

Organic Paddy Cultivation

Description of Technology adopted:

Organic Farming in Paddy Production (var. Chhindi Kapoor & Assam koti) :

- ▶ Organic seeds (75 kg/ha)
- ▶ Green manuring through sunhump @25 -30 kg/ha
- ▶ Vermi Compost 5 ton/ha
- ▶ Biofertilizer seed treatment(Pseudomonas @ 5g/kg, azotobacter @ 10 g/kg for soil application, Tricoderma @5 kg/ha , PSB Culture@5 kg/ha and azotobacter 5 kg/ha.)
- ▶ BGA @ 5kg/ha after 20-25 DAS
- ▶ Neem oil (2.5 kg/ha).

Standards for Organic Farming

- ▶ Crop production plan
- ▶ Conservation requirements.
- ▶ Duration of conservation period
- ▶ Land scope
- ▶ Choice of crop and varieties
- ▶ Diversity in crop production and management plan
- ▶ Nutrient management
- ▶ Pest, Disease and weed management
- ▶ Contamination control
- ▶ Soil and water conservation
- ▶ Collection of non cultivated materials of plant origin/forest produces

Standards of nutrient management for Organic Farming

- ▶ Products for Use in Fertilizing and soil conditioning

A. Matter Produced on an Organic Farm Unit

1. Farmyard & poultry manure, slurry, urine
2. Crop residues and green manure
3. Straw and other mulches

B. Matter Produced Outside the Organic Farm Unit

1. Peat without synthetic additives (prohibited for soil conditioning)
2. Sawdust, wood shavings, wood provided it comes from untreated wood
3. Compost from plant residues

C. Microbiological Preparations

1. Bacterial preparations (biofertilizers)
2. Biodynamic preparations
3. Plant preparations and botanical extracts
4. Vermiculite
5. Peat Permitted

Products for Plant Pest and Disease Control

A. Substances from plant and animal origin

1. Plant based extracts (e.g. neem, garlic, pongamia, etc.)
2. Extract from mushroom (Shiitake fungus)

B. Microorganisms / Biocontrol agents

1. Viral preparations (e.g., Granulosis viruses, Nuclear polyhydrosis, viruses etc.).
2. Fungal preparations (e.g., Trichoderma species etc.)
3. Bacterial preparations (e.g., Bacillus species etc.)
4. Parasites, predators and sterilized insects.”

C. Traps

1. Physical methods (e.g., chromatic traps, mechanical traps, light traps, sticky traps and pheromones)
2. Mulches, nets

Promising Characteristics of Technology

Characteristics of Technology sented variety of paddy (Chhindi Kapoor)	Characteristics	Observation (Unit)
	Plant height (cm)	57.5
	Profuse tillering /plant	5.3
	No. of filled grains/panicle	45
	1000 grain weight (g)	24.2
	Yield (q/ha)	12.35

Horizontal Spread of Technology

No. of village covered	No. of farmers	Area in ha
312	8551	12140

Name of schemes Supported by Central/State Govt. in large scale dissemination under convergence, if any:

S.No	Central Govt.	State Govt.
1.	-	Agriculture Department and ATMA

Economics of adopted technology:

Cost (Rs./ha)	Gross Return (Rs./ha)	Net return (Rs./ha)	B:C ratio
19320	39520*	20200	2.04:1

* Sealing rate @ 3200/qt.

Note :Net return obtained in organic practices from 12,140 ha area is 24 crores 52 lacs while net return in inorganic practices from same area is 13 crore 25 lacs only. So the total profit is 11 crore 27 lacs.

Impact of adopted technology in economic and social terms.

- Improved of Soil physical, chemical and biological property.
- Reduce hazard effect on human health.
- Reduce Environmental Pollution
- Support for Animal health.

Technological extension of organic Kharif crop by PGS Group



Line sowing in Rice

Promotion Activities for enhancing income of the farmers





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