



DATCP 2013 INSECT SURVEYS & OUTLOOK FOR 2014

Danysael

KRISTA HAMILTON, DATCP

DATCP PEST SURVEY PROGRAM

- The Wisconsin Pest Survey Program was established in 1915 to:
 - Collect data on economic pests affecting WI crops
 - Detect exotic pests of regulatory significance
 - Support export certification
- All surveyed fields are selected objectively and pest levels are measured using standard sampling methods
- Results are published in the Wisconsin Pest Bulletin

WISCONSIN PEST SURVEY

DATCP PEST SURVEY PROGRAM



Wisconsin PEST BULLETIN

your weekly source for first alerts, weather
and crop pest information for Wisconsin

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INSECT SURVEYS 2013



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

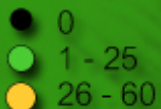
WESTERN BEAN CUTWORM



WISCONSIN PEST SURVEY

WESTERN BEAN CUTWORM

Cumulative number
of moths per trap



- Cumulative moth count was the lowest since 2005
- 2013: 663 moths or 6 per trap
2012: 3,290 or 25 per trap
2010: 10,807 or 79 per trap
- Traps monitored for 10 weeks, from mid-June to mid-Aug
- Highest individual trap count was 60 moths in Marquette Co.

663

2013

Cumulative number
of moths per trap



3,290

2012

Cumulative number
of moths per trap



4,895

2011

Cumulative number
of moths per trap



10,807

2010

Cumulative number
of moths per trap



4,928

2009

Cumulative number
of moths per trap



2,433

2008

Cumulative number
of moths per trap



WBCW OUTLOOK FOR 2014

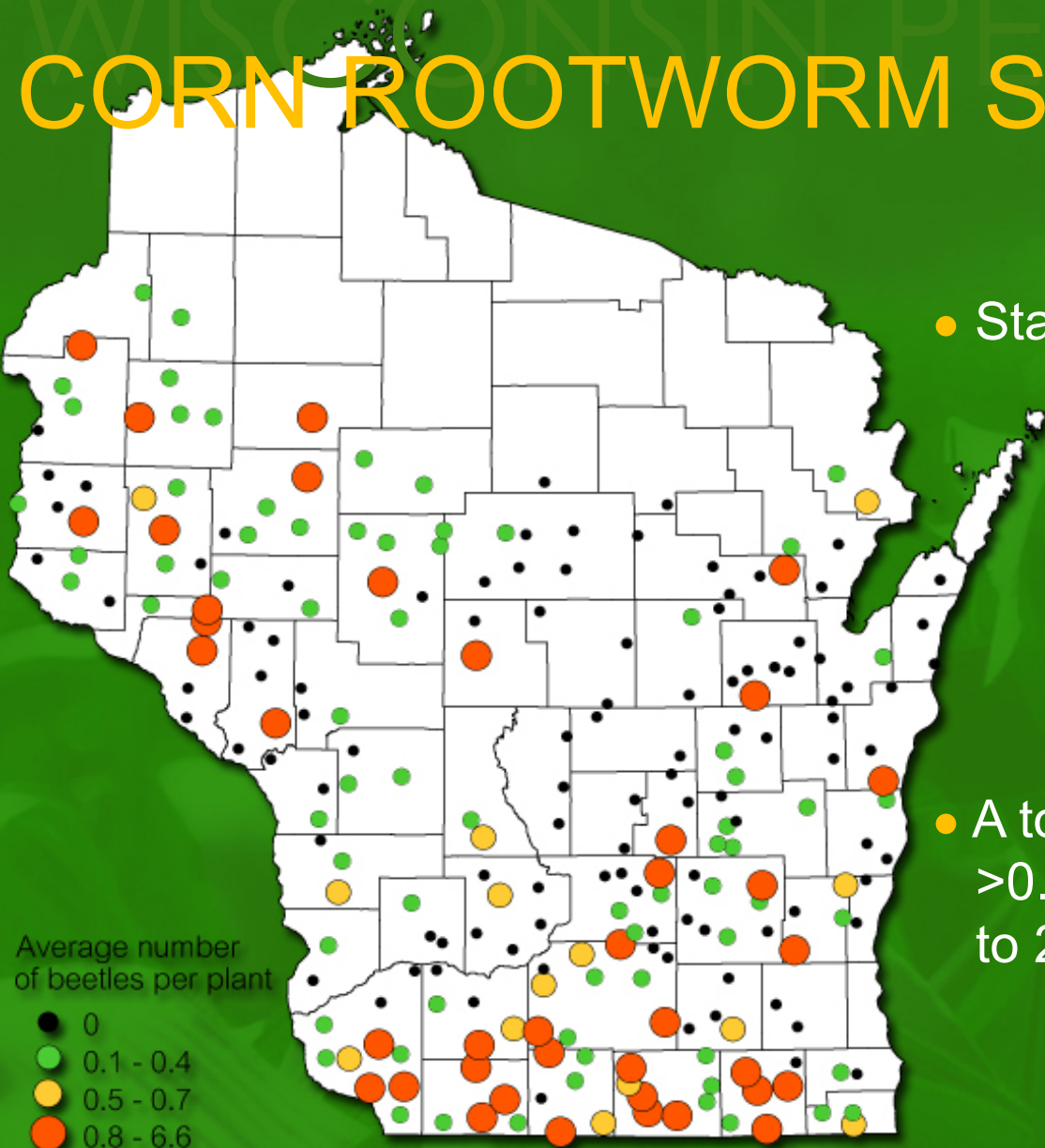


- Late summer drought of 2012 may have affected overwintering prepupae
- Natural enemies could be regulating larval populations
- Begin scouting at 1,320 gdd
- Know your Bt hybrid. Cry1F trait performs inconsistently under heavy wbcw pressure

CORN ROOTWORM BEETLE



CORN ROOTWORM SURVEY



Average number
of beetles per plant



- State Ave. No. Beetles per Plant:

2013 0.50

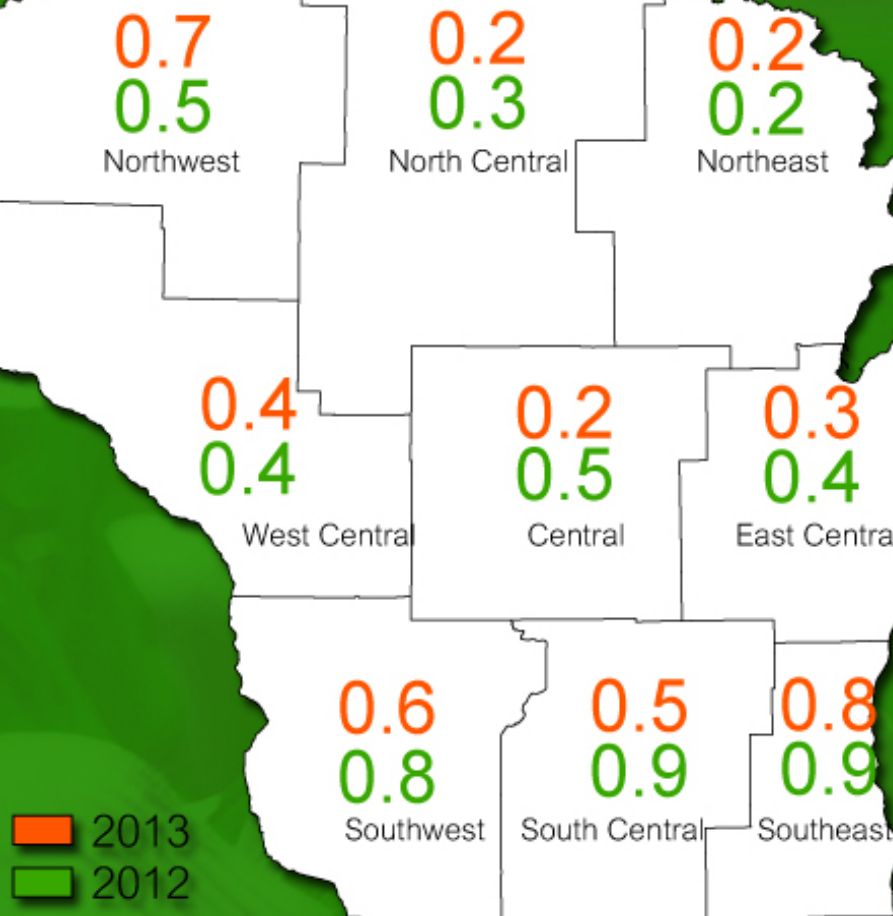
2012 0.60

10-year 0.80

Threshold 0.75

- A total of 17% of 229 sites had >0.75 beetle per plant compared to 25% in 2012

CORN ROOTWORM SURVEY



- Populations decreased or stayed the same in all districts, except the NORTHWEST
- Largest decreases recorded in SC and C areas
- Only increase occurred in NW where several fields had very high counts of 1.3-3.2 beetles per plant

CORN ROOTWORM OUTLOOK 2014

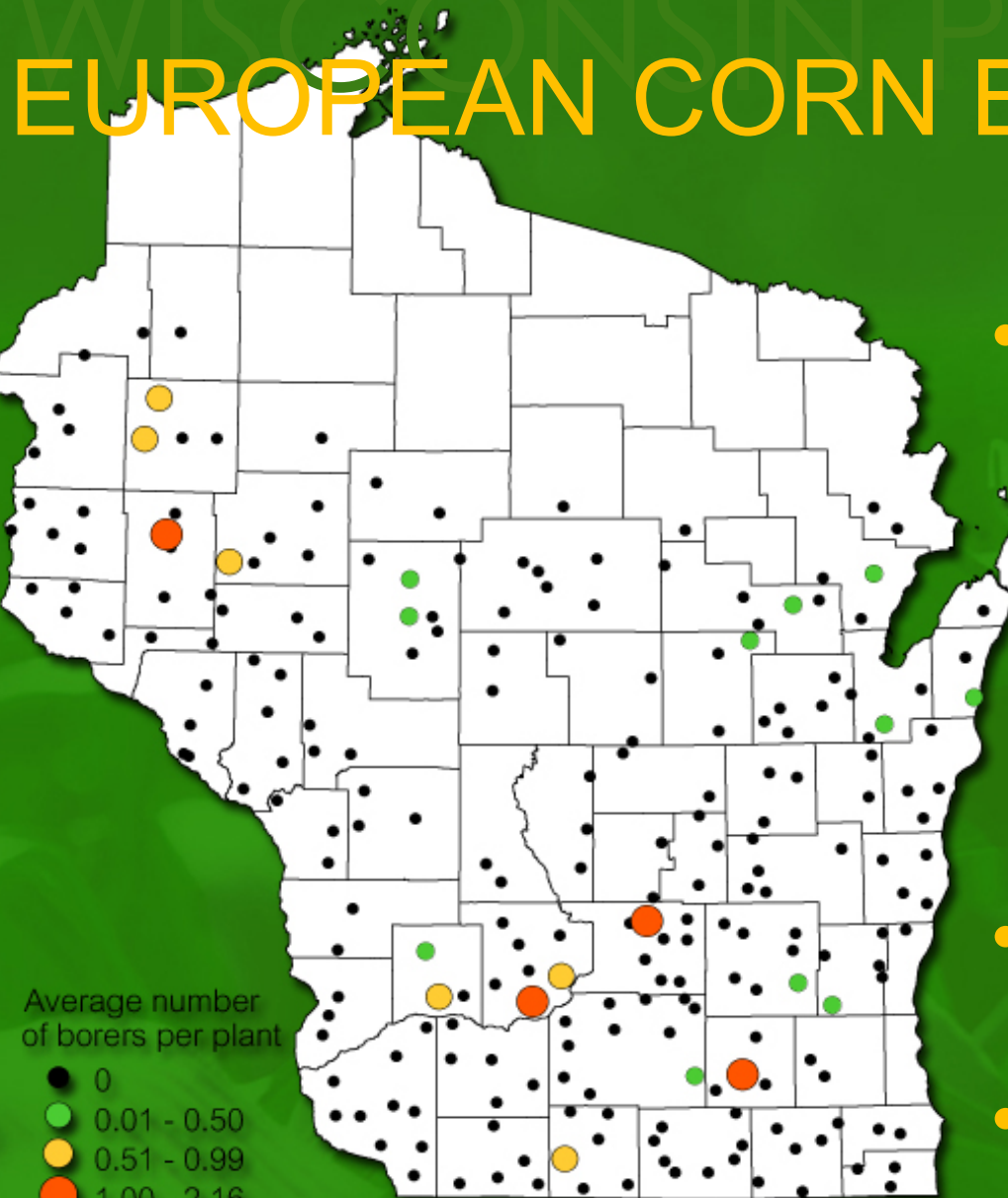


- Lower beetle counts in 2013 may indicate lower root damage potential for 2014
- Continuous corn in parts of southern and northwestern Wisconsin is still at risk of crw injury next season
- Approx 17% of survey sites at HIGH risk of root injury

EUROPEAN CORN BORER



EUROPEAN CORN BORER SURVEY



- State Ave. No. Borers per Plant:

2013 0.04

2012 0.03

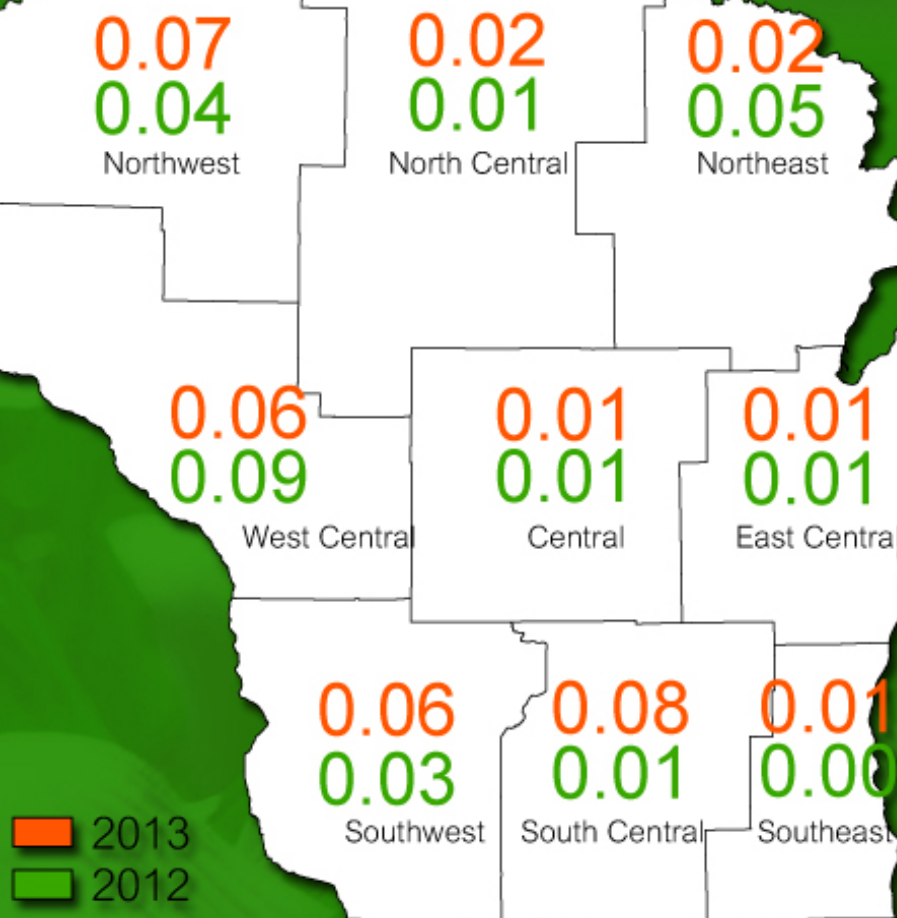
10-year 0.14

50-year 0.43

Threshold 1.00

- Only 2% of 229 fields had HIGH averages of > 1.0 borer per plant
- 82% of surveyed fields had no larvae or signs of infestation

EUROPEAN CORN BORER SURVEY



- Minor population increases in the SW, SC, SE, NW and NC crop districts
- Populations declined in the WC and NE areas

CORN BORER OUTLOOK FOR 2014



- Populations in WI and Midwest remain at historically low levels
- Spring flight of moths next May early June should be very small
- Given current low ECB levels, is it time to take a break from Bt?

BLACK CUTWORM



BLACK CUTWORM SURVEY

Cumulative number
of moths per trap

- 0
- 1 - 25
- 26 - 68

- Moths began arriving from southern U.S. on April 15
- First significant flight was registered from May 6-7
- Primary cutting period was projected to begin by May 28 in the far south
- 577 moths in 30 traps from April 15-June 5 compared to 2,090 moths in 2012

BLACK CUTWORM OUTLOOK 2014



- Risk of outbreaks depends on size and timing of spring moth migration
- Reduced and no-till systems with winter annual weed cover, during peak BCW egg laying, have highest potential for infestation
- Follow WPB migration reports and scout fields from VE-V5

SOYBEAN APHID



WISCONSIN PEST SURVEY SOYBEAN APHID SURVEY

Average number
of aphids per plant



- Densities in 2013 were the highest in five years
- State Ave. No. Aphids per Plant:

2013	55
2012	7
2008	72
2003	758

- 139 soybean fields surveyed
- Only 6% of fields had >250 aphids per plant

SOYBEAN APHID SURVEY

JULY APHID COUNTS

AUGUST COUNTS

Average number
of aphids per plant

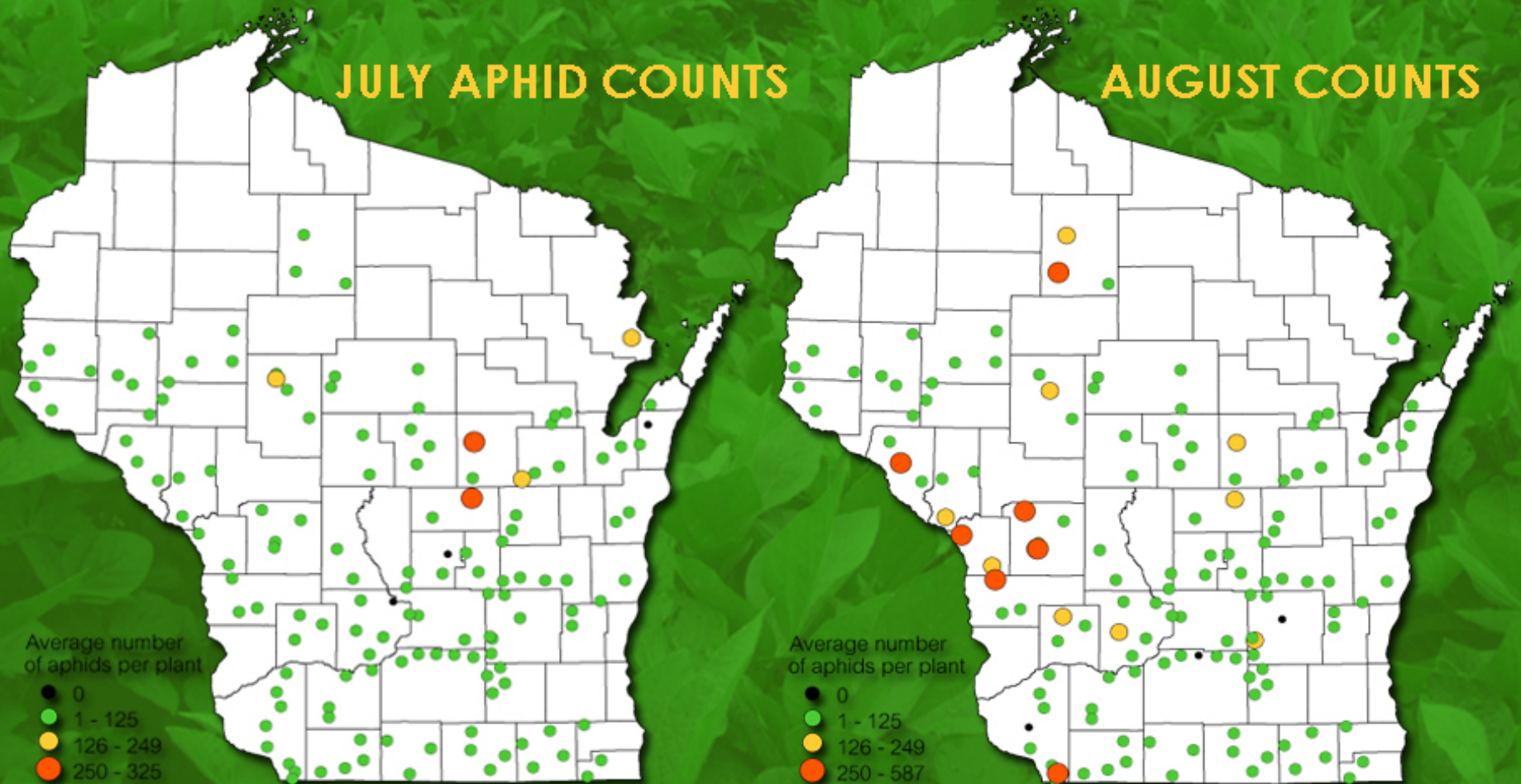


18 PER PLANT

Average number
of aphids per plant



55 PER PLANT



WISCONSIN PEST SURVEY

SOYBEAN APHID OUTLOOK 2014



- Early indications are for lower densities in 2014, if aphids follow typical two-year cycle
- Suction trap counts during fall aphid migration to buckthorn were extremely low

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