

## Prepare soya-agar medium Petri dishes

This recipe is for preparing a wide spectrum nutritional medium which can culture almost any type of mushroom (of those which is possible to put in culture).

**Materials:** petri dishes (PD), marker, parafilm / plastic wrap, soya flour, sugar beet molasses, agar-agar, distilled water, flask or glass jar, pressure cooker, scale

### Part 1: Calculate Ingredient Ratios

Below are the quantities for creating medium for 10 petri dishes; multiply the numbers and keep this ratio for more petri dishes

Component	Quantity	Custom Quantity	
Soya flour	2 g	multiplier  x	g
Beetroot Molasses	1 g		g
Agar-agar	2 g		g
Distilled water	100 ml		ml

### Part 2: Weigh Ingredients And Mix Into Flask

- Using a scale, weigh the ingredients you need.
- Put the ingredients in a flask/jar and mix well!.  
HINT: don't fill the vessel more than 1/3 of its volume, to reduce overboiling issues.
- Cover the top of the flask with aluminum foil



#### *Tips For Weighing*

- don't put ingredients back into the jar where they came from, even if there is extra (you don't want to contaminate the whole jar)
- make a small aluminum foil vessel for holding the ingredients
- if you are having trouble getting it well mixed, heating the water before adding the ingredients helps



### Part 3: Sterilize In Pressure Cooker

- Add a couple centimeters of water into the pressure cooker, put the vessel in, sitting in the water but not floating, close the cooker and bring the water to boil.  
**(No air tight containers in the pressure cooker, they could burst)**
- Reduce the heat and keep it at the minimum temperature so that the water still boils
- Wait 40 minutes
- Shut the heating source, and let the cooker cool down by itself  
HINT: Don't release the pressure; A sudden drop makes the medium overboil
- When the cooker is just warm, release the pressure (there should be no pressure), open the lid, carefully take out the medium.  
(if everything went well, the aluminum cap is still in its place)



### Part 4: Pour Liquid Medium Into Petri Dishes

- Prepare the working station, cleaning the workspace and sterilizing with spiritus
- With a fast but decisive hand movement, fill each PD with some medium, just enough to fully cover the surface (it doesn't need to be thick)
- Wrap with parafilm and keep it in the fridge until needed.

