Mushroom Growing Kit 4lb, Injectable Horse Manure and Rye Grain Substrate

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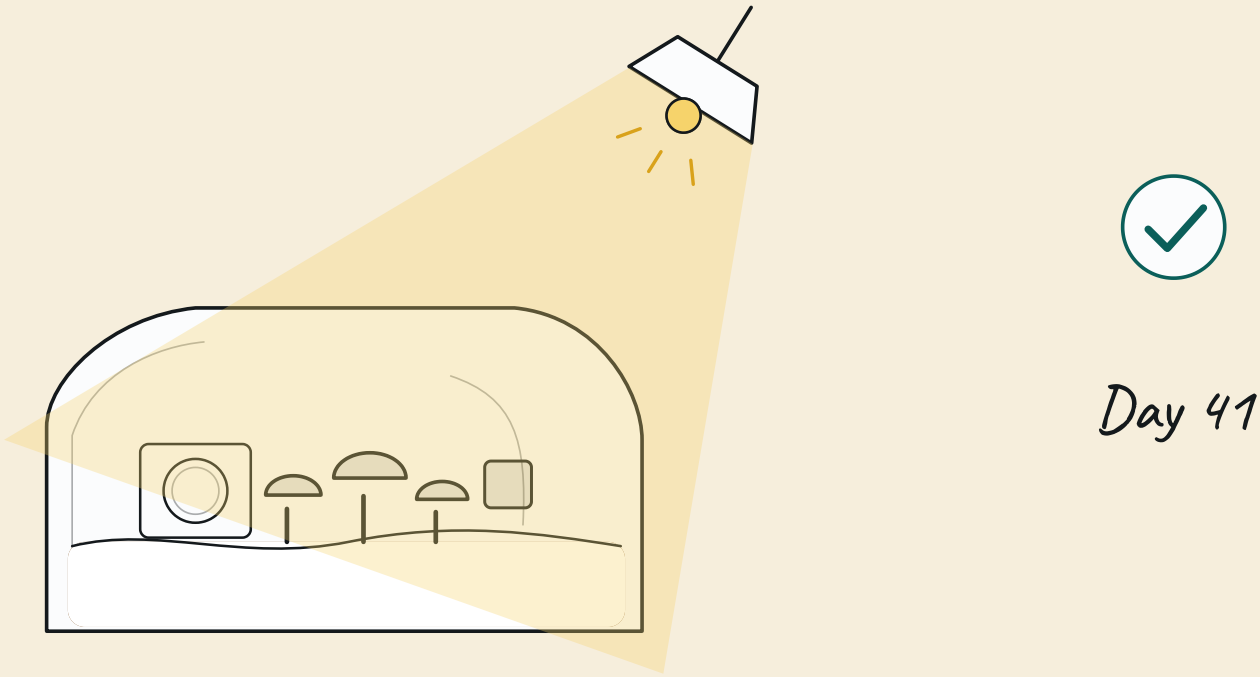
THE METHOD, STEP BY STEP



1 Wipe the port with the alcohol swab

2 Needle through the port once; inject it all in one place

3 Tilt the bag so the liquid runs across the base; no mixing

4 Days 1 to 10: growth shows at the bottom; leave it alone

5 Day 10: break it up and mix well, then lay it on its side; leave it until day 15

6 Day 15: mix well again, still on its side; leave it until day 20

7 Day 20: mix once more; light on, fruiting on its side, sealed

8 Days 34 to 41: mushrooms form, still sealed

About Mushroom Growing Kit 4lb, Injectable Horse Manure and Rye Grain Substrate

A 4 lb (1800 g) sealed growing kit: 2 lb of injectable rye grain in the base of the bag with 2 lb of horse manure based substrate on top. One injection of gourmet liquid culture, three mixes through the plastic, then the light goes on and it fruits in the same sealed bag; spores are not included.

What is included

The substrate mix is rye grain, coco coir, vermiculite, horse manure and gypsum, hydrated and ready for injection. It comes in a 0.5 micron filtered incubation bag with a self-healing injection port, and that bag is where the kit colonises and fruits.

- One 50/50 substrate bag holding 4 lb of substrate: 2 lb rye grain at the base and 2 lb horse manure substrate on top
- Alcohol swab

How it works

Rye grain colonises from points of contact: wherever the liquid culture touches a grain, mycelium starts there and spreads grain to grain. Tilting the bag after the injection runs the culture across the whole base, so the grain layer starts from many points at once and growth shows first at the bottom of the bag. The whole bag is left alone until day 10. The mix on day 10 spreads the colonised grain through the manure, where every grain becomes a new starting point, and the mixes on day 15 and day 20 spread it through the rest. By day 20 the bag is mostly white, and it finishes colonising as it fruits. Horse manure is the traditional substrate for the larger gourmet species. On day 20 a light goes on over the bag, which is the signal to fruit, and the bag stays sealed: the 0.5 micron filter patch does the gas exchange, so there is no misting, no fanning and no opening until harvest. Keep it at 22 to 23 °C from injection to harvest; grain-based bags are kept cooler than the brown rice flour Inject-and-Forget bags so the grain layer does not dry out.

Method, day by day

The bag stays sealed from the injection to the first harvest.

- Day 0, inject: wipe the injection port once with the included alcohol swab and let it dry for a few seconds. Take the needle straight from its wrapper; never heat it or wipe it. Push through the self-healing port once, inject the full 20 ml of liquid culture in one place and withdraw in one movement. Do not move the needle about or wind it round in the port.
- Still day 0: do not mix. Tilt the bag so the liquid runs across the whole base, over the rye grain, then stand it somewhere dark and still at 22 to 23 °C.
- Days 1 to 9: leave it alone. White growth shows first on the grain at the bottom of the bag, and by day 10 the culture has taken.
- Day 10: break it up and mix it well through the plastic. Knead it, not a little shake, until the colonised grain is spread through the horse manure. Then lay the bag on its side, where it stays for the rest of the grow.
- Day 15: mix well again, through the plastic, with the bag still on its side. Five days between mixes lets the mycelium come back healthy.
- Day 20: mix well one last time, then switch a light on over the bag and leave it sealed on its side. The light is the signal to fruit; the temperature stays at 22 to 23 °C.
- Days 21 to 33: no misting, no fanning, no opening; the filter patch does the gas exchange. Small pins form against the plastic and grow into mushrooms inside the bag.
- Days 34 to 41: mushrooms, ready for the first harvest.

Harvest

Open the bag for the first time only to harvest, when the caps have opened out and the edges are still curled. Cut the top of the bag, twist the whole cluster away at the base, then fold the top of the bag over and clip it. A second flush often follows.

Weight	4 lb (1800 g)
Substrate	2 lb rye grain at the base, 2 lb horse manure substrate on top
Mix	Rye grain, coco coir, vermiculite, horse manure, gypsum
Bag	0.5 micron filtered incubation bag with self-healing injection port
Inoculation	20 ml of liquid culture through the injection port
Temperature	22 to 23 °C from injection to harvest
Mixing	Tilt after injecting; mix well on day 10 and lay the bag on its side; mix again on day 15 and day 20, still on its side, then light on and fruiting on its side
First mushrooms	Around days 34 to 41
Spores	Not included

Inject-and-Forget kit instructions

One bag, one injection, and the bag stays sealed until the first harvest (why the sealed bag, with its pros and cons). These instructions cover the 1 lb, 2 lb and 4 lb Inject-and-Forget bags, the horse manure kits, the LightBags and the SprinkleBags; the all-in-one grain and CVG bags have their own instructions and the monotub kit its own. Read the injection rules first: they are short, and they are where the difference between a good bag and a lost one is made.

Step 1: what you need

- The bag, unopened, at room temperature, and the alcohol swab that comes with it
- A gourmet liquid culture syringe, or a syringe you have filled yourself, with its needle still in the wrapper
- Still air: doors and windows closed, fans and heating off, hands washed and dried

Nothing else. No alcohol on the bag, no flame, no gloves unless you prefer them. Psilocybe cubensis spores sold on this site are supplied for microscopy and taxonomy only and are not for use with this kit.

Step 2: inject

Wipe the injection port once with the alcohol swab that comes with the bag and let it dry for a few seconds. Seat the needle on the syringe with a quarter turn until it will not turn further. Push it through the centre of the self-healing port at a slight angle, inject all of the amount your kit page gives in one place, and withdraw in one movement. Do not move the needle about inside the bag or wind it round in the port, which can damage the port. Do not make a second hole, do not tape the port, and do not wipe anything else, before or after.

Step 3: incubate, sealed

What happens next depends on the bag.

- **Inject-and-Forget bags (1 lb, 2 lb and 4 lb, brown rice flour based):** mix the bag well, through the plastic, straight after injecting: knead it, not a little shake. That same-day mix puts the culture in hundreds of places at once, which is why these bags are so fast. Stand the bag upright somewhere dark and still at 26 to 27 °C. On day 10, mix it well again and lay it on its side, where it stays until the harvest. Mix well once more on day 15, and start fruiting on day 20.
- **Grain-based grow bags (the horse manure kits, the LightBags and the SprinkleBags):** do not mix yet. Tilt the bag so the liquid runs across the whole base, then stand it somewhere dark and still at 22 to 23 °C (the LightBag is happy in dim light); the lower temperature stops the grain layer at the base drying out. Growth shows first on the bottom of the bag. Leave it alone until day 10, by which time the culture has taken, then break it up and mix it well through the plastic. Mix again on day 15 and once more on day 20. The LightBags and the horse manure kits are laid on their side after the day 10 mix and stay there, mixed and fruited on their side. A horse manure kit or a LightBag then goes into fruiting conditions in the bag. A SprinkleBag carries on colonising to day 25, by which time the grain is fully white; then pull the lower sealer stick so the vermiculite drops onto the grain as a casing layer, switch the light on and leave it sealed to fruit. The horse manure kits stay at 22 to 23 °C from injection to harvest. A plain grain bag is not fruited on its own: when it is fully colonised, the grain is mixed with bulk substrate for a monotub or bag-tek, or given a casing layer.

Whichever bag it is, leave at least five days between mixes so the mycelium comes back healthy. The incubation rules cover what normal and abnormal growth look like.

Step 4: fruiting, still sealed

On day 20, mix the bag one last time, switch a light on over it and place it into fruiting conditions; the substrate will be about four-fifths white and finishes colonising as it fruits. The light is the signal to fruit: the bag has been in the dark until now. From there the bag fruits on its own: the oxygen-release agents in the substrate and the filter patch do the gas exchange, so there is no tub, no misting and no fanning. Keep the bag at room temperature in indirect light and leave it sealed; the horse manure kits stay at 22 to 23 °C. Small pins form against the plastic and grow into mushrooms inside the bag over the next two to three weeks.

Step 5: harvest

Open the bag for the first time only when the mushrooms are ready: caps opened out, edges still slightly curled, before they drop spores onto the substrate. Cut the top of the bag, harvest the whole cluster by twisting it away at the base. For the next flush, pour half a cup of clean water into the bag and seal it with a bag-sealer stick so the water stays in. Leave it to soak for 24 hours, then open the bag and let the remaining water drain out for 15 minutes. Seal it again and put it back into its warm, lit fruiting conditions; the next flush shows in one to two weeks.

If it goes wrong

Green, black or pink patches, wet grey slime or a sour smell before the bag was first opened are contamination, and a bag and syringe bought together from us and handled by these rules are covered by the sterile guarantee: photograph the whole bag, the port and the filter patch, and send the claim form with your order reference.

Buy another kit

- Mushroom Growing Kit 1 lb, Inject-and-Forget
- Mushroom Growing Kit 2 lb, Inject-and-Forget
- Mushroom Growing Kit 4 lb, Inject-and-Forget
- Mushroom Growing Kit 4 lb, horse manure and rye grain
- Mushroom Growing Kit 6 lb, horse manure and rye grain, 80 cm bag
- Mushroom Growing Kit 6 lb, LightBag 80 cm
- Mushroom Growing Kit 4 lb, horse manure and brown rice flour
- LightBag 4 lb, colonises in dim light
- SprinkleBags, auto fruiting
- Monotub kit 45 L, full kit
- Gourmet liquid cultures
- Bag sealer sticks, for the soak before the next flush

Injection rules

Almost every contaminated bag we have ever replaced went wrong in the thirty seconds between opening the syringe and finishing the injection. The syringe, the needle and the bag all arrive sterile; the job is to keep them that way for those thirty seconds. These are the rules our sterile guarantee asks you to follow, and they apply to gourmet liquid cultures and spawn bags alike.

Rule 1: never heat, flame or wipe the needle

Every needle arrives gamma-irradiated sterile in its own wrapper, and the syringe casing and end cap keep the contents sterile. Flaming a needle leaves soot and a hot tip that kills what it touches; wiping it with alcohol drags whatever was on the wipe onto the one part that goes inside the bag. Use the needle straight from the wrapper. There is a sticker on every bag saying the same thing.

Rule 2: seat the needle properly

A loose needle is the other big cause of contamination. Push the needle hub onto the Luer lock and give it a quarter turn until it stops. It should not wobble. If it does, take it off and seat it again before you go anywhere near the bag.

Rule 3: work still, not clean

You do not need to sterilise the room. You need still air. Close the windows and doors, turn off fans and heating, and wait a minute for the air to settle. Wash and dry your hands, then keep them away from the needle. A still air box helps but is not required for a bag with a self-healing port.

Rule 4: go through the port, once

Every bag has a self-healing injection port. Push the needle through the centre of the port at a slight angle, inject, and withdraw in one movement. Do not inject through the plastic beside the port, do not make a second hole, and do not open the bag to "check" the grain.

Rule 5: how much, and where

Use the amount the product page for your bag gives, and inject all of it in one place. Do not move the needle tip about inside the bag and do not wind the needle round in the port: that can damage the port. The liquid is spread afterwards, not with the needle. An Inject-and-Forget bag is mixed straight after injection. A grain-based bag is tilted so the solution runs across the whole base of the bag.

Rule 6: wipe the port, and nothing else

Every bag comes with a small alcohol swab. Just before you inject, wipe the injection port with it, once, and give it a few seconds to dry. That is the only thing on the outside of the bag that gets wiped: not the needle, not the rest of the bag, and nothing afterwards. The port reseals itself; do not tape over it and do not wash the bag.

Rule 7: one syringe, one job

A syringe is a single-use item. Draw from a fresh syringe for each strain or culture, cap it if you have to pause, and do not put a used needle back into a sterile bottle.Spare needles can be added at the basket.

What happens next

The bag goes somewhere warm and dark and stays sealed until it is fully colonised. That part is covered by the incubation rules. Follow both sets of rules, buy the syringe and the bag together from us, and if the bag still contaminates before it is opened for the first time, the sterile guarantee replaces it.

Psilocybe cubensis spores sold on this site are supplied for microscopy and taxonomy only; germinating them is illegal in the UK and they are not for use with any growing product. These rules are written for gourmet liquid cultures.

Incubation rules

Once the bag is injected, the work is done and the waiting starts. Our spawn bags and all-in-one grow bags are made to stay sealed from injection to first harvest, so the incubation rules are mostly about resisting the urge to help. These are the rules our sterile guarantee asks you to follow after the injection rules.

Rule 1: keep it sealed

Do not open the bag, cut the bag, or add anything through the port after the injection. The filter patch lets the bag breathe; nothing else needs to. A bag opened "to have a look" is no longer a sealed bag, and it is no longer covered by the guarantee.

Rule 2: warm, dark, still

Put the bag out of direct light, where it will not be moved or knocked, at the temperature for its type: 22 to 23 °C for a grain-based bag (the 50/50 all-in-one bag, the LightBag, the SprinkleBags and every rye grain spawn bag), and 26 to 27 °C for the brown rice flour Inject-and-Forget bags. Grain-based systems are kept cooler so the grain layer at the base does not dry out. An airing cupboard, the top of a wardrobe or a heated incubator all work; the LightBag is made to colonise in dim light, the others prefer dark. Do not put a bag on a radiator, on a heat mat with no thermostat, or in a window: mycelium that goes past 28 °C stalls, and hot bags sweat, which is what contaminants like.

Rule 3: mix on the schedule, not before

An Inject-and-Forget bag is mixed well, through the plastic, on the day it is injected. That same-day mix is the reason Inject-and-Forget bags work so fast. A grain-based bag is the opposite: leave the grain where it landed, and only break it up and shake it after day 10, once the spores have germinated. After any mix, leave at least five days before the next one so the mycelium comes back healthy. Shaking a grain bag before day 10, or mixing more often than every five days, breaks the early growth and spreads whatever else is in there. When you do mix, mix well: knead the bag through the plastic, not a little shake.

Rule 4: wait for full colonisation

White mycelium spreads from the germination points and joins up. In a grain-based bag you see it first on the bottom of the bag, where the solution ran. An Inject-and-Forget bag that was mixed straight after injection shows hundreds of germination points all through the substrate. A bag is ready when the grain is white all the way through with no yellow, brown or grey patches. That takes two to four weeks for most gourmet species at the right temperature, longer if the room is cool. Slow is not the same as failed.

Rule 5: know what contamination looks like

Green, blue-green, black or pink patches, a wet grey slime, or a sour smell through the filter patch are contamination. White fluffy growth, small drops of yellow-brown liquid on the mycelium and a mushroom smell are not. If you are unsure, photograph the bag against a plain background in daylight and send it to us before you do anything else; the contamination guide has pictures.

Rule 6: when the bag is fully white, move on

A grain bag is fully colonised when every grain is covered in mycelium. For a spawn bag, that is the moment to mix it into bulk substrate for a monotub or bag-tek, with the substrate calculator giving the quantities; a grain bag is not fruited without a bulk substrate or a casing layer. A fruit-from-the-bag system is usually ready to fruit by day 20 on our mixing schedule: mix first on day 10, again on day 15 and again on day 20, then place it into fruiting conditions, still sealed until the product page says to open it. Opening the bag for the first time is where the guarantee ends and the growing begins.

If something goes wrong

Contamination before the first opening, on a bag and syringe bought together from us and handled by these rules, is covered by the sterile guarantee. Send the claim form with photographs of the whole bag, the injection port and the filter patch, and your order reference, and we will replace it.

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