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THE  
FUNGI  
CRASH  
COURSE

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*the complete beginner's guide to  
mushroom cultivation*



# FUNGI CRASH COURSE

THE COMPLETE BEGINNER'S GUIDE TO MUSHROOM CULTIVATION

Presented by [MonsterMushrooms.com](https://monstermushrooms.com)

## GROWING MUSHROOMS: WELCOME TO THE WORLD'S BEST HOBBY

Mushroom cultivation is fun, educational, and, in our humble opinion, will deepen your appreciation for nature in a way unlike *any* other hobby.

Growing mushrooms is a wonderful way to learn about the incredibly important role of fungi in the ecosystem, empower yourself through the self-sufficiency gained by growing your own food, and will introduce you to a worldwide community of mushroom enthusiasts.

Whether you're growing pearl oysters, reishi, lion's mane, turkey tails, or shiitake, the moment that you consume mushrooms that you grew all by yourself offers a sense of satisfaction that no other meal, tea, or supplement can possibly compare provide!

Better yet, growing mushrooms is incredibly affordable and doesn't take up much space

in your home. If you have room for a shoebox, you have room to grow mushrooms... although once you get started, you'll probably love the experience so much that you'll want to upgrade to a monotub (typically a 54 quart plastic storage bin).

At [MonsterMushrooms.com](https://monstermushrooms.com), we carry everything you need to get started in this wonderful hobby. If you want to get started immediately, we suggest picking up our [Complete All-In-One Mushroom Grow Kit](#).

While mushroom cultivation isn't that difficult, there is a mild learning curve. After reading this short guide, you'll be able to shop and grow with confidence.

### IN THIS REPORT, YOU'LL LEARN...

- COMMONLY USED TERMS WITHIN THE MUSHROOM CULTIVATION HOBBY—THIS REPORT INCLUDES A RICH GLOSSARY OF TERMS
- ALL ABOUT THE FUNGAL REPRODUCTIVE CYCLE
- A COMPREHENSIVE SHOPPING LIST DETAILING EVERYTHING NEEDED FOR YOUR FIRST GROW
- ADDITIONAL RESOURCES ON MUSHROOM CULTIVATION

# THE MONSTER MUSHROOMS GLOSSARY: A BRIEF EXPLANATION OF TERMS

Developing a strong understanding of the “language” of mushroom cultivation can be one of the most overwhelming problems for new growers. When you’re just starting out, you’re going to run into a lot of terminology that you may not understand.

Below you’ll find a hand-picked selection of the most commonly used terms that you’re likely to come across on our website and others and their definitions. While doing this research, you may want to keep this list handy—feel free to print it out!

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**Abort:** Mushrooms sometimes stop growing. When this happens prematurely, it’s called an abort. Aborts can be caused by a number of factors, including malnutrition, dehydration, overhydration, or a simple lack of room (as might be the case in a very successful flush).

**Annulus:** The annulus is a ring of tissue which can often be spotted around the stem of a mushroom. Sometimes prominent and sometimes barely-there, the annulus is formed when the veil (see below) of the mushroom breaks.

**Cap:** Most of you probably know this one already, but we’ve included it here for completeness—the cap of a mushroom is the top part, usually conical or wide-brimmed in shape. The “hat” of the mushroom.

**Colonization:** This is the stage of mushroom cultivation which starts with inoculation and ends with total permeation of the substrate with mycelium. In other words, colonization refers to the growth of mycelium throughout your chosen substrate.

**Desiccant:** A powder, gel, or bead with properties that make it absorb water (or humidity) from nearby substances (or the air). Desiccants such as silica gel beads are often used to dry out and preserve harvested mushrooms for later use.

**Flush:** Everyone’s favorite part of mushroom cultivation (perhaps other than harvesting!) in which many mushrooms begin to grow all at the same time. Most grows can experience multiple flushes between harvests.



**Fruiting:** When mycelium begins to produce mushrooms.

**Fruiting Body:** The proper term for “mushroom.” You will see this term used often when reading about fungi and mushroom cultivation—for a better understanding of why mushrooms are called fruiting bodies, make sure to read the section of this report about the fungal reproductive cycle.

**Gills:** Also referred to as the lamella, this term describes the fleshy formation underneath the cap of a mushroom. The gills appear as ridged, thin structures and are used to disperse spores.

**Grow Chamber:** Any container in which mushroom cultivation takes place, commonly a monotub (see “The Mushroom Cultivator’s Shopping List”).

**Inoculation:** The process by which spores or spawn are introduced to the growing substrate. When introducing spores to a spawning substance (to yield mycelium), sterility is a necessity. See “Mushroom Cultivation Guide” later on in this report.

**Mycelium:** The part of a fungi that grows underground. Mycelium looks like a fractal, branching, almost spiderweb-like formation of “roots”. Mycelium grows in a network, called a mycelial network. Mycelium is often the largest part of a fungal organism and, in some cases, is capable of spanning miles.

**Pinning:** When a mushroom cultivator refers to pinning, they’re talking about tiny little mushrooms which often appear in groups during the beginning of a flush. The immature fruiting bodies can look like little pins, hence the term.

**Polyfil:** A breathable polyester fiber—technically, Polyfil is the name of a brand, so it’s a bit like saying “make a Xerox” when you’re talking about making a copy of a document. Polyester fiber is used as a filtering medium for grow chambers, since the cultivator will want to introduce air flow into the chamber, but as few contaminants as possible. Polyfil and other brands are available at most big box stores or craft stores.

**Rhizomorphic:** This term simply means “root-like” and is often used to describe the growth pattern of mycelium. Among cultivators it’s generally considered a positive term, since rhizomorphic fungi strains tend to produce fruits (mushrooms).

**Spawn:** Technically refers to cultured mycelium, but generally you’ll see this term used to simply refer to the type of substance used for the mycelial spawning process—grain, sawdust, dung, and so on. For example, we carry a specialized grain spawn.

**Spore:** The easiest way to understand mushroom spores is to think of them as “mushroom seeds,” although this is technically very incorrect! Essentially, mushrooms produce millions of microscopic spores as a means of reproduction. Spores are often acquired by mushroom cultivators in spore syringes, which are sterile syringes that contain mushroom spores suspended in a non-nutrient liquid, usually distilled water.

**Stem:** The “shaft” or “body” portion of a mushroom. This is the lengthy bit of flesh that grows out of the ground and upon which rests the cap. Sometimes also called a stipe or stem.

**Substrate:** Sometimes called a fruiting substrate. This term refers to any substance one can use to grow fungi in. Cultivated spawn (spawn which has a mycelium culture growing throughout it) is broken up and introduced to the substrate. We carry a time-tested, sterilized blend of coco, vermiculite, and gypsum which has been hydrated with spring water, distilled water, and PH stabilizers. [See our Super Shroom Final Fruiting Substrate here.](#)

**Tek:** You’ll see this term a lot! Sometimes as “TEK” or “tek”, this is a shorthand for “technique.” Some cultivators also like to think of it as an acronym, short for “technical educational knowledge.” Regardless, whenever you see it, Tek refers to a methodology, technique, or other process relating to mushrooms.

**Veil:** Immature mushrooms start out with their caps attached to the stem. As the mushroom grows, the cap spreads out and leaves a thin membrane, the veil.

# UNDERSTANDING THE FUNGAL REPRODUCTIVE CYCLE

To become a successful mushroom cultivator, it is imperative that you have a solid understanding of the fungal reproductive cycle. Don't worry too much; as you continue your research and actually begin your first grow, you'll naturally pick up on all the different stages. This is knowledge best acquired through action—so don't be afraid to get your hands dirty!

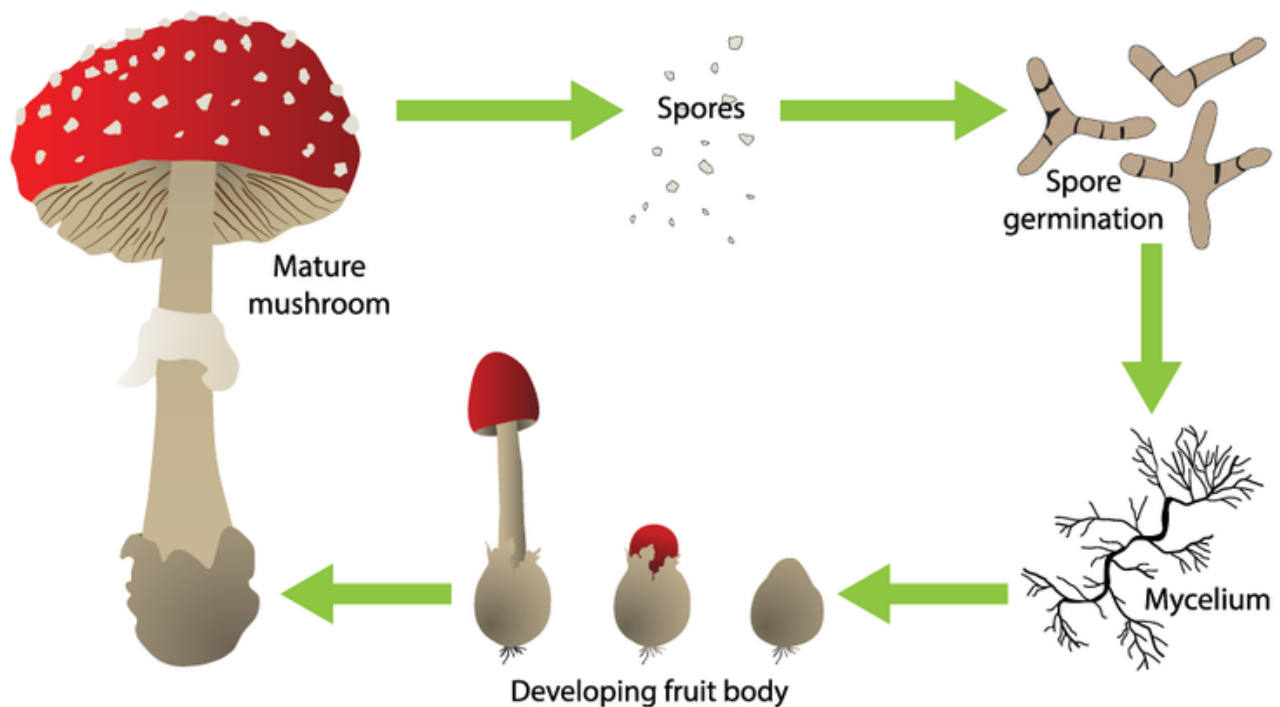
Having said that, let's briefly go over the fungal reproductive cycle. Get used to using the term “fungi” instead of “mushroom.” As we learned in the glossary of terms, a mushroom (the fruiting body) is just one part of a fungal organism.

In essence, fungi experience three phases in their life cycle:

- Spores
- Mycelium
- Fruiting bodies

Here's a visual example of the process:

## Life Cycle of a Mushroom



As a mushroom cultivator, you'll likely be starting out with spores, either from a spore print or a spore syringe. Your job is to give those spores what they need so that they can one day become mycelium and then produce fruiting bodies (mushrooms).

When spores are placed into the proper conditions and have enough nutrition, they'll grow microscopic branch-like structures called hyphae. The hyphae combine and eventually become mycelium. As a mushroom cultivator, you'll inoculate a spawning substance, such as grain, with spores. If all goes well, mycelium will begin to grow.

As you know, mycelium is the branching, spiderweb-like network that grows underground—or in the case of a mushroom cultivator, in a spawn bag. Mycelium gets nutrition from plant and animal material and begins to break it down. If mycelium is given the proper environment and additional nutrients, it will begin to produce fruiting bodies.

The fruiting body comes up from the ground—or your fruiting substrate in a monotub—and produces more spores, which are dispersed from the gills of the mushroom. Thus the cycle begins again!

To experience this process yourself, read on to the next section where we'll discuss the equipment you need to get started.





# THE MUSHROOM CULTIVATOR'S SHOPPING LIST: EVERYTHING YOU NEED FOR A SUCCESSFUL FIRST GROW

You may be surprised to learn that you don't actually need that much to get started growing mushrooms. Assuming you already have a source of spores (such as a spore print or spore syringe) and a clean room to work in, free of any fans running or pets running around, you only need a few more things to get started. You will need:

- A monotub for incubation and fruiting. We recommend our 54 quart tub.
- Sanitizing spray to clean surfaces, spawn bags, and the monotub itself.
- Air filtering system (see Polyfil in the glossary section above)
- Non-latex sterile gloves
- While not strictly necessary, a hygrometer and temperature gauge is very useful
- Grain spawn
- Fruiting substrate

All of the above and more comes with our [Complete All-In-One Mushroom Grow Kit](#). Let's take a closer look at the purpose of each component.

The monotub is the key component of your grow. It must have holes to allow for air flow, as well as a darkened bottom. Our kit comes with pre-drilled holes, Polyfil for air filtering, and a black plastic tarp for the bottom of the tub. If the bottom of the tub isn't darkened, fruiting bodies may be attracted to external light sources and start to grow in the wrong direction.

Sanitizing spray and sterile gloves along with a face mask are all critical components of the inoculation process. While "total" sterility isn't necessary, the cleaner the environment is, the better. You will learn more about this in the cultivation guides provided in the following section.

As described in the glossary section, grain spawn is the substance which your spores will germinate in and eventually form into mycelium. Once the grain spawn is fully colonized with mycelium—a beautiful sight indeed!—the next step is to break it up and introduce it to the fruiting substrate.

Given proper lighting conditions, moisture, and loving attention from a happy mushroom cultivator, fruiting bodies will start to appear. All that's left to do is harvest your mushrooms, dry them using desiccants (included in [the kit](#)), and preserve them to be enjoyed at a time of your choosing.





# MUSHROOM CULTIVATION GUIDES & ADDITIONAL GROWING RESOURCES

While this report has provided you with a solid foundational understanding of commonly used terminology, the mushroom life cycle, and the equipment every mushroom cultivator needs to own, there's still the matter of actually growing mushrooms!

The instructions for doing so are beyond the scope of this guide, however, our team at the Monster Mushroom Company have prepared a detailed cultivation guide for you, available in both written and video formats.

Please find these guides here:

- **Video Cultivation Guide & Grow Tips**  
(<https://montermushrooms.com/video-grow-guide/>)
- **Written Cultivation Guide & Grow Tips**  
<https://montermushrooms.com/written-guide/>



[Follow us on YouTube](#) for more guides, grow tips, and the latest news from the Monster Mushroom Company!

# LEARN MORE ABOUT THE MONSTER MUSHROOM COMPANY

Thank you for reading this special report!

To learn more about the Monster Mushroom Company and to order what we believe to be the world's finest mushroom cultivation supplies, please visit us on the web at:

**[MONSTERMUSHROOMS.COM](http://MONSTERMUSHROOMS.COM)**

