



Basmati Rice Production Technology Useful Tips

 **PADDY KIT** 

Get Maximum Profit



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Basmati Rice Cultivation

1. **Selection of Land/Farm:** - Select field with good water retention capacity with 6.5 to 8.0 pH suitable for paddy cultivation. Paddy cultivation can also be successfully done on a light loam land with adequate irrigation.
 2. **Selection of land for Nursery:** - Portion of field with previous crop of sugarcane or berseem will be an ideal choice. The land should be selected with suitable means of drainage, away from shade and adequate arrangement of irrigation. Weeds should be destroyed completely by running harrows and cultivator.
 3. **Area and nutrients for the nursery:** - For 1000 square meters, apply **Mykin** 40g and mix well in soil. Use 1000 kg of well decomposed compost with 0.5 kg **TRICHO PEP V** and 0.5 kg **Pseudo-PEP** in combination with 200 ml **ZINC PEP 7000**. Apply 5 kg urea on the 10th day of the sowing.
 4. **Field preparation:** - Prepare the Field by ploughing twice or thrice after the summer ploughing and level it preferably with laser leveller. The land must be irrigated a week before planting paddy. Apply 4kg of **Mycoprep** during field preparation, During tillering, broadcast 2 kg of **Crop Tiger** per acre uniformly in the field and 1Kg to be applied as foliar spray after 20-25 days. Before transplanting, ploughing should be done with harrow twice or thrice and later, then ploughed with tiller or paddler so that it becomes equal. Mix 150-200 kg cow dung manure / FYM / compost of leaves mixed with 2.0 kg **TRICHO PEP V** and 2.0 kg of **PSEUDO-PEP**. Spray water for moisture and cover it with a wet gunny bag. Remix the heap after 4 days and again cover the heap. After a week spread this mixture in a acre of field.
 5. **Selection of variety:** - The selection of variety is very important to achieve good yield with the best quality. Select the recommended variety on basis of area, crop duration, yield, low or high water requiring and demand in market.
 6. **Selection of healthy seeds:** - Take a tub with half filled water having dissolved 1.5 kg of common salt (10 lit) and pour the whole seeds which is to be sown in nursery. The floating seeds with the help of seive.
 7. **Treatment of seeds:** - Seed treatment is essential for the prevention of seed and soil borne diseases. Make a solution of Carbandiazem or Thiram @ 2g/kg seed and Pep-Rice primer (@10 ml per kg seed) in 40 liters of water. Soak 20-25 kg seeds in this solution for 24 hours. Take out these seeds from the solution and put them under a shade for sprouting. The seeds must be layered in 4-5 inches thick. Cover well with a wet sack. Keep spraying little water on the sack until the seeds are germinated. Approximately after 36-48 hours the seeds must be completely germinated.
- * **For Organic Treatment** An organic treatment will be ideal for ultimate organic rice production. Make a solution **Pep-Rice Primer** (@10ml/kg of seeds) and 250 gm **TRICHO PEP V** and 250 gm **PSEUDO-PEP** in 50 liters of water. Soak 20-25 kg of seeds for 24 hours and follow the same procedure as mentioned above for sprouting.
8. **Selection of Fertilizer:** - Fertilizer should be chosen after testing the soil. It is recommended not to use DAP or Single Super Phosphate with Zinc Sulphate. Use only the right amount of fertilizer; and After 30-35 days of transplantation, spray **ZINC PEP 7000** should be applied at the rate of 400-500 ml per acre during field preparation. The second application should be done as a foliar spray at the tillering stage, using 1.5 ml per liter of water. A total of 200 liters of this solution must be sprayed on 1 acre of land. and After 50-55 days of transplantation, spray **Aminofert Gold Liquid** @ 2 ml /liter of water. A total of 200 liters of this solution must be sprayed on 1 acre of land.
 9. **Process of Transplantation:** - The field must be filled with water and ploughed twice or thrice. The seedlings of 20-25 days (4th leaf stage) is best suited for transplanting. The distance between plant to plant and line to line should be 15 to 20 cm. Always plant 2-3 plants at one place. Transplant the seedlings 1.0-1.5 inches deep. The field should have 2-3 inches of water at the time of transplanting. There should be 30-35 plants approximate minimum in one square meter.

***Note:** Before transplanting, mix 250 gms of **PSEUDO-PEP** powder in a solution of 20 liters of water & immerse the root of plants for 30-35 minutes, then plant it. This treatment is very useful for the prevention of Bakane disease, sheath blight, foot rot other soil borne diseases.

10. **Irrigation management:** - The water must be maintained in field (2-3 inches) for 45 days after transplantation. The fields should have enough water at the time of bursting of blossoms, flowering and grain formation. This makes phosphorus, iron and manganese elements easily available and also reduces weeds.

11. **Drain and weed control:** - Use the khurpi or paddy weeder to destroy weeds in field or any weedicide / herbicide available in the market. But keep in mind that such chemicals must be use after 6-7 days from the treatment of **Tricho PEP V** and **Pseudo-PEP**.

12. Crop protection from major insects and diseases:

Insect:

S.No	Name of Insect	Insect identity	Effected part of plant	Control
1.	Stem Borer	Striped – Pink, White or Yellow larvae	The main stem and tillers turn white.	Cartap Don GR or Cartap Don 50 or other recommended insecticide
2.	Leaf Folder	Light green or sawfly color larvae	Soft leaves (wraps itself in the leaf and hides in it)	Cartap Don GR or Cartap Don 50 or other recommended insecticide
3.	Brown/white plant hopper	Light brown white color hopper	Stems and leaves at collar region (Whole plant)	Spray Chitti - 50 100g / acre

Diseases:

S.No	Name of Disease	Symptoms of Disease	Effective part of the plant	Control
1.	Blast or Blight	Eye-shaped Brown spots on the leaves and even the edges turns brown.	Leaf, stem and panicle	Montino (Tebuconazole 50%+ Trifloxystrobin 25% WG) or other recommended fungicide
2.	Bacterial Leaf Blight	Drying of edges of the leaves or the entire leaf gets a ash-color patch	Leaf and grains	Kasu-PEP (Kasugamycin 3% SL) or any other recommended bactericide
3.	Sheath Blight	Long green spots on the sheath becomes brown	Leaves causing drying of whole tiller	Montino (Tebuconazole 50%+ Trifloxystrobin 25% WG) or other recommended fungicide.
4.	Khaira disease	Chlorotic midribs, particularly near the leaf base of younger leaves	Overall growth stops	Zinc PEP 7000 (Zinc Oxide 39.5% SC)
5.	Foot Rot or Bakanae Disease	Thin plants with yellow leaves or seedling dries at early tillering	Roots, stem and the whole plant	Soil must be treated well with Tricho PEP V & Pseudo-PEP . Even the roots of the seedling must be dipped in Pseudo-PEP before transplantation.
6.	False Smut	Transform grain into, a yellow or black colored powder develops in the grain.	Grains	Treat the seeds with fungicide.

13. **Harvesting and Storage:** - Harvesting should be done when the crop is almost 90% mature. Store the grains after gradually drying. The good quality of yield gets the right market value. For long-term storage, the farmer should dry the paddy well before storage.

14. **Useful information:-**

- Level the farm with Laser Land leveler.
- Must use FYM, compost or green manure in the field to increase Carbon and beneficial microbial activities .
- Must remove weeds from the main crop early before flowering.
- Use a balanced fertilizer at the right time. Potassium, Zinc and Ferrous must be provided to crop.
- Seedlings must be planted in line only. Depth may not exceed 1 - 1.5 inches.
- Soak the roots of plants in the solution of **Pseudo-PEP** and soil augmented with with **Tricho PEP V** & **Pseudo-PEP** to prevent blast blight, sheath bligh and Bakane disease.
- Keeping the water level of 3-5 centimeters of planting for 45 days after transplantation.
- Keep track of disease and insects by regular monitoring of crop to manage crop health manage at early stage.

Products



TRICHO-PEP V
Trichoderma Viride



PSEUDO-PEP
Trichoderma Viride



Crop Tiger
(Increases Bio-Immunity)



ZINC PEP 7000
Zinc Oxide 39.5% SC



AMINOFERT GOLD
(Complete Nutrition)



CARTAP DON 5
Cartap Hydrochloride



CARTAP DON GR
Cartap Hydrochloride



MYCOPEP
Mycorrhizae



MYKIN
Concentrated
Mycorrhiza



MONTINO
Tebuconazole +
Trifloxystrobin WG



Kasu-PEP
Kasugamycin 3% SL