

BLUE SKY FUNGI BLACK PEARL OYSTER MUSHROOM BLOCK

Special Note: Do not open your mushroom fruiting block until you have read through **ALL** these instructions and prepared all the necessary materials. The Black Pearl King Oyster (*Pleurotus ostreatus*) mycelium (the fungi that forms the mushroom) is the white organism that is growing on the sawdust block. Before you begin, make sure that the mycelium block was not cracked or broken apart within the bag. If the block is cracked, place the sealed bag in a dark place and don't move it around. Allow the mycelium to recover and regrow for a few days undisturbed. If it starts growing clusters of tiny mushrooms within the bag, it is ready.

Use non-chlorinated water to keep the mushroom block moist. Well water is good, but if the tap water has it, you can boil it or leave an open container of water out overnight to breathe out the chlorine.

Placement Indoors: Find a place inside that is of average room temperature, has indirect lighting (enough to read words on a page, but not in direct sunlight), and away from drafty air currents, heat sources, and materials that are porous (spores drop from the mushroom). A more humid place like a basement is better than a really dry place. You will place a humidity tent (a plastic bag with many air holes cut out of it) over and around the block to maintain a high humidity environment. We recommend you place the block on a plate or pan to catch the water that drips off the side of the humidity tent.

Setting up and Initiating Fruiting: Prepare the space you would like your Black Pearl Oyster to grow in. The block will remain in the plastic grow bag during the growth process and mushrooms will grow from the surface of the block out of a long slice in the side of the bag or out from the top surface of the block. To determine where to make the opening, look for clusters of little pin-shaped mushrooms growing on the surface of the sawdust block, these are the primordia of the mushrooms. If you see the clusters on the top surface, cut the entire top of the bag off with scissors or a razor blade, to about 2 inches from the top of the block. If you see the clusters forming on the sides, cut the plastic around them with a razor blade to expose them to fresh air. If no primordia clusters have formed, you can direct the mushroom growth out of the cut you make. Either cut the top off (as detailed above) or make a 3-inch-long, horizontal slice in the side of the plastic grow bag. If the primordia has grown large and deformed within the grow bag, you may open the bag to remove the mushroom, which will restart the growing cycle for a new mushroom. To do this, cut the top seal of the bag open with scissors so you can reach in with clean hands to pull off (or cut off) the mushroom mass. Expose fresh mycelium on the sawdust to grow out of the top or roll the bag shut to remove as much air space as possible and make a long slice in the side of the bag. Black Pearl Oyster mushrooms will grow out of the hole toward the fresh air and expand once outside the bag. Oyster mushrooms are phototropic (grow toward light), so you may want to adjust the orientation of the block so that the opening is pointing toward the light in the room.

When everything is set up, follow these steps:

- Clean your hands and the scissors or razor blade.
- Determine the site where you want the mushroom to grow and cut the plastic or cut the plastic around the already growing mushrooms. Or cut the top off to grow primordia clusters on the top.
- Gently squeeze the excess air out of the bag and fold the top portion over. You can tape down the bag flap to keep it tight against the block, or you can turn the bag on its side to pinch down the plastic flap. Or grow out of the top of the block by cutting or folding down the top plastic.
- Place the humidity tent (plastic bag) over and around the entire mushroom block and the drip-plate. You should spray the inside of the bag with a water mist from a spray bottle prior to covering the block with the humidity tent.

Daily Care: Now that your mushroom fruiting block is set up, you need to perform some daily care.

- Maintain a high humidity environment within the humidity tent. There should be visible droplets of water on the inside of the humidity tent and on the grow block plastic. Do this with the spray bottle several times (2 to 3) per day. Also, mist the mushroom primordia and the exposed surface of the block.
- Allow for good airflow. There should be enough holes in the humidity tent to allow fresh air exchange and maintain the humidity for several hours. The humidity tent can also be removed and replaced each time you mist to promote air exchange.
- It is recommended to carefully remove the bag each time you spray the inside of the bag with the spray bottle, then carefully replace the humidity tent to create an open air pocket around the growing mushroom. Try to avoid allowing the plastic humidity tent to touch the growing mushroom. (Remember to use non-chlorinated water or breathe off the chlorine first)

Growing: Black Pearl Oyster mushrooms should start to grow within 2 weeks after opening the bag and take about 1 week to grow. You may see other clusters of mushroom primordia forming under the plastic of other areas of the grow bag; you can cut away the plastic on those to allow them to grow. Continue to water the humidity tent while it has mushrooms growing but try to avoid getting a lot of water onto the underside of the developed mushroom caps. The cap of the Black Pearl Oyster will be an ashy gray or black color, while the stem should be white.

Harvesting: The mushrooms are ready to harvest when the cap is still curled downward. As the mushroom matures, the cap will flatten out and is dropping spores at that point. The quality of the mushroom will begin to degrade after the cap has flattened. You can harvest the mushroom by cutting it off at the base of the stem and flush with the surface of the block. Younger mushrooms are denser and will have a better shelf-life than an older, flat-capped mushroom. Always cook your mushrooms prior to eating.

More Mushrooms! Don't get rid of the block. The Black Pearl Oyster will produce another flush of mushrooms, but you will need to maintain the humidity in the tent to promote adequate growing conditions. You can expect at least 2 flushes of mushrooms from these blocks. If the block seems very light a few days after you harvested the first mushrooms, soaking the block for an hour or two can stimulate more growth. If the bag is still intact and you cut the top off, add about a pint of water to the bag. About 1 week after the harvest, search the sides of the bag for primordia clusters forming within the still-intact plastic areas of the grow bag and cut the plastic around them. If no more mushrooms form, or you cannot provide adequate daily care, then you can try to place the block outside to grow in the spring or fall weather. Just make sure to keep it in a humid environment and out of direct sunlight. If to no avail, then the block will make excellent mulch or compost for your garden.

Ideal conditions for Black Pearl Oyster mushrooms:

- Temperature: 50 to 75 °F
- Humidity: 90 to 100 %

Contact Matt or Nicole at blueskyfungi@gmail.com with any questions and include a photo if possible.

Post photos of your success and tag us on Instagram @Blueskyfungi . Thank you and enjoy!