



NATURE LION

MUSHROOM GROWING GUIDE

GUIDE DE CULTURE DES CHAMPIGNONS

INTRODUCTION

Growing your own mushrooms is a rewarding experience that is fun for people of all ages. Harness the power of nature through mushrooms and learn how to cultivate them at home.

Nature Lion mushroom grow kits come with everything you need to grow your own gourmet mushrooms at home. Please refer to this guide for tips on how to get the most from your kit.

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BASIC PRINCIPLES OF MUSHROOM CULTIVATION

SOIL/SUBSTRATE

The primary function of most fungi is to decompose dead or dying organic materials from nature. In the wild, they can be found growing on decomposing trees, and other organic material including animal excrements.

The various species discussed in this booklet are wood-loving fungi. Meaning, that you will often find them growing in nature on fallen, or dead trees. When growing mushrooms indoors we strive to re-create this natural environment.

Inside your growing kit is a bag of substrate. The substrate consists of hardwood sawdust, wheat-bran, and rye grains inoculated with healthy mushroom mycelium.

WHAT IS MYCELIUM?

Mycelium is the portion of the mushroom that you do not normally see in the wilderness. The reason being is that mycelium is like a plant's roots that grow underground. Mycelium can be found growing almost everywhere where there is decomposing, organic materials.

BASIC PRINCIPLES OF MUSHROOM CULTIVATION

The mycelium spreads through the organic materials and releases digestive enzymes that help speed up the process of decomposition. Mycelium is more often white in color, but not all fungi are true to this rule. For example, Pink Oyster mushrooms will have a tinge of pink in the mycelium. To a novice grower this may be mistaken for contaminated mycelium.

TEMPERATURE

Temperature plays an important role in the life cycle of fungi. When the mycelium is in the growth stage, it is best to keep the temperature at 70F - 80F. It is also important to remember that mycelium generates heat when growing, so your mushroom substrate will be a few degrees warmer than the surrounding air.

If the conditions are right, and the mycelium is fully grown, then it is time to begin fruiting. In nature, mushrooms tend to fruit during the spring or fall when outdoor temperatures are cooler.

Mushrooms like Shitake prefer temperatures as low as 50F when fruiting, but there are also warm-weather Shitakes which prefer temperatures in the 70's. Oyster mushrooms like a temperature in the 60-70F range, while Lion's Mane does best between 65-75F.

BASIC PRINCIPLES OF MUSHROOM CULTIVATION

HUMIDITY

Mushrooms do not have skin, so maintaining proper humidity during the fruiting stage is crucial. If the humidity drops for too long the mushrooms will begin to dry out and die prematurely. In nature, mushrooms are often found growing in autumn or spring when more frequent rainfalls increase relative humidity.

The micro-climate around the mushrooms can also play an important role in maintaining humidity levels. Things like; standing ground water, decaying leaves, and even wind speed can have a significant impact on the humidity levels throughout the forest.

When growing mushrooms at home it is important that we maintain proper humidity levels for our mushrooms to thrive. Advanced growers use large tents with ultrasonic fog machines. A smaller version of this can also be built with a small greenhouse and a small, bedroom humidifier.

Another alternative used by novice growers is to gently mist your mushrooms with water using a spray bottle. Misting mushrooms 3+ times per day can create enough humidity to achieve reasonable results in almost any environment.

BASIC PRINCIPLES OF MUSHROOM CULTIVATION

OXYGEN AND CO2

When fungi breathe, they intake oxygen and expel CO₂, which makes them more like humans than plants in that aspect. If the mycelium is developed enough, and an adequate supply of oxygen is present then mushroom primordia “pins” will start to grow.

The mushrooms will continue to intake oxygen as they mature so it is important that the air be exchanged in the growing environment regularly. When growing mushrooms in a tent an exhaust fan is used to draw the old air out, thus allowing fresh air to enter.

HOW TO SET UP YOUR MUSHROOM GROWING KIT

STEP ONE

Turn box to the side with the perforated window and cut out the window revealing the mushroom substrate.

STEP TWO

Use a sharp knife to cut an “X” in the plastic bag containing the substrate.

HOW TO SET UP YOUR MUSHROOM GROWING KIT

TIP: Don't cut the "X" too big or the humidity will escape quickly. Cut an "X" in the centre that is no bigger than 2 inches across.

STEP THREE

Place the kit upright in a location that receives ambient light, but not in direct sunlight.

STEP FOUR

Mist the "X" with water 2-3+ times per day until harvest.

TIP: *Misting more than 3 times a day will yield better results. You can also try placing the kit in a humid area of your home like a kitchen, or a*

STEP FIVE

In 7-14 days, mushroom primordia "pins" will develop in the area you made your cut.

STEP SIX

Harvest mushrooms when they are fully mature.

HOW TO SET UP YOUR MUSHROOM GROWING KIT

A.



B.



C.



D.



HARVESTING YOUR MUSHROOMS

OYSTER MUSHROOMS

When to harvest depends on the sub-species of Oyster mushrooms (ie Pink, Grey, Black, Gold) that you are growing. Oyster mushrooms mature quickly and will be ready to harvest 4-7 days after the primordia “pins” first appear.

No matter what the sub-species of oysters, there will be tell-tale signs when the mushrooms are ready for harvest. Firstly, look at the shape of the caps. When growing, the edge of the caps will be pointed downwards towards the earth. As the mushrooms mature the caps will begin to point upwards towards the sky. A good rule of thumb is to harvest when 1 or 2 of the caps turn upwards.

Another way to tell if your oyster mushrooms are ready to harvest is to observe the outer edge of the caps. A discoloration in the form of a ring will begin to form around the edge of the caps. This ring will appear very slight at first and will become darker as the mushrooms mature.

To harvest, place one or both hands on the cluster of mushrooms and proceed to gently twist and pull the mushrooms away from the substrate. Harvest all the mushrooms at once, then cook and enjoy!

HARVESTING YOUR MUSHROOMS

LION'S MANE MUSHROOMS

Harvesting Lion's Mane is a similar process to oyster mushrooms but there are different signs to look out for. These mushrooms grow in clusters of one or two and the fruits can become rather large. From the time you see the first primordia "pins" until harvest is generally 14-21 days depending on your preference.

As lion's mane matures, there are a few things to watch out for. The first thing will be that the fruits stop getting bigger in size. The second thing is that the spines, which make-up lion's mane unique appearance will grow longer. The color of the mushroom will also begin to change from bright white to an off-white yellow.

The texture will change based on when it is harvested. Younger fruits will have a firmer appearance and texture, while mature fruits will be less dense.

TIP: *Lion's mane will begin to discolor and turn yellow as it matures. Harvest before this happens for optimal results.*

HOW TO GET ADDITIONAL HARVESTS

STEP ONE

Use a fork or similar object to scratch the surface of the substrate where the original “X” was cut. Fold back the plastic with one hand and use the fork to scrape off the top layer of mycelium.

STEP TWO

Remove the substrate bag from the box and place it in a large bowl to soak for 24-48 hours. Make sure the substrate is completely submerged under water during the soak. Use a heavy object like plate to weigh hold the substrate underwater.

TIP: *Let the substrate recover from the soak for 48 hours and re-soak for 24 hours to increase your chances of a successful second harvest.*

STEP THREE

Remove the substrate bag from the box and place it in a large bowl to soak for 24-48 hours. Make sure the substrate is completely submerged under water during the soak. Use a heavy object like plate

HOW TO GET ADDITIONAL HARVESTS

STEP FOUR

Mist the “X” with water 2-3+ times per day until harvest.

STEP FIVE

Harvest your mushrooms the same as you did in the first round.

TIP: *Achieving a second harvest requires some patience. It takes anywhere between 3-6 weeks before the mushrooms will start to grow again.*

VIDEO INSTRUCTIONS

Watch the video instructions on our website.

www.NatureLion.ca/videos

Or scan the QR code with your smart phone.

