

Orion's Apothecary is here to help you have the most successful growing experience possible. While we can't control nature, there are many things that can be done to have the best success rate possible.

Have questions? Feel free to come by the store, give us a call 970-617-2996, or send us an email with pictures to info@orionsapothecary.com

Glossary

- Flush A "crop" of mushrooms
- **Grain** Corn, wheat, rye, millet, etc. in which you inoculate your cultures
- Pins Baby mushrooms
- Substrate Sawdust, wood shavings, coconut coir/husk, and similar materials that form the "dirt" on which mushrooms grow

Parts of a Mushroom

- Cap The top of a mushroom containing the gills and spores
- **Gills** The underside of a mushroom cap, spores drop from these
- Mycelium "Roots" of mushrooms
- **Spore** The "seed" for a mushroom
- Veil The "skin" between a cap and stem

DAY I INOCULATION OF GRAIN_BAG

Supplies needed

- Cleaned/alcohol sterilized work surface
- 70-91% alcohol in spray bottle
- Disposable gloves- use only for this day
- Liquid Culture
- Grain bag



Directions

- Wash hands thoroughly with soap and water
- Clean the work area and sterilize with alcohol
- Wash hands again, put on gloves, spray the gloves with alcohol
- Open the syringe bag, take out the liquid culture, & needle pouch
- Attach the needle, keeping the needle in its hard plastic cover
- Spray the outside of the syringe with alcohol and allow it to dry

- Spray alcohol on the black foam injection port on the grain bag
- Shake the syringe to mix up the liquid
- Remove the plastic cap from the needle and puncture the black port
- Withdraw the needle 1/4 inch
- Inject 5-10 mL of liquid culture, remove needle and recap. Mix the bag to spread the culture thru the grain
- Place the grain bag in a dark, warm spot at 70-85 degrees

7-14 DAYS LATER-ISH BREAK UP THE GRAIN

the bag should be 25-50% white

Supplies needed

None

Directions

- Mix up the grain and the white mycelium in the bag, being careful not to open the plastic
- Form into a block again
- Place it back into the dark for another 7-14 ish days





7-14 DAYS LATER-ISH MOVE INTO GROW TUB

the bag should be 80-90% white

Supplies needed

- Cleaned/Sterilized work space
- Plastic grow tub
- Antibacterial or bleach wipes
- New Gloves
- Alcohol in spray bottle
- Face mask

• Black trash bag

Non-porous plastic tape - ie packing or scotch tape

- Scissors
- Colonized grain bag
- Substrate bag



Directions

- Give the grow tub and lid a good rinse and let dry
- Clean the work area and sterilize with alcohol
- Wash hands again, put on gloves, spray the gloves with alcohol
- Wipe the inside of the dry tub and lid with antibacterial or bleach wipe and let dry in sterilized area
- Spray the inside of the bin with alcohol
- Spray one side of the black trash bag and line the entire inside of the bin, then spray the side facing up.

- Cover each of the holes on the outside of the tub with non porous tape
- Break up the substrate and grain bags
- Put on the face mask and fresh gloves-spray gloves with alcohol
- Spray alcohol on the top of the grain bag, the substrate bag, scissors, and gloves (again)- and put in sterile spot
- Cut open the substrate bag between the heat seal and the ziplock, keeping the ziplock on the bag so you can close it

[13]	Cut open the grain bag	18	Open the bag and pour the mixture into the trash bag-lined plastic tub, and close the lid
14	Pour the grain into the substrate bag	19	Spray gloves with alcohol again and spray the handle on the lid
15	Close the ziplock on the substrate bag, double check that it is sealed	20	Open the lid & gently spread the mixture, making it flat & even, but don't press down to compact the mixture
16	Shake to mix the substrate and grain together until well-combined	21	Close the lid and place the tub in a dark, warm spot (70-85 degrees) for at least 10 days
17	Spray gloves with alcohol again	22	Avoid peaking and do not open the lid for the first 5 days. After 5 days, you can start peeking while wearing a mask

10-15 DAYS LATER-ISH FRUITING

the surface should be 80-90% white

Supplies needed

- Tub
- Filter patches or micropore tape
- Scissors
- Face mask
- New Gloves
- Alcohol
- Spray bottle (first with some alcohol, then rinsed and filled with water)
- Water distilled, reverse osmosis filtered, or boiled then cooled
- Optional hydrometer/thermometer



Directions

- Remove the non-breathable tape and apply the micropore tape or filter patches to the holes
- Put on face mask
- Put on new gloves and sterilize with alcohol
- Sterilize scissors and tub lid handle with alcohol
- Open the tub and cut the black trash bag to just below the small holes, close the tub
- Place the tub in a low-traffic area with at least 12 hours of light each day. This could be near a window, or you can use a grow light, positioned about 6 feet away from the tub

- 7 If using a hydrometer/thermometer, sterilize the probe end with alcohol
 - 8 Humidity should be kept between 85-95%
- During the first flush, only mist with water if the walls stay dry for more than 24 hours. Misting might not be needed during the first flush.
- During subsequent flushes, it's best to spray 2-3 mists every other day
- If water begins to collect in the bottom of the bin, stop misting
- After 7-20 days, baby mushrooms (called pins) will appear

7-20 DAYS LATER-ISH HARVESTING & PROCESSING

Supplies needed

- Scissors
- New Gloves
- Alcohol in spray bottle
- Face mask
- Sharp knife

- Storage Jar/Bag
- Optional-Dehydrator
- Optional-Oxygen absorbers
- Optional-Silicone Desiccants



How do I know when to harvest?

Mushrooms will mature at different rates. When the "veil" connecting the stem to the cap has just broken or when you start to see the gills (the underside of the caps), the mushrooms are ready to be harvested. For best results, pick mushrooms before the caps flatten or curl up, which indicates that they have started dropping spores. They can be harvested individually or all at once.

How to harvest?

- Sterilize new gloves with alcohol and a sharp knife with alcohol

 Dehydrat possible)
- Hold onto the mushroom's cap or upper stem and slice through the stem just above the substrate
- It's best to dehydrate right away, making sure to slice thin to ensure they dry fully
- Dehydrate on low heat (95 degrees if possible) until crispy
- Store in a mason jar or ziplock bag
- Optional-Use 1 silicone desiccant packet and 1 oxygen absorber per 8 oz

10-20 DAYS LATER-ISH SUBSEQUENT FLUSHES

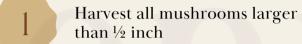
When do I start the next flush?

Once you have harvested most of a flush, and/or if you need a few days off from harvesting, then you can rehydrate the substrate.

Supplies needed

- Tub
- Quart cup
- Alcohol in spray bottle
- New gloves
- Water distilled, reverse osmosis filtered, or boiled then cooled

Directions





2 Sterilize a quart cup with alcohol and fill with cold water

Put on gloves, sterilize with alcohol, and gently hold the substrate while tipping the tub to drain out water

Gently pour the water over top of the substrate

Put the tub into fruiting conditions again

Repeat the fruiting, harvesting, and rehydrate steps until mushrooms stop growing, or you see contamination/other types of mold growing on the substrate.