

Agro Advisory Service for Rice
ICAR - National Rice Research Institute, Cuttack 753 006

Strategies for 2nd Fortnight of November 2019

- Store the harvested paddy in a safer place (properly stacked with suitable cover) to avoid damage due to untimely rain. For safe storage of paddy/rice, use Super Grain Bag which is helpful for retaining the quality, texture, colors, aroma, fragrance and taste of the commodities for longer period of time and process, dry and pack paddy varieties separately without mixing for better price of the produce.
- Harvest the crop when 80% of the grains in the panicles are matured and thresh, sun-dry, clean and pack paddy varieties separately without mixing for better price of the produce.
- Soon after noticing the infestation of the stored grain, 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, which helps to discard the remnants after completing the fumigation. All the corners of plastic cover should be plastered with 6 inch thick layer of mud/ sand snake/ adhesive tapes to prevent leakage of gas. Minimum exposure period is for about 7-10 day.
- Crops like potato, sunflower, groundnut, rabi maize etc. can be taken immediately after harvesting of rice crop in irrigated medium lands.
- In rainfed shallow lowlands, where irrigation facilities are not available, crops like lathyrus, field pea, blackgram, linseed etc. can be raised as paira / utera cropping by sowing them on standing crop of rice after draining excess water from the field or under saturated soil moisture condition.
- In the late transplanted crop heavy infestation of Brown Plant Hopper (BPH), Whitebacked Plant Hopper (WBPH), Green leaf hopper (GLH), Gundhi bug in long duration varieties of rice and Ear-cutting caterpillar in matured/harvested crop kept in the field. [The Economic Threshold Level (ETL) for: BPH: 5-10 insects/ hill; WBPH: 5-10 insects/ hill; Gundhi bug: 2 - 4 bugs/sweep net/m²; **Note:** To conduct monitoring for BPH/WBPH, the basal parts of some rice plants are to be disturbed mildly with a stick so that the insects jump to standing water from which their occurrence or ETL can be known].
- If the insect pest population is above ETL, apply any one of the following pesticides mixed with 200 liters of water per acre if the rice crop is at late vegetative or panicle initiation stage. Wherever rice crop became mature or grain hardening completed, no pesticide should be applied except against Ear cutting caterpillar.
- **BPH/WBPH** : Imidacloprid 17.8SL @50ml/acre or Thiamethoxam 25WG @ 40g/acre or Ethofenprox10EC @ 200ml/acre or Neem oil @ 5ml/litre of water with 2% detergent liquid.
- The mixture should be applied in proper dose with proper alley formation so that spray can be applied at the basal portion of the crop for effective management of BPH/WBPH.
- Do not burn the crop, as it helps in quick dispersion / migration of brown plant hopper to other un-infested rice fields.
- **Gundhi Bug:** Ethofenprox10EC @ 200 ml/acre should be applied as foliar spray mixed with 200 litres of water or Malathion 5D @ 10 kg/acre should be dusted uniformly during morning hours, when there is no or minimum wind.
- **Ear cutting caterpillar:** Quinolphos 25EC @ 400 ml/acre or chlorpyriphos 20EC @ 500ml/ acre and it should be applied in the morning hour to the base of the crop.

- In the harvesting stage of rice crop there may be chance of rodent attack. Hence, to manage the rodent the following practice may be adopted.
- **Rodent management:** Locate the rodent burrow in the crop and surrounding areas. Place Aluminum phosphide 6% tablet @ One tablet (12 gm) per burrow and seal the burrow with mud which will kill the rodent.
- For late transplanted rice there may be chance of incidence of false smut and neck blast so proper measure may be taken.

False smut: Spraying of copper hydroxide 77WP @ 800g/acre or copper hydroxide 53.8DF@ 600g/acre at pre-flowering stage or spraying of chlorothalonil 75 WP @ 400g/ acre or Propiconazole 25 EC during flowering stage will reduce false smut disease.

Neck/Panicle Blast: If there is 1- 2 % neck infection, spray carbendazim or tricyclazole 75WP @ 200g /acre or tebuconazole 50 + trifloxystrobin 25WG @80g/acre.
- **Note:** In case of confusion farmers are requested to contact the concerned subject matter specialist from NRRI or other institutes.