



Easy Mushroom Grow Kit Blue / Elm Oyster strains

Thank you for purchasing our Easy Mushroom Grow Kit! This kit contains oyster mushroom mycelium. To facilitate the beginning of your adventure into the world of mushrooms, you are invited to read this instructive booklet. For more details and direct communication, please visit our website www.homegrownmushroom.ca or send us a message at info@champignons-maison.com

Conservation:

No time to start your kit now? No worries, simply put it in the fridge until the time is right!

Some practical terms

- **Mycelium:** The mycelium is the mushroom's vegetative state. It is composed of many filaments named hyphae. In nature, it is usually below the soil surface or inside dead trunks. In your kit, the mycelium corresponds to the entire white block in the bag.
- **Substrate:** The substrate is the nutritive material in which the mycelium grows. At Homegrown Mushrooms, the substrate consists mainly of coffee ground and sawdust recovered locally. An excellent way to add value to our residual materials!
- **Spores:** Spores are the reproductive cells of fungi. They are microscopic and each mushroom can produce hundreds of thousands of them. They are released by the gills or pores located under the mushroom cap.
- **Primordium:** A primordium (primordia in the plural) is a baby mushroom. The primordia look like small buttons or pinheads and are highly sensitive to dehydration.
- **Mushroom:** Mushroom is the reproductive organ. It's also the part we eat! The term mushroom is however often used to talk about the fungus, which is the whole organism.

Instructions

- 1- **Cut both plastic layers from the window** in a + shape gently trying to avoid damaging the mycelium block too much.
- 2- **Fill a bowl with cold water to submerge the kit** and let it soak for 24 hours. This will humidify the mycelium and induce necessary stress to bring it out of its vegetative state.
- 3- After 24 hours, **drain the mycelium block completely** by watering your plant or garden with what is now a rich liquid fertilizer!
- 4- Place your kit in a bowl or a plate, on a surface that can handle humidity. It should be in a suitable place, away from heat sources, air conditioning or direct sunlight. Mushrooms need indirect light and

should be submitted moderately to sunlight to avoid drying out.

5- If your kit includes a greenhouse (holed plastic bag provided) roll over the bottom to make it stiffer and **put it over your mycelium bag**. If not, you can simply make one of your own by taking a (preferably clear) plastic bag and cutting some holes in it. This will greatly help you keep the required humidity level between 50% and 95%.

6- **Remove the tent and spray the block** twice a day, then put it back on the mycelium block. This will provide fresh air and moisture needed for the growth of your mushrooms. **If the water droplets inside the tent have evaporated, this is sign that new watering is needed. Make sure to remove exceeding cumulating water** inside the bag if it happens. **The block should not soak in stagnant water.** Remove and use it to water your plants.

7- **Monitor your mushrooms carefully**, when growth starts it goes rapidly! If your mushrooms **grow without opening their cap or if they stay really small**, it means they lack oxygen so you need to **cut out bigger holes in the greenhouse**, or leave it open an hour or two a day, depending on the environment you provide.

8- **Harvest your mushrooms** when the biggest mushrooms of the cluster are mature. A mature oyster mushroom is recognized by a cap almost flat, but still slightly curved toward the stem. If your mushrooms release their spores, this is another sign that they're ready to harvest. Spores appear as white dust that stick to surfaces. With clean hands, **take the whole cluster** of mushrooms and turn it gently until it pulls out off of the block. Make sure to remove the entire bouquet. If mushroom flesh or dried primordia are left on the mycelium, they will rot and damage the mycelium. Use a clean knife if needed.

9- **Submerge your mycelium bloc** again in cold water for 24 hours to recharge its humidity and stimulate the next flushes of mushrooms.

New primordia will reappear within 14 days. This process will provide between 2 to 4 harvests!

Once the substrate is exhausted, you can **give a second life to your mycelium** by feeding it with your garden or kitchen residues.

Improve your mycelium mileage

After many months of culture, your grow kit will yield smaller harvests as the substrate will have been depleted of its nutrients by the action of the mycelium.

Do not worry; your culture is still fully alive, it only lacks the proper food content to grow forever more. You can improve your mycelium mileage by feeding it with many carbon sources; spent coffee grounds and filter, spent tealeaves and bags, any wood product including corrugated cardboard and paper, *brown* garden debris as branch, leave and stalk as much as dead wood in the form of logs and stumps.

As mycelium propagate by contact, your grow kit will become an *inoculum* – a mushroom culture vessel – that will allow you to deploy the culture of your choice on those substrates, turning those debris into mushroom in matter of months.

Gardening with the mushrooms

During opening and closing time of the garden, mushrooms turn out to be neat allies of the gardeners. When it is time to grow more food out of a limited gardening space, producing a homegrown fertilizer or mulch improver, upcycling pruning trees residues or taking care of dead leaves insitu, mycelium can be use to do more with less. (finding two truffles with one shovel).

Here's a basic strategy for mushroom gardener aficionados that can use homegrown mushrooms growing kits in a way that they transmute garden residues into food sources forever and ever more.

Required materials:

Ligneous material or any “brown composting material”

A **soaking container** (temporary) as a barrel or a plastic tote

A **culture container** (a hole in the ground or a pot)

Substrate Preparation:

Fill the soaking container of ligneous material to the **2/3** and add water until submerging it.

Let it soak half hour, the time needed for the “brown composting material” to reach the given humidity lever by absorbing water.

Culture container preparation:

At the bottom of the space chosen to host the mushroom patch, place a layer of corrugated cardboard or of wood chips. This will maximise the water retention and stimulate mycelium deployment.

If the patch is install in the soil, dig a hole at least 3 inches deep to **maximize the water retention** and the mushroom culture deployment. Avoid too deep patches (over a meter deep, mycelium will start to suffocate) and prioritize sets up that are wide but not too deep. Mycelium runs way more easily at the horizontally then vertically.

Installing the mushroom patch:

Empty water from the soaking container while preserving the ligneous material now humidified. Crumble the mycelium coming from your mushroom growing kit, from another mushroom patch or from a aging log that have grown mushroom lately. **Introduce only one variety of mycelium at the time, at a rate equal or superior to 20% of the dry weight.** If no scale is available, a rule of thumb is that a 1 Kg of mycelium can be used to inoculate a square meter mushroom patch about 5 to 10 centimeters, or 2 to 3 inches deep.

Additional notes:

Blue and Elm oysters are extremely versatile and can handle a wide variety of temperatures. They prefer medium to cool weathers but will still produce mushrooms from early Spring to late Fall in the right environment. Furthermore, they can survive our harsh Canadian Winters.

Issues and solutions

I: The mushrooms form long stems and small caps, or have the appearance of corals. *This happens when the mushrooms lack soxygen.*

S: Be sure to raise the tent to spray it, this will bring fresh air in the bag. Ventilate and vaporize the mycelium 2 to 4 times a day. If the problem persists, cut more opening in the moisture tent.

I: The mushrooms dried up. *This happens when the ambient air is too dry.*

S: Make sure the mycelium is away from heat sources, ventilation, air conditioning, or direct sunlight. Be sure to spray the moisture tent sufficiently. When there are no more droplets in the tent, it's time to spray again. If the problem persists, you can cover some openings of the moisture tent with sticky paper.

I: Mold appeared. *This can be caused by exhausted mycelium (spent substrate) or a sporefull environment.*

S: In the case of a green mold, with clean hands, dab the infected area with 70% alcohol. If necessary, remove the mycelium from its bag. With a clean knife, cut out the infected area and discard it. Ideally, spray the inside of the mycelium bag as well as the mycelium block with peroxide at 3% concentration. Put the mycelium back in its bag. It is possible that the mold reappears. In the case of a black, pink or orange mold, throwing the mycelium away will be the best option.

Visit our website for more detailed information.
Happy harvest!