



PACKAGE OF PRACTICES FOR PADDY CULTIVATION

Crop: Rice

Variety/Hybrid: All types of Archana seeds' varieties

Sponsoring Organization: Archana Agri Genetics, Hyderabad.

=====

Nursery Preparation:

About 320 sq.mt. nursery areas are required for transplanting one-acre main field. The nursery should be well puddled, levelled and free from weeds and the area should have adequate water for irrigation and facilities for drainage. Plough the nursery area 2-3 times to bring the soil to a fine tilth. Puddle the soil properly so that 2-3 cm layer of water is maintained in the nursery bed. Apply 250 kg FYM, 2 kg Urea, 2.5 kg SSP & 1 kg MOP in nursery bed as nutrient management.

Sowing Time: Kharif- May & June Rabi- November & December

Seed rate: 8-10 kg/acre (for improved variety) and 6 kg/acre (for Hybrid)

Sowing method: Treat the seeds with carbendazim @ 1.5g/kg and soak in water for 12 hours. Then incubate it for 36-48 hours or till it sprouts properly. Broadcast sprouted seed uniformly in the seed bed and maintain 2-3 cm water level till sprouted seeds are established.

Main Field Preparation: The aim of good tillage is to ensure suitable puddling of soil, which can restrict the loss of water due to percolation and consequent loss of applied fertilizers. Plough the land 3-4 times and each ploughing should be followed by clod breaking operation. Incorporate 6 t/acre organic manure (FYM) in the soil. Level the land properly before letting in water.

Nutrient Management (kg/acre):

Time of Application	Urea	DAP	MOP	Zinc sulphate
Before Transplanting (Basal dose)	10	50	20	12
Tillering stage	30	--	--	--
Panicle Initiation stage	30	--	20	--

Transplantation: Transplant 20-25 days old healthy seedlings (for kharif) and 25-30 days old healthy seedlings (for rabi) at 1 seedling (for hybrid) or 2 seedlings (for improved variety) per hill. Spacing should be followed at 20 cm between lines & 15 cm between plants.

Weed management: Weeds can be reduced by proper puddling and water management in paddy. Butachlor @ 1 kg per acre is recommended. The chemical should be applied 2-5 days after transplanting. Water should remain in the field for 3-4 days after the application of herbicide.

Water management: Irrigate up to 2-3 cm level of water in the main field for initial 15 days, thereafter maintain 3-4 cm water level till crop reaches grain maturity. In absence of rains irrigate the crop at tillering, ear emergence, flowering and grain filling stage. Water needs to be drained prior to top dressing of nitrogen, panicle initiation stage and 2-3 weeks before harvest, depending on whether the soil is light or heavy.

Disease & Pest management:

Disease/Pest	Management
--------------	------------

Blast	Spray Carbendazim@400g/acr or Tebuconazole 50% + Trifloxystrobin 25% @80g/acre.
Sheath blight	Spray Propiconazole 75%@ 200ml/acre or Validamycin 3L @400ml/acre. Repeat the spray at 7-10 days interval.
False Smut	Spray Copper hydroxide 77% @ 400 g/acre or Tebuconazole 25% @ 400 g/acre at boot leaf stage. Second spraying should be done after 7- 10 days for effective control of false smut or Copper oxychloride@0.3% at panicle emergence stg.
BLB	Apply Streptomycin sulphate (9%) + Tetracycline hydrochloride (1%) @ 200 g/acre along with Copper oxychloride @ 400 g/acre.
Stem borer	Broadcast Cartap hydrochloride 4G @ 10kg/acre mixing with sand at 1:1 ratio or spray Chlorantraniliprole@ 60ml/acre.
BPH	Spray Imidacloprid@50ml/acre or Pymetrozine@120g/acre.

*Use 200 L of water for one acre.

Harvesting & threshing: Harvest the crop when 80-85% of the grains are matured either manually by sickle or reaper or by using combine harvester. Threshing is carried out at 16% grain moisture content and storage done at 12% moisture content.

Above given contents are based on results of research centres and advisories of central & state agricultural research institutes. The result may defer based on geographical and climatical conditions.