

datcp

# PEST SURVEY

program

**2014 INSECT SURVEYS AND  
OUTLOOK FOR 2015**

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# DATCP PEST SURVEY PROGRAM

- The Pest Survey was established in 1915 to:
  - Collect data on economic pests of WI crops
  - Detect exotic pests of regulatory significance
  - Support export certification
- Surveys are conducted in the major agronomic crops and specialty crops
- DATCP specialists sample thousands of fields annually and receive pest data from over 60 trained cooperators





# INSECT SURVEYS 2014

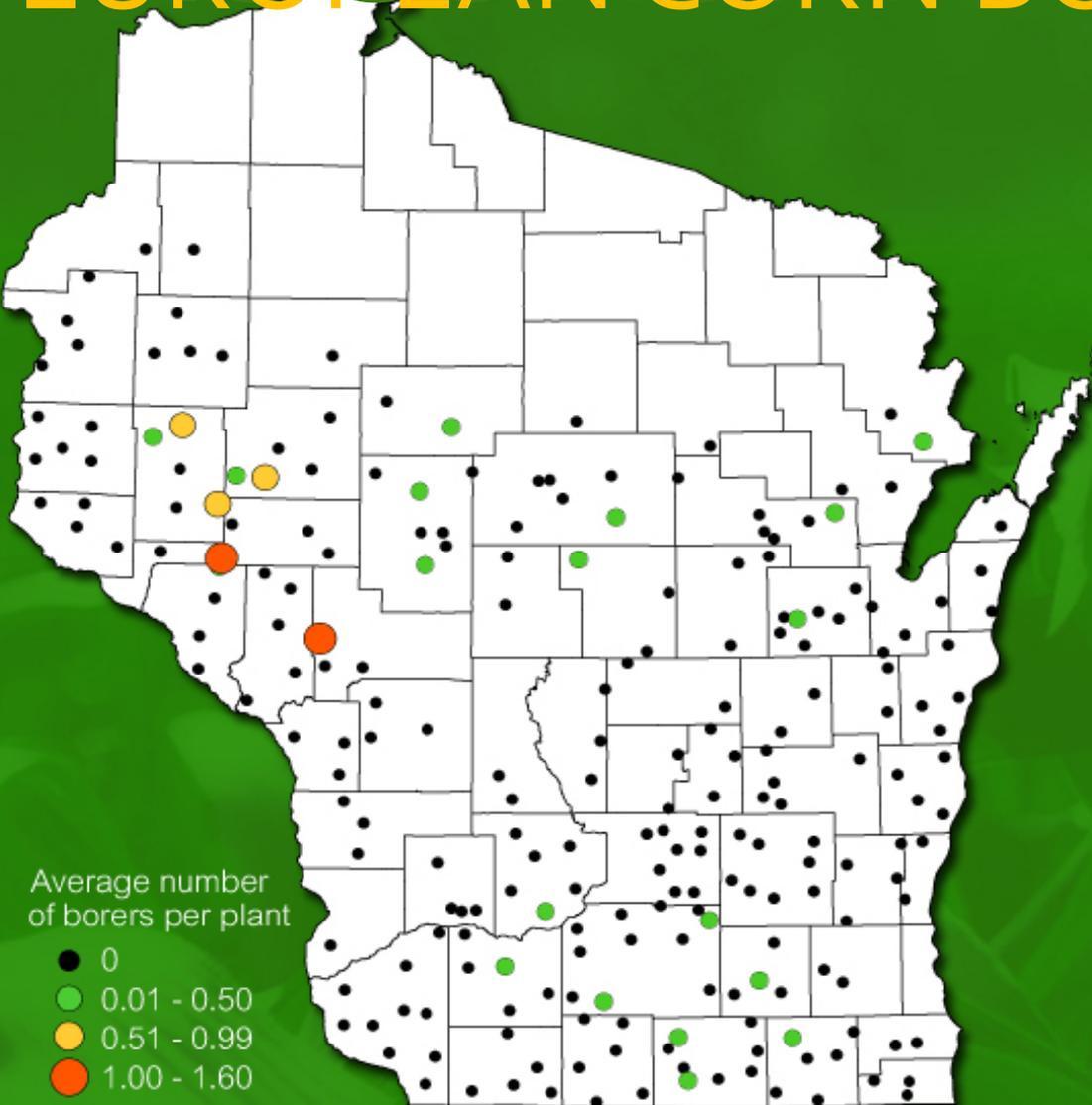


- European corn borer
- Corn rootworm beetle
- Western bean cutworm
- Black cutworm
- Soybean aphid

# EUROPEAN CORN BORER



# EUROPEAN CORN BORER SURVEY



Average number of borers per plant

- 0
- 0.01 - 0.50
- 0.51 - 0.99
- 1.00 - 1.60

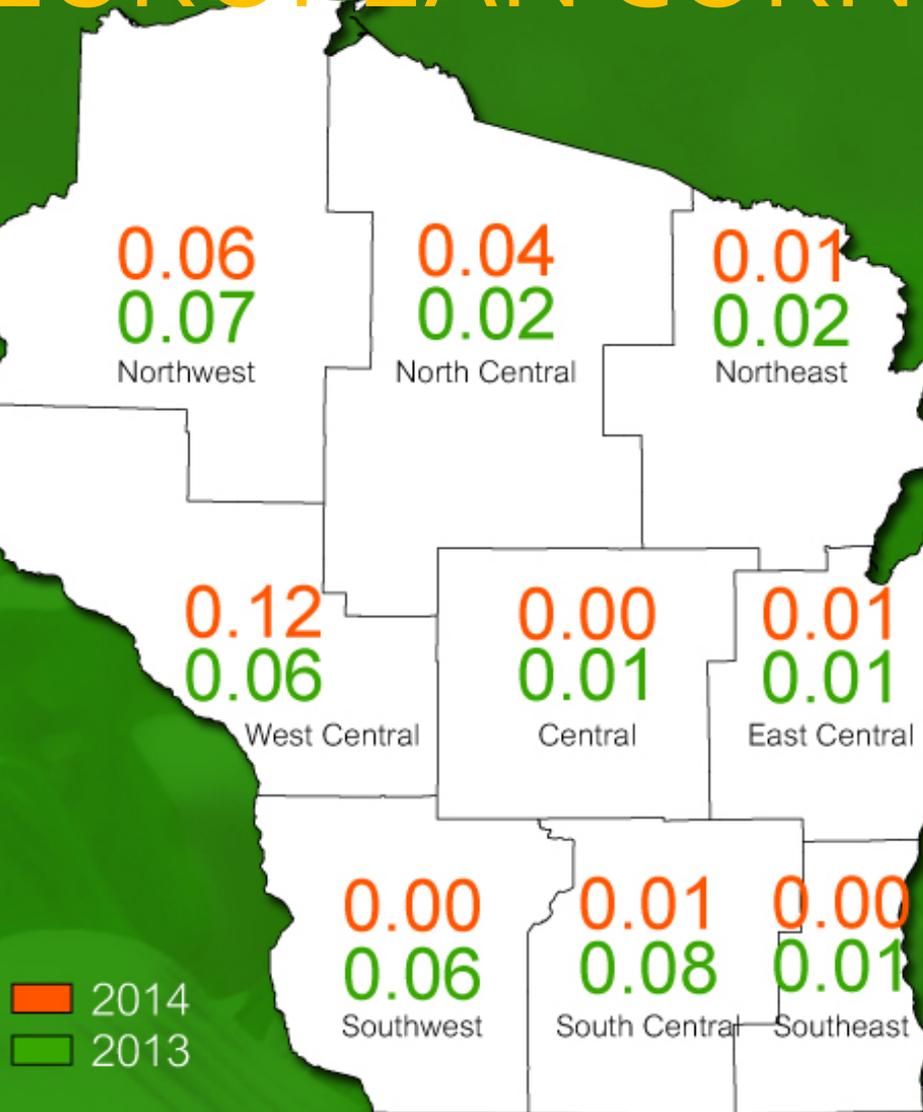
- ECB population tied 2012 as the lowest average in the last 73 years

- Ave. Borers per Plant:

2014	0.03
2013	0.04
10-year	0.13
50-year	0.40
Threshold	1.00

- 84% of surveyed fields had no signs of ECB larvae

# EUROPEAN CORN BORER SURVEY



- Six of the nine crop districts had averages of 0.01 borer per plant or lower!
- Minor population increases in the WC and NC crop districts
- Some of the lowest averages documented in the last 73 years!

# CORN BORER OUTLOOK FOR 2015

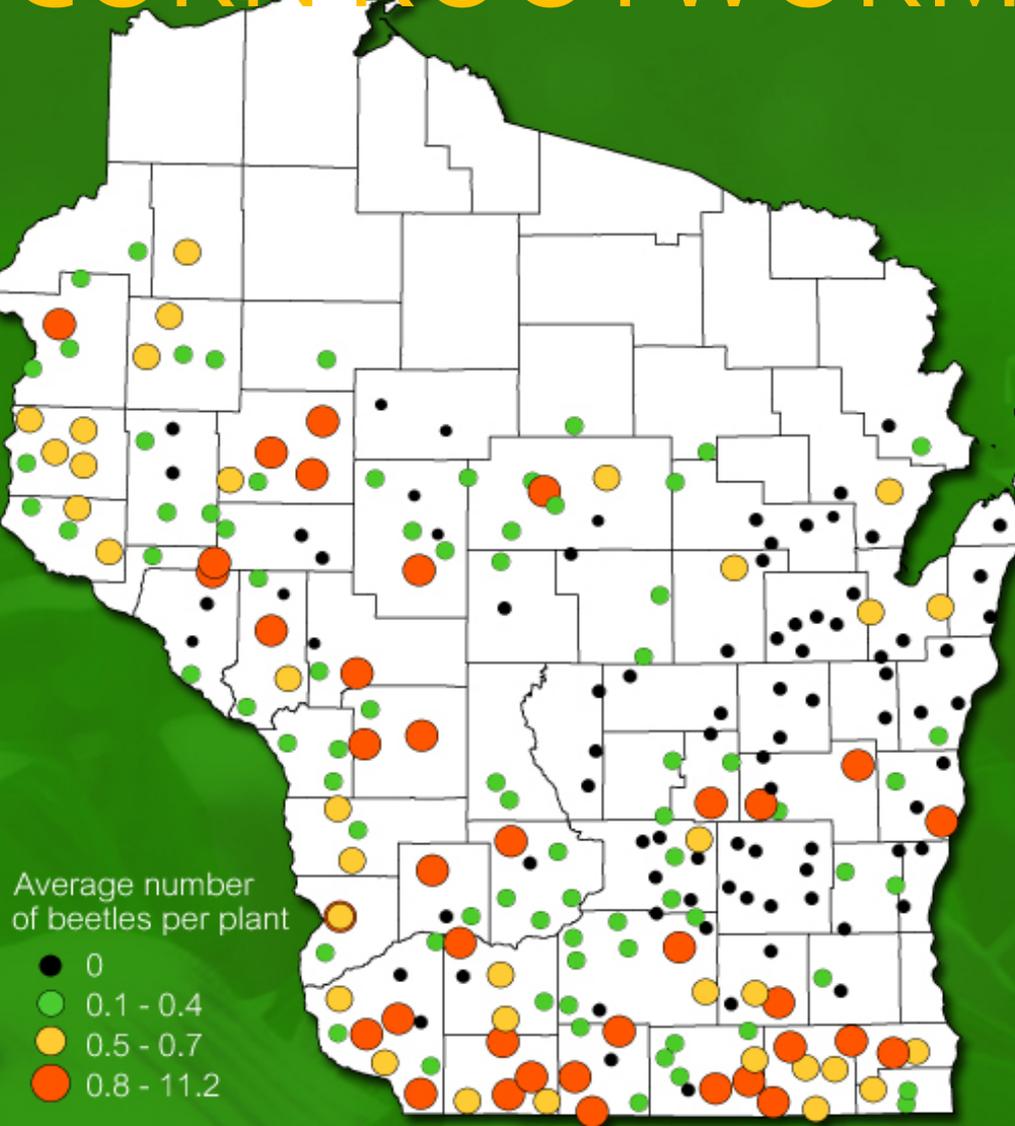


- Populations in WI and Midwest remain historically low
- Spring flight of moths next May-early June should again be very small

# CORN ROOTWORM BEETLE



# CORN ROOTWORM SURVEY



- 2014 state average is the lowest since 2010 and 2<sup>nd</sup> lowest in survey's history

2014: 0.4 beetle per plant

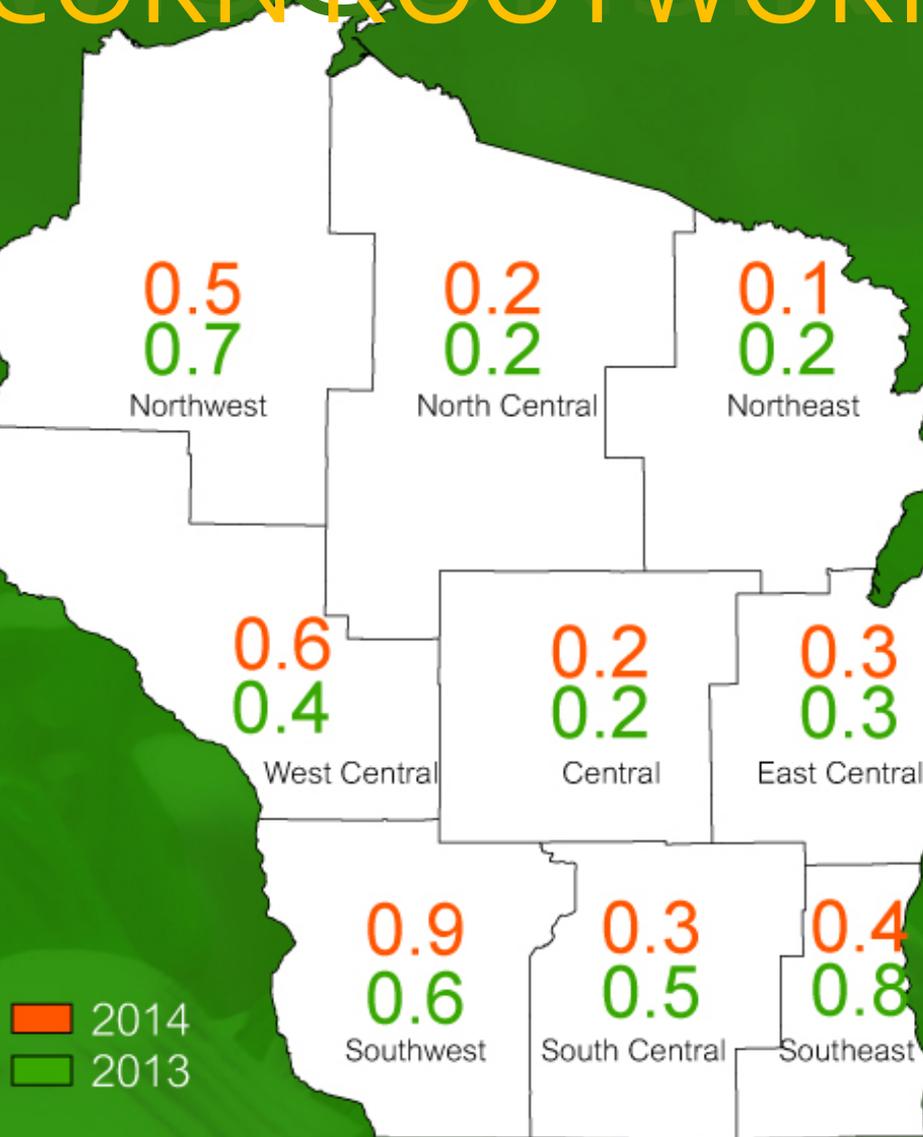
2013: 0.5 beetle per plant

10-year: 0.7 per plant

Threshold: 0.75 per plant

- Economic counts >0.75 beetle per plant found at 16% of 229 sites compared to 17% in 2013

# CORN ROOTWORM SURVEY



- Populations decreased in east and increased in parts of western WI
- Non-economic averages found in all crop districts except SW

# CORN ROOTWORM OUTLOOK 2015

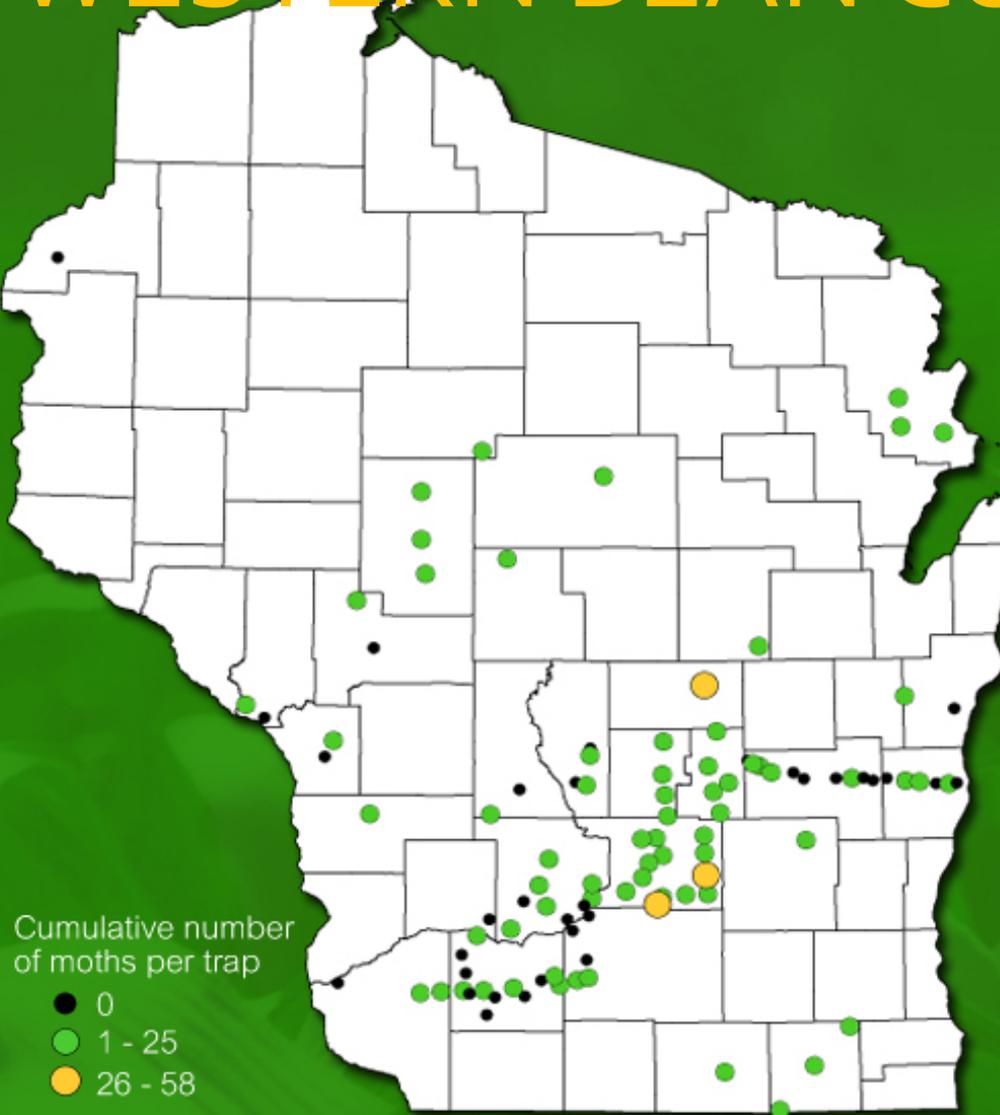


- Lower beetle counts in 2014 may indicate lower root damage potential for 2015
- Continuous corn in parts of southern and western WI at risk of crw injury next season
- Recommendations:
  - Rotate out of corn
  - Use a new Bt trait
  - Scout your fields!

# WESTERN BEAN CUTWORM



# WESTERN BEAN CUTWORM



- Moth counts declined to 10-year low in 2014  
2014: 521 moths (5 per trap)  
2013: 663 moths (6 per trap)  
2010: 10,807 (79 per trap)
- Highest individual trap count was only 58 moths in Waushara County

521

2014

Cumulative number of moths per trap  
● 0  
● 1 - 25  
● 26 - 58

663

2013

Cumulative number of moths per trap  
● 0  
● 1 - 25  
● 26 - 60

3,290

2012

Cumulative number of moths per trap  
● 0  
● 1 - 50  
● 51 - 100  
● 101 - 812

4,895

2011

Cumulative number of moths per trap  
● 0  
● 1 - 50  
● 51 - 100  
● 101 - 453

10,807

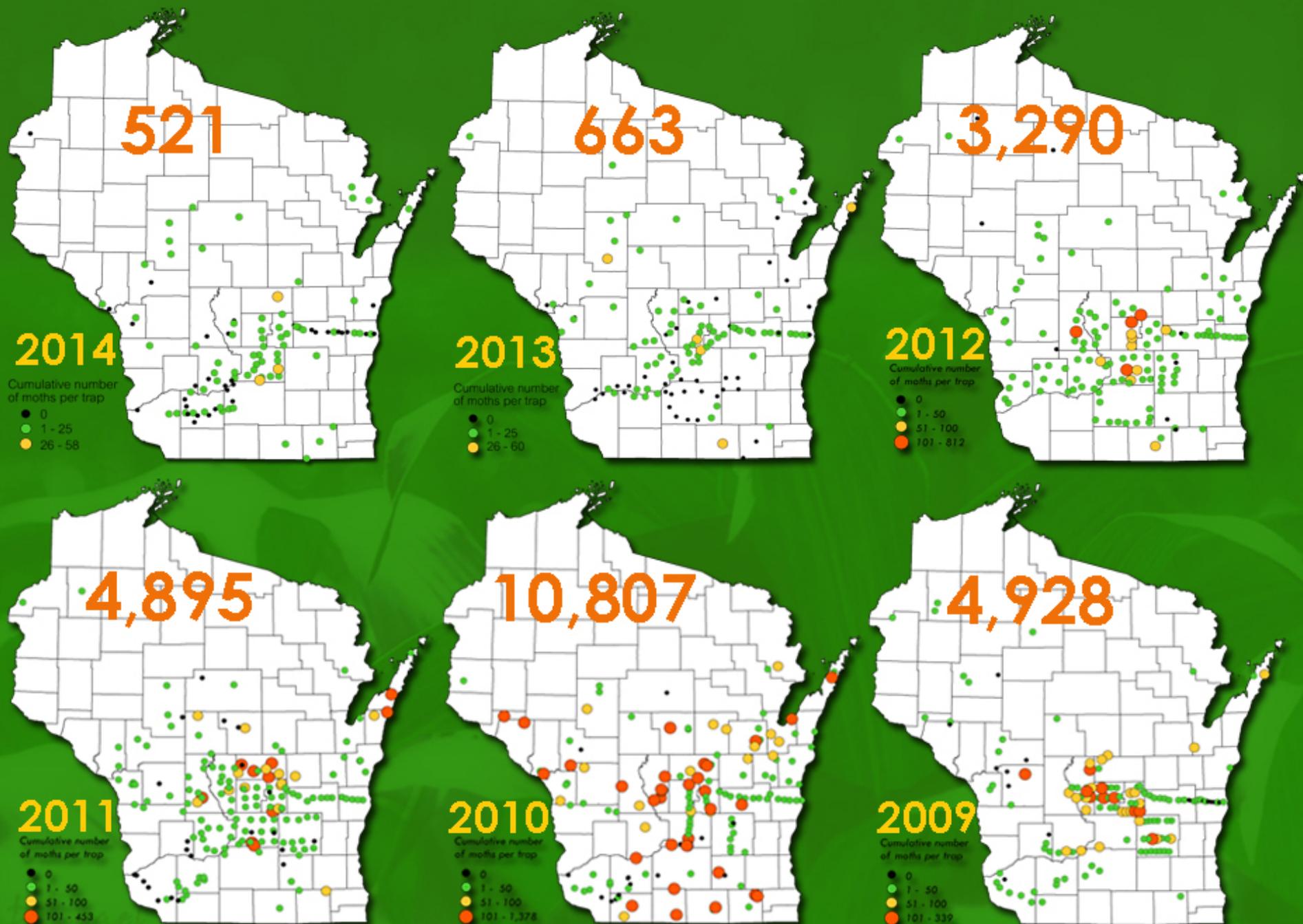
2010

Cumulative number of moths per trap  
● 0  
● 1 - 50  
● 51 - 100  
● 101 - 1,378

4,928

2009

Cumulative number of moths per trap  
● 0  
● 1 - 50  
● 51 - 100  
● 101 - 332



# WBCW OUTLOOK FOR 2015

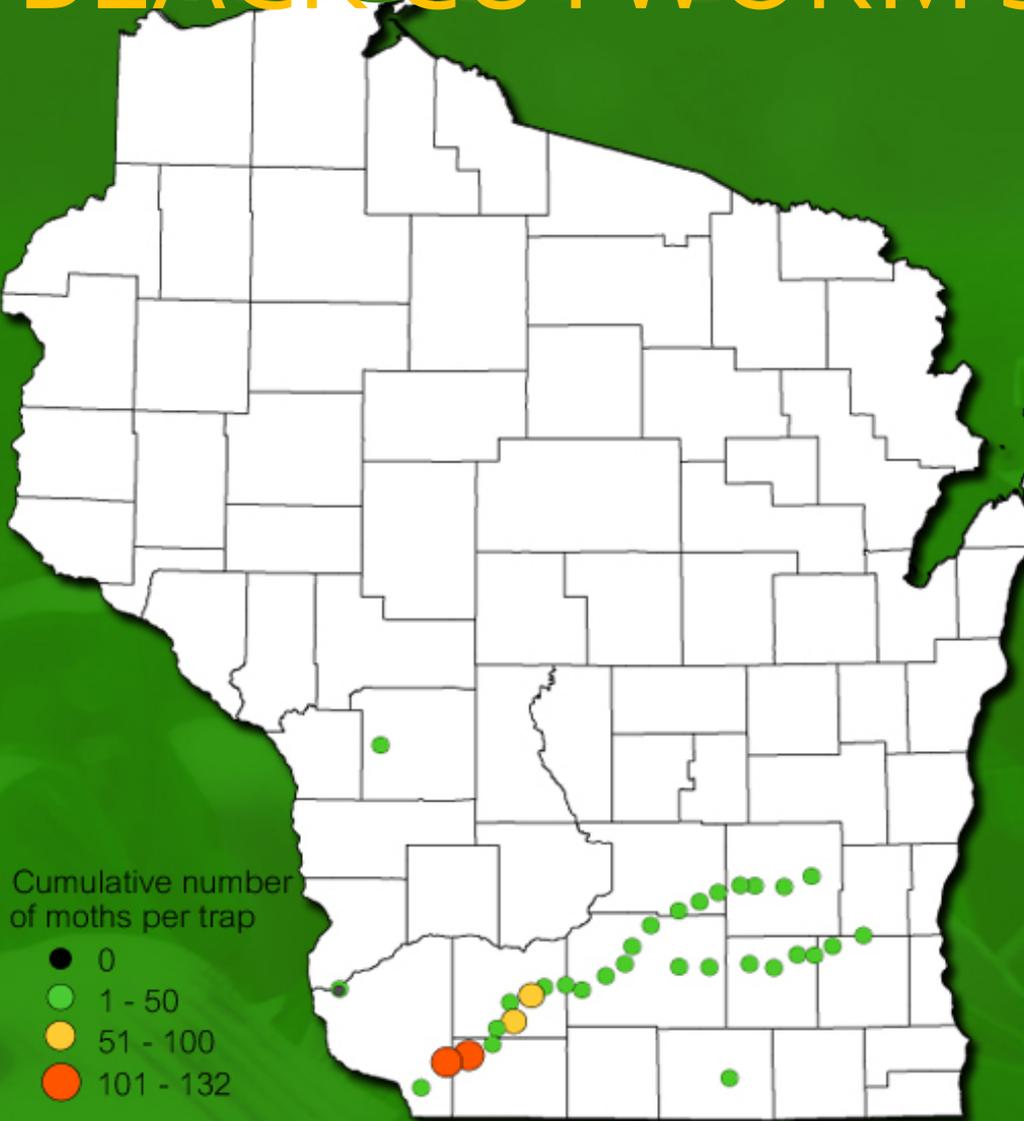


- Scouting for egg masses and small larvae at 1,320 gdd is recommended
- Know your Bt hybrid. Cry1F trait performs inconsistently under heavy wbcw pressure

# BLACK CUTWORM



# BLACK CUTWORM SURVEY



- 34 pheromone traps monitored from March 31- June 1
- 1,068 moths captured in 2014 (average 31 per trap)
- 2014 flight was MODERATE in comparison to previous flights (19 per trap in 2013 and 84 per trap in 2012)
- Economic bcw damage not observed in 2014

# BLACK CUTWORM OUTLOOK 2015

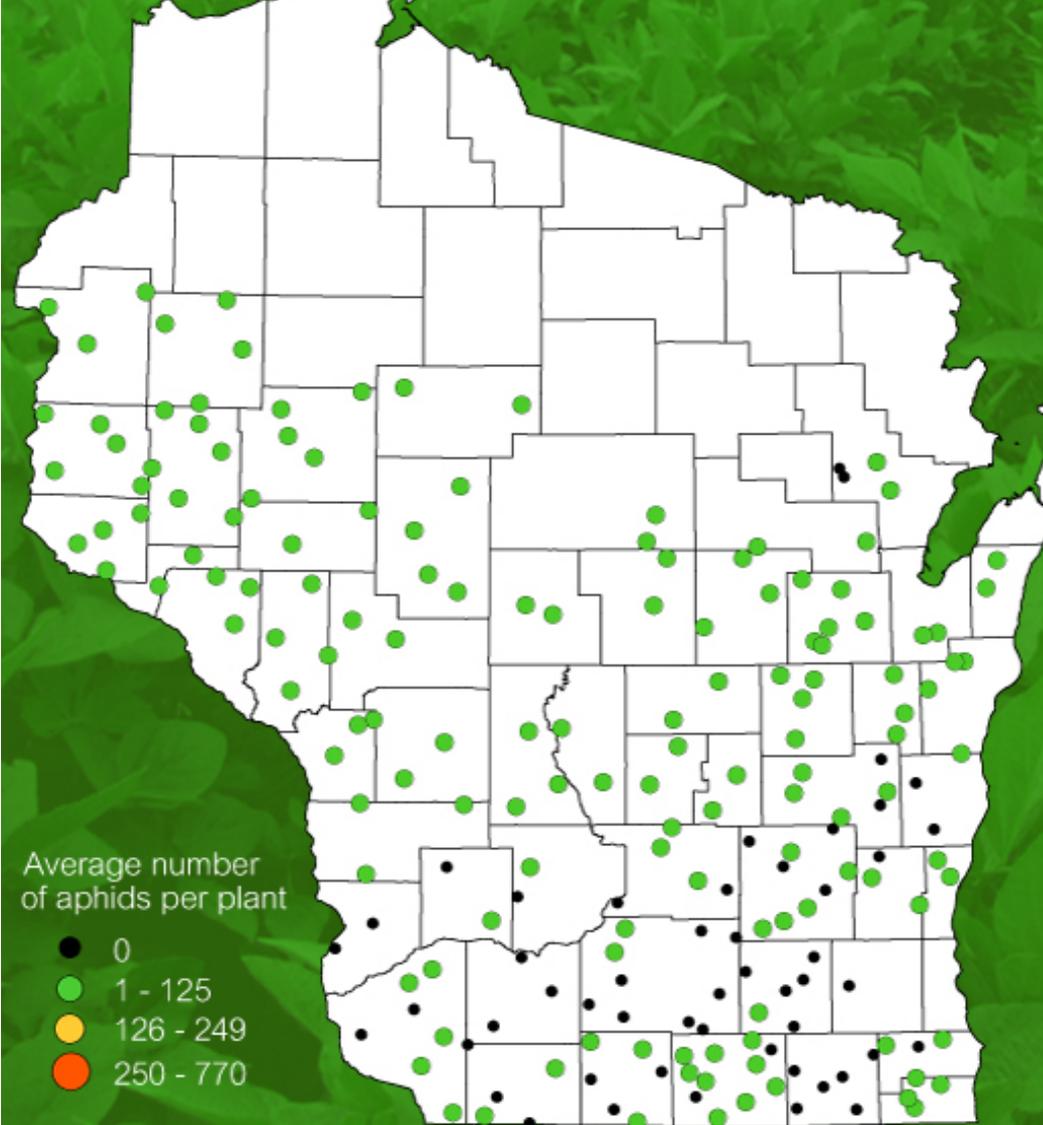


- Risk of outbreaks influenced by size and timing of spring moth migration
- Reduced and no-till systems with winter annual weed cover, during peak BCW egg laying, at highest risk of infestation
- Follow WPB migration reports and scout fields from VE-V5

# SOYBEAN APHID

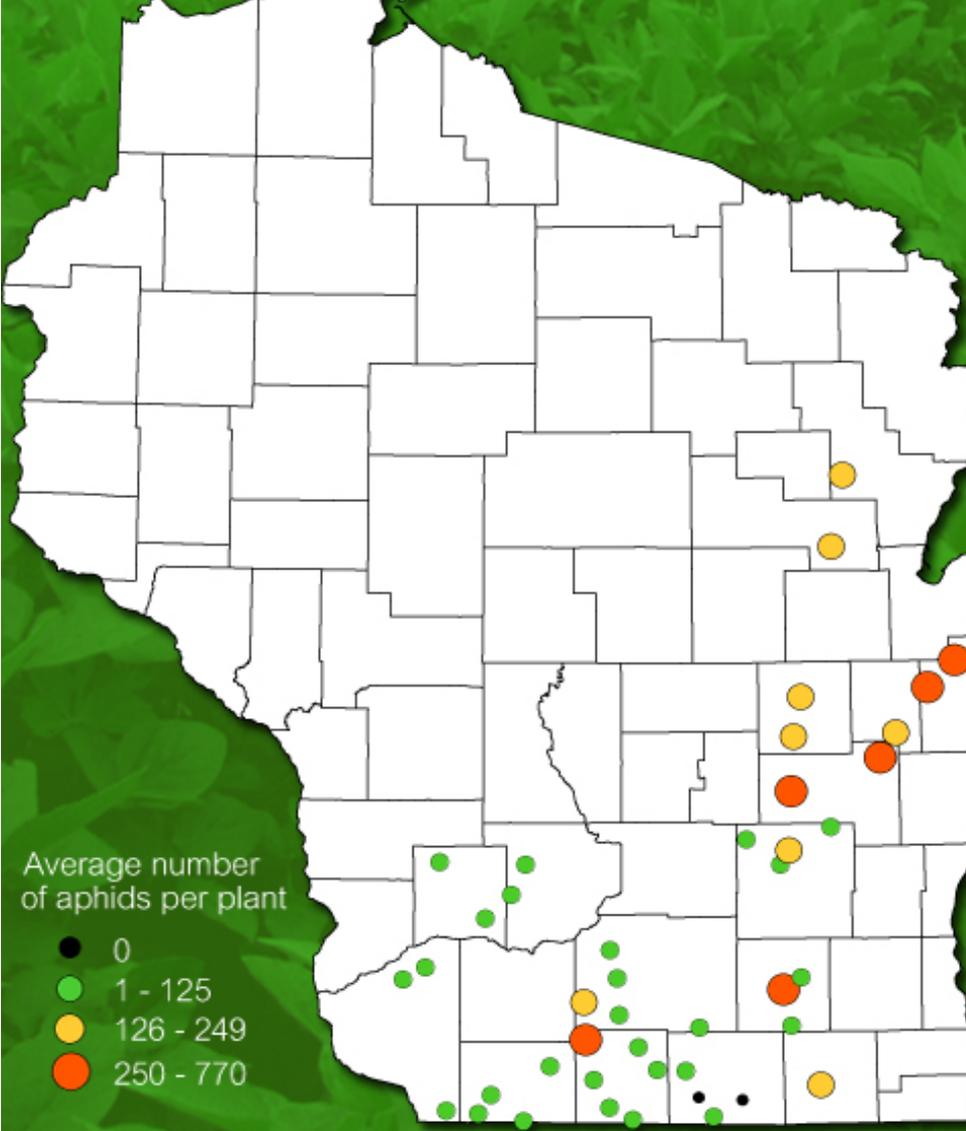


# SOYBEAN APHID SURVEY - JULY



- 196 soybean fields sampled from July 14-August 11
- Densities remained very low in July at less than 5 aphids per plant
- 97% of sites had fewer than 25 aphids per plant
- Highest average was 93 aphids per plant

# SOYBEAN APHID SURVEY - AUGUST



- 43 soybean fields resampled from August 18-28
- Average density in August increased to 118 per plant
- 14% of sites had averages  $\geq 250$  aphids per plant
- Highest average was 770 aphids per plant

# SOYBEAN APHID OUTLOOK 2015



- Early indications are for higher densities in 2015, if aphids follow typical two-year cycle
- Fall 2014 suction trap counts suggest a larger aphid migration to buckthorn than in 2013



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