

Proposal by:

**Shri Jagdishprasad Jhabarmal Tibrewala University,
Rajasthan (Id: U-0423) 01-04-2019**

Title of the work:

Mushroom cultivation

Village where it is to be implemented:

Dhanuri

Brief description of the problem and Significance of Project:-

Rajasthan is the largest State of India. Agriculture is the backbone of state economy. Water is the basic necessary of life and a pre-requisite for sustainable of mother earth. This is most true of state like Rajasthan which is well known as chronically water-deficient state in the country. An analysis of Rajasthan state data indicates that 40 out of the 50 years have been drought years. The major challenge in rain fed agriculture is therefore to minimize yearly variation in crop yields due to aberrant weather condition and to stabilize production at a reasonably acceptable level. Short rainy season, erratic rainfall distribution, high mean temperature, high potential evop-transpiration rates and shallow and sandy soils with poor water holding capacity are some of the factors that create drought like situation. These factors singly or combination commonly results is moisture stress at one or more stages of plant growth. Furthermore, higher soil surface temperature adversely affects germination and seedling establishment, resulting to poor crop stand and plant.

Need for customisation:

A mushroom farming business can be mean big profits in just a few weeks. Plus, starting business growing oyster mushrooms for profit is fairly easy. In fact, here's how to get started in just six easy steps which we have done in JJT University:

1. Get spawn and substrate

We need a spawn to start the culture. Produce spawn using a sterile culture, or can buy ready-to-inoculate spawn, which are carried by suppliers. Producing cheaper in the long run, but the start-up costs can be high, so chances are buying the ready-to-inoculate

spawn. So need to buy the substrate. Many growers use straw or wood chips. Straw is generally the preferred method. Straw that can be chopped up into little pieces.



2. Prepare the substrate

First, chop the straw into short pieces. Next, wet the straw. Now it's time to heat the straw in boiling water. Continue boiling for half an hour and then remove the straw and drain it. Next, spread out the straw on a clean surface and let it cool down.



3. Pack the plastic bags

Now it's time to pack plastic bags with the straw and spawn. Pack two or three inches of straw into the plastic bag and then lightly sprinkle the spawn on top. Repeat this until almost filled the bag, close the top and poke holes in the bag.



4. Incubation

Now it's time for incubation. Keep the growing area at around 78 degrees F. Place the bags on a shelving unit. Remember to stop any threats of natural light getting into the room. Cover windows and cracks. Use a red "darkroom" light when need to check on bags. When start to notice tiny pinhead mushrooms near the air holes in bag, then ready to move on to the next step.



5. Fruiting

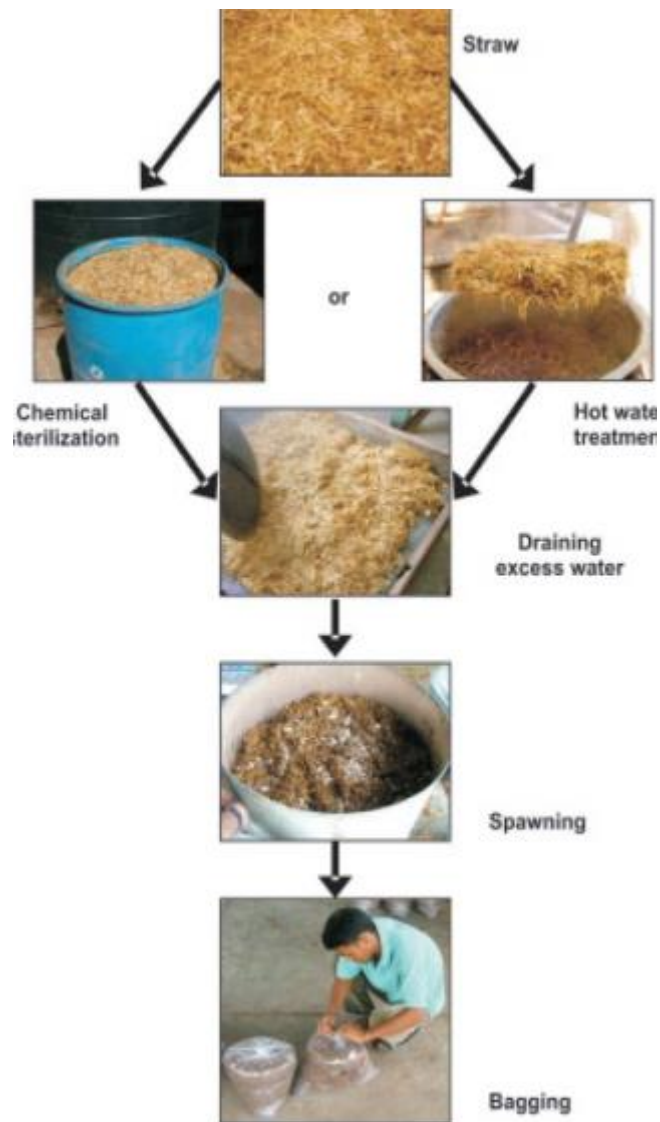
For fruiting room, need a high level of humidity. The temperature will need to be 65 to 70 degrees F. Unlike the incubation room, actually need a lot of natural light—at least 12 hours a day. To shock mycelium, which will force it into fruiting, move the bags to a cool place for a day, such as a basement or other cool place, and then move them back to the fruiting room. Next, cut away the bag, which allows mushroom growth to take place.



6. Harvest

Just before mushroom caps are fully uncurled, that's when it's time to harvest. To do so, twist the stem off as near to the growing block as are able to harvested mushrooms. Start a business growing oyster mushrooms for profit in just six easy steps. To learn all the basics of growing oyster mushrooms.





Cost of the facility:

Rs.100000

Role of institute:

University will provide more guidance and create more awareness about processing to maximizing the production of Mushroom and to help villagers for plantation of variation in Mushroom crop yields due to aberrant weather condition and to stabilize production at a reasonably acceptable level. University also provide guidance and support to step by step procedure for Mushroom cultivation.

Activity	3 Months Plan (Production of 100 Bags- out of which Mushroom cultivation 7 to 10 Kg per month)		
	June 2019	July 2019	August 2019
Plan Execution			
Implementation and Training			
Monitoring			
Reach Market			

Impact of this work and Future prospects of the work:

This project provides rural development by providing the most important aspect in agriculture is to achieve uniform seed germination and better initial seedling establishment. In this Program of UBA with collaboration of technical support by IIT-Delhi, we Shri J.J.T. University will provide complete support for monitoring and guidance throughout cultivation till product reach to market area to see the best Return on Investment (ROI). In case need support for selling of Mushroom, Shri JJT University have research plant of Mushroom Plantation hence university will take care about selling of Mushroom production.

- Cost effective and Profitable
- Operation and maintenance expenses are affordable
- Create footprint as own brand in Mushroom
- Facilitates multiple use
- Fluctuation in operation
- Enter in to exporting with growing tech.

Availability of any other funding:

No

Details of the funds rise from other agencies:

Not applicable

Duration of the work:

3 months