



Extension

UNIVERSITY OF WISCONSIN-MADISON

Provided to you by:

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

Brian Hudelson, UW-Madison Plant Pathology

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.

Revised
Apr. 23, 2013



Extension

UNIVERSITY OF WISCONSIN-MADISON

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:

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