

# Intro:

I've decided to put this guide together because there are numerous old threads and outdated information floating around regarding the cultivation of the sclerotia producing *Psilocybes*.

There are however some really great threads too, like the [Easier than Cubes!](#) or the [Sclerotia FAQ](#).

Both very good reads, highly recommended👍

I'll try to cover the most popular and readily available species:

- *Psilocybe galindoi*/ATL#7
- *Psilocybe mexicana*/A
- *Psilocybe tampanensis*/Pollock
- *Psilocybe mexicana*/Jalisco

I have worked mainly with these four stone producers for the last year.

Section *Mexicanae* is my absolute favorite from the *Psilocybe* genus.

As you probably already know these species have the ability to produce sclerotia (stones) invitro and fruit bodies as well.

Most people cultivate them for stones only but hopefully after reading this thread they'll change their mind and give it a go at fruiting 'em too.

They aren't much harder to fruit than *P. cubensis* just require a thin casing layer and some extra TLC.

Let's get started!

# Grain/BRF Substrate Preparation (From Best to Least Optimal):

- Rye Berries
- Rye Grass Seed (RGS)
- Wild Bird Seed (WBS)
- Brown Rice Flour (BRF)

I will not go into details with the BRF, WBS and RGS preparation, because these three methods are truly inferior to a perfectly prepped rye berries substrate. Here's a short version of those three.

## **BRF Preparation:**

BRF cakes preparation is the regular formula (1/1/2 - BRF/water/verm) but instead of 100% water use a 50% coffee/50% water solution. Steam sterilize for 90 minutes or PC for 60 minutes @15psi.

*P. tampanensis sclerotia forming on BRF substrate*



## **RGS Preparation (/quart jar):**

300ml RGS

150ml coffee/water mix (50/50)

Pinch of gypsum

Put RGS and gypsum in your jar, pour coffee/water on it.

Shake to distribute the liquid evenly and let sit for two hours. Then PC it for 60 minutes @15psi.

*P. galindoi sclerotia on Rye Grass Seed*



### **WBS Preparation :**

I hate WBS because it's messy and pretty difficult to clean the millet away from the sclerotia.

Use it however if for some reason rye or RGS is not available.

You can also prepare it at the same way like the rye berries below.

*P. tampanensis colonizing on Wild Bird Seed*



### **Rye Berries Preparation:**

As for the rye berries here's a detailed and pictured preparation method.

This is basically identical to [RR's Rye Grain Preparation](#) with the

addition of coffee to the soak water.

I start it by brewing a full pot (2 quarts) of strong coffee.  
In a large pot/kettle heat up 2-2.5 gallon of water and add the coffee.  
Add a couple of teaspoons of gypsum and stir.

### *Prepping the coffee/water soak*



While the water/coffee is heating measure out your rye.  
Use a cup of rye for each quart jar.  
Rinse the grains a few times to clean them from all the dirt/debris.  
When the water runs clear drain it. Whenever the coffee/water is around 160F go ahead and shut off the stove and dump in the grains.  
Stir it around, cover and let it sit for 4-24 hours.  
I usually do this overnight, with a soaking time of 8-10 hours.

### *Rinsing the rye and adding it to the coffee/water*



Your rye is soaked, now it's time to boil.  
Bring it up to a full boil and let it go for 10-15 minutes.  
Turn off the stove and strain the grains in to large colanders/strainers.  
I like to put a fan on them and move them around a few times while drying.  
Make sure that the surface of the kernels are completely dry!

### *Boiling, straining and drying the Rye Berries*



Now they're ready to load into jars.

Use your favorite lids with your favorite filter (mine is synthetic filter disc).

Tyvek or polyfill will work too, but nothing beats the SFDs.

Screw on lids and put a layer of aluminum foil on them.

### *Filling the jars and fit them with lid & foil*



Now you can load the jars in the pressure cooker.

PC them for at least 90 minutes (I like to go with 120...) @15psi.

As always let the PC completely cool before removing the jars.

Jars are room temperature and the foil is removed.

The grains are a little bit compacted so I like to shake them gently a bit now.

Ready to be inoculated!

### *Jars before & after sterilization*





## Inoculation Methods:

So you have a spore print or syringe.

If you don't want to complicate things or just simply don't have the supplies/resources go ahead and inoculate the substrate with your spore syringe. If you have a print, well you know, just make a spore syringe...

*Spore print and spore syringe of P. mexicana*



If you are a bit advanced and make LCs for you cubensis, these species will do great in a DME (Dried Malt Extract) and DEX (Dextrose) LC.

Use your favorite recipe.

My preferred one is 1 tsp Malt Extract and 1/8 cup of Dextrose per quart.

The best and most advanced method however is to start your spores on agar.

*P. galindoi* mycelium on LME/DEX LC



I use premixed MEA media and have never had germination issue. When you have a nice healthy grow on your plate (not going into isolation...), you can inoculate your grain substrate or LC with a wedge.

*P. galindoi* and *P. mexicana* on agar



*Rye inoculated with agar wedge*



Now just set it and forget it!  
Are you ready for some stones?!

Very often (especially with spore and agar wedge inoculation) sclerotia will form before full colonization of the substrate. This is perfectly normal. If you inoculate with LC, the mycelium usually just rips through the substrate and stones will form after 100% colonization. Either way you should see stones soon.

*Some "young" jars (less than 30 days)*



There's a controversy on shaking or not at the 20-30% stage of colonization. Some say it's OK some say don't do it. I've done it with success, but failed a few times too. Therefore I don't shake anymore.

When I want to expand and plan on doing G2G transfers, the best method IME is to start with LC.

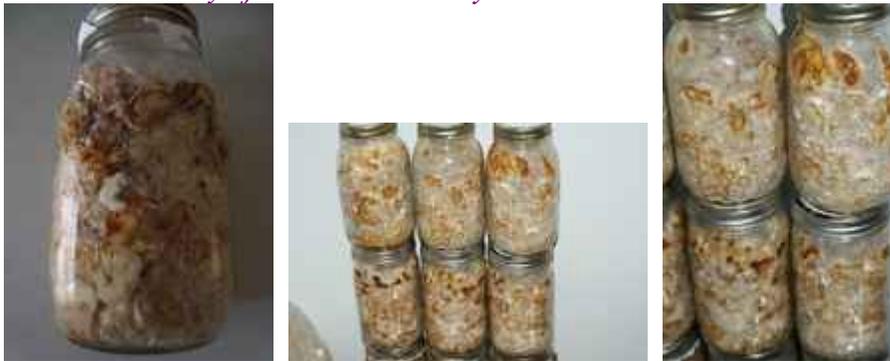
I use 3-4cc per jar and it's always done within a week.

Stones are not forming yet or if so, they are very tiny.

Just as usual, break up your colonized grain by shaking your jar, and transfer a small amount into new sterilized substrate jars.

However if you have a fair amount of LC, I'd rather go that way instead of G2G.

*P. mexicana/A rye jars around 60 days*



*P. galindoi rye jars around 60 days*



# Harvesting the Stones:

Well it is time to enjoy the first "fruits" of your labor.

When you're at this stage, your jars should be at least 2 months or older.

There's no point to harvest before 2 months and my latest harvest was 6 months.

Some leave it longer, but I always in need of jars/space.

Anyhow...

Get a spoon and sanitize it with alcohol.

Scrape out and separate the substrate and sclerotia on aluminum foil.

I have done this before in laminar air flow and totally open air.

Never ever get a contam with either method.

## *Stones harvested from RGS and rye berries substrate*



Clean your stones with a brush and store them fresh in paper bags in the fridge for weeks or dehydrate and store them for months.

## *P. mexicana/A sclerotia harvested from rye*



## *P. galindoi sclerotia from rye substrate*



*P. tampanensis* sclerotia from manure based bulk substrate



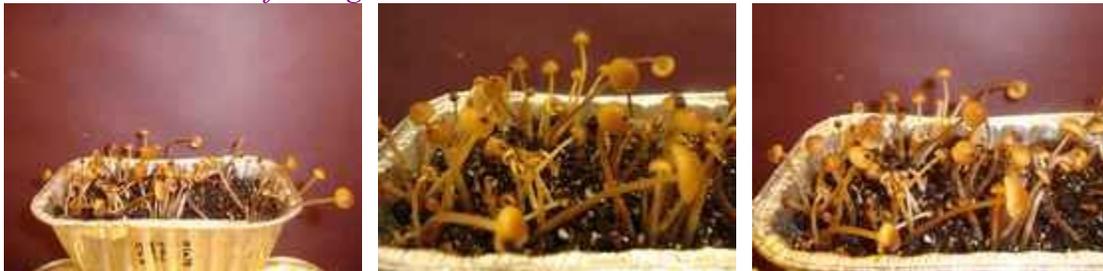
So now you have that leftover sub/very small stones mixture, ready to fruit.

## Fruiting Procedures:

### Cased Grain Substrate:

This is the easiest method to case the grains and fruit them as is.  
I've had OK results by casing RGS.  
Had great results by casing Rye.

*P. mexicana*/Jalisco fruiting on cased RGS



*P. galindoi*/ATL#7 fruiting on cased RGS



*P. galindoi/ATL#7 fruiting on cased Rye Berries*



They don't require a special casing layer, I've used pasteurized 50/50, 50/50+, Jiffy Mix and Plantation Seed Starter Mix with equally great results. Make sure that you use a thin (~1/4") layer of your mix. Spread it evenly on the top of the substrate and put it into your fruiting chamber. I've used a SGFC and Greenhouse and they both perform good. Keep high humidity and lots of FAE throughout the whole fruiting. Keep your temperature between 65-80F. I've had them to fruit on constant 65F and constant 80F and anywhere in between. Light temperature of 6500K is preferred (although I experimented with a 8200K light too with good performance as well) with a cycle of 12/12.

Pins should appear within 10-14 days in optimal fruiting conditions.

### **Grains Spawned to Bulk Substrate:**

You can spawn your grains to any pasteurized manure or coir based bulk substrate. My favorite mix is horse manure/straw/coir/vermiculite/gypsum (40/20/20/15/5). Let your bulk colonize, case and fruit it as above.

*P. mexicana/Jalisco rye berries spawned to pasteurized coir/coffee/verm/gypsum*





*P. tampanensis* spawned to pasteurized horse manure/straw/verm/coir/gypsum



## **Fruiting BRF Cakes:**

With this method I don't harvest the sclerotia from the substrate.  
After full colonization birth the cake and wash off the vermiculite barrier.  
After this I like to dry the cakes out in the front of the flowhood or a fan.  
Dry it for a few hours at least or overnight.

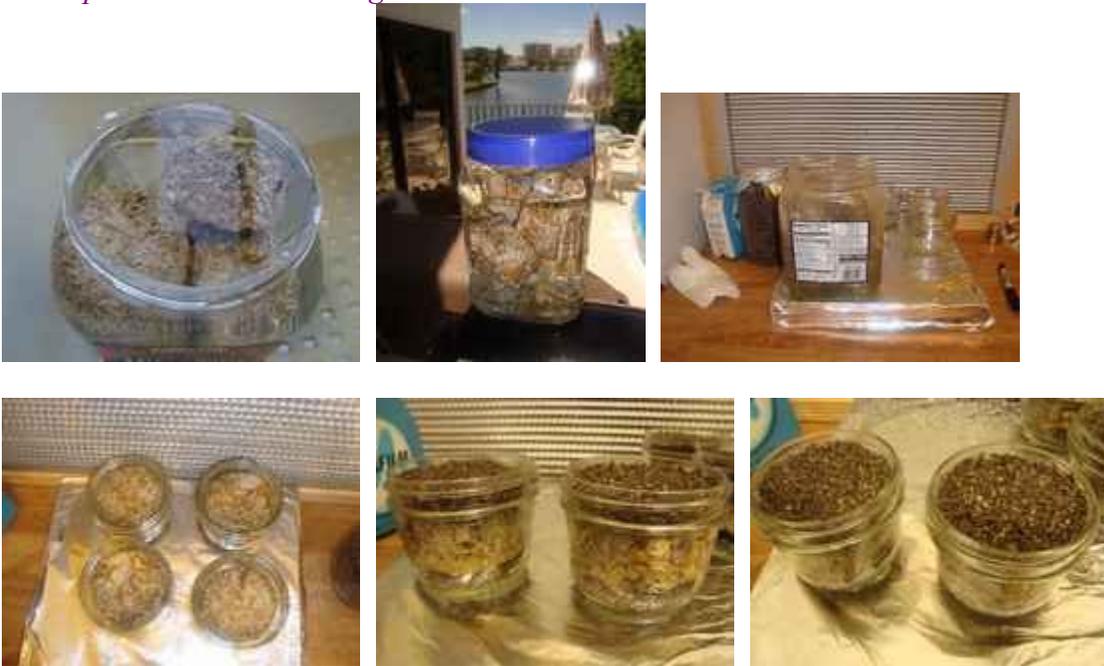
*P. tampanensis cakes drying*



Please note that the above step is not necessary but IME it will give you a better flush/pinset.

Now that the cakes are dry you can go ahead and dunk them for 24 hours. Put them back in the jars and case/fruit in the same manner as with grains (described above).

*P. tampanensis cakes dunking and cased*



*P. galindoi* fruits on BRF substrate



## Alternative Fruiting Method:

If you're after the fruits and don't care about sclerotia this is the TEK for you!  
Prepare a bulk substrate mix in a spawn bag and sterilize it,  
then inoculate it directly with LC.  
Here's how I prepare my bulk.

Shred the horse manure with a small food processor.  
I can't believe that some people still breaking up manure with their hands...

*Shredding the manure*



Chop up some wheat straw and submerge it in water for a couple of hours.

*Prepping wheat straw*



Hydrate some coir, and get the vermiculite & gypsum ready.

I don't measure anything exactly just eyeball it.  
It's not that important, just be somewhere in the ballpark of the above mentioned ratio...

### *Ingredients for the substrate*



Now mix your dry ingredients (manure/verm/gypsum) then mix in coir and straw.  
Hydrate the sub to field capacity and fill into gusseted spawn bags.  
I fill the bags with 2-4 quarts of substrate.

### *Mixed and hydrated substrate*



I love RRs idea with the tyvek sleeves inserted in the bags,  
you don't have to worry about contamination while your PC cools.

### *Prepping the spawn bags*



Fill your PC with the bags, and PC them for 120 minutes @15psi.

### *Bags before and after PCing*

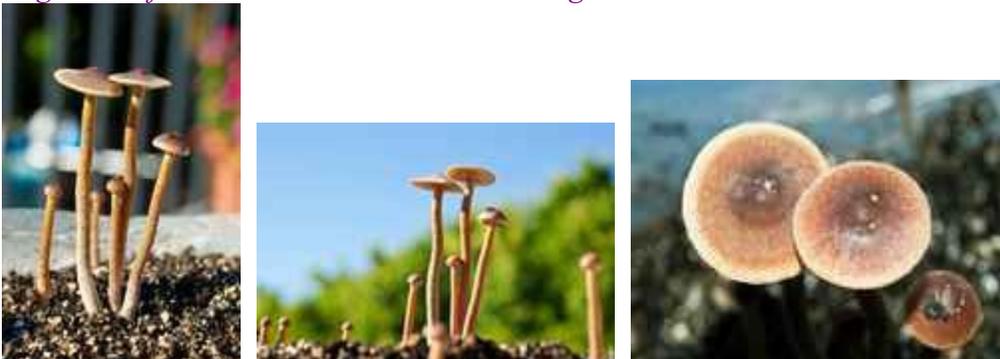


When the bags are cool I open them in the sterile laminar airflow and inoculate the bulk with 20-60cc of LC.  
Inflate it with the sterile air and tie them up.  
When fully colonized, cut the top of the bag just above the substrate level.  
Case it thin with your favorite casing layer and fruit it.

*P. galindoi* bag fully colonized, top cut off and cased



*P. galindoi* fruits on the above mentioned bag





## Harvesting & Spore Printing:

Now that the pins developed into mature fruits (anywhere between 5-10 days) you are ready to harvest them.

This is the same as you would do with any other species of mushroom, but keep it in mind that these guys are pretty fragile. Gently pull them off the substrate and set them aside.

### *P. galindoi harvest from BRF*



Cut the caps off the stipe as close as you can and place cap onto alcohol sanitized heavy duty aluminum foil. Do this in your glovebox or front of your flowhood.

### *P. galindoi caps printing*



An other good method is to use a plastic shoebox.

Take the lid, and lay a sheet of sanitized foil in it.  
Put the caps on the foil and place the bottom of the box on the top of the lid.  
You'll have a nice sheet of good quality prints.

*P. tampanensis caps mass-printing on foil in a shoebox*



*Finished prints of P. tampanensis*



Thanks for reading 😊

-----



STONESUN™

STONESUN™

[A Comprehensive Sclerotia Cultivation Guide - From Spore Print To Spore Prints \(VER 1.0\)](#)

[Links To My Psilocybe, Panaeolus and Edible Cultivation Attempts](#)

[A Sushi Session](#)

[Flowhood Construction](#)

[A Brew Session](#)