



1. **Title:** Creating Grain Spawn (3 lbs)
2. **Materials:**
 - a. Liquid culture 10cc/ml syringe
 - b. Sterilized rye grain/berries (3 lbs) in a polypropylene grow bag
 - c. Latex gloves
 - d. Isopropyl Alcohol wipes
 - e. Lighter
 - f. Scotch Tape
3. **Introduction:** The intent of the procedure is to provide instructions on inoculation of a bag of sterilized grain with the desired fungal genetics (spores) to create a bag of spawn.
4. **Terms:**
 - a. Grain Spawn - For the purposes of the procedure, this is defined as nutrient rich medium (grain) which has fungal DNA introduced into it and allowed to propagate to form mycelium. (Image 1)



Image 1

- b. Inoculation - This is the process of introducing fungal DNA by injecting a liquid culture or spores.
 - c. Sterilization - This involves the process of making a surface or substance biologically inert through chemical or physical manipulation. Alcohol is an example of something that can eliminate biological contamination on a surface. While an autoclave (pressure cooker) uses high temperatures and steam pressure can perform the same activity.
5. **Procedure:**
 - a. Put on latex gloves and sanitize them along with your arms with isopropyl alcohol. Sanitize the working area with isopropyl wipes.
 - b. Next use alcohol wipes to sanitize the area on the sterilized grain bag where the injection is planned.
 - c. Pick up the spores/liquid culture syringe and run the needle end over a flame to sterilize it.

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- d. Next inject the bag in the syringe and seal the bag with a piece of scotch tape.
- e. Place the bag in a warm (70-75F) humid (90%) location where mycelium can develop.