

SHIITAKE MUSHROOM GROWING KIT - INSTRUCTIONS



YOUR SHIITAKE MUSHROOM GROWING KIT SHOULD INCLUDE

50 x Shitake plugs

1 x 100g block beez wax

1 x 5/16" drill bit

WHAT ARE THE BEST SUBSTRATES?

Most hardwoods and some softer timbers will produce shiitake mushrooms. The best logs to use are Oak, Birch, Elm, Willow, Shining gum or poplar. Thick barked logs are preferable over paper barks. Ensure your logs is seasoned for at least 4 weeks before inoculating. Do not use logs that are shedding bark.

WHEN TO INNOCULATE?

You can inoculate your log any time from April to October. Your log will generally fruit in Autumn or Winter. Generally 6 – 12 months from the time of inoculation.

STEP 1: DRILLING

- Place the log between two sawhorses or use a bench clamp to secure the log in position.
- Use the 5/16" drill bit provided and drill to 1" depth.
- Starting 2" from the end of the log, drill 40 -50 holes in a grid pattern, 3"- 4" apart down its length, and 1" across.

STEP 2: INNOCULATE

- Inoculate your log immediately after the holes are drilled. Tap a plug into each hole with a hammer until the plug is flush with the bottom of the bark.
- Check that all the holes in your log are inoculated!

STEP 3: WAXING

- Slowly melt beez wax to a liquid and dab a thin coat of melted, hot wax over each inoculated site, using either a wax applicator or a brush. Do not let the wax get too hot.
- Ensure that all the holes have been covered with wax. This will seal the plugs within the log and stop the entry of foreign fungi.

STEP 4: TAGGING

- Use a pen to write on an aluminum or plastic tag the date and mushroom strain used. Staple or nail the tag to the end of the log with a nail or staple

SPAWN RUN

Place the log off the ground in a shady spot out of direct wind and sunlight. The log can be shaded using 60-80% shade cloth if desired. Evergreen trees make an ideal shade. The most common cause of failure is dehydrated logs. Aim to keep your log at a temperature of under 20 degrees Celsius. This will create an ideal environment for the spawn run.

INCUBATION

During the 6-12 month spawn-run you will need to keep your log high in moisture content. Ideally you want to maintain 45-60% internal log moisture content. There are 2 fundamental ways to soak your log:

1. Soak your log with a sprinkler or soaker hose for 2-3 hours once - twice a week.
 2. Immerse your log for 12-24 hours about every two weeks, depending on the weather.
- It is equally important to **ALLOW THE BARK TO DRY BETWEEN SOAKINGS** to discourage weed fungi. The best yields come from infrequent deep soakings and frequent light ones.
 - Flip the log end over-end every few months to reduce the accumulation of moisture in one end of the log.

FRUITING

The spawn-run requires at least one warm season. The mycelium produces mushrooms in response to stress, such as a rapid increase in moisture and a sudden drop in temperature. Once fruiting has begun, keeping optimal temperatures and high humidity will produce higher yields and good quality. Fruiting is close when white splotches of mycelia appear at the ends of the logs. The first harvest occurs naturally after a cool Autumn or Spring rain. You can choose to let the logs fruit naturally with an occasional deep soaking during hot, dry weather. This "natural" fruiting method yields lots of mushrooms in the Spring and Autumn, but few or none in the Summer and Winter.

FORCED FRUITING FOR QUICKER HARVESTS

To simulate Spring and Autumn conditions, a log is immersed in clean cool water for 24 hours. Within 2-4 days, buds (primordia) emerge from the log and attain maturity in 4-6 days. To harvest, cut the stems close to the bark with a sharp knife. Place the mushrooms in a paper bag, which can be stored in the fridge for up to a month. After fruiting for 7-10 days, the harvest will taper off. The mycelium now needs 6-8 weeks to digest more of the wood for the next fruiting. In this "resting" stage, store your log in a sheltered place and cover to allow slow drying. While excessive drying of a log can kill the mycelia, allowing rain to soak "resting" logs causes premature fruiting and / or small harvests at the next soaking,

We're sure you will enjoy growing your own fantastic fresh shiitake mushrooms at home. Remember that like many things, log & stump cultivation requires time, patience and a little luck. For further information or enquiries please email us at: enquiries@fungi.net.au