

JANUARY 15, 2009

# DATCP Insect Surveys 2008 and Outlook for 2009

Krista L. Hamilton  
Survey Entomologist  
DATCP PEST SURVEY PROGRAM

# WISCONSIN PEST SURVEY

Wisconsin Dept of Agriculture, Trade & Consumer Protection

## Insect Surveys 2008





## ECB Survey Summary

- **State Average # Borers per Plant:**

**2008                      0.09**

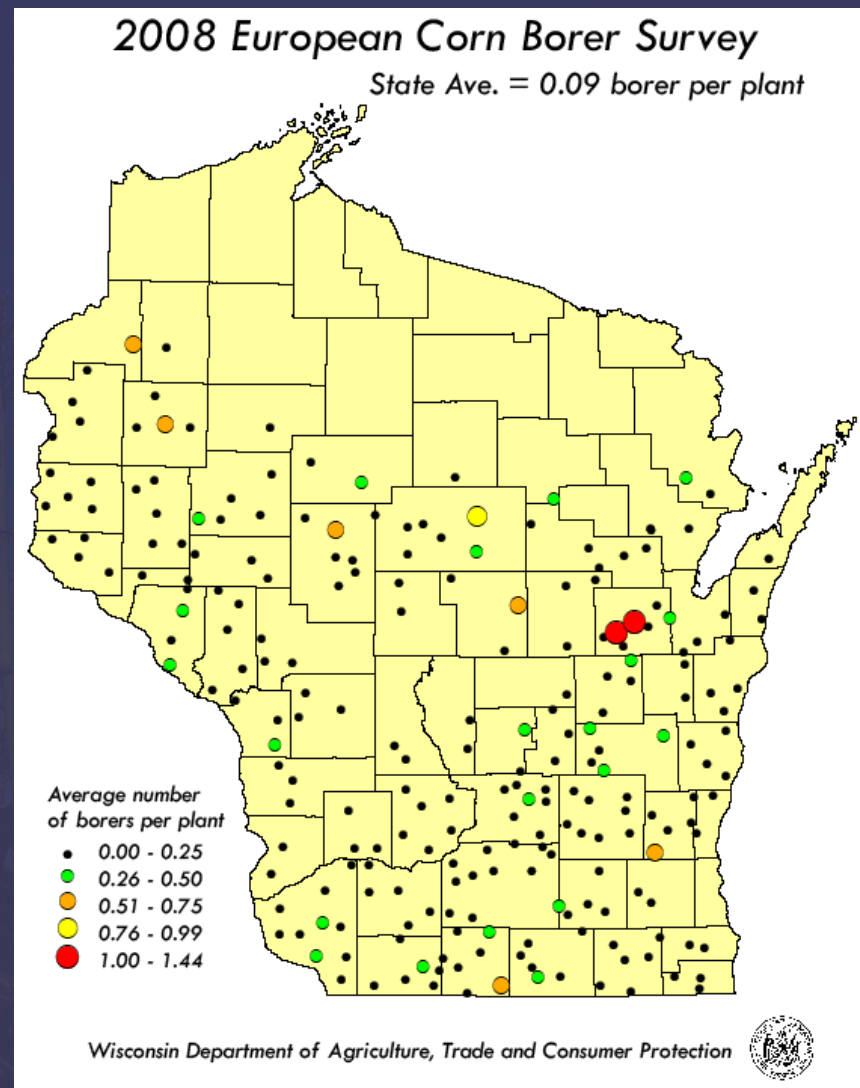
**2007                      0.31**

**10-year                0.31**

**50-year                0.46**

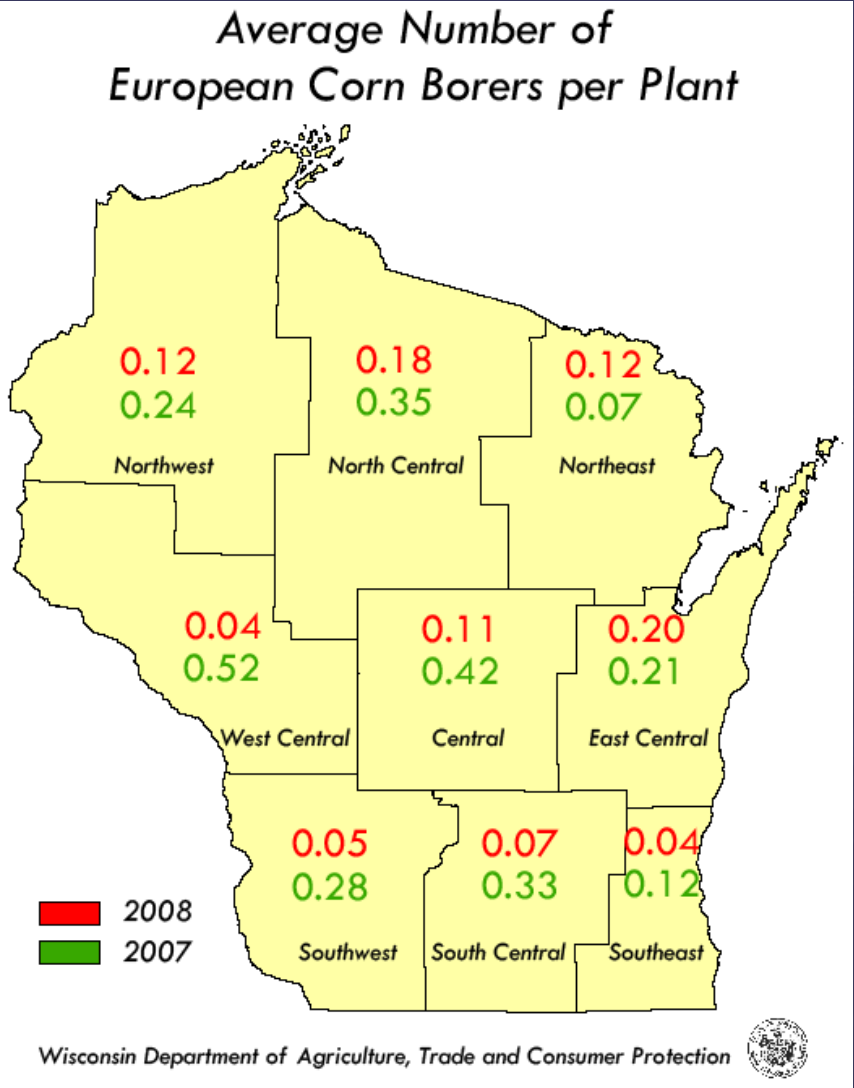
**Threshold            1.00**

- **Third lowest fall population since surveys began in 1942**



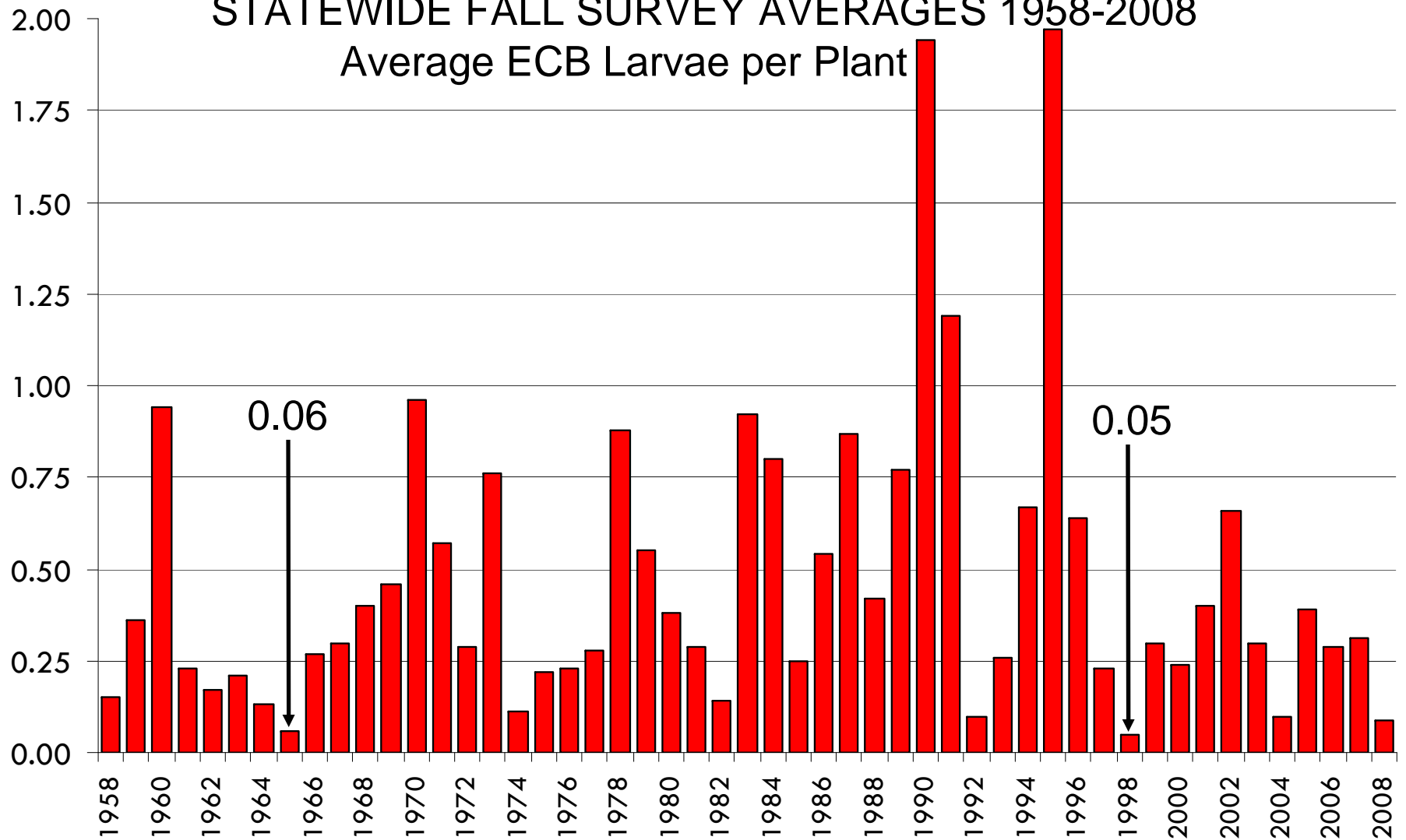
## District ECB Averages

- Population decreases recorded in all but the northeast district
- 99% of the fields had ECB densities < 1.0 per plant
- 1% of the fields had ECB densities > 1.0 per plant



# STATEWIDE FALL SURVEY AVERAGES 1958-2008

## Average ECB Larvae per Plant





# Outlook for ECB in 2009

- **EXTREMELY** low overwintering population
- **VERY** light first flight of moths expected next May-early June



## CRW Beetle Survey

- August 5 to Sept 5 2008
- Total of 229 corn fields
- Statewide Average # Beetles per Plant:

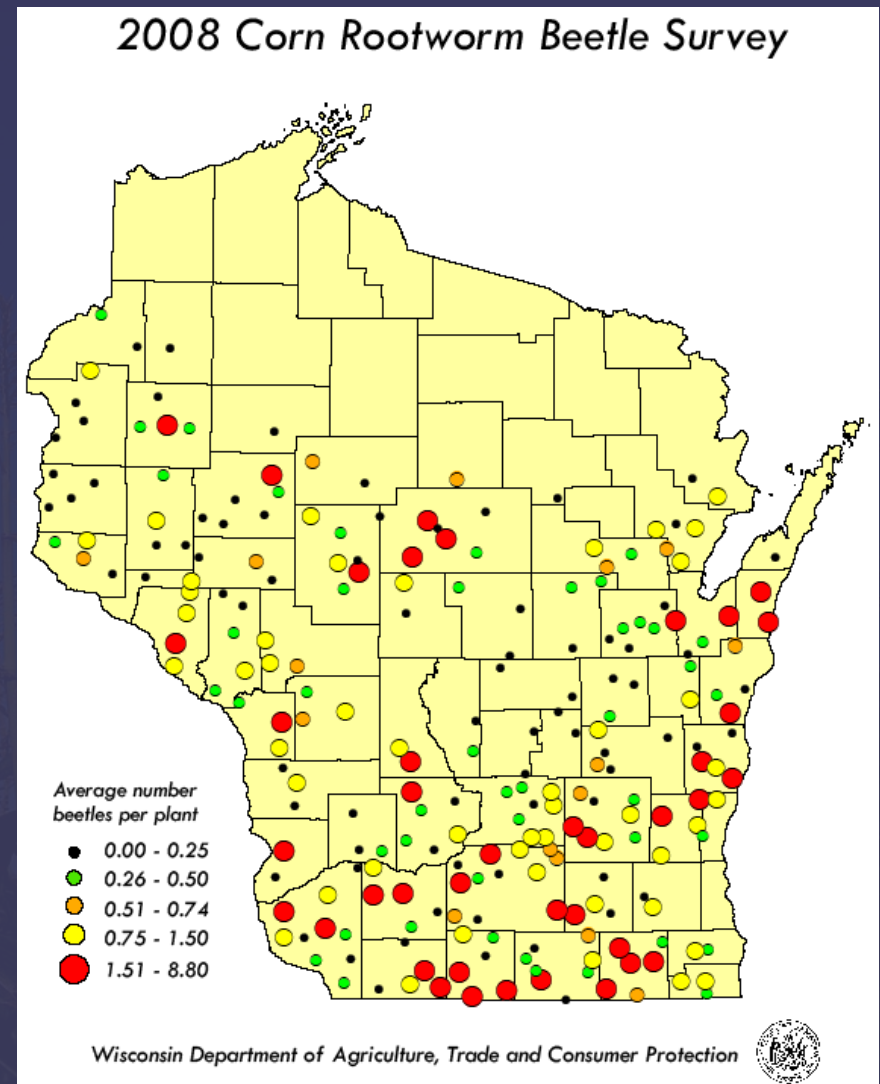
2008            1.0

2007            1.0

2006            1.4

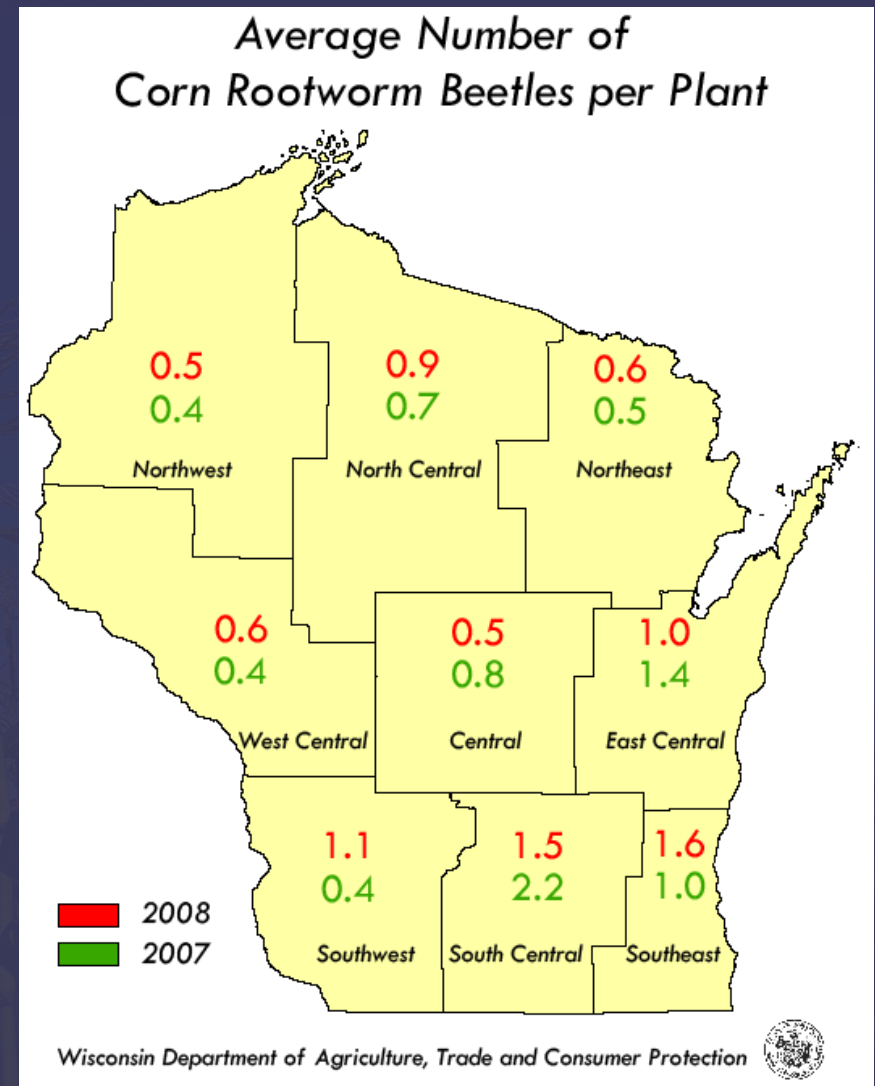
Threshold    0.75

- 38% of sites with averages > 0.75 beetle per plant



## CRW Beetle Survey

- Heavy CRW beetle populations found in 2008, particularly in the SW, SC, SE, EC and NC districts
- Largest population increases in the SW and SE districts





# CORN ROOTWORM BEETLE

Wisconsin Dept of Agriculture, Trade & Consumer Protection

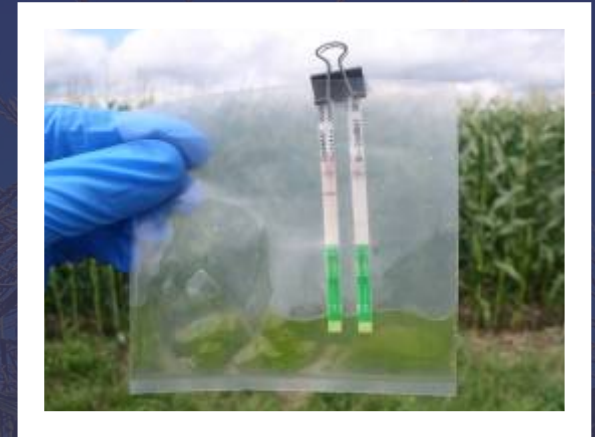
## Mobile Testing for BT-ROOTWORM Corn



**MOBILE LAB**



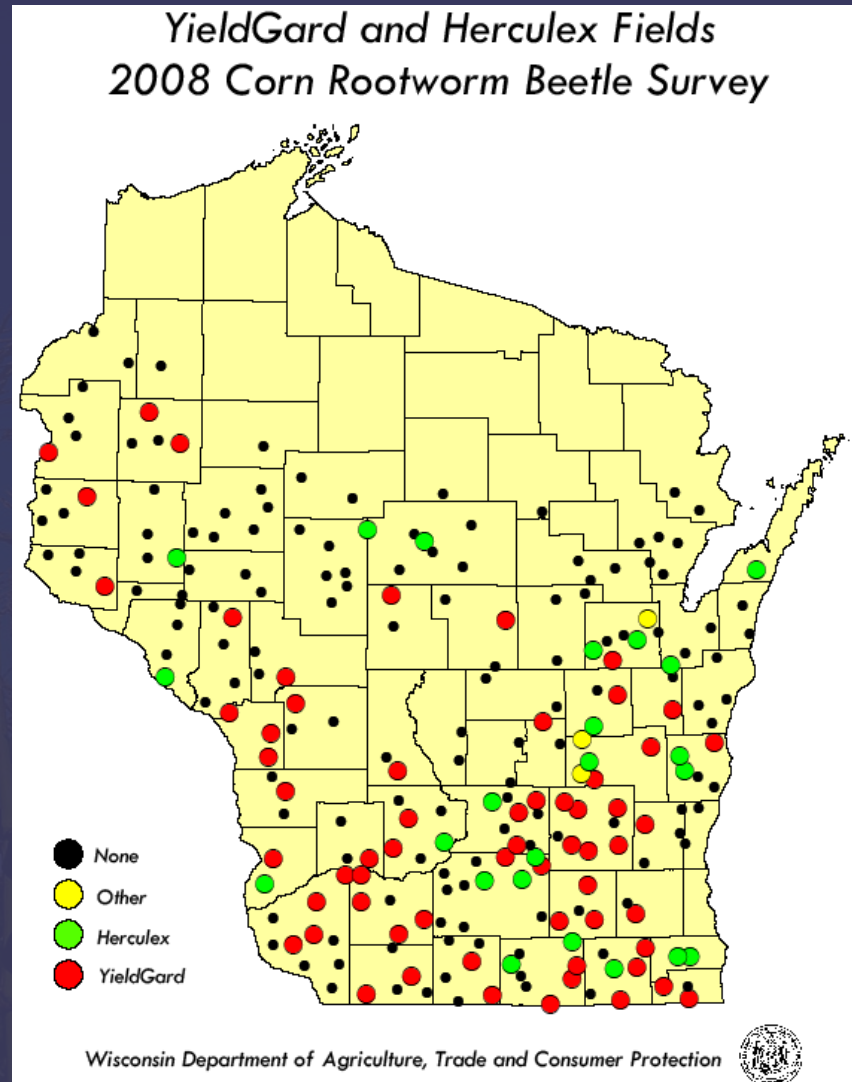
**LEAF SAMPLES**



**TEST STRIPS**

## CRW Beetle Survey

- Bt-rootworm sites increased from 27% in 2007 to 40% in 2008
- 28% tested + for YieldGard<sup>®</sup> Bt-Cry3b1 protein
- 11% tested + for Herculex<sup>®</sup> Bt-Cry34/35Ab1 protein
- 1% tested + for Agrisure<sup>®</sup> mBt-Cry3A protein



## Outlook for CRW in 2009

- **HIGH RISK areas in SW, SC, SE, EC and NC districts**
- **Options for corn growers in these areas include:**

**Crop rotation**  
**Bt-rootworm hybrid**  
**Seed treatment**  
**CRW soil insecticide**

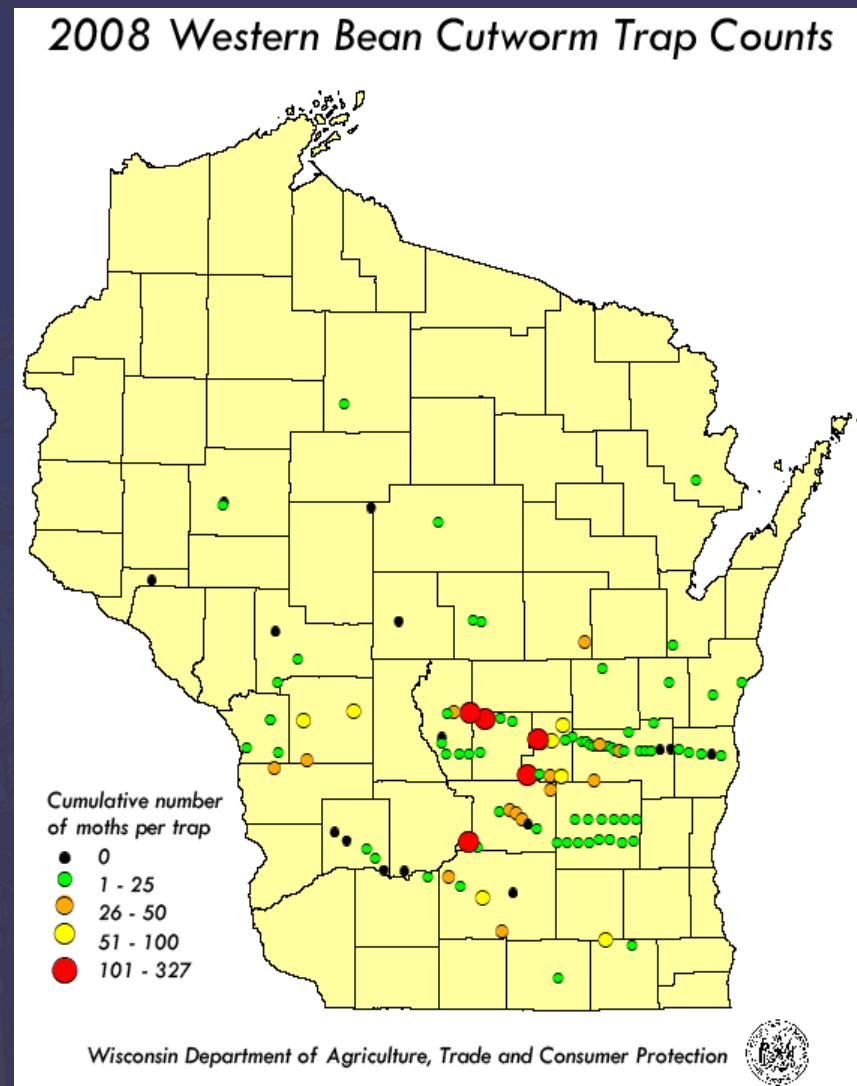






## WBCW Trapping Survey

- 112 milk carton pheromone traps set in 2008
- First moth captured on July 2 compared to June 20 in 2007
- 76% of traps caught 0-25 moths
- 20% of traps caught 26-100 moths
- 4% of traps caught 101-327 moths
- Total of 2,433 WBCW moths trapped in 2008





# WESTERN BEAN CUTWORM

Wisconsin Dept of Agriculture, Trade & Consumer Protection

## WBCW Trapping Survey

- Highest single nightly capture was 50 moths at Princeton on July 23
- Highest cumulative capture was 327 moths at Princeton in Green Lake County
- Peak flight registered from July 23 to August 6 at all sites



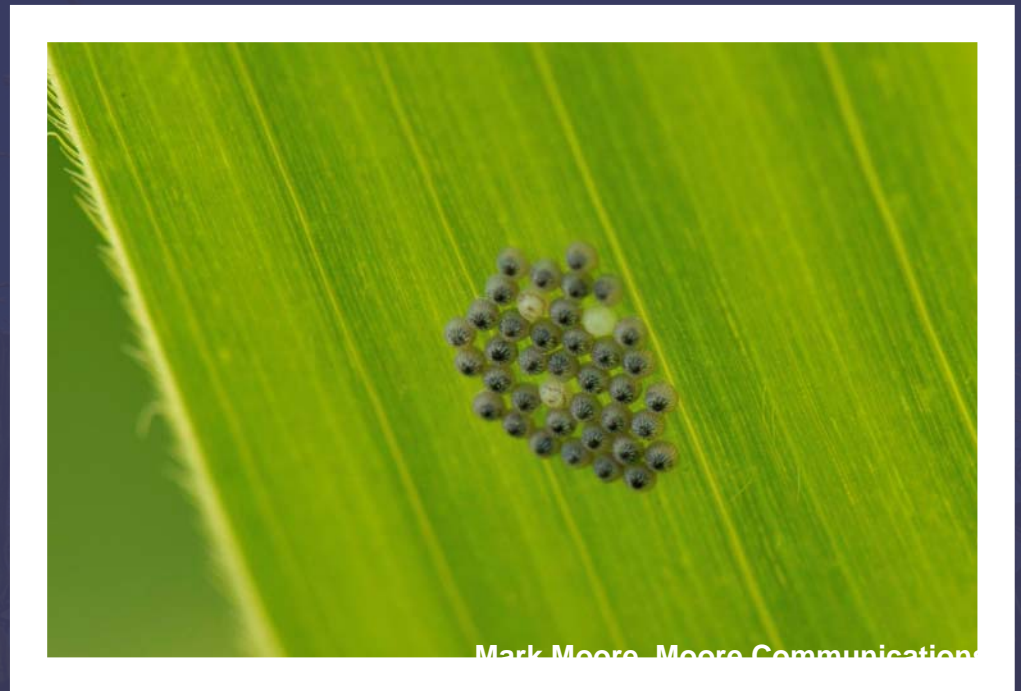


# WESTERN BEAN CUTWORM

Wisconsin Dept of Agriculture, Trade & Consumer Protection

## Outlook for WBCW in 2009

- Use degree days to anticipate adult emergence (first moth 1319 gdd)
- Begin scouting when the first moth is noticed (upper 3-4 leaves)
- Expect peak flight to occur by mid to late July
- Action threshold = 8% of plants with egg masses and/or small larvae



# VARIANT CORN ROOTWORM

Wisconsin Dept of Agriculture, Trade & Consumer Protection

## Variant WCRW Survey

- **The Variant WCRW Network monitored 26 soybean fields in 2008**
- **12 yellow sticky traps per soybean field**
- **Four-week sampling period in August**
- **Threshold = 5 B/T/D for the four-week period**



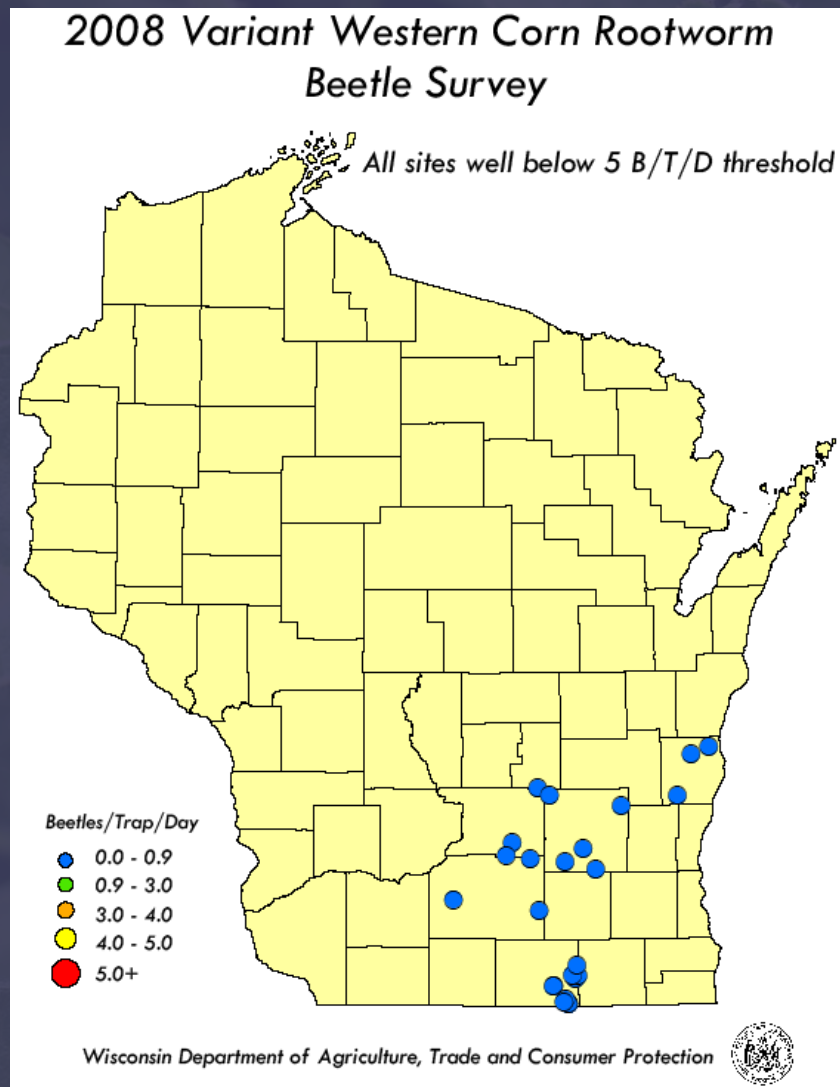


# VARIANT CORN ROOTWORM

Wisconsin Dept of Agriculture, Trade & Consumer Protection

## Variant WCRW Survey

- No fields with Variant WCRW populations > 5 B/T/D
- Highest average was 0.88 B/T/D in Rock County
- Averages in Rock County fell below 5 B/T/D for second time since 2003 (in 2007 & 2008)





# VARIANT CORN ROOTWORM

Wisconsin Dept of Agriculture, Trade & Consumer Protection

## Outlook for Variant WCRW in 2009

- **First year corn in fields monitored at LOW risk for root injury by WCRW larvae in 2009**
- **If you suspect VWCRW damage to first year corn, dig up plants in July to have roots assessed**

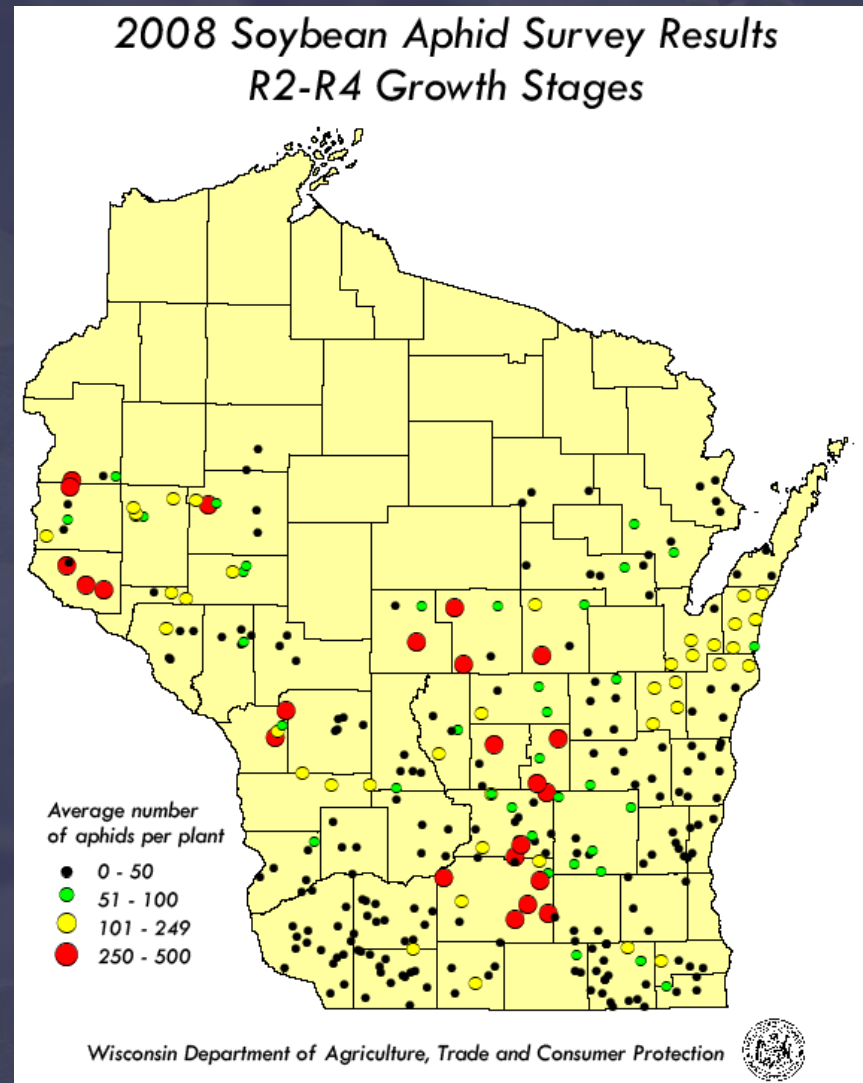


## Soybean Aphid Survey

- **Statewide Average No. of Soybean Aphids per Plant:**

2008	70
2007	164
2006	69
2005	118
2004	11
2003	758

- 79% fields with < 100 per plant
- 13% fields with 101-250 per plant
- 8% fields with 251-800 per plant





Wisconsin Dept of Agriculture, Trade & Consumer Protection

## Outlook for Soybean Aphid in 2009

### Soybean Aphid Overwintering Flight Suction trap counts from Sept-Oct

State	# Traps	2006	2007	2008
WI	7	213	17	530
MN	5	376	104	8629
IL	9	1762	31	2156
IA	4	532	9	1464
IN	6	8322	59	2614

- Heavy overwintering flight may indicate higher soybean aphid densities for 2009

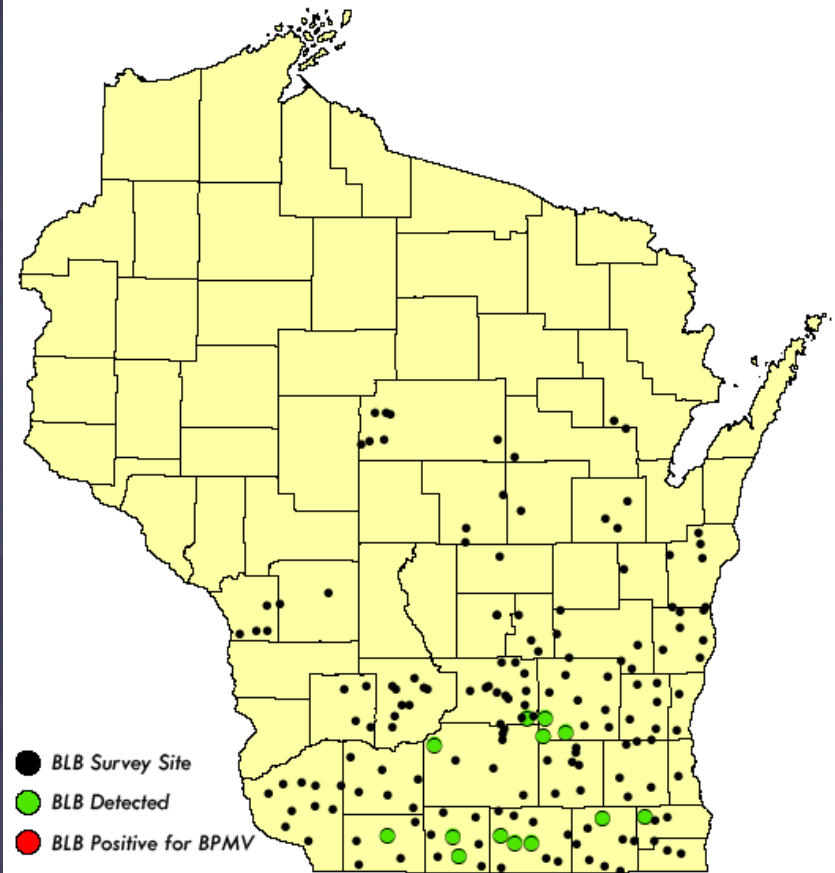




## Bean Leaf Beetle Survey

- May 14 to June 4, 2008
- 167 survey sites (alfalfa fields)
- Survey detected lowest number of BLB since 2003
- Total of 21 BLB swept compared to 509 BLB in 2007
- BLB found at only 13 sites
- All BLB collected from the southern 3 tiers of WI counties

### 2008 Spring Survey for Overwintered Bean Leaf Beetles and BPMV in Alfalfa



Wisconsin Department of Agriculture, Trade and Consumer Protection



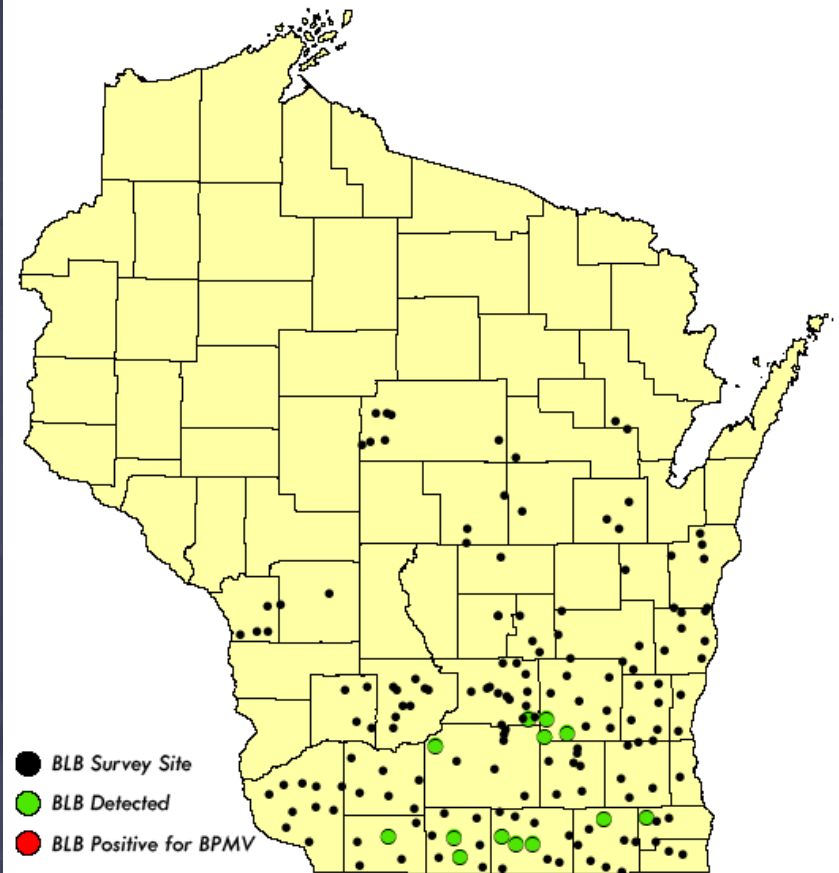
# BEAN LEAF BEETLE SURVEY

Wisconsin Dept of Agriculture, Trade & Consumer Protection

## Bean Leaf Beetle Survey

- 21 BLB collected from 167 alfalfa fields compared to 509 BLB from 86 fields in 2007
- BLB from 0 of 167 alfalfa fields tested positive for BPMV

### 2008 Spring Survey for Overwintered Bean Leaf Beetles and BPMV in Alfalfa



Wisconsin Department of Agriculture, Trade and Consumer Protection



# BEAN LEAF BEETLE SURVEY

Wisconsin Dept of Agriculture, Trade & Consumer Protection

## Outlook for Bean Leaf Beetle in 2009

- **Appears to be a LOW risk for early-season BPMV transmission**
- **Scout earliest emerging soybeans for defoliation**





# WISCONSIN PEST BULLETIN

Wisconsin Dept of Agriculture, Trade & Consumer Protection

## The Wisconsin Pest Bulletin

# Wisconsin PEST BULLETIN

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

<http://pestbulletin.wi.gov>



# WISCONSIN PEST SURVEY

Wisconsin Dept of Agriculture, Trade & Consumer Protection

## Acknowledgments

Clarissa Hammond, DATCP  
Bill Halfman, UWEX Monroe Co.  
Bill Veith, Seneca Foods  
Anette Phibbs, DATCP  
Adrian Barta, DATCP  
Eileen Cullen, UW-Madison Ent.  
Sara Schramm, UW-Madison Ent.  
Jim Stute, UWEX Rock Co.  
Patrick Branick, Pioneer Hi-Bred  
David Bauer, Pioneer Hi-Bred  
Joe Brown, Pioneer Hi-Bred  
Todd Leystra, Pioneer Hi-Bred  
Michael Theis, Lodi Canning Co.  
Bruce Tourbier, Pioneer Hi-Bred  
David Rundquist, Pioneer Hi-Bred  
Mark Weihing, Pioneer Hi-Bred  
Steve Hoffman, Crop Consult.  
Ken Krentz, Pioneer Hi-Bred  
Liz Leudtke, Winnebago Co.  
Savannah Conradt, West Madison

Joe Bollman, Jefferson Co. UWEX  
Jerry Clark, Chippewa Co. UWEX  
Carla Hargrave, Green Lake Co. UWEX  
Steve Huntzicker, La Crosse Co. UWEX  
Doug Kapral, Kapral Agronomy  
Kristin Meyers, Kapral Agronomy  
Mark Kopecky, Price County UWEX  
Paul Knutzen, Knutzen Crop Consulting  
Warren Pickar, Western Technical College  
Scott Reuss, Marinette Co. UWEX  
Scott Sanford, UW-Madison  
Todd Schaumberg, Brown Co.  
Ken Schroeder, Portage Co. UWEX  
Steve Quade, the DeLong Company  
Paul Sturgis, Croptech Agronomics  
Trisha Wagner, Jackson Co. UWEX  
Chris Weber, Pioneer Hi-Bred  
Ken Williams, Waushara Co. UWEX  
Kyle Much, Waupaca County  
Randy Zogbaum, Columbia Co. UWEX