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Topic : *Pleurotus* spp. Cultivation Technology  
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## **Cultivation of Oyster mushroom (*Pleurotus* spp.)**

Species of the genus *Pleurotus*, called **Oyster mushroom** or **Dhingri** or '**Wood fungus**' is ranked as the fourth important mushroom of the world among the five most important cultivated mushrooms. The leading countries producing Oyster mushroom are Japan, Taiwan and Italy. In recent years, its cultivation is increasing in France, Italy, Japan, Thailand, Taiwan, Philippines and India.

The genus contains over 50 species. Of these, *P. ostreatus*, *P. Flabellatus*, *P. sajorcaju* have been cultivated in India. In *Pleurotus*, the stipe is usually lacking, context hyphae mostly thin walled before maturity.

The various substrates utilised for the cultivation of *Pleurotus* are banana pseudostems, wheat straw, paddy straw, ragi straw, compost prepared from straw, saw dust, beech saw dust, sunflower stalks, rice husks and karad hay. However, the highest yields are obtained on rice straw. These can be grown in any container, e.g. earthen pot, cane gasket, polyethylene bags, iron baskets or in wooden trays.

### **Requirements**

- Thatched hut/polyethylene chamber, mud/pucca house
- Dry paddy straw (chopped) or other agro-wastes- 100 kg
- Horse gram powder – 4 kg
- Spawn bottles of *Pleurotus* sp.
- Polyethylene bags- 1 kg
- Water sprayer

### **Procedure**

1. Take dried paddy straw.
2. Chop the straw into 1 to 2 cm bits.
3. Soak the chopped straw into water overnight.
4. Drain off the excess water.
5. Add horse gram powder at the rate of 8 g/ kg.
6. Add spawn at the rate of 30 g/kg.
7. Mix all the constituents.
8. Fill the mixture into polyethylene bags with holes.
9. Keep (incubate) the field bags in a room at 21°C to 30°C with sufficient light and ventilation for 15-16 days for spawn running.
10. Cut open the polyethylene bags on the sides without disturbing the bed.
11. Spray water over the bags twice a day.

**Observations**

Observe for the mushroom crop after 3 to 4 days of opening the polyethylene bags (i.e. after 20-22 days of spawning).

**12. Harvesting**

First harvesting is to be done 20-22 days after spawning, 2nd harvesting 27-29 days after spawning and 3rd harvesting 34-36 days after spawning.

**Precautions**

1. For better yields, temperature of the room should be in the range of 20°C – 26°C and relative humidity of 70-90%.
2. Provide light for 15-20 minutes during cropping period.
3. Polyethylene bags with holes should be used.