

Oyster Mushroom Cultivation

Part II. Oyster Mushrooms

ILLUSTRATED GUIDE TO OYSTER MUSHROOM CULTIVATION

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MushWorld

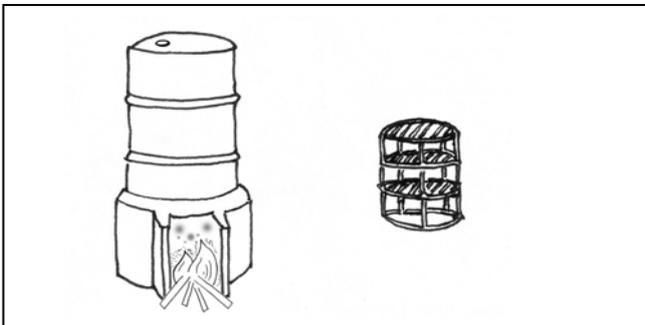
Part I. Bag Cultivation



[Bagging] Fill the bags with substrate mixture and compress them with a stick. Some growers bore a hole substrate.



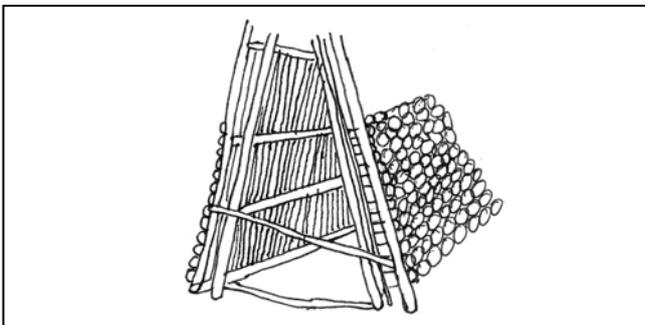
[Neck-making & Plugging] Put a plastic ring and pull the bag top out through the ring. Plug the mouth with a cotton ball or paper and a rubber band.



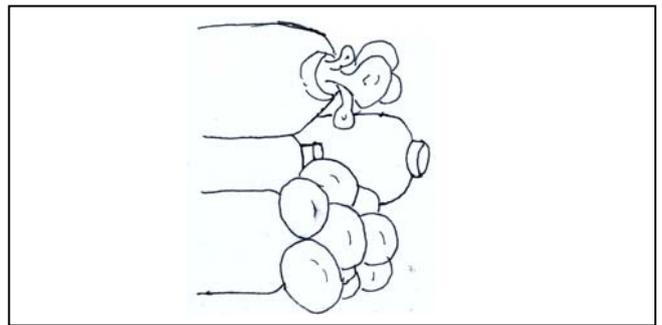
[Sterilization] Put a metal rack in the oil-drum sterilizer. Stack the filled bags on the linen-lined metal rack. Linen prevents bags burning from the searing heat in the sterilizer.



[Pasteurization in bulk] Substrate mixture is pasteurized with live steam at 60°C for at least 6 hours. During this process, possible pathogenic fungi and bacteria in the substrate mixture are killed.



[Incubation] Inoculated bags are stacked and incubated. When colonization is completed, remove

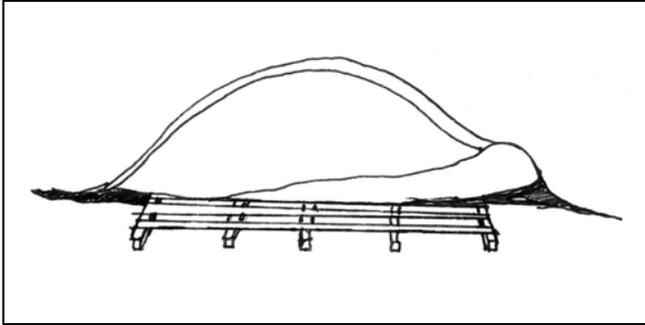


[Fruiting] Fruiting bodies ready to harvest. Frequent, light watering is recommended to produce high

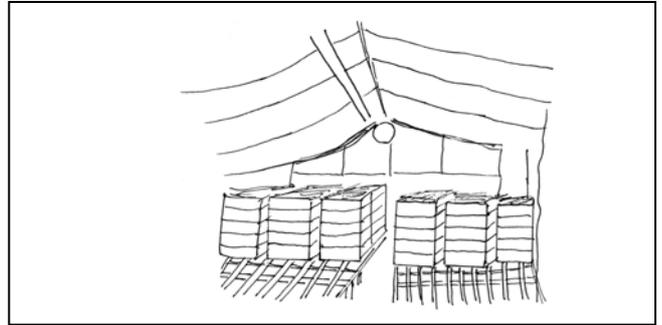
the cap for fruiting induction.

Quality mushrooms.

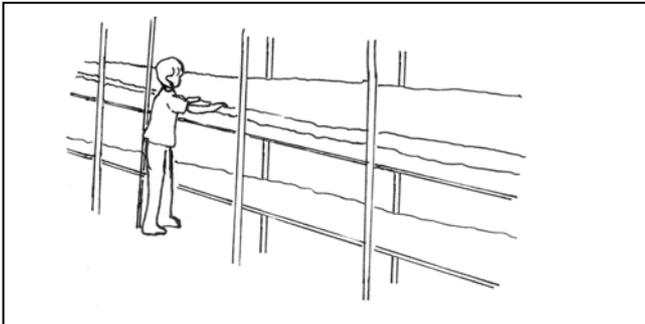
Part II. Shelf Cultivation



[Outdoor fermentation] Substrate materials are mixed and piled outdoors. During this process, organic compounds are degraded into simple substances, more absorbable by mushroom mycelia.



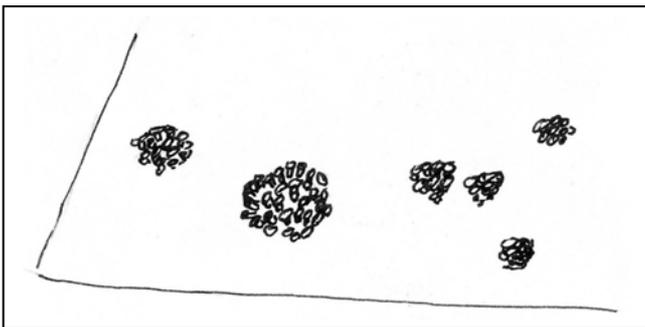
[Pasteurization in bulk] Substrate mixture is pasteurized with live steam at 60°C for at least 6 hours. During this process, possible pathogenic fungi and bacteria in the substrate mixture are killed.



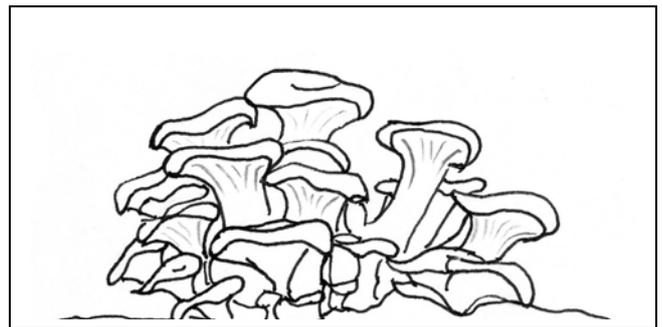
[Filling] When the mixture is cooled, fill the plastic sheeted shelves with the pasteurized substrate. After spawning, the entire shelf is covered by the plastic sheet.



[Spawning] Spawn can be distributed only on the surface or 70% of spawn can be mixed with substrate and the remaining 30% can be scattered on the for other disease and competitor fungi to take root.



[Pinning] Remove plastic cover upon full colonization, and small pins will occur. They are so delicate that heavy watering should be avoided.



[Fruiting] Fruiting bodies produced from the shelf system have high quality because of high spawning rate and quantity of available nutrients.

* Details of these growing methods will be further discussed in Chapter 7. Cultivation Modes.