



Field & Forest Products

Shiitake on Logs

Growing on Logs

What You Need to Know

This natural log cultivation process imitates nature closely, has low initial costs, but is physically demanding. Hardwood logs 36–40" long in varying diameters of 3–8" are ideal. These logs are drilled, inoculated with sawdust or plug spawn, and the holes are sealed using cheese wax. Inoculated logs can be incubated indoors (typically following fall inoculation in cold climates) or outdoors, allowing the spawn to fully colonize the logs. After incubation the logs are placed under varying environmental conditions to stimulate fruiting. Logs can be allowed to fruit naturally or they can be "force fruited," which is a method of soaking the logs in cold water. One 5.5 lb. bag of sawdust spawn will inoculate 25 logs and one bag of 1000 count plugs will inoculate approximately 20 logs.



Shiitake on Totems

The Basics

This method works best on larger diameter logs. Logs are cut from dormant trees, typically 6–12" in diameter by 6–8" long. Sawdust spawn is placed in the bottom of a black plastic garbage bag. Your first, fattest log is placed (vertically) on top of the spawn in the bag. Gently spread 1/8" to 1/4" of spawn on top of that log. Take your next log and place it on top of the first. Spread another 1/8" to 1/4" of spawn out on top of that log. The last log is capped with a few sheets of newspaper or a brown paper bag. The garbage bag is then closed up and stored for 6 months in incubation. When spawn run is complete, the bag is opened up, and the logs are placed outdoors to fruit. One 5.5 lb. bag of sawdust spawn will inoculate 12 log sections or 6 totems (2 logs high).



*More detailed instructions are included with every spawn or kit purchase!

Supply List

Here is a list of what you will need to purchase from us for growing Shiitake on logs.

For Sawdust Inoculation:

- Sawdust spawn
- 12mm drill bit with stop **OR** 7/16 inch drill bit
- 7/16 inch stop collar (only if using the 7/16 inch drill bit)
- Inoculation tool (Palm or Thumb)
- Cheese wax (2.5 lb. for each 5.5 lb. bag of sawdust)
- Wax daubers
- Aluminum tags

For Plug Spawn Inoculation:

- Plug spawn
- 8.5mm drill bit **OR** 5/16 inch drill bit
- 5/16 inch stop collar (only if using the 5/16 inch drill bit)
- Cheese wax (2.5 lb. for every 25 logs) **OR** plug wax (6 oz. for every 1000 ct. bag)
- Wax daubers (**not** needed if using plug wax)
- Aluminum tags

Totem Supplies

If you choose to use the Totem Method all we supply is the spawn. You will need to supply:

- Large black plastic bags
- Large rubber bands
- Small rubber bands
- Newspaper or paper grocery bags
- Logs

Things to Consider

Remember: Plug spawn is hammered in, so there is no need for an inoculation tool!

Sawdust spawn covers a larger area, therefore “spawn run” or the time it takes for the log to become fully colonized by mycelium is shorter, usually taking between 6 and 9 months. With plug spawn it is expected that spawn run will take a full 12 months, sometimes longer.