Wisconsin Department of Agriculture, Trade and Consumer Protection

Wisconsin Pest Survey Report

2010 SEED CORN SURVEY

http://pestsurvey.wi.gov/

In 2010 seed exporters requested inspections required for phytosanitary certification of 58 seed corn production fields in 8 Wisconsin counties. Stewart's wilt (*Pantoea stewartii*) infected seven fields in Columbia, Dane, Rock and St. Croix counties, compared to 4 of 62 sites last year. Goss's wilt (*Clavibacter michiganensis subsp. nebraskensis*) was diagnosed from 36 sites in Columbia, Dane, Eau Claire, La Crosse, Rock and Sauk counties. The incidence of both regulated diseases increased over the last season, particularly Goss's wilt, which showed a 10-fold increase. Reports from Illinois and Iowa indicated the Goss's wilt was also more prevalent in those states this year.



Symptoms of Stewart's wilt and Goss's Wilt on corn leaves are very similar.

The bacteria causing Stewart's wilt (Pantoea stewartii) are vectored by the flea beetle (*Chaetocnema pulicaria*). Goss's wilt also a bacterial disease (*Clavibacter michiganensis subsp.nebraskensis*) is not vectored by insects. Instead it infects corn plants through wounds, caused by heavy winds, rain and hail storms. Certain weeds (green foxtail and shattercane) can serve as a reservoir and the bacteria can over-winter in infected corn debris. Important management practices are rotation with non-host crops such as alfalfa, soybean and wheat and encouraging decomposition of corn stalks and debris. For more information please see http://www.ppdl.purdue.edu/ppdl/hot08/8-14.html

MDMV (maize dwarf mosaic virus) was found only in Dane Co., where it has been known to occur historically. MDMV is a potyvirus, transmitted by many species of probing aphids that can infect corn after feeding on weeds such as johnsongrass.

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