

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

Please follow Covid-19 guide lines as per the Ministry of Health and Family Welfare for doing any agricultural operations

Strategies for Second Fortnight of November 2020

- Harvest the crop when 80% of the grains are matured either manually by sickle or by using combine harvester or reaper. Paddy grains need to be sun-dried to 14% moisture content for consumption purpose and for seed purpose it should be dried to 12% moisture for better self-life. Pack each variety separately without mixing for better price of the produce.
- For safe storage of paddy/rice, use 'Super Grain Bag' which is helpful for retaining the quality, texture, colour, aroma and taste of the commodities for longer period of time. Or, store the harvested paddy in a safer place (properly bagged and stacked with suitable cover) to avoid damage due to untimely rain.
- Soon after noticing the infestation of the stored grain, take up fumigation by using Aluminium Phosphide (Do not use in dwelling houses) tablets @ 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 days.

There may be chances of infestation of Brown Plant Hopper (BPH), White-backed Plant Hopper (WBPH), Green leaf hopper (GLH), Gundhi bug in long duration varieties of rice or very late planted rice and ear cutting caterpillar in matured/harvested crop kept in the field.

- If infestation of **BPH** exceeds ETL (5-10 hoppers/hill), it is advised to alter the micro-climate of the rice plant by alternate wetting and drying (water should not stand in field for long time). If problem still persists, spray Azadirachtin 0.15% w/w (minimum) neem seed kernel based EC formulation @ 800 ml/acre **or** Triflumezopyrim 10SC @ 94 ml/acre **or** Pymetrozine 50% WG @ 120 g/acre **or** Dinotefuran 20% SG @ 80g /acre **or** Imidacloprid 17.8% SL @ 50 ml/acre **or** Acephate 75% SP @ 400 g/acre. Use 200 litre of water to spray in one-acre area.
- If infestation of **GLH** is noticed: Use Azadirachtin 0.15 % w/w @ 800 ml/acre **or** Imidacloprid 17.8 SL @ 50ml/acre **or** Thiamethoxam 25WG @ 40g/acre **or** Acephate 75% SP 400 gram/acre Use 200 litre of water to spray in one-acre area. Alternatively, apply granular insecticide Fipronil 0.3% GR @10kg/acre.
- If infestation of **Gundhi Bug** is noticed: Use Ethofenoprox 10EC @ 200 ml/acre as foliar spray mixed with 200 litres of water **or** Malathion 5D @ 10 kg/acre can be dusted uniformly during morning hours, when there is no or minimum wind.
- If infestation of **Ear cutting caterpillar** is noticed: Use Quinolphos 25EC @ 400 ml/acre **or** chlorpyrifos 20EC @ 500ml/ acre and it should be applied in the morning hours at the base of the crop.

•If **Rodent** problem is noticed: Locate the rodent burrow in the crop field and surrounding areas. Place Aluminium phosphide 6% tablet @ One tablet (12 gm) per burrow and seal the burrow with mud which will kill the rodents.

Due to low night temperature and high humidity, there may be chances of high incidence of False Smut and Neck/Panicle blast in late maturing rice varieties. For effective management, the following fungicides may be applied.

•**False smut:** Spray Copper Hydroxide 77WP @ 2g/litre of water at pre-flowering stage **or** Chlorothalonil 75 WP @ 2g/litre of water **or** Tebuconazole 250EC @ 1ml/litre of water during flowering stage will reduce false smut disease.

•**Neck/Panicle Blast:** If there is 1- 2 % neck infection spray Tebuconazole 50%+ Trifloxystrobin 25% (Nativo 75 WG) @ 80 gm in 200 litres of water per acre, **or** Isoprothiolane (Fugione 40 EC @300 ml/acre) **or** Aureofungin sol 25 gm/acre. Otherwise, spray leaf extracts of Bael (25 g fresh leaves) **or** Tulsi (25 g fresh leaves) or Neem (200 g fresh leaves) per litre of water to control the disease.

•**Sheath rot:** If there is sheath rot infection spray Hexaconazole 5EC @ 2ml /litre of water **or** Propiconazole 25% @ 1ml/litre of water **or** Thifluzamide 24SC @ 1ml /litre of water.

•**Sheath blight:** Spray with Propiconazole 25% (Tilt) @ 1ml/litre, **or** (Rhizocin 3L, **or** Sheathmar 3L) @ 2 ml/ litre of water) or Tebuconazole 50%+ Trifloxystrobin 25% (Nativo 75 WG) @ 0.4g/litre **or** Contaf 5 EC (Hexaconazole 5EC) @ 2ml/ litre of water **or** Thifluzamide 24SC @ 1ml/ litre of water.

•Crops like potato, sunflower, groundnut, rabi maize, lentil, toria, green gram, black gram etc. can be taken with land preparation after harvesting of rice crop in irrigated medium lands.

•In rainfed shallow lowlands, where irrigation facilities are not available, crops like lathyrus, field pea, linseed, lentil 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.