

## INNERVISIONS GROW KIT COLLECTION



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GROW KIT EASY**  
Available in multiple  
varieties.



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GROW KIT BASIC**



**MUSHROOM GROW KIT  
MASTER**



**MUSHROOM SPORES**  
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GROW KIT  
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Available in multiple  
varieties.



**SCLEROTIA  
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Available in multiple  
varieties.



# MUSHROOM GROW KIT MASTER - MANUAL

This grow kit is based on a simple and proven cultivation method. Prepare a cultivation box that provides several harvests in three easy steps. Requires minimum care once set up. All you need to do is harvest the mushrooms and water the box for the next cycle.

If you are new to home cultivation, you might want to learn more about the life cycle and growing conditions for mushrooms. Before you start, make sure you start with the **life cycle** and **working clean** chapters, at the end of this manual.

## CONTENTS:

- 1 Mushbag with 1400 g sterilized rye
- 1 XL cultivation box (2100 ml) with air filter
- 1 grow bag with air filter
- 350 ml vermiculite
- 400 ml perlite
- 1 alcohol swab • 2 paperclips

## OTHER REQUIREMENTS:

(torch) lighter, clean spoon, clean scissors, 10 ml spore syringe (available separately)



## STEP 1 - INJECTING THE SPORES

REQUIREMENTS: (torch) lighter, 10 ml spore syringe (available separately)

### 1. CLEAN THE INJECTION PORT

Wash your hands. Use the supplied alcohol swab to disinfect the injection port. Do not touch the port afterwards.



### 2. HEAT THE NEEDLE

Shake the spore syringe really well for 5-10 seconds for even distribution of the spores. Take off the protective cap and heat the needle of the syringe until it is red hot. Then let it cool for 15-20 seconds.



## 3. INJECT THE SPORES

Carefully insert the needle through the rubber patch and inject the contents of the syringe. If the flow blocks, gently pull the needle back a bit.



## 4. INCUBATE

Put the bag in a warm, dark place (\*- see TIPS on last pages). Make sure that the filter is free from the back of the bag. A temperature of 20°C is acceptable, but if possible, aim for a temperature around 28°C. Lower temperatures can slow the growth process. Temperatures of 15°C and below will halt the growth of mycelium.



## 5. GROWTH

After about seven days, when the mycelium starts to grow, the bag will inflate a little.

Shaking the bag now and gently breaking up the solid pieces will accelerate growth. Be careful not to damage the filter and make sure that all kernels are collected again at the bottom of the bag. After two to four weeks all kernels are covered with white mycelium; it is time for the next step (\*\*). Your job is done for now. The spores need time to grow into mycelium (\*\*\*)

## STEP 2 - PREPARING THE CULTIVATION BOXES

REQUIREMENTS: clean spoon, clean scissors

When all grain kernels are covered with mycelium it is time to prepare the cultivation box. Mushrooms are made up of over 90% of water. By using a layer of perlite and by covering the mycelium with vermiculite, we create a water buffer for the mushrooms. The vermiculite also helps maintain high humidity levels inside the grow bag.

### 1. BREAK UP THE COLONIZED GRAIN

Take the Mushbag and gently shake the grain loose. This can be difficult since the



rye has turned into solid chunks of mycelium. By carefully squeezing the bag we can break up the solid mass into loose kernels. This is necessary to easily fill up the cultivation box.

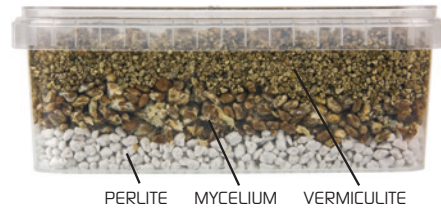


## 2. PREPARE THE VERMICULITE

Clean part of a table to use as a work area. Take a clean spoon and a clean pair of scissors. Before you start, wash your hands with soap and dry them thoroughly with a clean towel or kitchen paper. Add 90 ml of tap water to the bag of vermiculite and close the bag again. Mix the vermiculite until it is completely moist by squeezing the bag. This is easiest when the bag doesn't contain much air.

## 3. FILL THE CULTIVATION BOX

It is now important to work as clean and precise as possible. Rinse the inside of the box and the lid in running tap water. Empty the bag of perlite in the cultivation box and shake the box gently from side to side for even distribution (or use the spoon; it is important to create an even layer). Cut the Mushbag open with a (clean) pair of scissors and fill the box with a layer of mycelium (the grain from the Mushbag) until 0.5 cm from the top of the box. Depending on the size of your kernels, you will have an extra of about 10 % mycelium. This can be discarded. Avoid contact with your hands when you fill the box (with the kernels). Again, shake the box gently from side to side so the grain settles and forms a uniform layer. With the (clean) spoon, fully cover the upper part of the mycelium with the moist vermiculite. Put the lid on the grow box and place it in a warm and dark environment under the same circumstances as described earlier(\*).



The mycelium now needs time to penetrate the vermiculite. The next step will take place in about one week, when all kernels are covered with mycelium again and when the mycelium becomes visible through the vermiculite (about 10-20%).

## STEP 3 - MUSHROOM GROWTH

You now have a ready-to-grow box with colonized substrate. It does not take too long now before the first mushrooms will pop up. But first we will need to water the cultivation box, to make sure there is enough water available for the growing mushrooms.



### 1. WATER

Carefully open one corner of the lid of the box. Gently turn on the tap and let the box fill up with water. Make sure the substrate is fully submerged. Close the lid again and let the box stand for 12 hours.

### 2. LET THE EXCESS WATER RUN OFF

After 12 hours, open one corner of the lid of the box and let all the excess water run off.



### 3. GROWTH

Wash your hands, remove the lid and place the box inside the grow bag. Fold the top of the bag and attach the paper clips to keep it closed. Do not throw the lid away, clean it and store it. You will need it again later on. Put the grow kit in a warm spot (20-25°C) in the light, but not in the sun or above a radiator. Temperatures of around 25°C will allow for faster growth of the mushrooms. Leave the bag closed and the first mushrooms will appear in approximately 14 days. These will mature in about 7 days.



### 4. HARVESTING

Mushrooms do not appear continuously, but in so called 'flushes'. Preferably pick them when the veil on the underside begins to tear. If you wait too long, the caps will open and the mushrooms will drop their spores. These will colour the mushrooms and



the inside of the bag black/purple. This is just a cosmetic problem however. Pick all mushrooms at once, except when one or two are growing much faster than the others (\*\*\*) . Small mushrooms between the substrate and the side of the box are best left undisturbed.

### 5. NEXT FLUSH

Immediately after harvesting, the box needs to be watered again for the next flush. Remove all mushrooms that failed to grow out,

but try to keep the substrate intact. Put the lid back on the box, water it again and let the water run off after 12 hours. Put the box back in the bag and close it. The cycle of watering, growing and harvesting can be repeated until the substrate is depleted. Often this is only after three or more flushes, with the second flush generally giving the best results.

### TIPS

(\*) A good place to store the Mushbag would be the cupboard above the refrigerator. The heat produced by the refrigerator rises and increases the temperature by a few degrees. Heat pads can also be used, but never place the Mushbag directly onto a heat source – this causes the Mushbag to dry out.

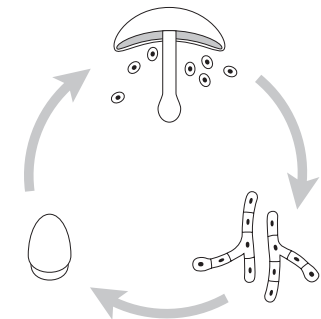
(\*\*) It is important that all kernels are covered with mycelium. Sometimes, after a few weeks of colonization, the mycelium stops growing. Gently break up the mycelium and shake the bag. The mycelium will then continue to grow.

(\*\*\*) If the Mushbag contaminates, it cannot be saved. Never open a contaminated Mushbag!

(\*\*\*\*) Before harvesting, carefully wash your hands with soap. Open the bag and take out the box. Harvest the mushrooms by grabbing the stem at the base and perform a twisting motion while lifting it upwards, out of the substrate. Touch the substrate as little as possible.

### LIFE CYCLE

The life cycle of the mushroom is best understood when compared to that of a plant. The spores are the seeds, the underground mycelium is the plant, and the mushrooms are the fruits. The (white) mycelium reproduces by forming mushrooms. When the mushrooms are mature they release their spores. These will later germinate and grow into mycelium again, thus completing the circle of life. By injecting a spore suspension in the Mushbag, we simulate part of this process. The spores will develop into mycelium, using the nutrients present in the rye. Exposing the mycelium to fresh air and light will then trigger mushroom formation.



### WORKING CLEAN

Mycelium is very sensitive to contamination, in particular during growth. Inside the Mushbag the mycelium can grow under perfectly sterile conditions. Once mature, it is less sensitive to contamination. However, to reduce any risk of contamination, it is still important to work clean. It is therefore advised to wash your hands with soap before every step and to carefully follow the instructions.



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