

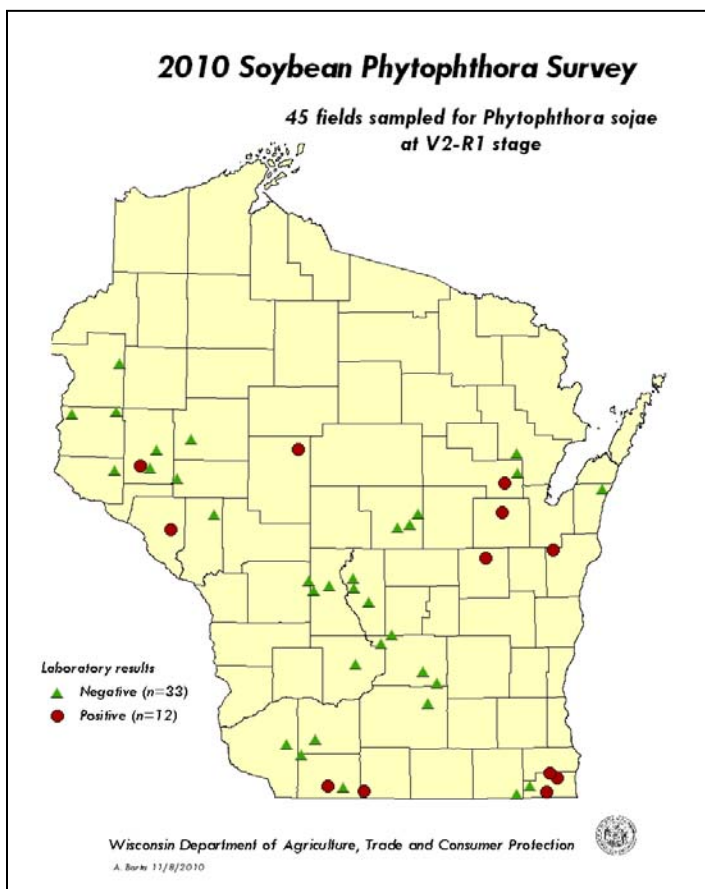
Wisconsin Pest Survey Report

2010 PHYTOPHTHORA ROOT ROT SOYBEAN SEEDLING SURVEY

<http://pestsurvey.wi.gov/>

Root rot diseases of soybean seedlings can be difficult to identify in the field. That's why the pest survey team has been conducting a state-wide survey for Phytophthora root rot (*Phytophthora sojae*) that includes laboratory diagnosis. From June 16 to July 9, 2010, 45 fields were sampled in 32 Wisconsin counties. Seedling roots were tested at Plant Industry laboratory. The presence of the *P. sojae* pathogen was determined by using molecular methods (Polymerase chain reaction, PCR), that are very effective and specific in detecting this pathogen.

In 2010, Phytophthora root rot was detected in twelve (27%) out of 45 fields sampled. Infected fields were found in 9 of the 32 surveyed counties. All soybean-growing regions of the state were affected (see map below). Three years of data show an upward trend with 27% infected fields in 2010, a marked increase from 18% in 2009 and 20% in 2008.



Wet spring weather with soil temperatures above 60°F create ideal conditions for this root rot disease. Saturated soils for a stretch of 7 to 14 days, whether due to heavy rains, irrigation or areas with poor drainage, provide the environment where Phytophthora can thrive. Many races exist in Wisconsin, often co-existing in the same field. Growers that experience Phytophthora root rot disease in their fields, may want to choose varieties with different resistance genes (Rps genes). See these websites for more detailed information:

<http://www.plantpath.wisc.edu/soyhealth/prr/prrmgenes.htm>

http://ohioline.osu.edu/ac-fact/pdf/AC_17_09.pdf