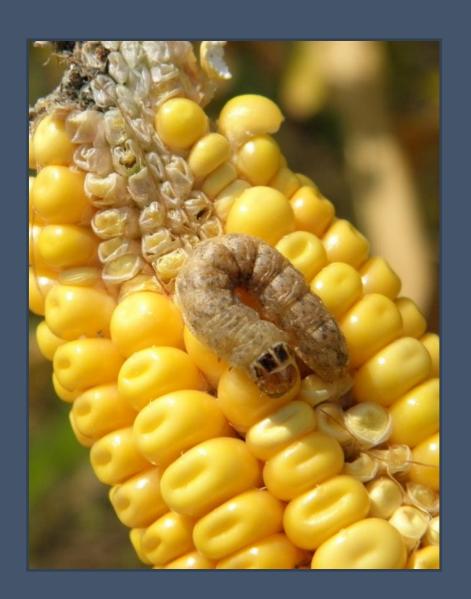
# INSECT SURVEY RESULTS 2017 & OUTLOOK FOR

KRISTA HAMILTON, ENTOMOLOGIST

DATCP PEST SURVEY PROGRAM

#### INSECT SURVEYS 2017

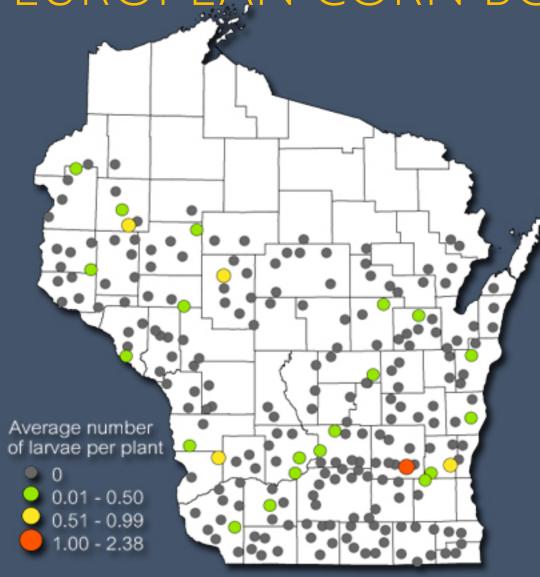


- European corn borer
- Corn rootworm beetle
- Western bean cutworm
- Soybean aphid
- Brown marmorated stink bug

## EUROPEAN CORN BORER



#### EUROPEAN CORN BORER SURVEY

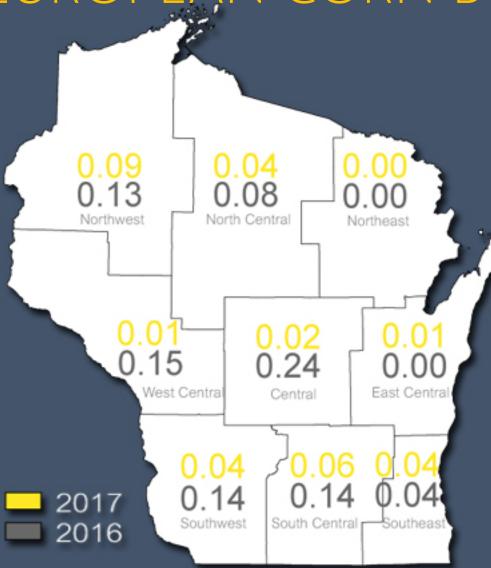


 State average number of corn borers per plant:

2017 0.03
2016 0.11
10-year 0.06
50-year 0.42
Threshold 1.00

- 86% of sites had no signs of ECB infestation
- Second lowest fall ECB population since 1942, tying 2012 and 2014

#### EUROPEAN CORN BORER SURVEY



- State average = 0.03 corn borer larva per plant
- Averages decreased or remained unchanged in 8 of the 9 crop districts (except EC area)
- Low 2017 ECB population indicates suppression trend continues

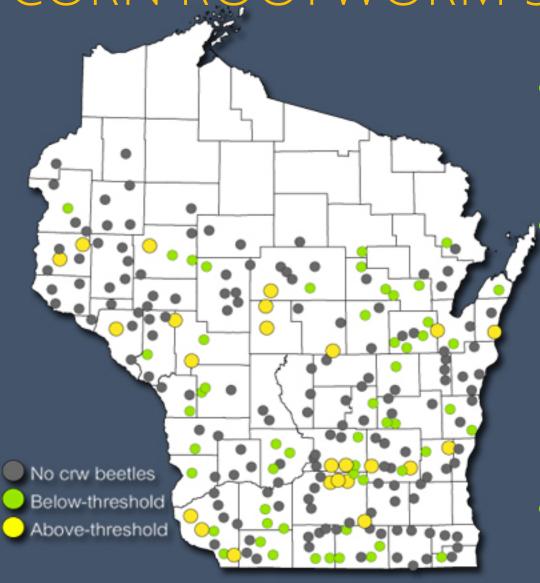
#### ECB OUTLOOK FOR 2018



- ECB populations in Wisconsin still generally very low
- Low ECB pressure expected to continue in 2018, with localized "hot spots"
- Non-GM corn must be scouted



#### CORN ROOTWORM SURVEY 2017



 Crw beetle counts dropped in 2017 to the lowest level on record (since 1971)

State average number of beetles per plant:

**2017**: 0.2 per plant

**2016**: 0.5 per plant

10-year: 0.5 per plant

Threshold: 0.75 per plant

No crw beetles found at 66% of survey sites

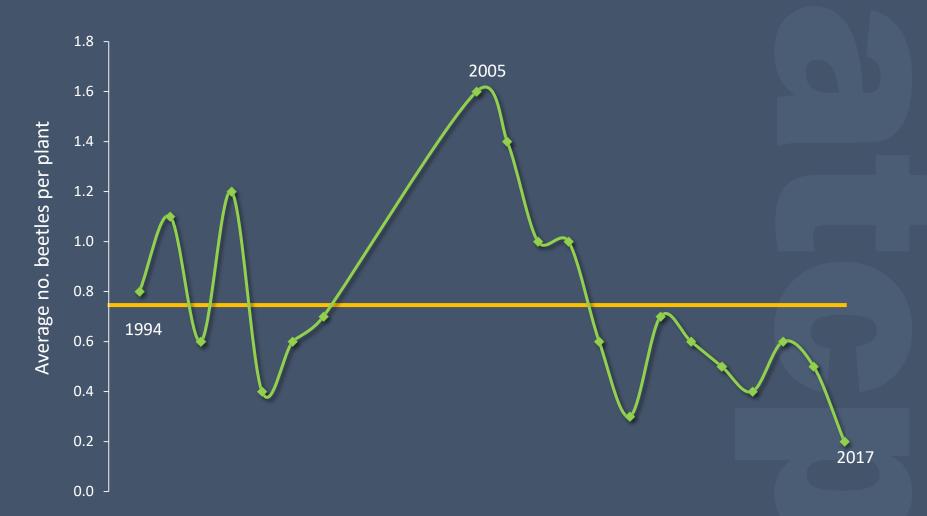
#### CORN ROOTWORM SURVEY 2017



Averages decreased across all 9 crop districts from 2016 to 2017

 District averages were uniformly low, no higher than 0.3 per plant

# CORN ROOTWORM AVERAGES 20-YEAR TREND 1994-2017



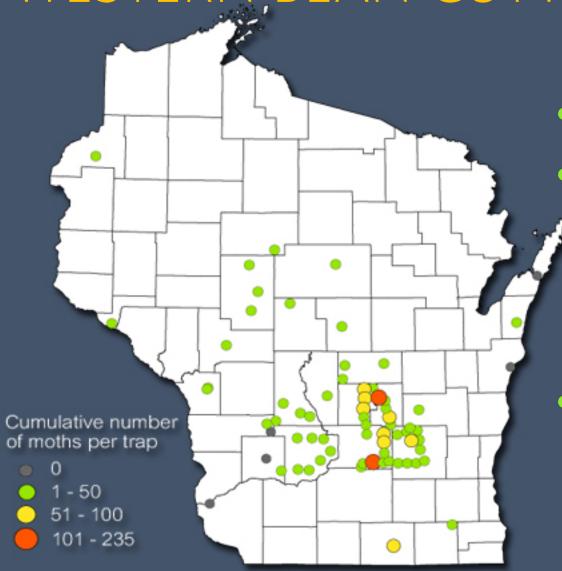
#### CORN ROOTWORM OUTLOOK 2018



- CRW beetle populations
   were historically low in 2017
- Beetle pressure expected to be similar, perhaps slightly higher, across WI in 2018
- Rotate crops, rotate traits, and scout corn fields!



### WESTERN BEAN CUTWORM SURVEY



70 traps set June-August

Annual Total Moth Count:

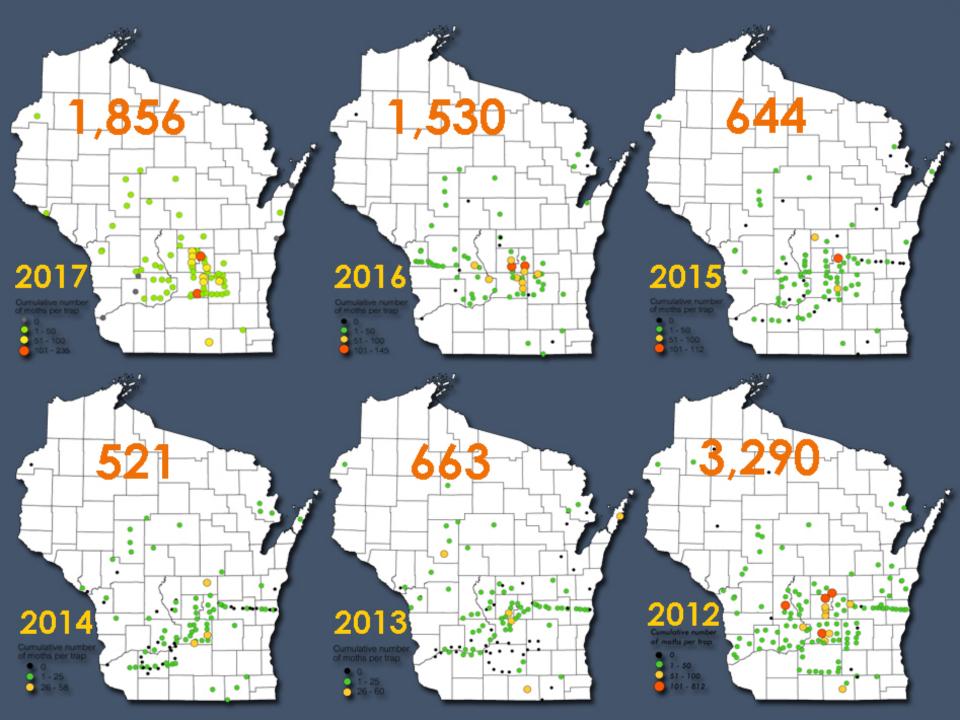
**2017**: 1,856 or 27 per trap

**2016**: 1,530 or 20 per trap

**2010**: **10**,807 or 79 per trap

13-year: 23 moths per trap

 Moth counts increased for the second consecutive year, but remained low overall



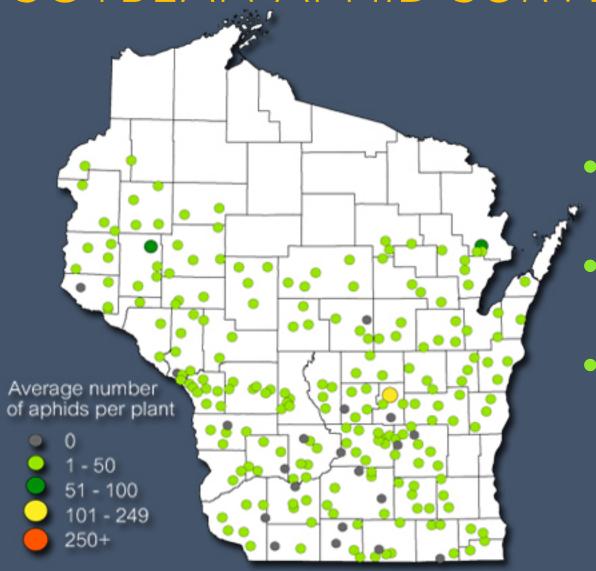
#### WBCW OUTLOOK FOR 2018



- WBCW is a regional (not statewide) threat, mainly in central and south-central WI
- Choose hybrids accordingly (Only those with Vip3A protein provide reliable wbcw control; HX1/Cry1F does not)
- Begin scouting for egg masses and small larvae at 1,320 gdd



#### SOYBEAN APHID SURVEY 2017



228 soybean fieldssampled July 20-Aug 20

- 96% of sites had fewer than 50 aphids per plant
- State average count of 6 aphids per plant is the lowest in 15 years of surveys

#### SOYBEAN APHID AVERAGES 15-YEAR TREND 2003-2017



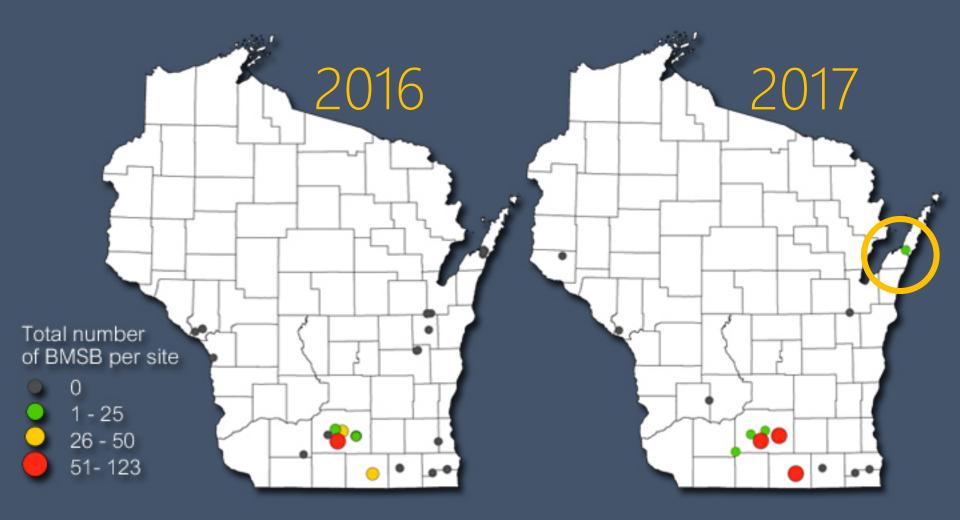
#### SOYBEAN APHID OUTLOOK 2018

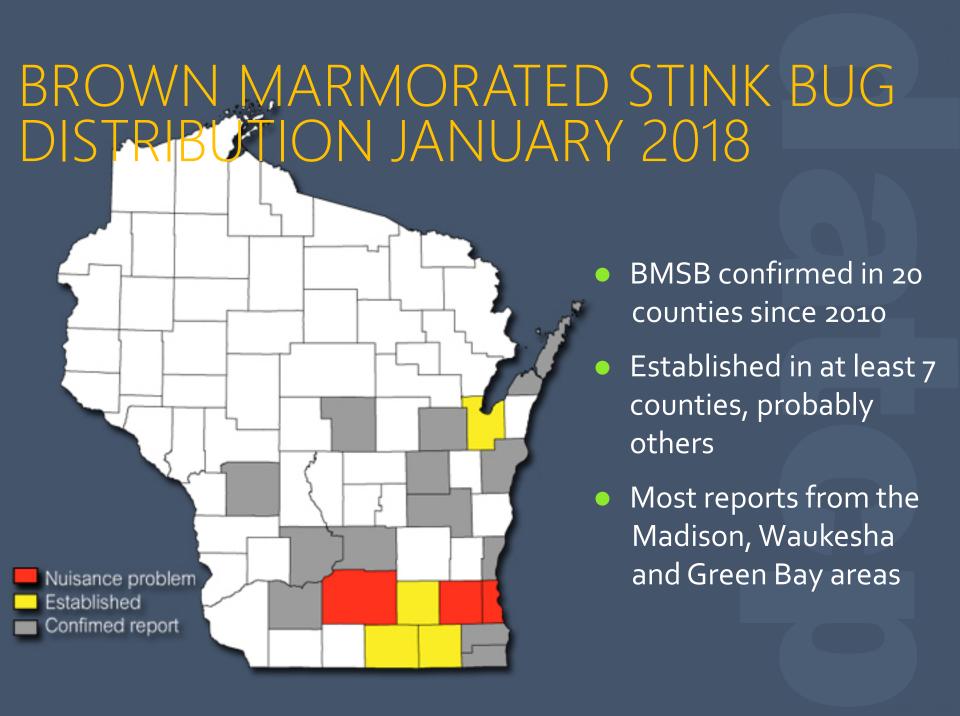


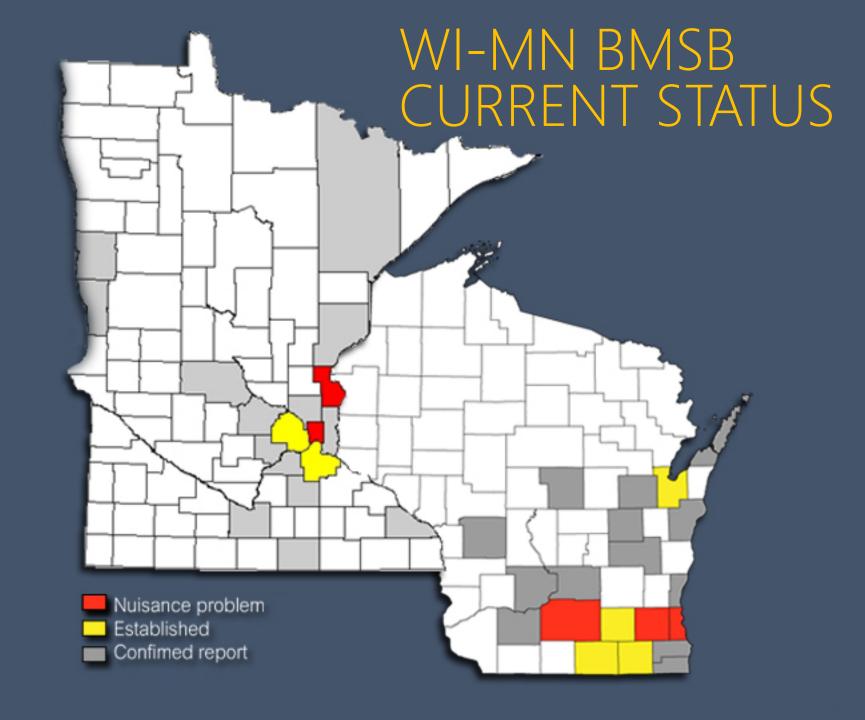
- DATCP surveys indicate aphid densities have been mostly low since 2010
- Natural enemies continue to be very effective at regulating aphids
- Continue to use 250 aphid per plant action and DO NOT spray early or preventively

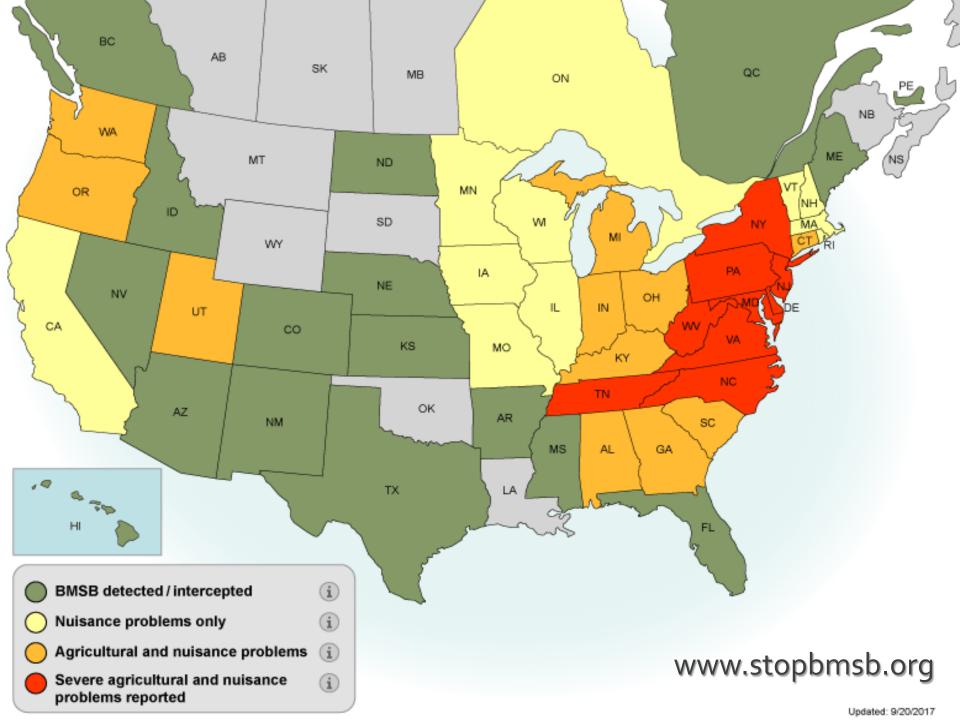


#### BROWN MARMORATED STINK BUG UW, DATCP, IPM INSTITUTE SURVEYS











#### **WEATHER & PESTS**

Lingering humidity early in the week contrasted with cooler, drier weather as high pressure settled over Wisconsin during the last days of August. Daytime temperatures in the 80s were replaced by comfortable highs in the 70s, while nighttime lows cooled to the 40s and 50s. Rain showers continued to slow alfalfa and oat harvesting, though mild conditions promoted corn and soybean maturation. Following this summer's pattern of unseasonable warmth and plentiful precipitation, crop development remains one to two weeks ahead of last year and the long-term average. Crop condition ratings are still exceptionally favorable, despite increasing fungal disease problems intensified by high humidity and frequent rain, with 86-90% of the state's alfalfa, corn, potato and soybean acreage reported in good to excellent condition. The early-September forecast calls for a return to above-normal temperatures, which should expedite the corn silage harvest and accelerate crops toward maturity.

#### LOOKING AHEAD

FALL PESTS: Nuisance insects including the boxelder bug, brown marmorated stink bug, multicolored Asian lady beetle, and western conifer seedbug will begin aggregating on warm southern and western exposures of buildings later this month in advance of their indoor invasion. Exterior insecticide treatments may temporarily deter

insects from entering homes, but exclusion measures such as sealing cracks around windows, doors, siding and other openings are preferred. Insecticides should be applied by a licensed pest control technician and considered only for severe infestations. Fall nuisance insects do not reproduce inside the home or cause structural damage.

CORN EARWORM: Migrants arrived in substantial numbers for the third consecutive week. Another 2,865 moths were captured in pheromone traps during the period of August 25-31, for a cumulative total of 6,372 moths in 17 traps since the primary migration began earlier this month. The weekly high count of 1,961 moths was registered near Ripon in Fond du Lac County. Sweet corn growers are advised to maintain CEW scouting and management programs as long as moth activity persists and green silks are available for oviposition.

BROWN MARMORATED STINK BUG: This new invasive pest has been trapped in Dane and Rock counties this summer and is now established in south-central Wisconsin. Similar to the multicolored Asian lady beetle and boxelder bug, BMSB clusters on the exteriors of buildings in autumn in search of protected overwintering sites. Reports from Mid-Atlantic States where BMSB is a severe pest of fruit, field and vegetable crops indicate that BMSB usually develops from a household nuisance into a significant agricultural pest over a

September 1, 2016

ato in Dane County and on ounty. Plants showing sympsaved and should be disnit spread to other plants. submitted for free testing to ostic Clinic.

inspectors noted a heavy aper' euonymus in Kenosha ect inhibits photosynthesis, entire plants. Severe probhere plants are crowded or ontrol measures include sted branches before the summer, or applying ly hatched crawlers, with rt. Nursery growers and examine euonymus cull any infested plants



Carol Beativ

shiny black beetles abundant on the shrubs and peren-According to the rant, hydrangea, oderately damaged ding varies by leaf redding on thinner ittern on the thicker. ants. Insecticides ost effective control, ired.







#### ACKNOWLEDGEMENTS

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