤ Mat nursery may be raised for machine transplanting in irrigated medium lands and shallow lowlands. To do this, a polythene sheet can be spread over the soil and a wooden frame of 24 X 40 cm has to be kept over it. Cover 2/3 rd of the frame with powered soil. About 125 gram of seed mixed with rootex @ 3 gram/kg of seed has to be sown per tray. Cover the seeds with 1/4th of the powdered soil and irrigate the field alternate day. After 14 15 days or attaining 16 18 cm height of the nursery, the seedlings should be transplanted with trans planter. About 32 such mats will be needed for an acre of land.
- > Spraying of herbicide i.e. Pretilachlor 50 EC @ 130 ml or Pyrazosulfuron ethyl 10% DF@ 16 g per 800 m² nursery beds should be done to control the weeds.
- ➤ Dhaincha crop after reaching 40 45 days stage i.e. pre flowering stage should be incorporated in situ to a depth of 15 cm using a green manure trampler or tractor.
- ➤ Main field land preparation should be done by puddling the field twice at 7 10 days intervals and land leveling for uniform crop stand. About 2t/acre of well decomposed FYM may be applied at first puddling.
- ➤ One third of the Nitrogen (14 kg Urea/acre) and full dose of P and K (44 kg DAP /acre and 34 kg / acre should be applied as basal. Care should be taken while applying the fertilizer, having a thin film of water on the field.
- ➤ After uprooting of 25 30 days old seedling, root dipping should be done with chlorpyriphos solution (1 ml per liter of water) for controlling insect attack.

- ➤ Transplanting should be done @ 2 3 seedlings per hill at a spacing of 20 X 15 cm and a thin layer of water (1 2 cm) should be maintained in the main field up to 10 days after transplanting.
- ➤ Application of herbicides (Bensulfuron methyl 0.6% + Pretilachlor 6% GR) may be applied sand mix at 1:1 ratio @ 4 kg / acre within 3 7 days after transplanting for controlling weeds in transplanted rice.
- ➤ In Brown Plant Hopper (BPH) endemic areas, alleyways of 30 cm width should be left after every 8-10 rows of transplanting.
- ➤ In early transplanted rice, if problem of thrips and yellow stem borer is noticed, farmers can go for Neem seed kernel based E.C. insecticides with Azadirachtin 0.15% (min.) @ 2.5 ltr/ha. If not controlled, chemical insecticides like chlorantraniliprole 0.4% GR @ 40 g/ha (10 kg product/ha) or chlorantraniliprole 18.5% SC @ 30 ml/ha (150 ml formulation/ha) for yellow stem borer, whereas for thrips lambda-cyhalothrin 5% EC @ 12.5 ml/ha (250 ml formulation/ha) or thiamethoxam 25% WG @25g/ha (100 g formulation/ha)
- > Seedling treatment with streptomycin (0.1g/liter) in bacterial leaf blight endemic areas.
- > Spray Carbendazim 12%+Mancozeb 63% WP (Saaf, Riper, Sixer, Companion) @ 2.5g/l of water for brown spot and spray tricyclazole 75WP @ 0.6g per litre of water (in blast endemic area) in the nursery.