

Growing the woodlovers outdoors

Overview

Spawn is prepared on sterilised woodchips. In the spring the colonised woodchips are used to inoculate more (non-sterile) woodchips in outdoor beds. The beds are covered with plastic and watered on a regular basis. In autumn the plastic is removed and watering is increased. In the late autumn or begin winter the beds will fruit.

Preparation of grain spawn

The preparation of grain spawn is described [here](#). It will not be repeated here.



Mycelium is cultured on agar



And transferred to sterilised grain

Growing mycelium on sterilised wood chips

Preparation of the wood chip substrate

Although some people use colonised grain to directly inoculate their outdoor beds this is not the preferred method. The grain attracts all kinds of bugs and rodents. The grain is also more likely to contaminate than properly prepared wood chip spawn.

The woodchips we use are made of beech (*Fagus sylvatica*) and are sold as animal bedding. We use the smaller size for spawn and the larger as substrate for the beds.

The chips are soaked in water for 48 hours. Don't wait longer than this or fungi may start growing on the wood. The chips are then drained.



Beech wood chips



Make sure all water runs off

The soaked chips can be supplemented with something like oatmeal or boiled grass seed to speed up mycelial growth. About one half cup per bag is used.



Bags filled with supplemented wood chips



The flaps are folded down, ready for sterilisation.

The bags are placed in the pressure cooker and a rack is put on top to prevent them from blocking the vent pipe.



Four of these bags fit in this cooker



The rack on top is very important

Subsequently the bags are sterilised for 3 hours at 121°C and left to cooled down in the flow cabinet.



Sterilise the full 3 hours, don't cut corners



Bags cooling down in the flow cabinet

Inoculating the wood chip substrate

The cooled bags are placed in the flow cabinet. The bag is opened taking care not to touch the inside and colonised grain spawn is poured in.



Opening the bag...



...and pouring the spawn in

Now the bag is sealed with an impulse sealer, and the seal is tested. If the bag is leaking at the seal it is sealed again.



Sealing the bags



Testing the seal

The strain and date are written on the bag and the bag is shaken to distribute the spawn. The bags are now incubated at 20°C for 3-4 weeks after which they are ready for use.



Making the outdoor bed

For the bed we choose a shaded place surrounded by bushes. First a shallow hole is dug by Cowboy Luuk.



Cowboy Luuk digging a hole

The woodchips that are the same as those used as spawn but they are much coarser (larger particles). The chips are put in bags and these bags are filled with water. The chips are soaked like this for 24 hours.



The hole is filled with drained chips and the spawn is mixed in. A ratio of 1:20 should suffice although higher rates are preferred if the spawn is available.



Colonized wood chip spawn

Cowboy Luuk mixing in the spawn

Now the bed is given a final watering and it is covered with a piece of plastic to prevent dehydration.



Keep the bed covered until September

Maintenance

Every week or so you should check to see if the bed is still moist on the inside and water if needed.



Mycelium is clearly visible on the woodchips



Close up

Replace the plastic after watering. There will probably be all kinds of insects running underneath but don't worry about them. In september the plastic is removed and the bed is watered on a regular basis to prevent it from drying out.



These will be under the plastic

Mushrooms!

Once the temperatures are right for the species being cultivated the bed will start to fruit. Do not water the mushrooms unless it's really dry. It helps to live in the neighbourhood of the beds, and not like us, a 2 hour drive away. Usually one or two flushes pop up. In spring next year fresh chips can be added to the beds to promote further fruitings.



Psilocybe subaerigunosa



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