

## Forage Research Updates

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### MINNESOTA - Alfalfa Brown Root Rot Update

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Alfalfa brown root rot, caused by *Phoma sclerotoides*, was first found in Wisconsin and Minnesota in 2003. The disease has been linked to widespread winter injury and loss of alfalfa stands in the western US, but its impact in the Midwest is unknown.

University of Minnesota ongoing research aims to determine the distribution of the fungus, evaluate alfalfa varieties for resistance, develop a rapid soil test for the fungus, and determine if the fungus also causes disease on winter wheat. Some progress to date:

- Surveys completed with the assistance of Extension educators have detected the fungus on alfalfa plants in 9 Minnesota counties (Fillmore, Marshall, Otter Tail, Pennington, Red Lake, Sherburne, Wabasha, Washington, Winona) and 6 counties in Wisconsin (Columbia, Marinette, Pierce, Oconto, St. Croix, Shawano).
- In 2004, 18 fields with winter wheat or perennial ryegrass in 6 Minnesota counties were sampled. The fungus was found on roots of plants in 3 counties (Kittson, Marshall, Roseau).
- A test for determining whether the fungus causes disease on winter wheat by rotting roots, or lives on roots without causing damage, was started in Fall 2004 and will be evaluated in Spring 2005.
- Field tests for resistance to the disease in alfalfa will be established in 2005 in northwestern and west central Minnesota fields where the fungus has been identified.
- A website with brown root rot survey results and information: <http://www.tc.umn.edu/~medicago/brr.htm>