



INSECT SURVEY  
**RESULTS 2016**  
& OUTLOOK FOR

2017

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**DATCP** PEST SURVEY PROGRAM

# INSECT SURVEYS 2016

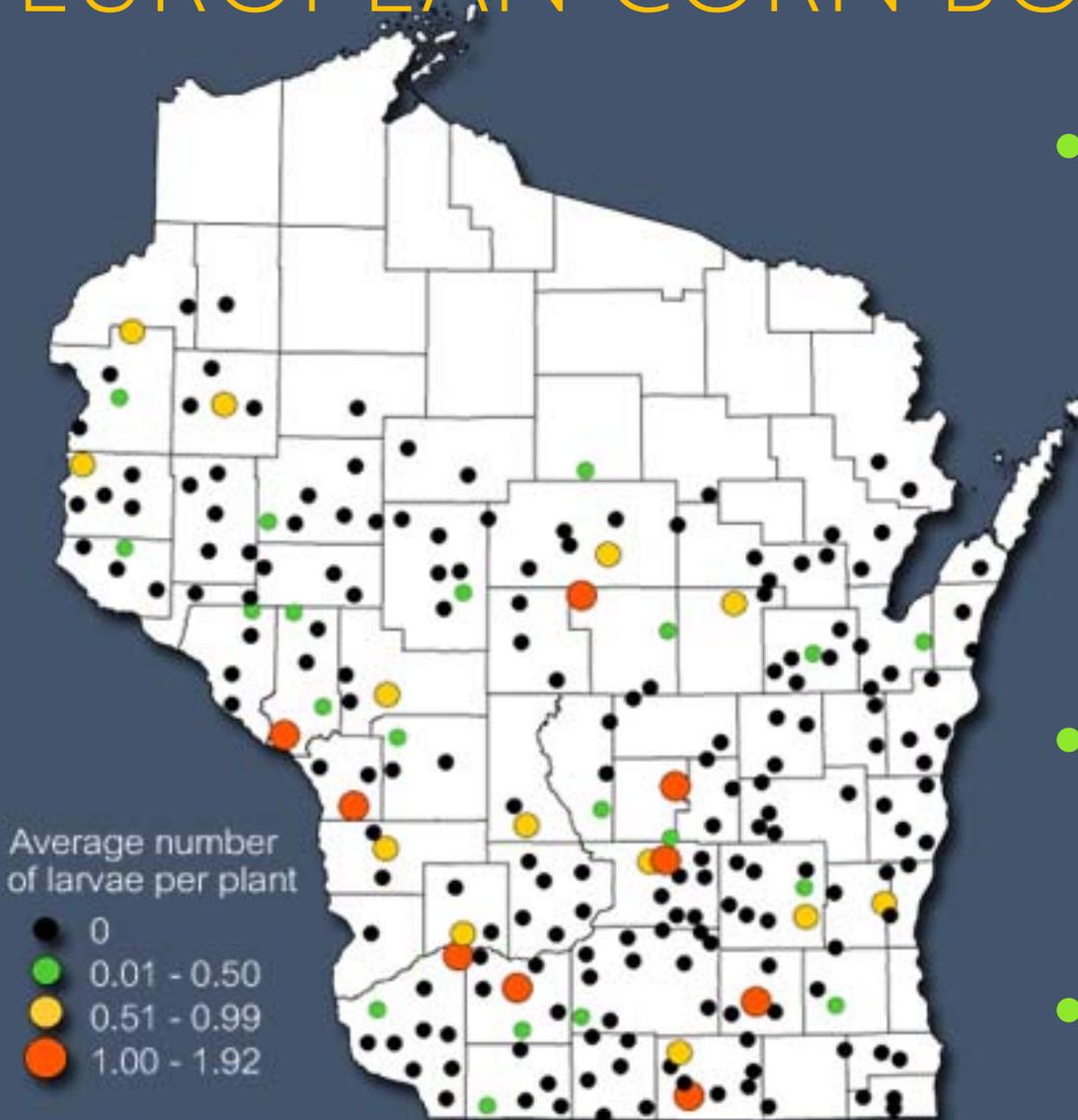


- European corn borer
- Corn rootworm beetle
- Western bean cutworm
- Soybean aphid
- Brown marmorated stink bug

# EUROPEAN CORN BORER



# EUROPEAN CORN BORER SURVEY



- State average number of corn borers per plant:

<b>2016</b>	0.11
<b>2015</b>	0.02
<b>10-year</b>	0.09
<b>50-year</b>	0.43
<b>Threshold</b>	1.00
- ECB population increased to highest level since 2007, but was still low overall
- 79% of surveyed fields had no signs of ECB larvae

# EUROPEAN CORN BORER SURVEY



- State average = 0.11 corn borers per plant
- Averages increased in 7 of the 9 crop districts (except EC and NE areas)
- Largest increase found in the CENTRAL area

# ECB OUTLOOK FOR 2017

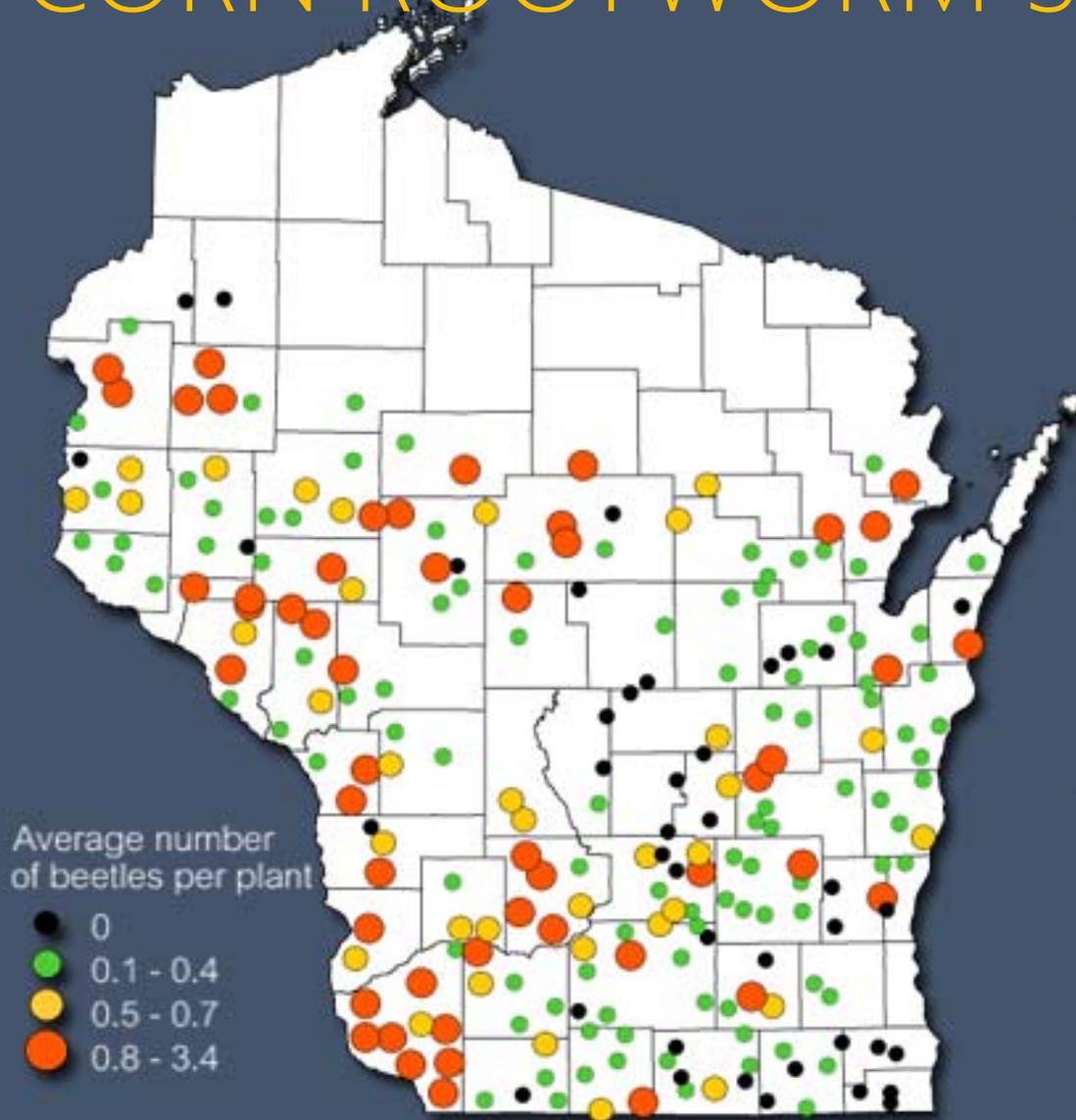


- Increase in conventional corn favored ECB larvae in 2016
- ECB populations in Wisconsin and Midwest still very low
- Generally low ECB pressure expected, with localized hot spots. Non-GM corn must be scouted

# CORN ROOTWORM BEETLE



# CORN ROOTWORM SURVEY 2016



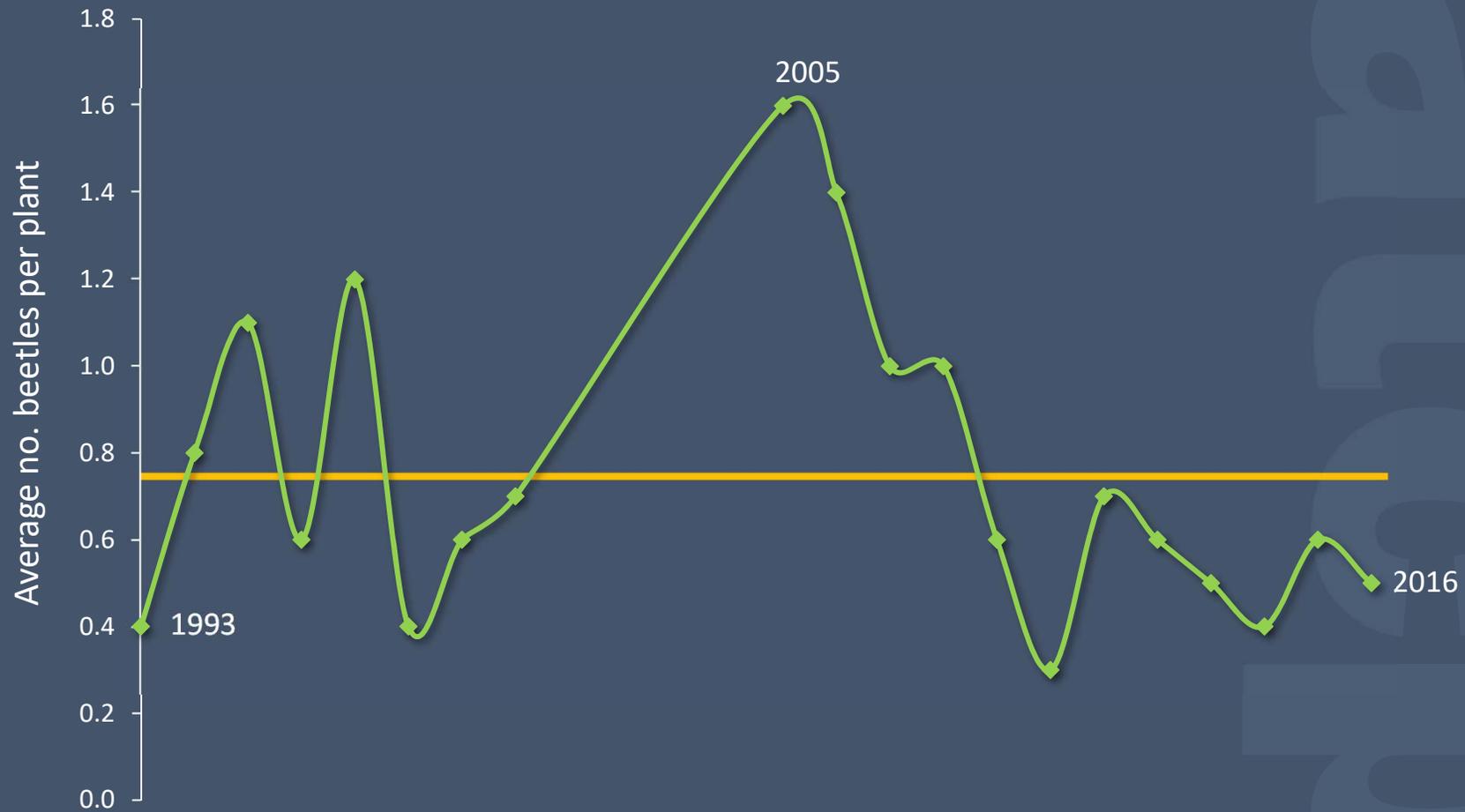
- State average number of beetles per plant:
  - 2016:** 0.5 per plant
  - 2015:** 0.6 per plant
  - 10-year:** 0.6 per plant
  - Threshold:** 0.75 per plant
- Economic counts  $>0.75$  beetle per plant found at 22% of 229 sites compared to 25% in 2015

# CORN ROOTWORM SURVEY 2016



- Although the state beetle count declined, averages increased sharply across three northern districts and in WC region
- Averages decreased from 2015 in southern, central and EC districts
- 2016 survey results opposite of typical CRW population trend

# CORN ROOTWORM AVERAGES 20-YEAR TREND 1993-2016



# CORN ROOTWORM OUTLOOK 2017

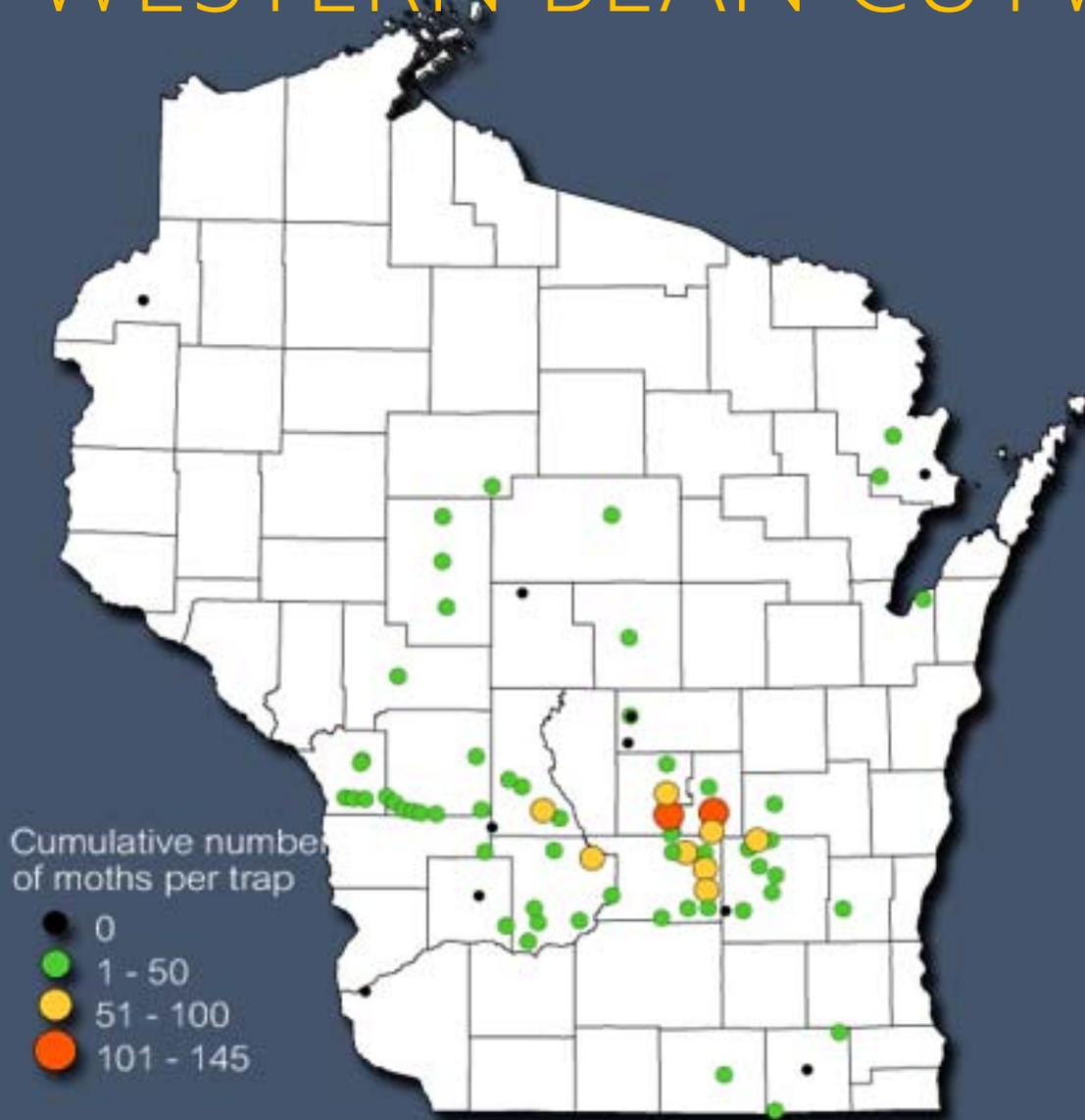


- Statewide beetle counts low or moderate for the last eight years
- Beetle pressure may be lower across southern and central WI in 2017; higher in northern and WC areas
- Rotate crops, rotate traits, and scout corn fields!

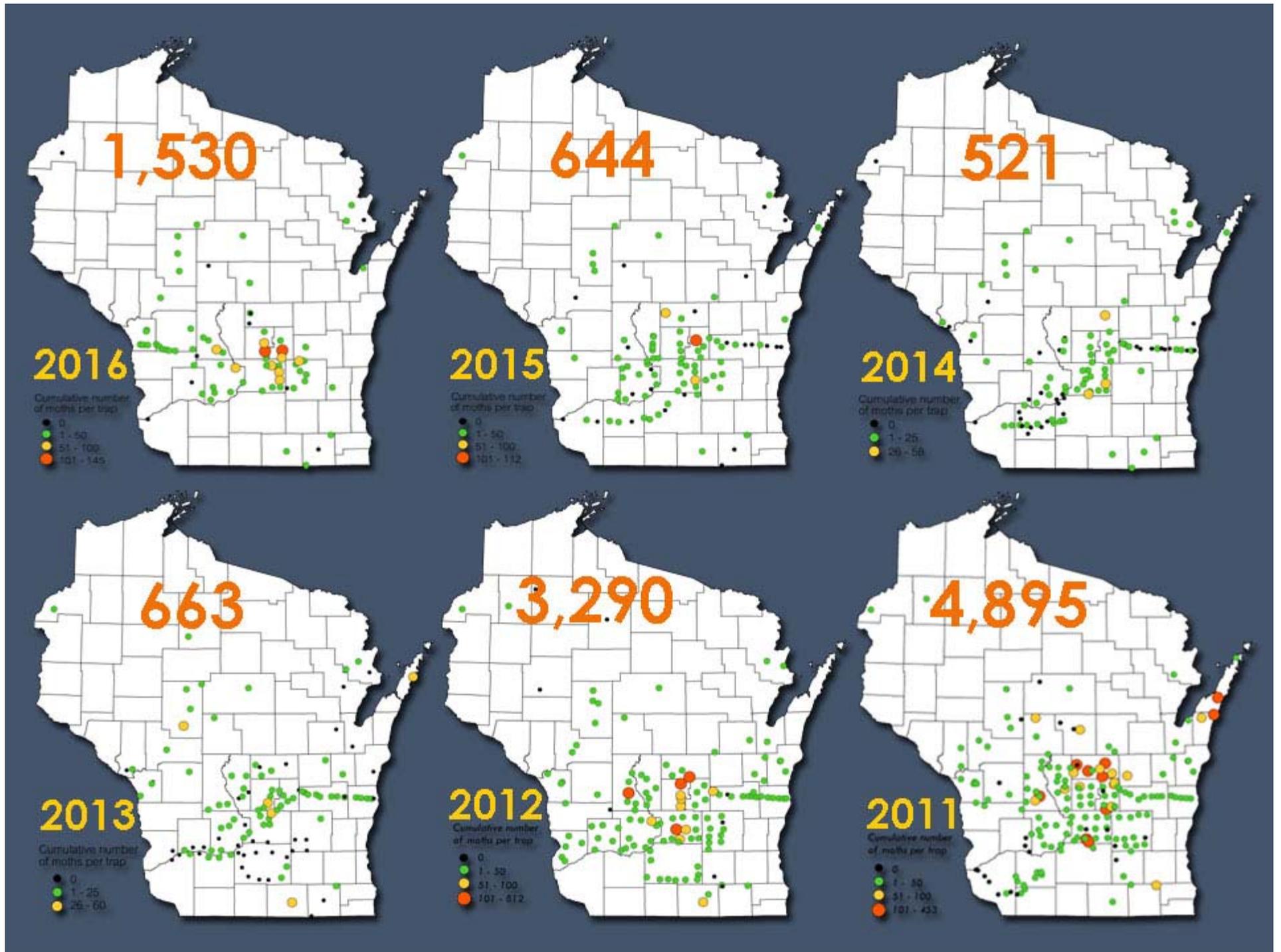
# WESTERN BEAN CUTWORM



# WESTERN BEAN CUTWORM SURVEY



- 75 traps set June-August
- Annual Total Moth Count:
  - 2016:** 1,530 or 20 per trap
  - 2015:** 644 or 7 per trap
  - 2010:** 10,807 or 79 per trap
  - 12-year:** 23 moths per trap
- Moth counts increased moderately after a 3-year low



# WBCW OUTLOOK FOR 2017

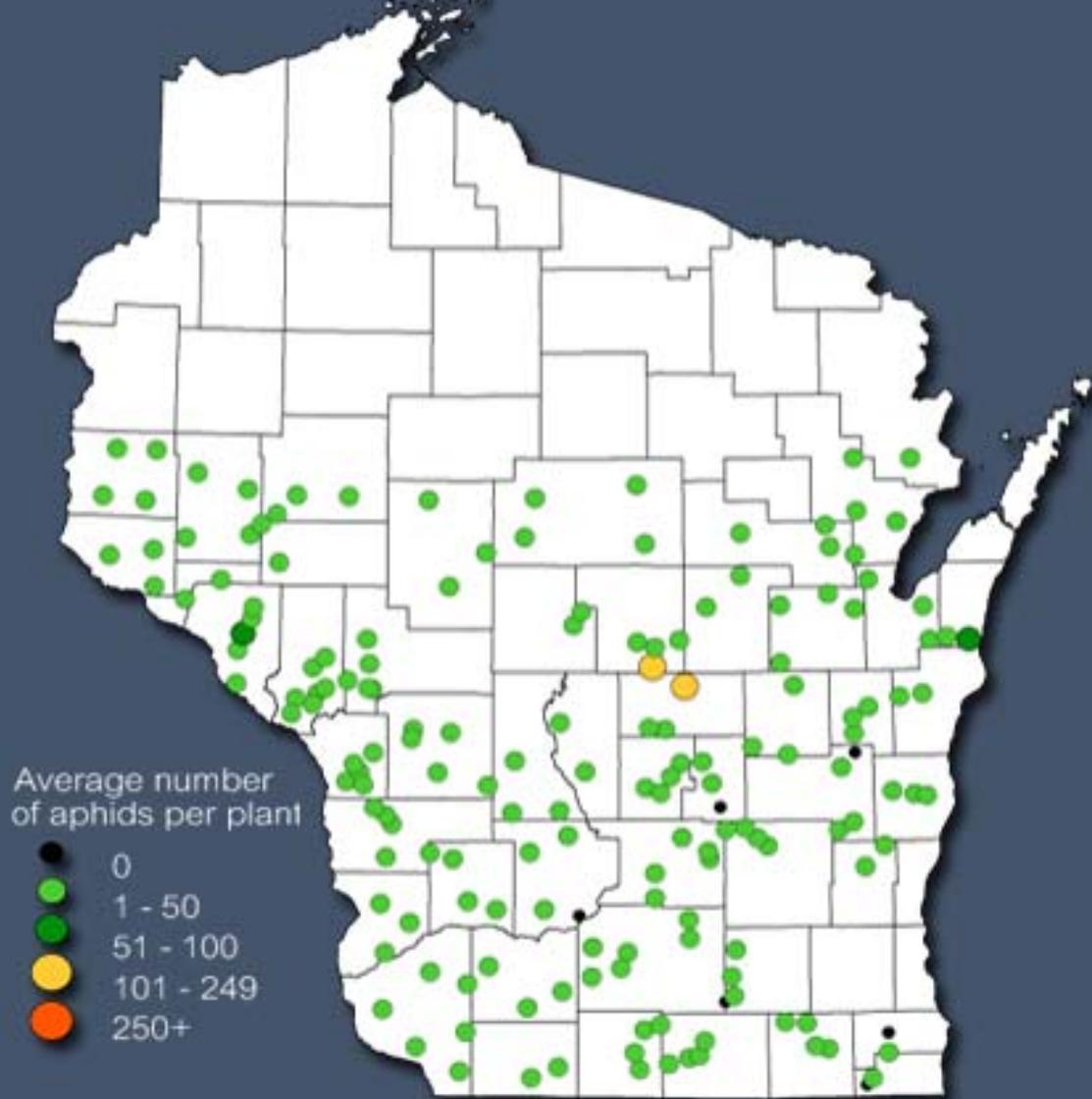


- WBCW is a regional (not statewide) threat, mainly in Central WI
- Choose traits accordingly (Cry1F performs inconsistently under heavy wbcw pressure)
- Begin scouting for egg masses and small larvae at 1,320 gdd

# SOYBEAN APHID



# SOYBEAN APHID SURVEY 2016



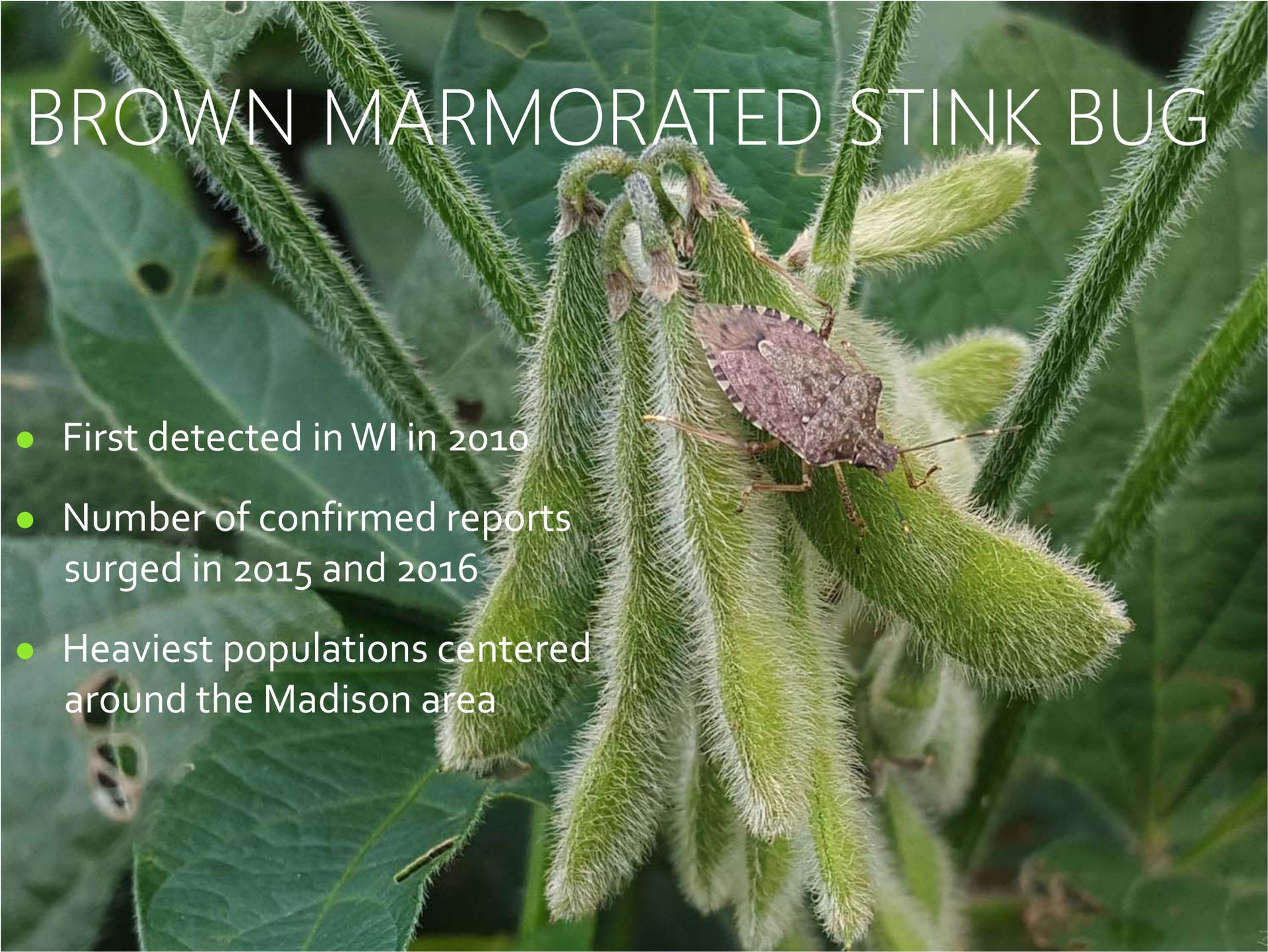
- 170 soybean fields sampled July 25-Aug 15
- State average count of 8 aphids per plant was extremely low
- 90% of sites had fewer than 25 aphids per plant
- Highest average was 151 aphids per plant

# SOYBEAN APHID OUTLOOK 2017



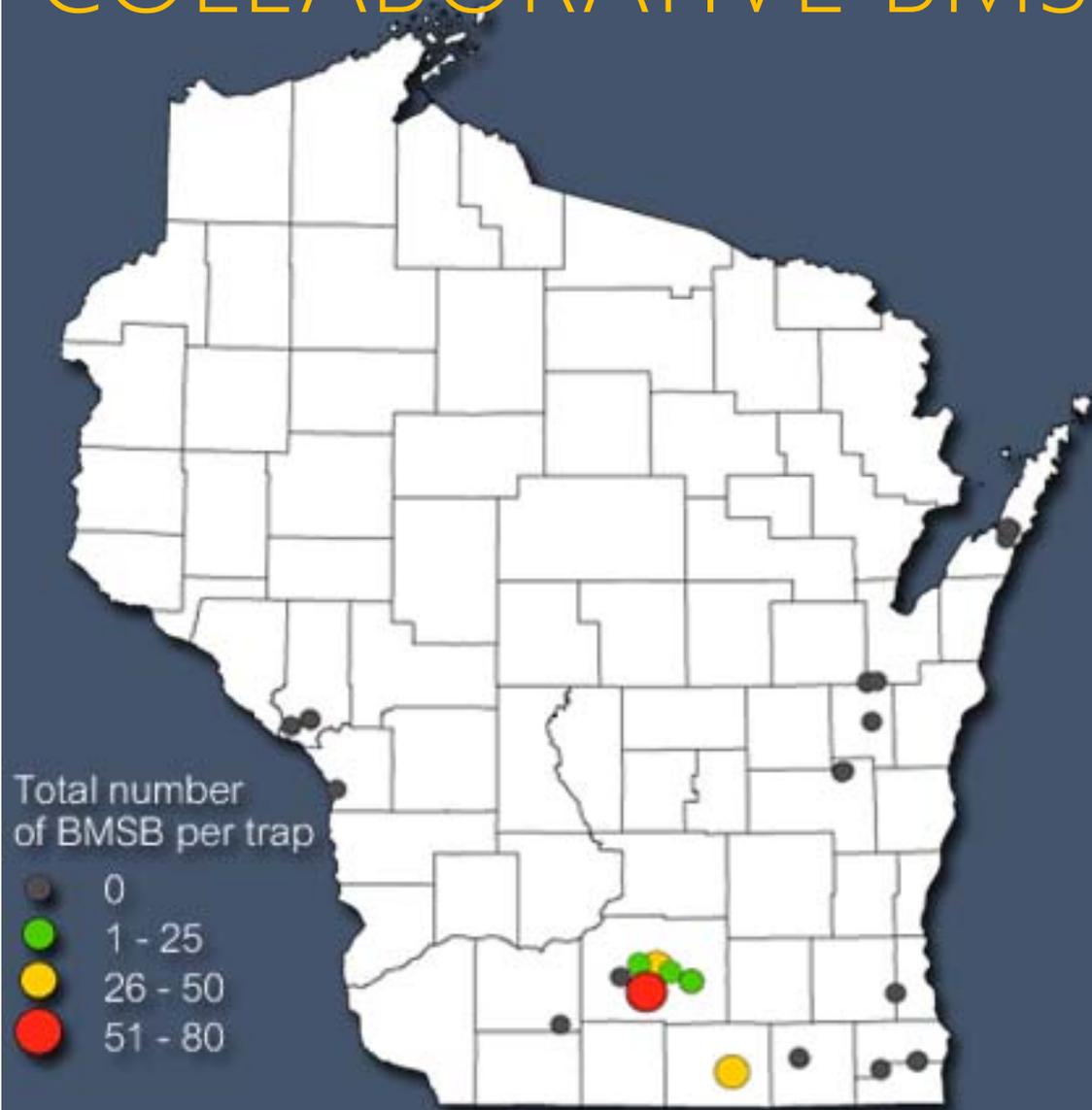
- Soybean aphids now only a sporadic problem in some fields each season
- Widespread chemical control of aphids not required most years
- Continue to use 250 aphid per plant action and DO NOT spray early or preventively

# BROWN MARMORATED STINK BUG

A close-up photograph of a brown marmorated stink bug (Hemiptera: Coreidae) perched on a green, hairy plant stem. The bug has a brown, mottled pattern on its back and is facing right. The plant has several green, fuzzy, elongated structures, possibly developing flowers or seed pods. The background is a blurred green leaf with some small holes.

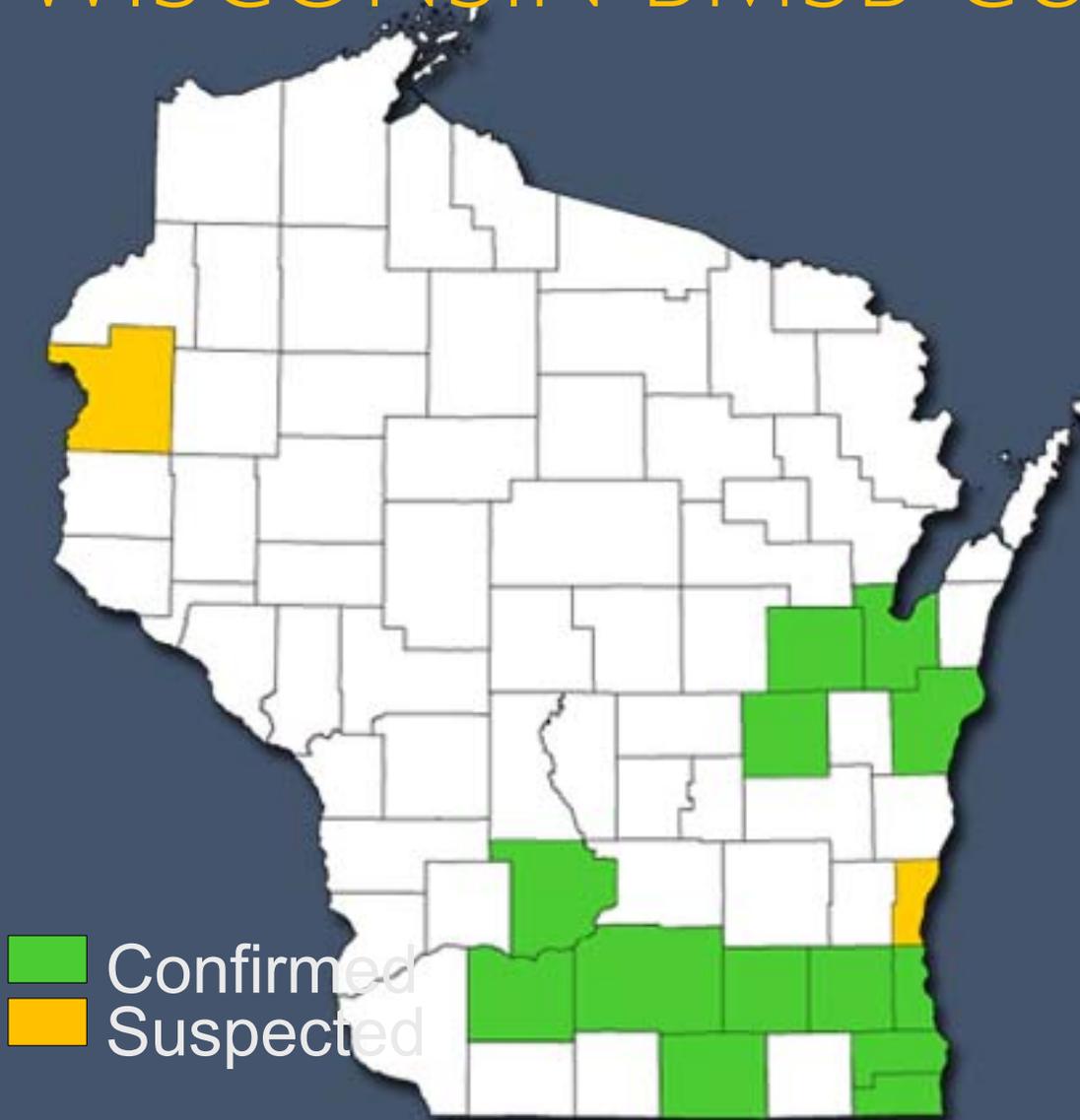
- First detected in WI in 2010
- Number of confirmed reports surged in 2015 and 2016
- Heaviest populations centered around the Madison area

# COLLABORATIVE BMSB SURVEY 2016



- DATCP, UW Entomology IPM Institute and apple growers
- 51 pyramid traps set in 12 cos. (3 per orchard)
- 185 BMSB captured in 7 separate traps
- First report of BMSB on apples and pumpkins

# WISCONSIN BMSB CURRENT STATUS



- BMSB confirmed in 13 counties since 2010
- Established in Dane and Rock Cos.
- No reports of stink bugs in field crops to date
- First crop damage 3-5 years after detection
- Send suspects to UW for confirmation





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