

- Once pin heads develops and increase in size (mushroom) volume of watering should be increased
- Stop watering when mushroom are fully developed.



Mushroom flushes

#### HARVESTING AND YIELD

- Matured and fully opened sporocarps are harvested by placing the thumb and forefinger near the base of the fruiting body and twisted in clockwise direction to get detached from the mycelium.
- First harvest will be ready on 15 - 21 days.
- After first harvest spray water to moist the bed
- Second harvest may develop after one week.
- Totally four harvest can be taken from one bed within 35 - 45 days period.
- An average yield of 500-700 g can be harvested from 1 kg of straw.
- The spent straw can be used as enriched manure.



Watering



*Pleurotus sajor caju*



*Pleurotus florida*



*Pleurotus djimori*

#### PEST

##### *Mushroom fly/ Phorid fly*

- The phorids cause damage to mushroom by feeding on mycelium.
- For controlling phorid flies, fix nylon net of 35 or more mesh size in the mushroom house to prevent the entry of flies.
- Regularly remove the waste materials.
- Install sticky trap to attract the phorid flies.

##### *Mushroom production is very simple but*

- Utmost care has to be taken to maintain hygiene in the growing place, since the contamination can ruin mushroom.
- Care should be taken to use only good quality spawn and paddy straw for mushroom production.
- Paddy straw should be treated properly before bed preparation.
- Also, maintain good hygiene in the cropping rooms and bed preparation yard

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## MUSHROOM CULTIVATION A PROFITABLE ENTERPRISE



**कृषि विज्ञान केन्द्र-फेक**

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Mushroom are fresh structure appearing often overnight on humus rich soil, moist wood etc. It occurs in nature which are collected and consumed. Mushroom has an exotic flavour, nutritional and medicinal values. Naturally occurring mushrooms are season specific, therefore cultivating at home scale will provide potential opportunity for the house wives and the educated youths of Nagaland.

### SUBSTRATES AND MATERIALS

- Pleurotus spp can be successfully cultivated
- Agro waste like saw dust, maize, vegetable wastes, paddy straw can be used.
- But the best suitable substrate is found to be paddy straw.
- Other raw materials required are poly thene bags/wooden block, antiseptic solution, sand and water, Jute rope, bamboo poles, bucket, drum, sprayer



Spawn

### PRODUCTION HOUSE

- A thatched shed or room, preferably with optimum relative humidity of 80 - 95 %, room temperature of 24°C - 28°C with diffused light and ventilation is required.
- Lower temperature adversely affects growth and production of oyster mushroom.
- The room should be made rodent and insect proof

### CULTIVATION PROCEDURE

- Chop the straw to 2-3 inches long.
- Fill the straw in a gunny bag and soak it for about 1 hour.
- Drain out the excess water.
- Sterilize the straw by steaming for 2-3 hrs in drum.
- Allow it to cool by spreading on a clean surface.



Chopping and boiling of paddy straw

### SPAWNING

- Fill perforated polybags/block with the sterilized straw upto 1/6th.
- Press it gently with hand to make it compact and spread 8-10nos of spawn inoculated grains (Bason powder may be used during winter)
- Fill the 2nd layer of straw to 2/6th of its capacity and repeat the process till 5/6th of the polybag.
- Bind the mouth of the polybags with a rope



Polybag

Block

### SPAWN RUNNING

Hang the spawned bags on the bamboo racks in the dark room

### ENVIRONMENTAL PARAMETERS

Temperature	:	20-30°C
Relative humidity	:	75-80%
Ventilation	:	Minimum



### FRUITING AND CROPPING

Under optimum conditions mycelium will fully colonize within 14-20 days. Tear the poly bags with a sharp blade when pin heads emerge from the holes.



Pinheads

Following environmental condition should be maintained for fruiting:

Temperature	:	20-30 °C
Relatively humidity	:	80-90%
Light	:	2-3hrs daily
Ventilation	:	2-3hrs daily

- Relative humidity can be maintained by periodical spray of water on the walls and floor.
- Small fruit bodies called pin heads will appear within a week in presence of fresh air and light.

