

## How to Submit a Soil Sample for Aphanomyces Race Testing on Alfalfa

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The Plant Disease Diagnostics Clinic (PDDC) routinely provides testing of agricultural fields that are or will be in alfalfa production to determine the potential for problems with race 1 and race 2 of *Aphanomyces euteiches*, as well as *Phytophthora*. If you are interested in having your soil tested, you can submit a soil sample to the PDDC. **The importance of correct soil sampling cannot be overstressed.** In order to obtain the most accurate estimate of *Aphanomyces* and *Phytophthora* in a field, a soil sample must accurately represent the field.

The following are suggested guidelines that you should follow when collecting, packaging and shipping a sample to make sure that the sample will arrive in the best possible condition and provide the most accurate results possible.

- **Collect the appropriate number of samples.** If a field is less than 40 acres in size, collect a single sample for testing. If a field is greater than 40 acres in size, subdivide the field into equal-sized sections that are less than 40 acres in size and collect a separate sample from each section. For example, a 160 acre field would be subdivided into 4 sections of 40 acres, and four samples would be collected, one from each section.
- **Collect samples appropriately within each sampled area.** Gather each sample by walking a zig-zag or W-shaped path within the sample area. Every 55 to 75 paces, collect approximately 2 cups of soil from the first 4 to 6 inches of the soil profile. **DO NOT** sample below 6 inches. Be sure to collect soil from at least one location per acre and make sure that the total soil sample is **at least 1½ to 2 gallons**. Collect soil from all parts of the sample area, representing different drainage conditions, soil types and elevations.
- **Store soil samples appropriately.** Double bag each soil sample in plastic bags to prevent spills. Bags can be carried conveniently in a bucket or pail. Keep samples in a cool, dry location prior to submission.
- **Document samples properly.** Fill out the submission form on the opposite side of these instructions.
- **Submit samples promptly.** Mail or hand-deliver a sample to the:

**Plant Disease Diagnostics Clinic  
Department of Plant Pathology  
University of Wisconsin-Madison  
1630 Linden Drive  
Madison, WI 53706-1598**

PDDC hours are 8:30 am to 4:30 pm Monday through Friday.

**For more information or help in diagnosing *Aphanomyces* and *Phytophthora* root rots on alfalfa:** Contact Brian Hudelson, Department of Plant Pathology, University of Wisconsin-Madison, 1630 Linden Drive, Madison, WI 53706-1598, phone: (608) 262-2863, fax: (608) 263-2626, email: [bdh@plantpath.wisc.edu](mailto:bdh@plantpath.wisc.edu).



**For PDDC Use Only:**

Intake Number: \_\_\_\_\_

Date Received: \_\_\_\_\_

Sample Number: \_\_\_\_\_

*Plant Disease Diagnostics Clinic*  
**Aphanomyces Race Test**  
**Submission Form**

***Please use a separate form for each sample.***

Date: \_\_\_\_\_

Submitter: \_\_\_\_\_

Address: (Street) \_\_\_\_\_

(City) \_\_\_\_\_ (State) \_\_\_\_\_ (Zip Code) \_\_\_\_\_

Telephone Number: \_\_\_\_\_

Grower (if different from submitter): \_\_\_\_\_

Address: (Street) \_\_\_\_\_

(City) \_\_\_\_\_ (State) \_\_\_\_\_ (Zip Code) \_\_\_\_\_

Telephone Number: \_\_\_\_\_

County where sample was collected: \_\_\_\_\_

Description of the location where the sample was collected: \_\_\_\_\_

GPS coordinates of field where sample was collected, if available: \_\_\_\_\_

Field history (e.g., number of year field has been in alfalfa within the past 10 years: \_\_\_\_\_

**Submit the sample to the:**

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**University of Wisconsin**