


장흥군버섯산업연구원

# WEB CONTENTS


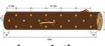




2024년 05월 10일 10시 06분

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Cultivation technology was described by focusing on basic principles. It must be applied appropriately according to the cultivation environment of each forest household, the condition of the log and sawdust medium, the variety, and changes in weather.

### Log Mushroom Cultivation Technology

Category	October			November			December			January			February			March			April			
	first	middle	last	first	middle	last	first	middle	last	first	middle	last	first	middle	last	first	middle	last	first	middle	last	
Work	Log logging									Spawn Inoculation												
Log gin g & Ino culation	Com mon	<ul style="list-style-type: none"> <li>Drying: Naturally dry logs in the shade for 2-4 months (shading net or tent covering)</li> <li>About 1/3 to 2/3 of a split in the center of the felled tree.</li> <li>Standard tree: Diameter: 9-12cm, Length: 1-1.2m</li> </ul>									<ul style="list-style-type: none"> <li>Inoculation Period: Determined based on the temperature of the cultivation area</li> <li>In-house inoculation: Late February to early March, Open-field inoculation: mid March to early April</li> <li>Inoculation Method</li> <li>Plug-shaped spawn is used for inoculation by cutting 5-6 rows of each log.</li> <li>When an air inoculation machine is used, the Styrofoam stopper and the surface of the inoculation hole are to be kept horizontal.</li> </ul>											
																						
Category	October			November			December			January			February			March			April			
Work	Management of inoculated logs (Main Laying)						Management of inoculated logs (Standing and cultivation)												The first mature mushrooms			
Cult ure and dev elo pm ent (1st yea r)	High temperature	<ul style="list-style-type: none"> <li>Method (Hash-shaped layering, Pillow-head layering)</li> <li>Stack logs at least 20cm above the ground and under 1m (Hash-shaped layering)</li> <li>Management of Moisture (used early in the morning)</li> <li>&gt; 6 hours / 1 week</li> </ul>						<ul style="list-style-type: none"> <li>Conduct the method after November when the temperature drops enough to prevent mushrooms from growing.</li> <li>Management of Moisture (used in the morning): Stand the logs for about 1 hour when the temperature rises above 10°C. Avoid direct sunlight.</li> </ul>														
	Mid-high temperature																					
	Mid temperature																					
	Low temperature																					
Category	October			November			December			January			February			March			April			
Work	mushroom development									mushroom development												
Dev elo pm ent (2nd yea r)	High temperature																					
	Mid-high temperature																					
	Mid temperature																					
	Low temperature																					
Development Work: Spraying and felling																						
mushroom harvesting																						

## Top Sawdust-Bag Cultivation Technology

Category	October			November			December			January			February			March			April		
	first	middle	last	first	middle	last	first	middle	last	first	middle	last	first	middle	last	first	middle	last	first	middle	last
Cultivation standard for mid-high-temperature Sanjo 701 mushroom cultivation	Production of oak mushroom sawdust media																				
	Medium culture (early, mid-term, ridge and browning culture)																				
	Medium opening and browning acceleration																		Production of oak mushroom sawdust		
Cultivation standards for mid-temperature Charamcuthivar	Production of oak mushrooms the following year (with heating environment management in winter)																				
	Medium waste and disinfection																				

### Production of oak mushroom sawdust media

- Ingredients: Oak sawdust, rice bran, calcium carbonate, etc.
- Production process:
  - ① mixing ingredients ② sealing ③ sterilization ④ inoculation



Mixing      sealing      inoculation

### Sawdust culture (initial, mid-term, ridge and browning culture)

- Initial culture: Up to 20 days after inoculation, culture temperature: 23°C, dark culture
- Mid-term culture: Up to 40 days after inoculation, culture temperature: 20°C, dark culture
- Ridging and browning culture: 100-120 days after inoculation, culture temperature: 20°C, light culture



initial culture      mid-term culture      browning culture

### Medium opening and browning acceleration

- Opening: Cut the top surface of the media by 1-2cm., and remove the plastic on top.
- Browning acceleration: Accelerate browning on the sides and bottom of the medium. (Sprinkle for 2-4 hours, turn the medium over, return the medium to original position)



medium opening      browning acceleration

### Production of oak mushrooms (environmental management)

- Mushroom development: Sprinkle for 6-24 hours, turn the medium over, sprinkle for 6-24 hours, and return the medium to its original position.
- Environmental management:
  - Keep the temperature inside the cultivation facility below 30°C in summer (shading, water screen, cold air)
  - Keep the temperature inside the cultivation facility above 15°C in winter (thermal insulation, water curtain, warm air).



mushroom emergence      mushroom growth (September)      mushroom growth (December)      secondary shading facility

### Medium waste and disinfection

- Medium Waste
  - The medium after mushroom cultivation is discarded
  - Clean the cultivation bed and floor thoroughly
- Disinfection of the cultivation facility
  - Ultraviolet ray disinfection using sunlight (opening the light blocking net)
  - To prevent any potential damage the following year, spray quicklime (granulated kaolin) on the ground of the cultivation facility where pests and diseases occur.

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