

Growing oyster mushrooms on straw pellets

- 1 Soak the pellets for approx. 7 days in water until fermented
- 2 Inoculate the pellets in a flower pot (supplied spawn quantity is sufficient for two large flower pots)
- 3 Put the flower pot in a warm place

This growing method is suitable for the whole year. For example you can put the flower pots indoor in a “normal” room, in a cellar with some daylight (but not completely dark), on a balcony, in the garden or the greenhouse. The mushroom spawn already grows at a temperature above approx. 10° C, but approx. 20°C is ideal. The mushroom mycelia permeates the straw in approx. 4-6 weeks depending on the temperature. 1 litre of grain spawn (and the supplied 2.5kg straw pellets if you ordered a whole kit) are sufficient for two plastic flower pots with a diameter of approx. 26 cm. or larger. You can also grow them throughout the year in the greenhouse in a bed with soil contact. You will need a frame (e.g. a wooden cold frame) to ensure that the straw does not fall apart. An ideal place for growing is under the table in the greenhouse. Mushroom cultures on the balcony should be brought into the house in the frosty months (January to March in Germany).

1. Soak the pellets in water

The pellets consist of pressed straw. They must be thoroughly soaked in water in a bucket for about 7 days. This results in a fermentation process which kills damaging organisms such as mould and bacteria. Add max. 8 litres of warm water to 2.5 kg. of pellets. Warning: the pellets swell a lot so make sure that the bucket is not too small. It is better to use two buckets. A lid can be useful to minimize the rather penetrating smell of fermentation.

2. Inoculate the pellets in a flower pot with grain spawn

After the fermenting phase, fill the soft mass from the bucket into two flower pots (plastic, min. diameter 26 cm.). Warning: the damp straw can leave stains so you should do this e.g. in the bath tub or garden!

Slightly press down the straw mass in the flower pot, excess water can then flow out through the bottom of the flower pot (important!). If you use a bucket for the culture, it is essential to provide drain holes in the bottom. While filling in the straw, spread the grain spawn evenly into the straw mass layer by layer (e.g. stir in with a spoon). Then press down the mixture in the flower pot.

Now cover the flower pot with clear plastic film into which you have put a couple of holes for ventilation. So-called microwave foil which already has minute pinholes is ideal for this purpose. The foil should not lie directly on the straw, but be stretched over the edge of the flower pot. The mushroom mycelia should now start to grow from the grain spawn into the straw.

3. Put the flower pot in a warm place

Now put the flower pot on a saucer in a warm place or, depending on the season, in the house, the greenhouse or garden (protect it against snails!).

The substrate is too wet if you see large water drops condensing on the lower side of the plastic film in the first few days. In this case, remove the film for one day to let it dry out slightly. The film should stay on the flower pot for about four weeks. Check from time to time if the substrate has a moist but not wet consistency. If it appears too dry (unlikely) you can spray it occasionally with a fine garden spray.

The mycelia growth should be visible on the surface of the straw within about one week (white fine hairy structure). The surface should be covered with thick mycelia after about four weeks. The flower pot now needs fresh air, so remove the plastic film. Occasional spraying with water is more important now to ensure that the surface does not dry out too much. The first mushrooms should appear soon. They should develop within 3-4 days to harvesting size. Harvest an entire bunch of mushrooms when the cups are still slightly turned down at the edges and before the spores start to come out (white, fine dust). Harvest using a knife. After this, carefully cut out remains of mushroom stalks which may be left in the straw. You can still harvest and eat the mushrooms even if they have started to emit spawn. Mushrooms (fruiting bodies) should grow again in several flushes in the next few weeks. If the mushrooms have long stalks or irregular growth, this is a sign of insufficient fresh air. To prevent the culture (substrate) from drying out, water it occasionally, just like an indoor plant. It doesn't matter if small puddles are visible on the surface for a day, the water will soak in later. However, water puddles which are still visible after 12 hours should be poured off and the saucers should be emptied.

The harvests remove the nutrients from the substrate which will cause it shrink in the flower pot after a while. When a gap forms between the substrate and the flower pot after a couple of harvests, you can remove it from the flower pot and put it up side down on a saucer in a clear plastic bag. Cut approx. 10 large holes in the side and top of the bag. This allows the mushrooms to grow out of the sides of the substrate too. If the substrate has largely dried out, you can put it for 2-3 hours in a bucket of water (put a weight on top to stop it floating in the water).

You may be annoyed by very small flies which are walking on the surface of the substrate. The so-called fungus gnats are often found on indoor flowers too. They don't eat the mushrooms but the substrate. You can use yellow insect sticks if the gnats are problem. Theoretically, you may also get weed mushrooms such as the common ink cap. They cannot be eaten and should be removed. This doesn't mean that the culture is ruined. It is simply much too wet and should be left to dry out. The substrate is exhausted after 3-5 months of harvesting and no more mushrooms will appear. It can then be composted.