

# Shiitake

- The Shiitake mushroom (*Lentinula edodes*) prefers cool temperatures (10-18°C), and a high humidity (60-85% RH). It requires light - direct sunlight is too strong, but 'skylight,' or light from a window or fluorescent lamp up to about 10 hours a day is OK.
- It requires some fresh air but excessive air movement may cause the mushrooms and the growing medium to dry out too quickly. Frequently spraying water onto the mushrooms is a poor way to maintain humidity, and may promote rot. If humidity is low, make a poly "tent" over the block and, if necessitated by very dry conditions, spray the inner walls of the enclosure or hang a damp cloth in the enclosure. Humidity issues will very much depend on your climate and the season. If it is necessary to delay fruiting your kit, then close the top of the bag containing the substrate with a tie to minimize drying and then you may store it at 0-4°C for a month or longer. Mushrooms will grow inside the package if the temperature is higher than this.
- The substrate on which your mushrooms are growing is made of Fraser Valley Red Alder hardwood sawdust supplemented with millet grain, wheat bran and crushed limestone. There may be a wad of cotton stuck on the top of your block, This was used to exclude contaminants while the packs were being incubated but serves no purpose anymore and may be carefully removed or else left in place if it's too difficult to remove.
- Put your grow block in a cold place (1-10°C), which could be your fridge or an unheated room depending on the weather for several days to a week to "activate" it. If mushrooms have begun to form then you do not need to activate it further).
- Make a couple of "slits" near the bottom of the bag. Open the top of the bag and hold the open bag under the tap to flood it with cold water and leave in the sink for half an hour to drain, Turn 'bottom up' to drain any remaining excess water. Then scrunch the top of the bag together, and place it in your growing environment. Giving the block a thump on the table will help to promote fruiting.
- When mushrooms 'buttons' appear, open the top of the bag a little more. As the buttons expand more, slit the bag in 4 or 5 places from the top down to the top of the substrate block to provide room for the expanding mushrooms and to provide more ventilation. Contact with the intact bag will inhibit the complete development of the mushrooms, If mushrooms appear down the sides of the block under the plastic, you may slit the bag to that point. Do not cut the surface of any developing mushrooms or the surface of the substrate block. It is sometimes *best to ignore* those mushrooms as slitting the bag down the sides of the block exposes more substrate surface to drying out,
- In dry environments, removing only the top of the bag and leaving the bottom part of the bag permanently in place around the substrate block will help to conserve moisture. Forced air heating or draughty locations may cause excessive drying. Constructing a 'tent,' in the form of a large, clear plastic bag placed loosely over the top, or poly bag supported by wire or sticks may be beneficial. When very dry conditions prevail, you may also need to mist the inside of the tent or place a damp towel in it (remember that freezing weather outside results in low humidity indoors), Misting directly onto the mushrooms themselves is not very satisfactory and may lead to problems such as mold and bacterial growth. During damp, cool weather they will grow well outdoors but protect them from direct sunlight, slugs, bugs etc.
- The substrate block and the developing mushrooms may benefit from periodic drenching but neither the mushrooms nor the substrate should remain continuously wet or they will rot. Drenching the pack by holding it under a cold shower for a couple of minutes once every day or 2 is better than misting frequently
- Harvest when the white, cottony veil beneath the cap has broken away from the stem or, if you want really large mushrooms just let them grow.
- After a heavy harvest the block will have lost much moisture. Put the block in a loosely fitting poly bag with a few small holes in it for ventilation and let it rest for 2-4 weeks at 18-25°C. Then replenish the moisture by immersing the block in cold water for a few hours to overnight. The soaking water should be cold. Immersion in warm water for more than a short time may damage your mushroom plant. Warm water does not carry as much dissolved oxygen as cold water and at the same time the mushroom's need for oxygen is greater in warm, water.
- Drain the block well and place it back in a loosely fitting poly bag so that it will have a little fresh air. More mushrooms should appear within a week or so. If none appear, fruiting may be encouraged by thumping the block down on a table several times and/or by cycling the block between cool (10°C) and warm (20°C) places, The re-activation cycle may be repeated 3 or 4 times or more, with a 2-4 week rest each time.
- Freezing temperatures should not damage your Shiitake plant unless it is very wet. Shiitake mushroom mycelium may be killed at a temperature of about 40°C just above body temperature), so be careful during hot weather.
- The Shiitake mushroom has an excellent flavor and texture, reminiscent of meat, and makes an excellent addition to soups, stews, stir fries, etc. Dried shiitake chips are a real treat, although strong flavored.

---

The Mushroom Man  
Culinary and Medicinal Mushrooms and Mushroom Products

Scott Henderson  
Owner

Mushrooms.Vancouver@gmail.com

604.910.1792