



TYROLER
glückspilze

Instructions for
Organic Black poplar mushroom - *Agrocybe aegerita* - indoor spawn-bag
(level 1 - beginner)

For successful growth, mushrooms need suitable temperatures, relatively high air humidity levels, oxygen, as well as a little light. One mycelium bag (about 3.3 kilograms of substrate) can produce up to 600 g of fresh mushrooms in 2 to 3 flushes. The fruiting cycle is described here. Please note that, working with organisms, time designations may vary – checking daily on your mushrooms, especially the temperature and humidity levels, is of the greatest importance.

You are provided with a fully colonised mycelium bag. These instructions will guide you through the necessary working steps from delivery to harvesting of your own fresh mushrooms.

Phase 1: Preparation of the grow kit

Working very clean is imperative when cultivating mushrooms. Spring-clean hands, workspace and the growkit.

HINT: Because chlorine attacks both bacteria and mold, a sodium-hypochlorite-based household-detergent that leaves no traces of chemicals on surfaces works best for cleaning of the working area and of the growkit (NOT of your hands!). Please do refer to product informations. Prepare a water-chlorine-solution (only a small amount of the chlorine-containing product will do) in your household-spray bottle using clean water. Just spray the inside of your grow kit and wait until the sharp smell of chlorine has disappeared.

Perlite is used in order to be able to maintain high air humidity levels (required for fruiting) inside the grow kit. Just make wet the Perlite in a sieve or the like and let drip off well. Then disperse evenly on the growkit bottom. Prevent the Perlite from drying out by periodically checking by hand and spraying with clean water when necessary.

Place the growkit in a room with no air draft (but WITH fresh air supply) that has the right temperature for the strain you obtained and wish to cultivate (about 15 °C). Do not place in direct sunlight.

Phase 2: arranging of the mycelia and establishing initiation conditions

Initiation temperatures for this strain range from **10 - 16 °C**, at very high air humidity levels (**95 - 100%**); those for fruitbody development between **13 and 18 °C**, again at relatively high humidity (**90 - 95%**). Oxygen influx must also be guaranteed at these stages.

Simply cut off the upper portion of the substrate bag, leaving a 5 cm 'rim' over the top surface of the substrate block. By doing so, humidity is better retained and enough oxygen can reach the mycelium.

Now place the fruiting bag in the growkit and put back on the transparent cover, leaving one of its lids open just a bit. The growkit cover should be sprayed on the inside with clean (drinking) water 2 to 3 times a day to maintain high humidity. Remember to check on the Perlite as well. Soon the first primordia will appear.

Factbox: optimum conditions in professional cultivation facilities:

Temperature: 10 - 16 °C	Air humidity: 95 - 100%
Duration: 7 - 14 days	CO ₂ : < 2000 ppm
Fresh air exchange: 4 - 8 per hour	Light: 500 - 1000 Lux

Once the first primordia (premature fruitbodies) appear, lowering air humidity just a bit is indicated (see below).

Phase 3: Fruiting and harvest

During this phase make sure you stay within the appropriate temperature range. Within 4 to 6 days the mushrooms will mature. As with all gilled mushrooms, Pioppino has extended shelf life when harvested (just) before the veil (protecting the delicate region of spore production - the gills) breaks. Cut as close as possible to the substrate block when harvesting; remaining parts of stalks should be carefully removed, because these are most vulnerable to midges, bacteria and/or mold.

Factbox: optimum conditions in professional cultivation facilities:

Temperature: 13 - 18 °C	Air humidity: 90 - 95%
Duration: 4 - 6 days	CO ₂ : < 2000 ppm
Fresh air exchange: 4 - 8 per hour	Light: 500 - 1000 Lux

After the flush the mycelium will need to rest for approx. one week before the second flush sets in; during this phase keep the growkit and the perlite humidified.

Storage of fresh mushrooms:

Fresh Pioppini can be stored at good quality in the fridge (+4 °C) for about 5 - 6 days. For extended storage, drying down, deep-freezing or preserving/jarring are further options.

For drying the mushrooms are sliced 5mm strong and layed out in a dry and well-ventilated place. Hot-air-dryers are convenient tools, but make sure you do not operate above 40 °C, because many of the valuable ingredients may be lost.

Slicing up the mushrooms is also recommended for deep-freezing; frozen fungi are put directly into the hot pan.

Recycling of the substrates:

After the last flush the mycelium blocks are organic 'waste'. Recycle plastic bags according to the prescriptions in your area. The blocks can be piled up for composting as well, if you happen to have a garden or green space. In that case, while the substrates are decomposed by microorganisms, and with a little luck, in the upcoming warm periods you may even have a few of your own outdoor-mushrooms growing from your pile.