

Drying Plant Material

This document does not purport to address all of the hazards. Individuals are responsible for obtaining full safety and hazard training prior to attempting this procedure.

Summary of activity:

- Bring plant material in from the field (see Standard Operating Procedures for Sampling Corn @ V6, Mat Stover Collection, or Whole Bean Plant Sampling) and place it in the appropriate dryer.

Hardware for drying samples:

Plant material samples in paper or cotton bags

Dryers 2, 3, and 4, located on second floor of Plant & Soils, room 210.



Procedure

1. Remove the individual samples from the respective burlap bag.
 - a. Be careful not to inter-mingle samples from different experiments or fields, as it will make later sample handling very difficult. If the samples are allowed to mix together, it will require opening every sample bag to look at the individual tags.
2. Place the samples still in their individual bags, onto the wire drying rack.



- a. Lay samples out in a single layer.
- b. If possible, keep all samples from a single experiment together on a single rack.
- c. If it is necessary to have multiple experiments together on a single drying rack, keep the samples grouped together. Labeling the outside of the paper bags will also help differentiate samples.

3. Place an identifying tag or label on the shelf with the samples
4. Fresh samples must be dried in dryers 2, 3 or 4, which are set to 140°F.
 - a. Dryer 1 in P&S 210 and all dryers in the basement, P&S B-39 are only set to 100°F. This is for the drying of seed only (**not** grain samples).



- b. Samples **must** be dried at 140°F or **THEY WILL MOLD!**
5. On the sign out sheet on the clipboard hanging on the oven, log in what shelf is being used along with the respective researcher's name, what the samples are, when they were introduced into the oven. Also sign out when you remove the samples

Dryer Usage Information				
	Name	Material	Date In	Date Out
1	Ugn/Bonson	Corn Biomass	3/22/07	
2				
3				
4				

6. Samples should be allowed to dry for at least 48 hours or until plant material is dry.
 - a. Samples should be removed from the dryer as soon as samples are dry when possible to facilitate use of the dryers.
 - b. Samples left too long risk being pushed aside, moved or even lost.
7. Once samples have been dried, gather the individual bags back together into burlap bags for processing (weighing and grinding). Label the burlap bags with tags having all of the pertinent information.
8. If the samples need to be kept briefly, they may be placed in the 100°F dryers in B-39.



9. Place the burlap bags of samples into the drying boxes



10. and place them into one of the dryers.

- a. Make sure the samples do not extend above the edge of the drying rack or they may be caught by a rack above and pulled out of their respective rack and lost.



11. Fill in the sign out sheet

Dryer Usage Information

	Name	Material	Date In	Date Out
1
2
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