



Advanced Mushroom Grow Kit

Stropharia Wine Cap strain

Stropharia Rugosoannulata

Thank you for purchasing our Easy Mushroom Grow Kit! This kit contains King Stropharia mushroom mycelium. To ease starting 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 at www.homegrownmushroom.ca or send us a message at info@champignons-maison.com

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 is the entire white block in the bag.
- **Substrate:** The substrate is the nutritive material in which the mycelium grows. At Homegrown Mushrooms, our substrate mainly consists 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:** The 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.
- **Casing:** The Casing is an organic non-nutritive mixture that creates the optimal fruiting conditions for your mycelium.

Instructions

- 1- Open the box, **unroll the bag containing the mycelium block and cut it open from the very top.** Avoid damaging the mycelium block.
- 2- **Fill it with cold water to submerge the block** 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- Using a clean knife, pierce the bottom surface of the bag. This will allow exceeding water to drip out when spraying it later.

5- Your kit comes with a bag of soil-like casing. **In a bowl, put the casing material with 60ml of water** and mix thoroughly. Then, **gently spread the casing layer** on top of your mycelium. **Avoid compacting the casing.**

6- 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.

7- **Roll the bottom of the greenhouse** (holed plastic bag provided) to make it stiffer. Then **put it over your mycelium bag.**

8- **Remove the tent and spray the inside** at least 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. Within a month, the mycelium will colonize the casing and primordia will start to appear. The primordia are fragile; make sure they do not dry up. **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.** Use it to water your plants.

9- **Harvest your mushrooms** when the cap is almost flat, but just slightly curved toward the stem. Pick the mushroom individually as they mature. If your mushrooms release their spores, this is another sign that they are ready for harvest. Spores appear as white dust that sticks to surfaces. With clean hands, **take the mushroom at its base** and gently pull it off. **Enjoy your mushrooms.**

10- **Continue to water** your kit and **new primordia will form over time.**

Improve your mycelium mileage

Once the substrate is exhausted, you can **give it a second life** by feeding it garden or kitchen residues. 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 producing mushrooms. 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, leaf and stalk as much as dead wood in the form of logs and stumps. As mycelium propagates by contact, your grow kit will become an *inoculum* – a mushroom culture vessel – this will allow you to deploy the culture of on those substrates, turning those debris into mushrooms in a matter of months. Visit our website for more detailed information.

Gardening with the mushrooms

During opening and closing time of the garden, mushrooms turn out to be neat allies for 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 in situ, mycelium can be used to do more with less (finding two truffles with one shovel).

Once outside, the King Stropharia usually takes about 3 months to install itself and start producing mushrooms in the right environment.

Here's the 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) such 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 for half an hour, the time needed for the “brown composting material” to reach the required humidity level 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 wood chips. This will maximize the water retention and stimulate mycelium deployment.

If the patch is installed 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 setups that are wide but not too deep. Mycelium runs way more easily horizontally than vertically.

Installing the mushroom patch:

Empty water from the soaking container while preserving the ligneous material now humidified.

Crumble the mycelium from your mushroom growing kit, from another mushroom patch or from an 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.

Conservation:

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

Issues and solutions

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: One month have passed and **no primordia have formed.** *This can be caused by a lack of moisture cold temperature.*

S: If the casing layer is allowed to dry, it will prevent primordia from forming. Water your mushroom enough to keep it moist. Colder temperature will slow the mushroom down. Be patient and primordia will form. If several harvests have already been made, it is possible that your substrate is exhausted. Check out our web site to learn how to revitalize it!

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

S: In the case of a green mold, gently remove the mold with a clean spoon. Molds usually appear in an environment that is too moist. Try reducing watering, without letting the casing to dry out. It is possible that mold reappears. In the case of a black, pink or orange mold, discarding the mycelium will be the best option.

Visit our website for more detailed information.