

How to Submit a Soil Sample for the Aphanomyces Race Survey

Brian Hudelson, UW-Madison Plant Pathology

The Plant Disease Diagnostics Clinic and Pioneer Seed are conducting a survey of Wisconsin and southeast Minnesota agricultural fields that have been or are likely (in the near future) to be in alfalfa production to determine which, if any, races of Aphanomyces euteiches (race 1 and/or race 2) is (are) present in a given field. The survey will also provide information on the presence or absence of Phytophthora megasperma f. sp. medicaginis in the surveyed fields. If you are interested in contributing to the survey, a soil sample can be submitted to the Plant Disease Diagnostics Clinic (PDDC). The following is a list of suggested steps that you should take when collecting, packaging and shipping a sample to make sure that the sample will arrive in the best possible condition.

- Each sampled “field” should be 5 acres in size (either a stand alone field or part of a larger field), and should be a field that has previously been used for alfalfa production or that is slated for alfalfa production within the next 5 yrs. Approximately one cup of soil should be collected from each of 25 sites within each field, yielding a total, bulked sample that is between one and two gallons. Sites within a field should be selected as randomly as possible within the sampled area and soil should be collected from the upper 6 in. of the soil profile.
- Information should be collected on the location of the sampled area (GPS coordinates should be provided if possible, otherwise road and distance information so that the areas can potentially be revisited) and previous cropping history of the field (i.e., how many years within the past ten years the area has been cropped to alfalfa).
- Bulked soil samples should be double bagged in self-sealing (e.g., Ziplock®) bags. Samples should be kept as cool as possible after they have been collected and shipped in sturdy, leak-proof containers as soon as possible to the Plant Disease Diagnostics Clinic (PDDC). The PDDC address is:

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

Samples can be mailed to the PDDC or dropped off in person. PDDC hours are 8 am to 4:30 pm Monday through Friday, and 8 am to noon on Saturday.

- Include with the sample a completed copy of the “Aphanomyces Race Survey Submission Form” on the back of this sheet.

For more information or help in diagnosing Aphanomyces seedling blight of 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.



For PDDC Use Only:

Intake Number: _____

Date Received: _____

Sample Number: _____

Plant Disease Diagnostics Clinic
Aphanomyces Race Survey
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