ଭାକୃଅନୁପ-ଜାତୀୟ ଧାନ ଗବେଷଣା ଅନୁଷ୍ଠାନ, କଟକ-୭୫୩୦୦୬ (ଓଡିଶା
भाकृअनुप-राष्ट्रीय चावल अनुसंधान संस्थान, कटक-753006 (ओडिशा)
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Agro-Advisory Service

Strategies for Second Fortnight of August, 2023

Transplanted Rice

- Transplanting of rice must be completed by second 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 35 kg of DAP and 13.5 kg of MOP **or** 18 kg of urea +100 kg of SSP + 13.5 kg 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 @ 6 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 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.
- 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.
- To control weeds, apply granular herbicide Bensulfuron methyl 0.6% + Pretilachlor 6% GR @ 4 kg/acre mixed with 4 kg of sand within 5 - 10 days after transplanting **or** Bispyribac sodium 10% SC @ 120 ml/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) **or,** spray ready mix Penoxulam + Cyhalofop butyl (Vivaya) @ 900 ml/acre **or**, tank mix Fenoxaprop-p-ethyl + Ethoxysulfuron (Rice star + Sunrise)@ 240+50 g/acre at 15-20 DAT in 8 tanks of 16 litre capacity sprayer at 15-20 days after transplanting.

- 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 @ 100 ml/acre or Thiamethoxam 25 % WG @ 40 g/acre in 200 litre of water.

- In Brown Planthopper (BPH) endemic areas, skip a row after each 8-10 rows of transplanting.

- In stem borer endemic areas, release egg parasitoid, *Trichogramma japonicum* @ 20000 eggs /acre (1-2 cards /acre) at weekly interval. 4-5 such releases to be made.

- Fix light trap @ 1/acre to attract and trap/kill adults of stem borer, leaf folder and other pests.

- Place 3 pheromone traps with lures/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 4% GR @ 4 kg/acre mixing with sand at 1:1 ratio **or,** spray Chlorantraniliprole 18.5% SC @ 60 ml/acre or Tetraniliprole 200 SC @ 100 – 120 ml/acre **or** Flubendiamide 20 WG 50g/acre in 200 litres of water **or** Cartap hydrochloride 4G @ 10 kg/acre

- 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,** Cartap hydrochloride 50 WP@ 400 g/acre **or,** Tetraniliprole 200 SC @ 100 – 120 ml/acre in 200 litres of water.

- Undertake gap filling with aged seedlings or clones separated from the same field in order to maintain a plant population of 33 hills per m^2.

- In Zinc deficient soil, if Zinc sulphate ($ZnSO_4$) has not been applied during final land preparation, spray Zn-EDTA @ 0.5 g/1 litre of water at 30 and 45 days after transplanting of rice **or,** spray 0.5% $ZnSO_4$ solution (2 kg $ZnSO_4$ +10 kg of lime in 400 litres of water in one acre) thrice at 15 days' interval on appearance of deficiency symptom in the field.

- If there is infection of sheath blight, on appearance of diseases in 1-2 tiller, spray Tebuconazole 50% + Trifloxystrobin 25% WG @ 0.4 g **or,** Propiconazole 75% @ 1ml per litre of water **or,** Hexaconazole 50% @ 2 ml per litre of water **or,** Validamycin 3 L @ 2 ml/litre. Repeat the spray at 7-10 days' interval. Use 200 litre solution for one-acre area.

- In case of incidence of Bacterial blight/Bacterial leaf streak, apply Plantomycin @ 1 g/litre along with Copper oxychloride @ 1 g/litre of water using 200 litre of water per acre.

- In case of leaf blast incidence, spray Tebuconazole 50%+ Trifloxystrobin 25% (Nativo 75 WG) @ 0.4 g/litre **or,** Edifenphos 50 EC @ 2 ml/litre or Tricyclazole 75 WP

@ 0.6 g/litre of water may be done for controlling the disease. Otherwise, spraying of leaf extracts of Bael (25 g fresh leaves) or Tulsi (25 g fresh leaves) or Neem (200g fresh leaves) per litre of water can help in reducing the incidence of disease.

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.

- In direct seeded rice where were herbicide was used to control weeds, apply 18kg urea/acre as 2nd top dressing at maximum tillering stage. In early upland varieties apply 18 kg urea/acre at panicle initiation stage.

- In case of incidence of brown spot, spray Propiconazole 25 EC @ 1ml **or,** Mancozeb 75 WP **or,** Carbendazim 50 WP @ 2 g of water **or,** Carbendazim 64% + Mancozeb 8% 75 WP @ 1.5 g per litre of water.

- To control yellow stem borer, leaf folder, bacterial blight, sheath blight in direct seeded rice follow the recommendations as mentioned for transplanted rice

- 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.

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