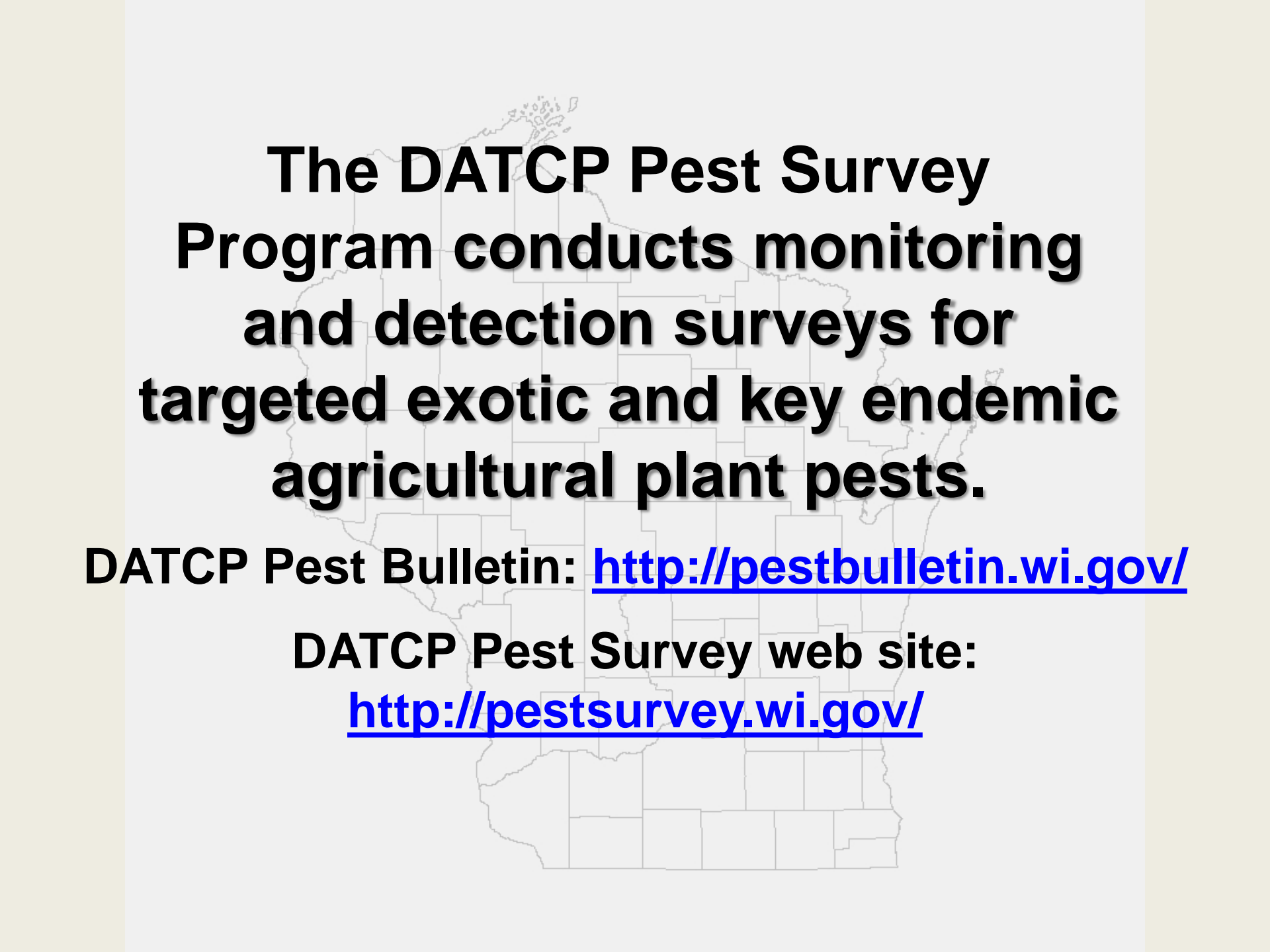




2013 DATCP WI Crop Disease Survey Results

**Adrian Barta, DATCP Pest Survey Program
Anette Phibbs and Sue Lueloff, DATCP Plant
Industry Bureau Laboratory**



**The DATCP Pest Survey
Program conducts monitoring
and detection surveys for
targeted exotic and key endemic
agricultural plant pests.**

DATCP Pest Bulletin: <http://pestbulletin.wi.gov/>

**DATCP Pest Survey web site:
<http://pestsurvey.wi.gov/>**

Highlights of 2013 Survey Season

- *Phytophthora sansomeana* continues to be detected
- Soybean Vein Necrosis-associated Virus shows up again
- Soybean Dwarf Virus detection stays high
- *Cephalosporium* stripe on wheat reappears
- Goss's wilt occurred on corn inbreds, Stewart's wilt didn't

Phytophthora sansomeana



Photo credit: Anette Phibbs, DATCP Plant Industry Laboratory

Seedling soybean survey

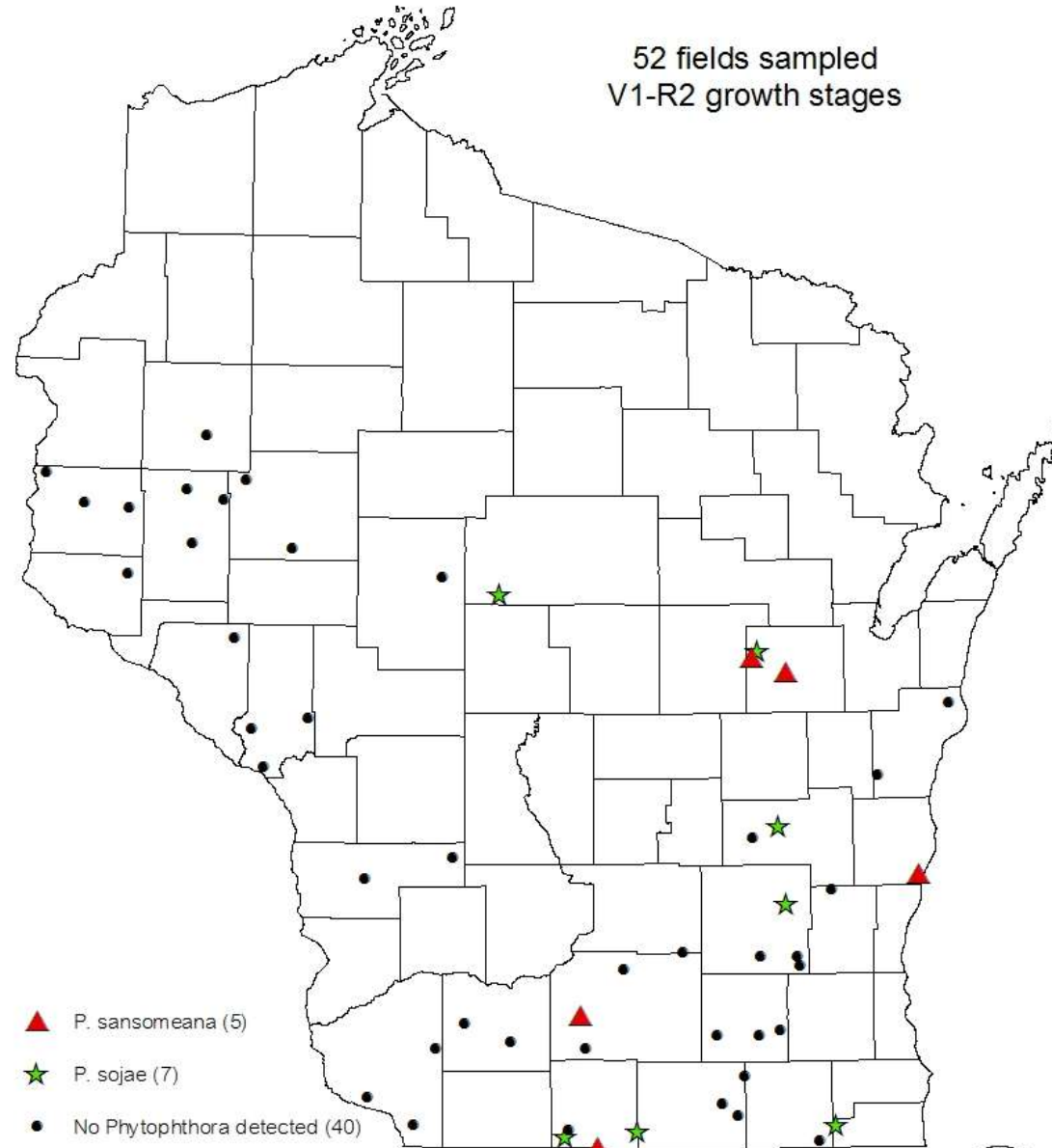
52 fields sampled

7 *Phytophthora sojae*

5 *Phytophthora sansomeana*

2013 Soybean Phytophthora Survey

52 fields sampled
V1-R2 growth stages



What's the significance of *Phytophthora sansomeana*?

Reported host range of *P. sansomeana* includes:

- *corn*
- alfalfa
- Balsam and Fraser fir (WI), Douglas (OR)
- white clover
- white cockle and wild carrot

Host range that includes corn and alfalfa along with soybeans may mean rotation is not effective to reduce inoculum levels in the soil.

Soybean vein necrosis-associated virus ***(SVNaV)***



Photo credit: fieldcroppathology.msu.edu



Photo: Dr. Damon L. Smith

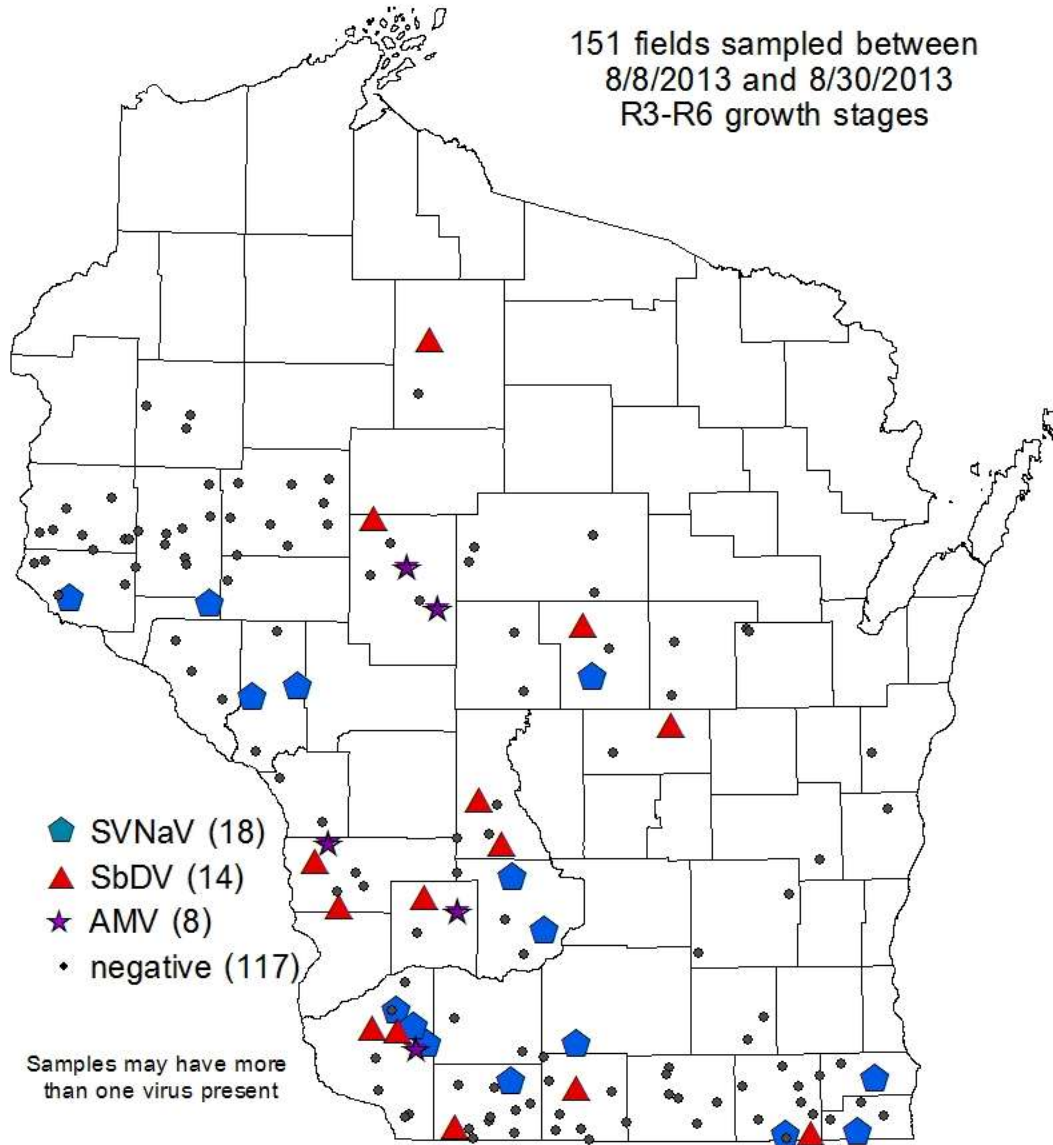
Midway up or higher in canopy

Distinct from bacterial blight or bacterial pustule



2013 Soybean Virus Survey

151 fields sampled between
8/8/2013 and 8/30/2013
R3-R6 growth stages



What's the significance of SVNaV?

???

- probably vectored by thrips
- occurs late in season??
- impact on yield??

For more information: [UW Field Crops Pathology site](#)

Soybean dwarf virus ***(SbDV)***



Photo credit: [Plantwise.org](https://www.plantwise.org)

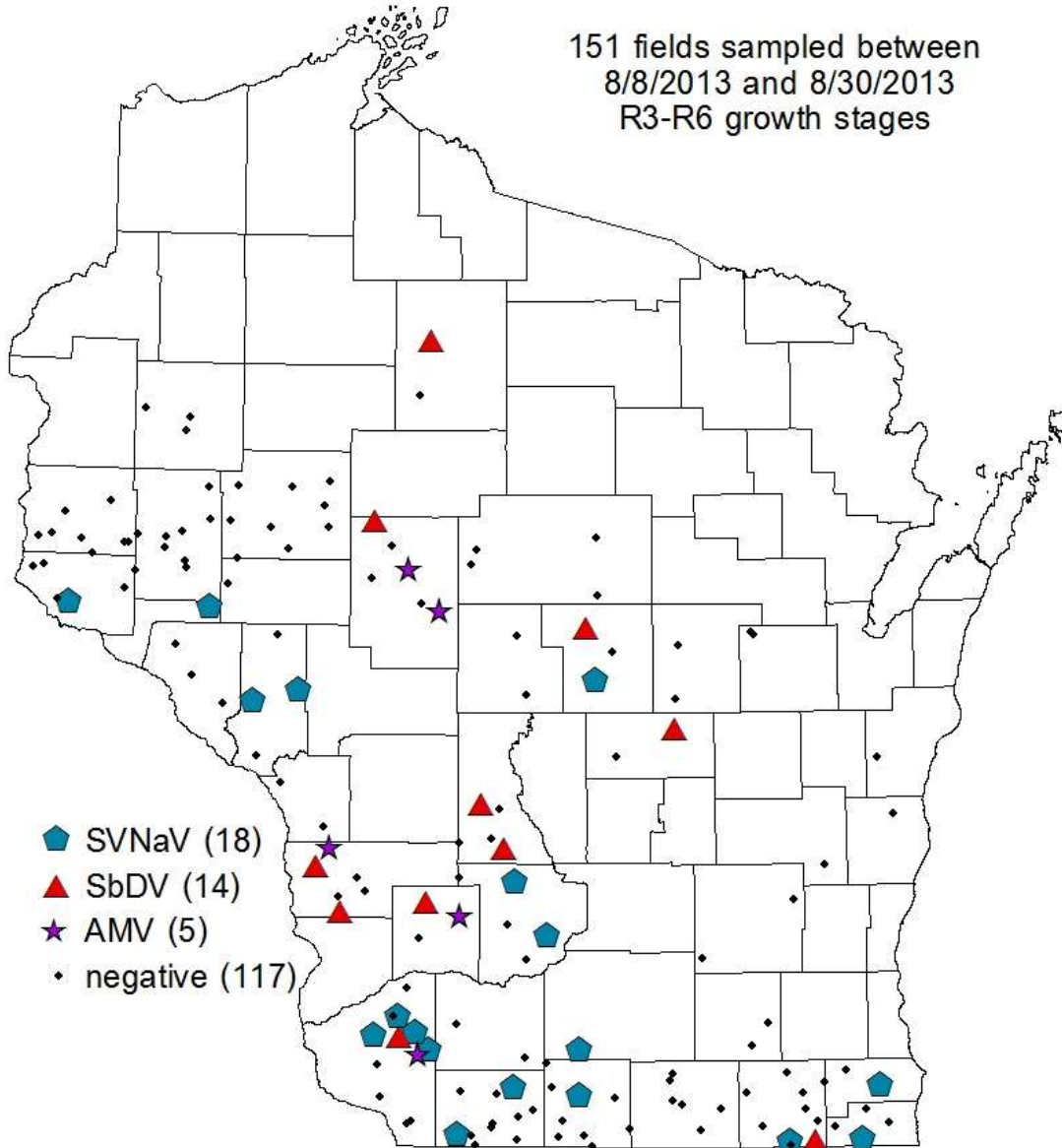
What's the significance of SbDV?

- First detected in WI soybeans in 2003
- Vectored by aphids, though soybean aphid is apparently a poor vector
- Widespread in red clover



2013 Soybean Virus Survey

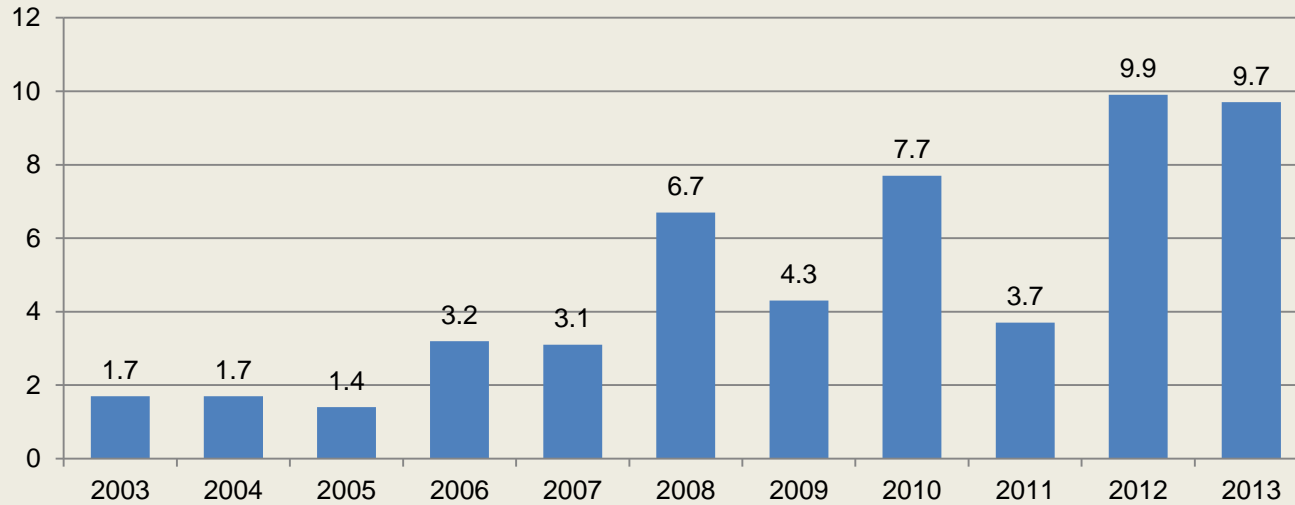
151 fields sampled between
8/8/2013 and 8/30/2013
R3-R6 growth stages



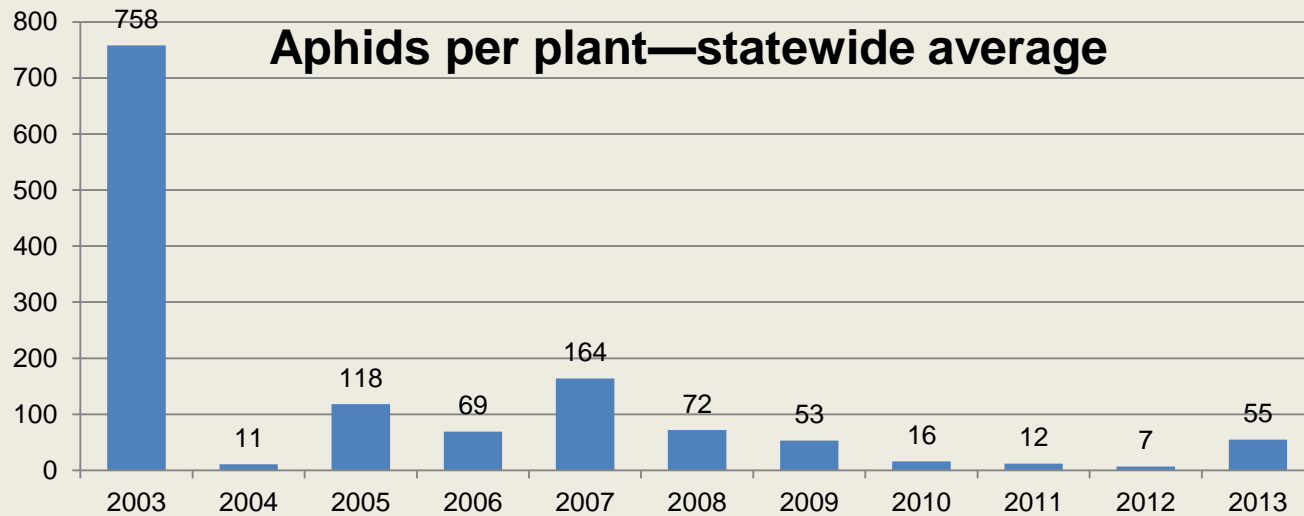
- ◆ SVNaV (18)
- ▲ SbDV (14)
- ★ AMV (5)
- negative (117)



% of samples positive for SbDV



Aphids per plant—statewide average



Aphid data: Krista Hamilton, DATCP Pest Survey

Cephalosporium stripe of wheat



Photo: P. Esker

Cephalosporium stripe of wheat

- Historical observations suspected but not confirmed
- laboratory-confirmed in 2011
- In DATCP surveys (~40-50 fields per year),
found once in 2011 and once in 2013
- widespread in much of U.S.
- favored by cool, wet conditions

Diseases of Regulatory Concern on Corn



Photo credit: Sue Lueloff, DATCP Plant Industry Laboratory

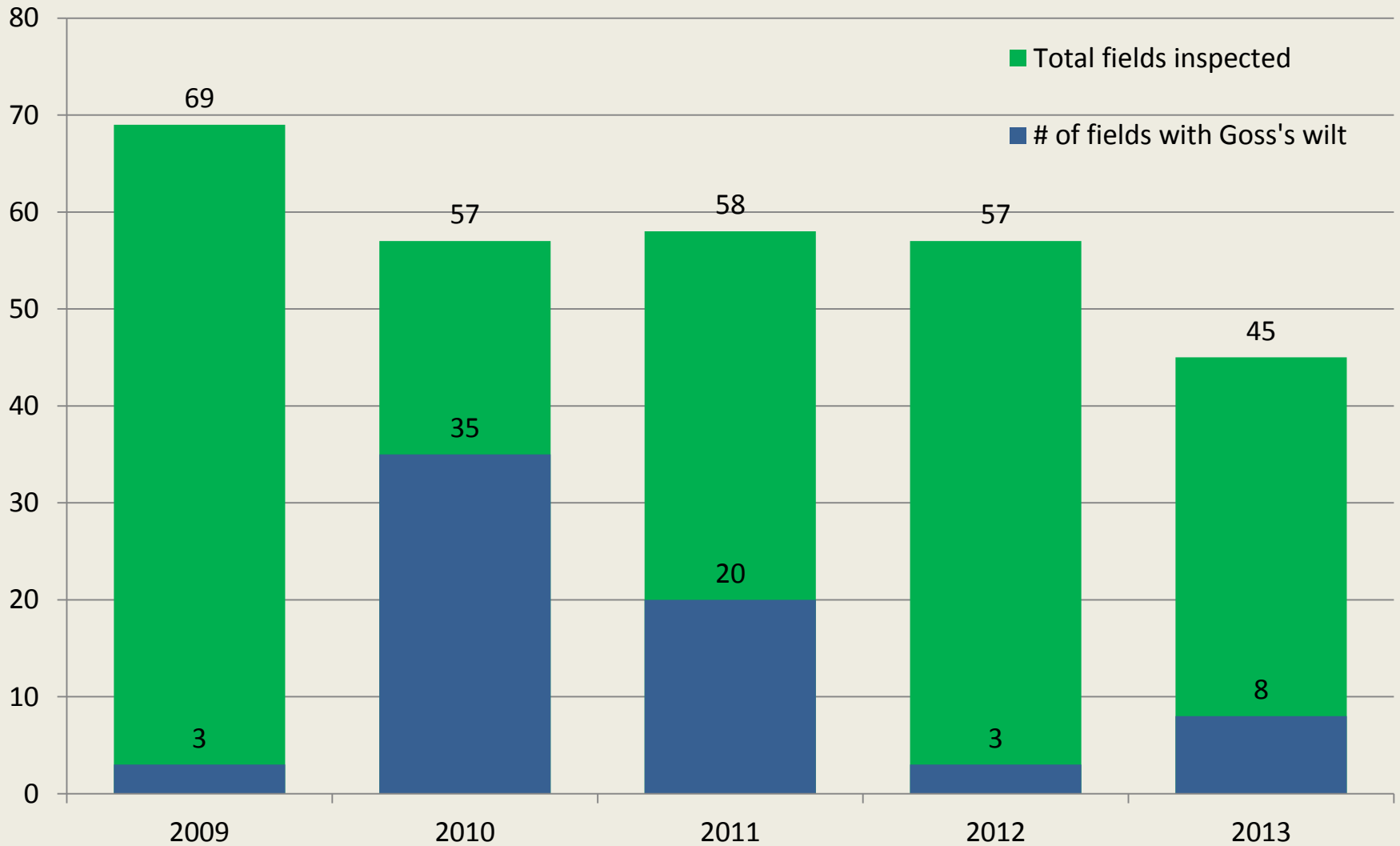
Corn hybrid seed production fields



Corn inbreds are the canaries of the field crop world—
they catch everything that comes along



Goss's wilt in corn inbred fields



Viruses in corn seed production fields (45 fields):

- Wheat streak mosaic virus (WSMV) 0
- High Plains virus (HPV) 0
- Sugar cane mosaic virus (SCMV, syn. With MDMV) 9

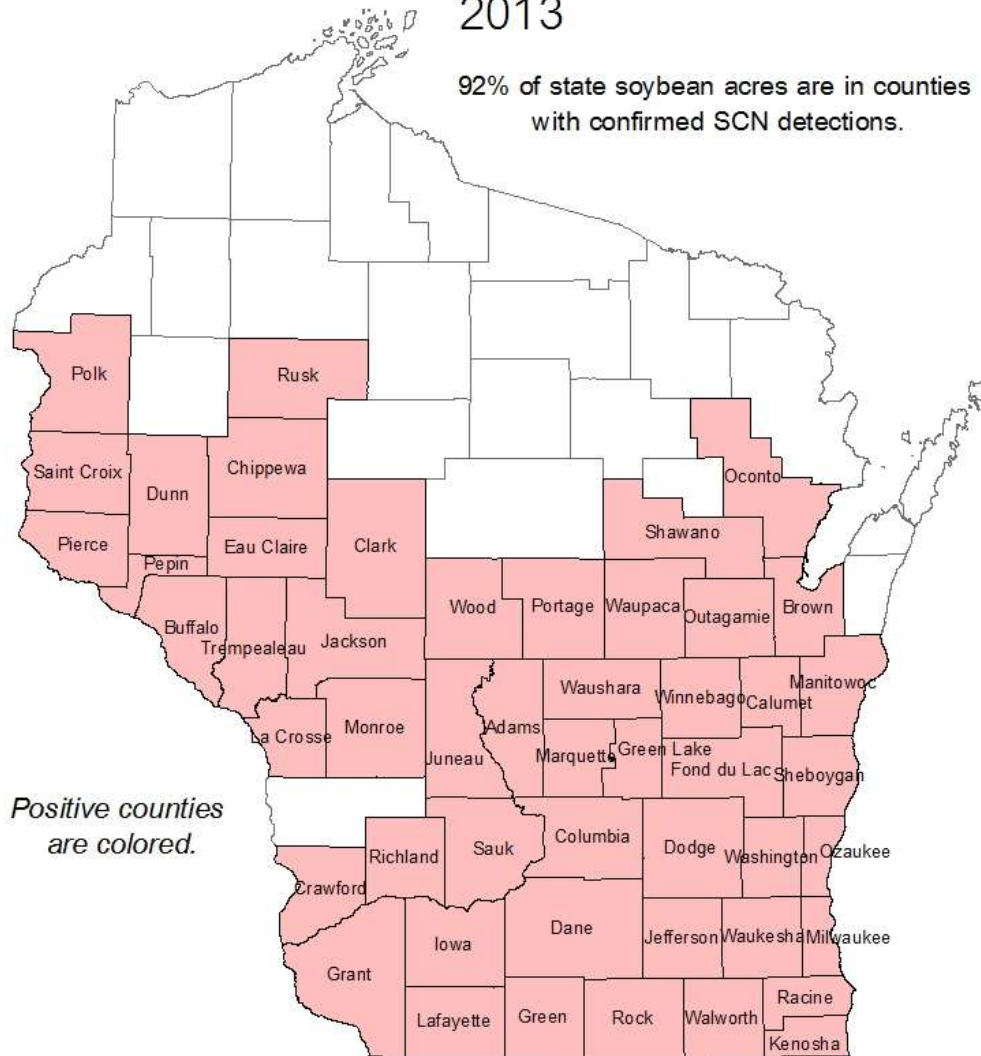


SCMV
Image by Anette
Phibbs, DATCP
PIB Laboratory

Soybean Cyst Nematode Confirmed Counties

2013

92% of state soybean acres are in counties with confirmed SCN detections.



Combined DATCP and UW data

Wisconsin Department of Agriculture, Trade and Consumer Protection



Soybean Cyst Nematode Confirmed Counties

2013



DATCP is planning to discontinue surveying for SCN—

Soybean growers in any county of the state should test regularly

For info on free testing, visit www.coolbean.info.

Lafayette Green Rock Walworth Kenosha

Combined DATCP and UW data

Wisconsin Department of Agriculture, Trade and Consumer Protection



You have a key role in exotic pest detection!



<http://pestbulletin.wi.gov>

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

Image:
US. Crop Corps, WWII