

# MUSHROOM PLUG SPAWN: PLUG FRESH CUT HARDWOOD LOGS WITH PLUG SPAWN DOWELS

Turn your fresh cut hardwood logs into a mini mushroom farm using our fully colonized mushroom plug spawn dowels.

*\*Note that we offer a **Plug Spawn Tool Kit** that contains a wool dopper, two beeswax bars (Beeswax from local Chase Honey Company,) and a 1/4 inch drill bit for this project. Sold separately.*

## Here's a simple guide to get you started:

- 1. Choose Your Hardwood Logs:** Start by selecting hardwood logs, like oak, maple, beech, birch, alder, dogwood, walnut, aspen, elm or willow, as they're great hosts for many types of mushrooms. Make sure they're freshly cut, about 4 to 6 inches in diameter, and preferably from a healthy tree. This ensures that your mushrooms have the best chance to thrive.
- 2. Drilling Holes:** Using a drill with a 1/4 inch drill bit, drill holes about 1.5 inches deep or slightly deeper than the length of a dowel pin and spaced about 4 to 6 inches apart in a diamond pattern around the whole log.
- 3. Inoculating the Logs:** Insert the mushroom plug spawn dowel pin into each hole. You can gently tap them in with a rubber mallet. Make sure the dowel pins are at least flush with the log. If the pins stick out the next step is more difficult.
- 4. Sealing the Holes:** To protect the spawn from drying out and from pests, cover each plug with a bit of melted beeswax using a wool dopper. This step is crucial for maintaining the right environment for your mushrooms to grow.
- 5. Incubation:** Find a shady spot in your yard to stack or stand your logs. They should be kept off the ground slightly to prevent competitor fungi and pests from colonizing your log before your plug spawn can. This phase is all about patience, as it can take anywhere from 6 months to a year before you see the fruits of your labor (larger logs take longer to colonize).
- 6. Watering:** Make sure to water your logs periodically, especially right after inoculation and during dry months. Maintaining moisture helps the mycelium colonize the wood effectively (soaking the logs for 24-48 hours prior to plugging can help tremendously).
- 7. Harvesting:** Once your mushrooms start to appear, usually after a good rain and during the right season for your chosen variety, it's time to harvest! Gently twist and pull them from the log, and enjoy the freshest mushrooms you can get.

# SMS MUSHROOM SOIL AMENDMENT OR FOR BUILDING COMPOST

Our Garden Ready Mushroom Soil Amendment or "spent mushroom substrate" (SMS), is perfect for farmers and gardeners looking to boost their soil health in a sustainable way. Once the mushrooms have been harvested, this leftover substrate is decomposed wood that can do wonders for your gardens biodiversity and water retention! So, let's dive into why using SMS is a win-win for both your plants and the soil!

## Why It's Great for Soil Health and Biodiversity:

- 1. Nutrient-Rich:** SMS is full of nutrients like nitrogen, potassium, and phosphorus, which are essential for plant growth. It acts as a natural fertilizer, feeding the soil and promoting healthy plant development.
- 2. Improves Soil Structure:** The organic material in SMS helps improve soil structure by increasing aeration and water retention. This means your plants' roots will have better access to the oxygen and moisture they need to thrive.
- 3. Promotes Microbial Activity:** SMS is a host to plenty of beneficial microorganisms that boost soil biodiversity. These microorganisms play a crucial role in breaking down organic matter, cycling nutrients, and suppressing soil-borne diseases.
- 4. Supports Biodiversity:** By enhancing soil health, SMS creates an environment where a diverse range of plants and beneficial insects can flourish. This diversity leads to a more resilient ecosystem, which is better equipped to handle pests and diseases naturally, limiting the need for pesticides and herbicides.

## How to Use Mushroom Soil Amendment or SMS:

*\*1 bucket can amend a 4x8 garden bed. The more SMS you use, the better. SMS can be used to build better compost too!*

- 1. Prepare Your Garden Bed:** Before adding SMS, loosen the soil in your garden bed to help integrate the substrate more easily.
- 2. Apply the Amendment:** Spread a 2-3 inch layer of SMS across the soil. You can do this in vegetable gardens, flower beds, or even around trees and shrubs.
- 3. Mix It In:** Gently mix the SMS into the top 6 inches of soil using a rake or garden fork. This ensures that the nutrients and microorganisms are evenly distributed.
- 4. Water Thoroughly:** After application, water the area well. This helps the substrate settle into the soil and begins the process of nutrient release.
- 5. Monitor and Adjust:** Over time, observe how your plants respond. You can reapply SMS as needed, typically once or twice a year, to maintain soil health.



# A HOW TO GUIDE ON GROWING YOUR OWN MUSHROOMS AND AMENDING YOUR GARDEN SOIL

[www.pnwmushrooms509.com](http://www.pnwmushrooms509.com)



# GROW-AT-HOME KIT: GROW INDOORS ON YOUR KITCHEN COUNTER

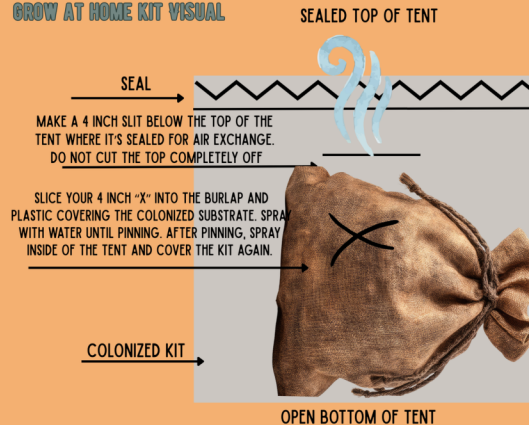
Our kits are designed with simplicity in mind, making it easy for everyone in your family to embark on a sustainable, fun, and rewarding culinary adventure. Inside of the burlap kit is everything you'll need – a block of substrate inoculated with mushroom culture, a kit "tent" to help balance humidity and oxygen flow, and a spray bottle to mist inside of the tent. All you need to do is follow our grow instructions, and with a little bit of patience, and a lot of love, in 10-14 days time, you'll witness the magic of growth, as mushrooms begin to emerge, ready for harvesting. It's a hands-on science experiment, a lesson in sustainability, and an opportunity to grow your own gourmet ingredients, all rolled into one.

## Instructions:

1. Choose a place in your home with indirect light exposure and good airflow. This is very important as mushrooms breathe oxygen! Hint: We recommend placing it in your kitchen or a room that is not above 80 degrees.
2. Open your burlap bag and remove the spray bottle and plastic folded tent, leaving your substrate bag folded in place, and tie your bag back up.
3. Using a clean sharp knife, slice a 4 inch "X" in the center of your burlap bag, making sure to pierce into your plastic substrate bag inside. This is where your mushrooms grow out of.
4. Fill your spray bottle with cool fresh water, and spray around the "X" 7-10 pumps until you see moisture on the burlap. Repeat daily making sure to place the tent back over the kit each time. After about a week you'll notice small mushroom "pins" forming in the "X." This is when you'll make a 4 inch slit in the top of the plastic tent and place over the kit.
5. You will now switch from spraying the burlap to spraying inside of the tent and placing back over the whole kit. Repeat 3 times a day. Do not let the tent rest on the fruiting mushrooms. this process takes about a week to 10 days.
6. Now it's time to HARVEST! After around 10 days have passed and a consistent schedule with spraying has been maintained, you will harvest. At the base of the bloom using a firm grip, gently twist and pull off.
7. Store your new mushroom fruits in a paper bag in your fridge for up to a week.

# VISUAL OF USING THE TENT OVER YOUR KIT.

## PACIFIC NORTHWEST MUSHROOMS GROW AT HOME KIT VISUAL



## WHY A TENT?

OUR "TENT" IS A TURKEY BAG. ITS PURPOSE IS TO HELP KEEP IN HUMIDITY WHEN NEEDED BY COVERING THE KIT AFTER EACH TIME YOU SPRAY IT. THINK OF THE TENT AS KEEPING IN DEW LIKE YOU'D SEE IN A FOREST OF MUSHROOMS. FIRST, SPRAY DIRECTLY ON THE "X" PRIOR TO PINNING. ONCE PINNING BEGINS, TAKE THE TENT OFF AND SPRAY INSIDE OF THE BAG AND NOT ON THE PINNING FRUITS. COVER THE KIT BACK UP. YOU SHOULD SEE CONDENSATION HAPPENING INSIDE OF THE BAG. DO NOT LET WATER TOUCH THE NEW PINS.



# WINE CAP SPAWN AKA STROPHARIA RUGOSOANNULATA: GROW OUTDOORS USING WOODCHIPS

*\*Note: 1 bag can inoculate a 4x8 ft bed or smaller. Use more bags for more space.*

To get started on this eco-friendly journey, choose the perfect spot in your garden or landscape. Wine caps thrive in partially shaded areas. Think about how mushrooms grow in a forest with intermittent light. Once you've found the right spot, you can get started.

Inoculate in April-October. During peak summer months, you will need to water more often when establishing the Wine Cap Spawn, so watering once a week is best. You can expect fruits 2x a year, in the Spring and Fall. They will keep returning if you add more wood chips for them to consume. Reinoculating every year, you will continue to produce more prolific fruits! At the end, not only will you enjoy eating fresh wine cap mushrooms 2x a year, but your garden will benefit from the increased soil fertility and improved structure, making it a win-win for both you and Mother Earth!

## Step-by-step guide:

- Step 1:** Choose a place on top of soil that is shaded. Wine Cap will grow in airpots, in garden beds, or on the ground as long as there is a surplus of wood chips for it to consume, and plenty of water to drink.
- Step 2:** Lay down about 2 inches of wood chips.
- Step 3:** Break off chunks of the Wine Cap Spawn and sprinkle on top of the wood chips.
- Step 4:** Add another 2-4 inches of wood chips on top covering the spawn completely so it doesn't dry out. Don't leave the spawn exposed.
- Step 5:** Water it in so the mycelium can establish and begin to consume the wood chips.
- Step 6:** Continue to monitor your wood chips and spawn by checking to see if it needs more moisture. Water is necessary especially at the beginning of this process, so watering the area twice a week minimum is best practice. After one month check the wood chips by digging down 3 inches or so to see the mycelial mat that will form.
- Step 7:** The primary trigger for fruiting is when the temperature dips below 50 with large amounts of moisture. Late September to early October in zone 6b. Wait for your fruits and harvest when the caps are wine colored. Roast, grill or sauté and enjoy! Note that wine caps can turn a golden color when the temperature is higher.