

Wisconsin Pest Survey Report

2016 New Corn Diseases

Corn fall survey and inspections screened for two new diseases, **tar spot of corn** (*Phyllachora maydis*) and **Xanthomonas blight** (*Xanthomonas vasicola* pv. *vascolorum*). 105 fields throughout Wisconsin were visited from Aug 5 to Sept 15, 2016.

Tar spot was detected in Green County on September 12, 2016 by DATCP's pest survey team and found in Iowa Co on September 20 by UW-Madison. The USDA Mycologist confirmed this first detection of tar spot disease in Wisconsin. It is considered of minor importance at this point. The disease, which only affects corn, was reported in Indiana and Illinois in 2015. It is better known in Mexico, Central and South America. In Mexico significant crop losses were observed when tar spot infections were colonized by another fungus, *Monographella maydis*. This second fungus has not been observed in Wisconsin. Tar spot is spread on plant debris that is carried by wind and rain.



Corn leaf with black spots caused by tar spot disease.

Xanthomonas blight was not observed in Wisconsin in 2016. Suspect samples were examined at PIB Lab and a specimen was sent to the USDA identifier in Kansas where it was determined to be negative. This bacterial pathogen was confirmed on Aug. 26, 2016 in Colorado, Nebraska, Illinois, Iowa and Kansas. It was first reported in the Republic of South Africa in 1949. Symptoms are similar to gray leaf spot but since this is a bacterial disease, fungicide applications are ineffective. USDA has determined that *Xanthomonas* blight is of negligible disease importance and has no quarantine significance for domestic or international trade.

This corn survey also detected **Southern rust** (*Puccinia polysora*) in Lafayette (September 9) and Grant counties (September 15). Prior to that UW reported it in Rock Co (August 25). Southern rust is rare in Wisconsin. It does not overwinter but occasionally can be blown up from the southern US and tropics. Late season arrivals after corn is in milk stage (R3) pose less of a threat to production.