

Wisconsin Pest Survey Report

FIRST RECORD OF CEPHALOSPORIUM STRIPE DISEASE OF WHEAT IN WISCONSIN

A winter wheat field in Rock County has been confirmed to have Cephalosporium stripe disease, caused by the fungus *Cephalosporium gramineum* (syn. *Hymenula cerealis*). This is the first record of confirmed detection of Cephalosporium stripe disease on wheat in the state of Wisconsin. On May 24th, 2011 a suspect sample was collected by a DATCP Plant Pathologist as part of a wheat disease survey. Confirmation of the pathogen was a collaborative effort of Plant Industry Bureau Laboratory, the UW Plant Disease Diagnostics Clinic and the National Mycologist at USDA PPQ National Identification Services.

Since Cephalosporium stripe disease is widespread in the United States and present in parts of Canada, this detection has no regulatory implications. The disease has been shown to cause yield loss on susceptible cultivars under cool, moist periods which favor disease development. The fungus is soil-borne and survives in association with crop residue, so short rotations and reduced tillage may favor the occurrence of the disease. Wheat varieties vary considerably in response to Cephalosporium, and resistance (or at least reduced susceptibility) is a consideration for control of the disease.



Cephalosporium stripe disease of wheat. Photo: A. Phibbs

Cephalosporium stripe disease produces fairly distinctive chlorotic stripes running the length of the leaf blade and sheath. Plants are infected through the roots, and systemic infections which occur early can lead to stunted plants which ripen early and yield poorly.

The DATCP wheat disease survey made observations in 42 wheat fields from Rock to Sheboygan counties including several in the immediate

vicinity of the Cephalosporium stripe field; no other suspect symptoms were observed. Examinations of the field history and management practices provided no illumination on the origin or causes of this disease emergence. According to Dr. Craig Grau of the UW-Madison (Emeritus), infections have been occasionally suspected over the years but never confirmed. Another infected field was found during general pest survey of wheat fields on June 26, 2013, this time in Calumet County.