



CR DHAN 307 (MAUDAMANI)



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Production Technology for Rice Variety CR DHAN 307 (MAUDAMANI)

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CR Dhan 307 (Maudamani) is suitable for cultivation in irrigated mid-duration rice ecology of Odisha. Days to 50% flowering of the variety is 100-105 days, semi-dwarf plant type (100-105 cm height), non-lodging genotype and suitable for mechanical harvesting. The average yield of the variety in the state is 5t/ha. However, the potential yield of the variety is 11t/ha. It produces short bold grain (Length/Breadth ratio-2.15), 278 panicles per m², moderate tillering (5-10/hill) with high grain number/ panicle. Grains of the variety possess all desirable quality characters like high milling percentage (72%), intermediate alkali spreading value (7.0), intermediate amylose content (23.73%) and gel consistency of 26.0. The variety shows moderate resistance reaction against the pests namely, stem borer, leaf folder, rice whorl maggot, green leaf hopper and gall midge biotype 6 attack. While, it shows moderate reaction to white backed plant hopper, gallmidge biotypes, rice hispa and rice thrips. It exhibits moderately tolerance reaction to diseases like leaf blast, neck blast and brown spot. The genotype has high response to fertilizer application.

Package of practices for high yield

SEED SELECTION

- Ensure genetic purity with more than 80% germination by obtaining seeds from a reliable source.

- Select well-filled seeds from a healthy crop, free from insect and disease attack.

LAND PREPARATION

- Plough the land 3-4 times at 4-5 days interval to get proper puddle condition.
- Level the land with a leveler to maintain a uniform water level through out the field.
- Before final ploughing, add 10t/ha of well decomposed farm yard manure (FYM) into the soil uniformly.

SEED TREATMENT

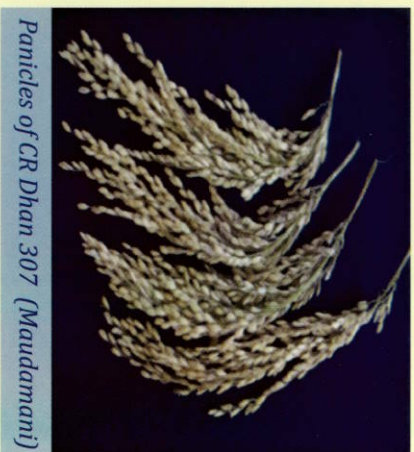
- Take good quality genetically pure and healthy seed of the variety CR Dhan 307 seed and reject the lighter seeds.
- Treat the seeds with Agrosan GN or Ceresan (dry) or Bavistin @ 2g/Kg of seed before sowing.

TIME AND METHOD OF SOWING

- During Kharif season, nursery sowing should be done from 1st to 4th week of June.
- Dry season nursery sowing should be finished before mid January.
- Transplant 20-25 days old seedlings after sowing during Kharif season, while 30 days old seedlings during dry/summer season by manual line transplanting or through transplanter using mat type nursery.
- Planting should be done at spacing of 20x15cm or 15x15cm with 2-3 seedlings/hill.

FERTILIZER MANAGEMENT

- Apply NPK @ 100:50:50 per hectare with 35% of nitrogenous fertilizer, full phosphorus & 50% potassic fertilizer as basal dose.
- Second split of 30% nitrogenous fertilizer at tillering (30-40 days after transplanting) & rest 55% nitrogen and 50% potassic fertilizer at panicle initiation stage (50-55 days after transplanting) need to be applied.



Panicles of CR Dhan 307 (Maudamani)

WEED MANAGEMENT

- Spray herbicide like Pretilachlor @ one litre/ha mixed properly with 300lt of water, after 2-3 days of transplanting or mix the weedicide with 50kg sand or 10kg urea and broadcast uniformly in the field.

WATER MANAGEMENT

- For raising a good crop, around 8-10 irrigations are needed after transplanting.

- However importance should be given to the critical stages like active tillering, primordial initiation (P1) and grain filling stage.

PEST AND DISEASE MANAGEMENT

Insect Pests

- For controlling stem borer, apply Monocrotophos at the rate of 0.5kg/ha or apply granular insecticide carbofuran 3G at the rate of 33kg/ha or Cartap 4G at the rate of 25kg/ha on the basis of Economic Threshold Level (ETL) (one egg mass/m² or 5% dead heart).

- When BPH population reaches 10 insects/hill, apply Monocrotophos 36EC @ 1.3 lit./ha or Chloropyrifos 20EC @ 2.5 lit./ha or Quinalphos 25EC @ 2lit./ha or Imidacloprid 200SL @ 0.5 lit./ha for controlling the insect.

- To control leaf folder, apply Monocrotophos 36EC @ 1.3lit./ha or Quinalphos 25EC @ 2lit./ha or Phosphamidon 85EC @ 0.6 lit./ha or Cypermethrin 10EC @ 1lit./ha.

Diseases

- For control of bacterial leaf blight, brown spot, sheath blight and false smut apply Streptomycin (150mg) + Copper Oxychloride (1g) in one liter of water.

HARVESTING

- Harvest the crop at 25-30 days after flowering. Threshing, winnowing and proper drying is done before storage.
- Dry up to 12% grain moisture level for storage.

