

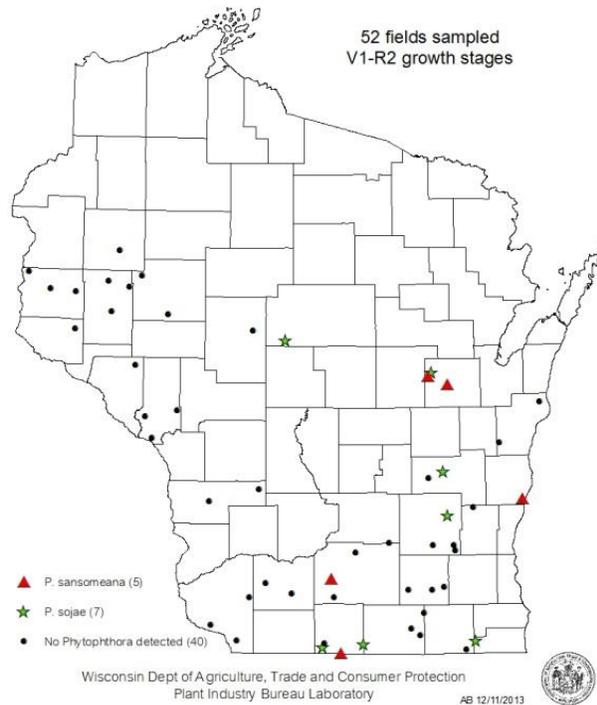
## 2013 Wisconsin Crop Disease Survey Results

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### Phytophthora sansomeana

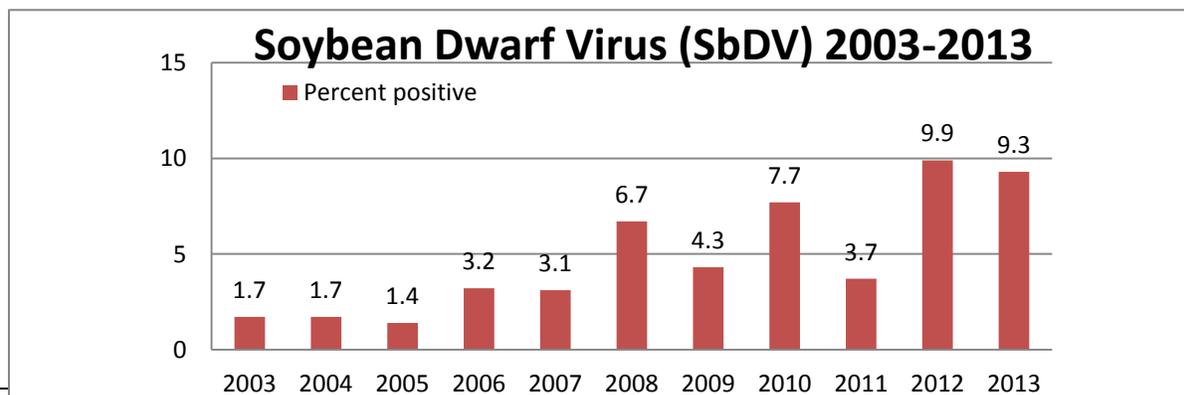
Continuing survey work for soybean seedling root rots again yielded *Phytophthora sansomeana* along with the endemic *Phytophthora sojae*. *P. sansomeana* was first detected in Wisconsin in 2012; results from the 2013 survey of soybean plants dug from 51 randomly-selected soybean fields found four fields to be positive. Fields were sampled between June 17 and July 18. The organism was also isolated from corn plants collected in one field which tested positive for *P. sansomeana* in 2012. While the significance, pathogenicity and environmental requirements of *P. sansomeana* remain under investigation, it is the apparent host range that raises concern about this organism. With both corn and soybeans being susceptible to infection (though the development of disease on corn has not been documented in Wisconsin to date), the potential for increases in inoculum is significant, given the widespread use of corn/soybean rotations.

2013 Soybean Phytophthora Survey



### Soybean Dwarf Virus (SbDV)

Soybean Dwarf Virus (SbDV) is an aphid-vectorred luteovirus which causes widespread economic



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damage in Japan. The first reported detection of SbDV in the United States was made in California in 1983 from clover, the first report on soybeans came from Virginia in 2000, and the first find on soybeans in Wisconsin was made in 2003. Subsequent annual surveys of soybean viruses in the state have shown an upward trend in the percentage of samples testing positive for SbDV.

The vector relationship of SbDV remains uncertain. Soybean aphid (*Aphis glycines*) is generally not considered to be an efficient vector of SbDV. Though transmission of the virus to soybean by *A. glycines* may simply be a function of large numbers, DATCP data on SbDV incidence and aphid pressure are not well correlated.

Other known vectors of SbDV include the clover aphid (*Nearcticus bakerii*) and the pea aphid (*Acyrthosiphon pisum*), neither of which are known to colonize soybeans, and the foxglove aphid, *Aulacorthum solani*, which is not known to occur in Wisconsin.

The virus is common in red and white clover, according to preliminary survey work done by DATCP in 2006, where SbDV was identified in 77% of red clover and 11% of white clover samples tested. Further observations are necessary to unravel this story.

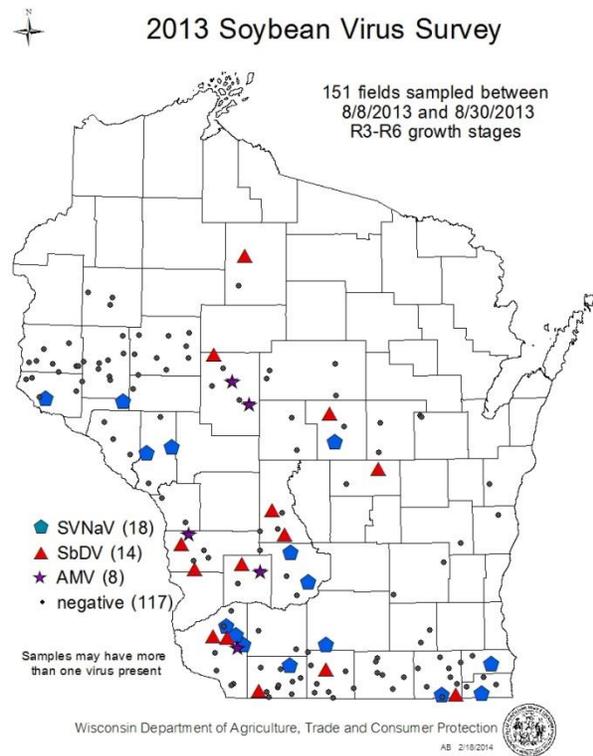
### Soybean Vein Necrosis-associated Virus

Soybean Vein Necrosis-associated Virus (SVNaV) was first identified in Tennessee in 2008, and was detected in Wisconsin in 2012, when it was identified by UW researchers and was found in 35.4% of soybean virus survey samples gathered by DATCP. In 2013, the virus was identified in 11.9% (18 of 151) of soybean leaf samples tested. The disease has been widely reported throughout the Midwest in the last two years. This tospovirus is vectored by thrips. Much remains to be



Soybean vein necrosis-associated virus

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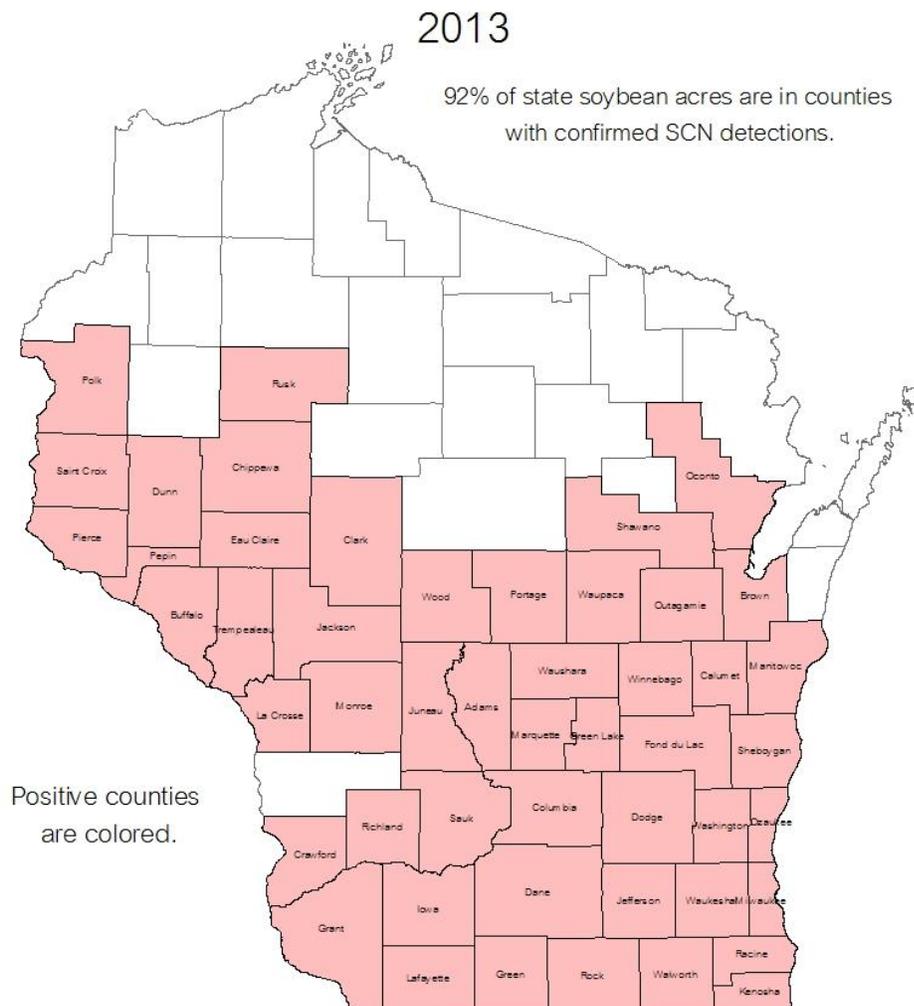
determined about this new disease in Wisconsin.

### Soybean Cyst Nematode

No new counties were added to the soybean cyst nematode map in 2013. The current counties where soybean cyst is known to occur include 92% of the state's soybean acres, **so growers are urged to test for the presence of this pest.**

Canada has proposed deregulating the soybean cyst nematode, which would reduce the need for current information on occurrence in Wisconsin for nursery growers and other exporters. With the substantial majority of soybean acreage in counties where the nematode has been detected and with deregulation by our state's number one trade partner nation, it is likely that DATCP will no longer conduct detection surveys for this nematode in the future.

## Soybean Cyst Nematode Confirmed Counties



Combined DATCP and UW data

Wisconsin Department of Agriculture, Trade and Consumer Protection

AB 12/11/2013

