

WISCONSIN INSECT SURVEY RESULTS 2011 AND OUTLOOK FOR 2012

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European Corn Borer

Larval populations remained historically low in 2011. The seventieth annual fall abundance survey in September revealed a state average of 0.09 borer per plant, the fourth lowest since record-keeping began in 1942. Minor population reductions from 2010 were charted in the southwest, central and northeast agricultural districts and increases occurred in the south-central, southeast, east-central, north-central and northwest areas. Larval densities in the south-central

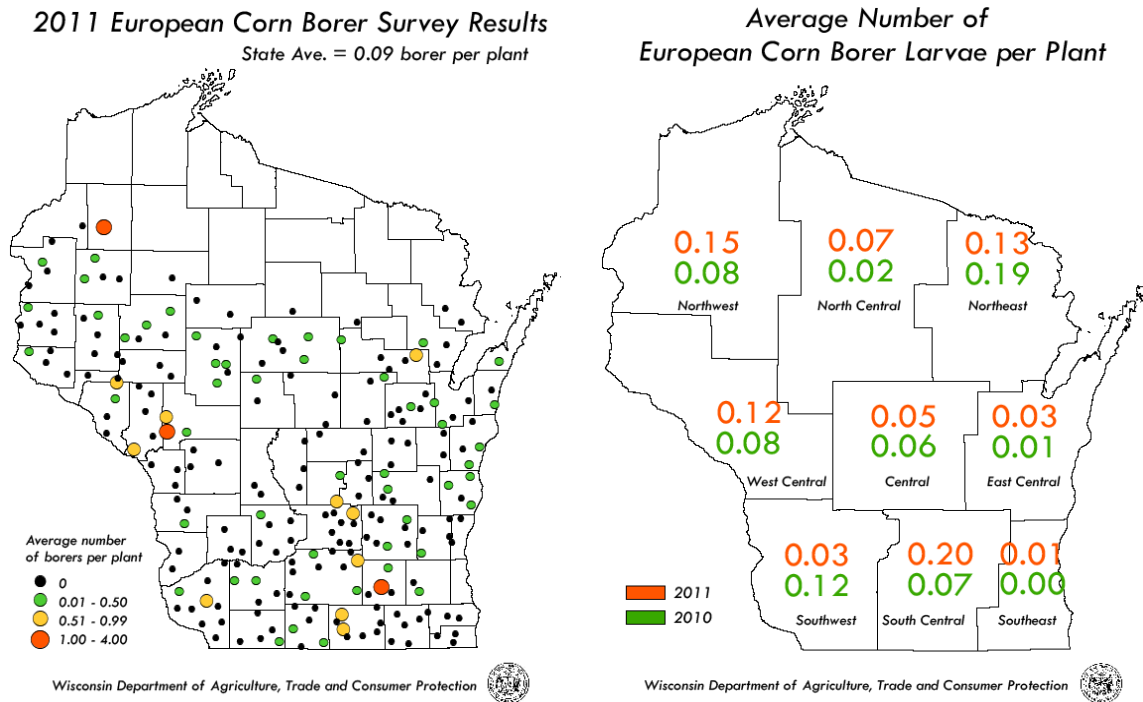


Table 1. European corn borer fall abundance survey results 2002-2011 (Average no. borers per plant).

District	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	10-Yr Ave
NW	0.44	0.20	0.13	0.01	0.27	0.24	0.12	0.06	0.08	0.15	0.17
NC	0.26	0.14	0.20	0.36	0.16	0.35	0.18	0.10	0.02	0.07	0.18
NE	0.75	0.23	0.22	0.33	0.23	0.07	0.12	0.12	0.19	0.13	0.24
WC	0.71	0.16	0.05	0.24	0.42	0.52	0.04	0.10	0.08	0.12	0.24
C	1.21	0.44	0.06	0.44	0.51	0.42	0.11	0.06	0.06	0.05	0.34
EC	0.44	0.20	0.22	0.25	0.11	0.21	0.20	0.09	0.01	0.03	0.18
SW	0.65	0.34	0.10	0.49	0.20	0.28	0.05	0.06	0.12	0.03	0.23
SC	0.86	0.51	0.05	0.67	0.38	0.33	0.07	0.02	0.07	0.20	0.32
SE	0.61	0.21	0.02	0.35	0.16	0.12	0.04	0.00	0.00	0.01	0.15
State Ave.	0.66	0.30	0.10	0.40	0.29	0.31	0.09	0.06	0.07	0.09	0.24

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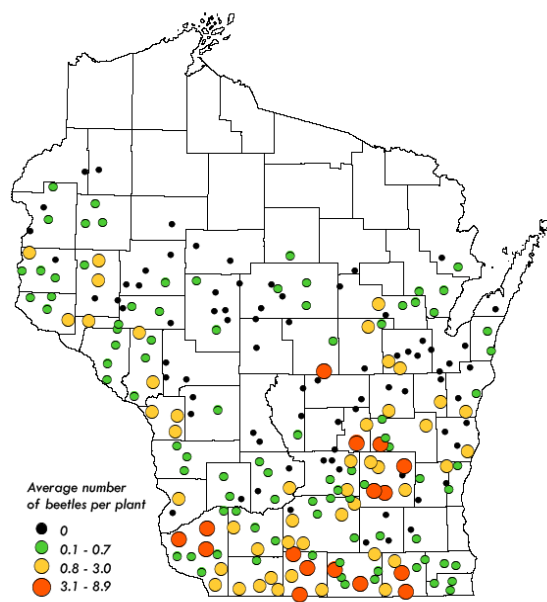
district increased to 0.20 per plant, or 20 larvae per 100 plants. On the basis of the fall survey results, a continued low population trend is expected for 2012.

Corn Rootworm

Results from the August beetle survey showed a substantial population increase in the southern and central districts. The 2011 state average beetle count of 0.7 per plant represents a more than two-fold increase over the historic low average of 0.3 per plant documented in 2010. The largest increase occurred in the south-central district where the average escalated sharply from 0.3 to 1.4 beetles per plant. Population increases were also noted in the southwest, southeast, west-central, central, east-central and northeast districts. By contrast, beetle counts in the northwest and northeast areas were extremely low at 0.1 per plant.

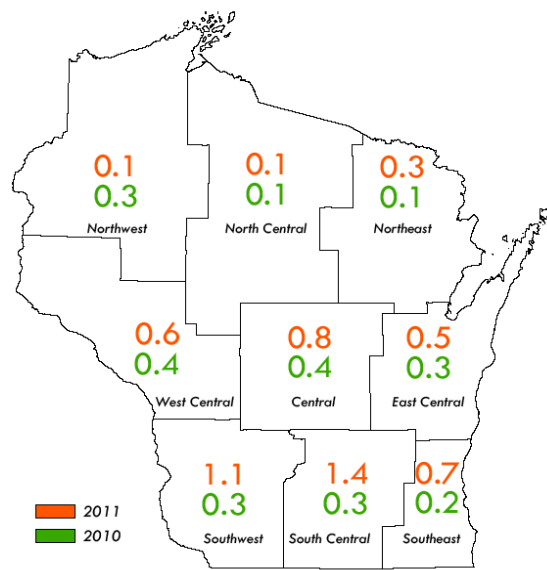
The survey findings indicate a high potential for root damage to continuous corn in the southern two-thirds of the state in 2012. Corn producers in these areas will need to consider crop rotation or another form of rootworm management for next season.

2011 Corn Rootworm Beetle Survey Results



Wisconsin Department of Agriculture, Trade and Consumer Protection

Average Number of Corn Rootworm Beetles per Plant



Wisconsin Department of Agriculture, Trade and Consumer Protection

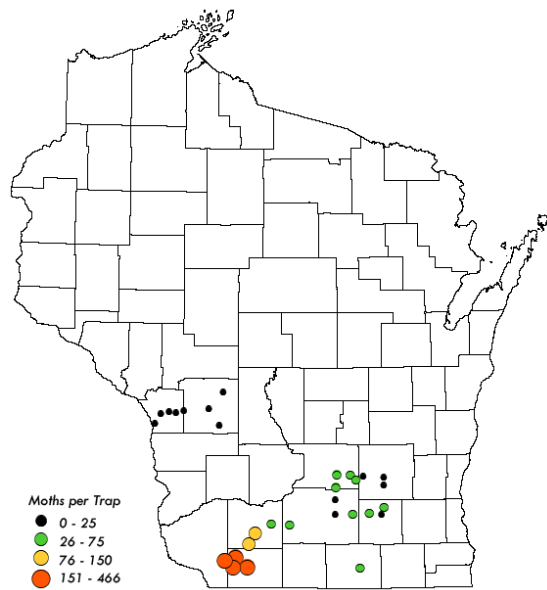
Corn Earworm

A lengthy flight began by July 27 and continued though September 21. The eight-week migration yielded a cumulative total of 4,571 moths at 15 sites, with a well-defined peak from August 4-10. Compared to 2010, the flight was smaller and moth activity was more concentrated in the south-central and central counties. Late sweet corn and other susceptible crops such as tomatoes and snap beans remained under a moderate to severe threat until mid-September.

Black Cutworm

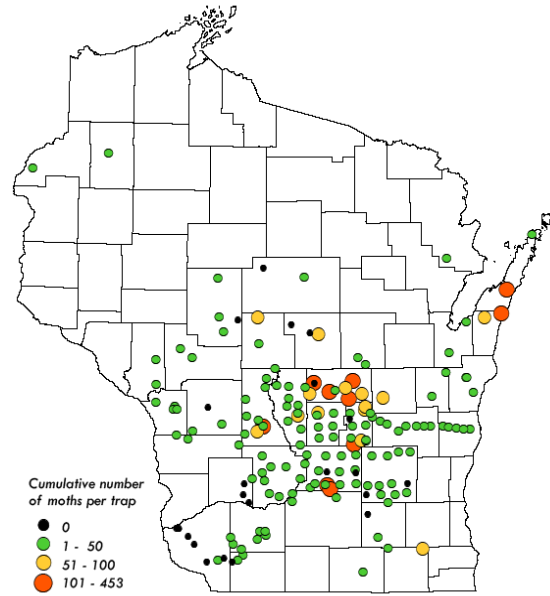
Delayed planting, late weed control and the largest moth migration in 10 years resulted in localized black cutworm problems this season. Larval progeny of the earliest migrants reached the destructive cutting stages by May 30 and infestations were noted in Dane, Dodge, Grant, Jefferson, Jackson, La Crosse and Vernon counties in early June. Damage estimates ranged from 3% cut plants to as high as 40% in exceptional fields. Insecticidal seed treatments labeled for black cutworm control proved ineffective in some instances and rescue applications were required. The threat from this early-season pest subsided by late June.

2011 Cumulative Black Cutworm Trap Counts



Wisconsin Department of Agriculture, Trade and Consumer Protection

2011 Western Bean Cutworm Trap Counts



Wisconsin Department of Agriculture, Trade and Consumer Protection

Western Bean Cutworm

Moth counts decreased significantly from the previous year, according to the statewide trapping program. The 2011 cumulative capture of 4,895 moths was a 55% reduction from 10,807 moths collected in 2010. Larval infestations resulting from the flight were also less prevalent and severe this year, although a few scattered fields had a fair number of larvae in the ears.

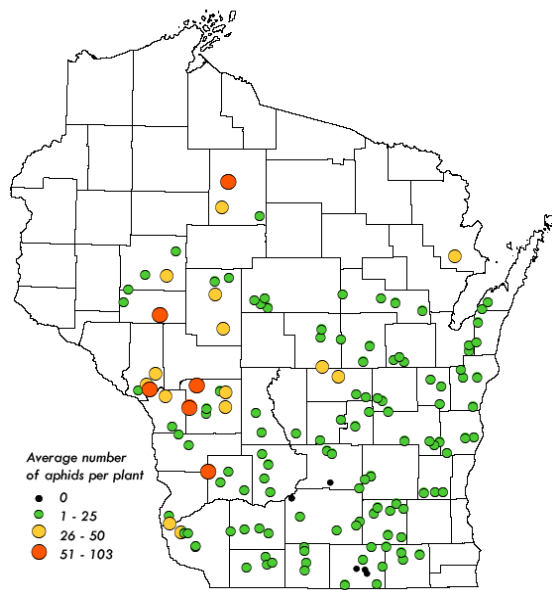
Japanese Beetle

Adults became prevalent in flowering soybeans by late July and foliar damage surpassed economic levels during the first two weeks of August. Controls were applied to fields in Chippewa, Dane, Eau Claire, Kenosha, Rock and Walworth counties, with unsatisfactory results in a few cases. According to survey observations and reports, Japanese beetles were far more abundant this season than in the last several years. The largest populations were noted on lighter soils in the southeast, south-central and northwest areas.

Soybean Aphid

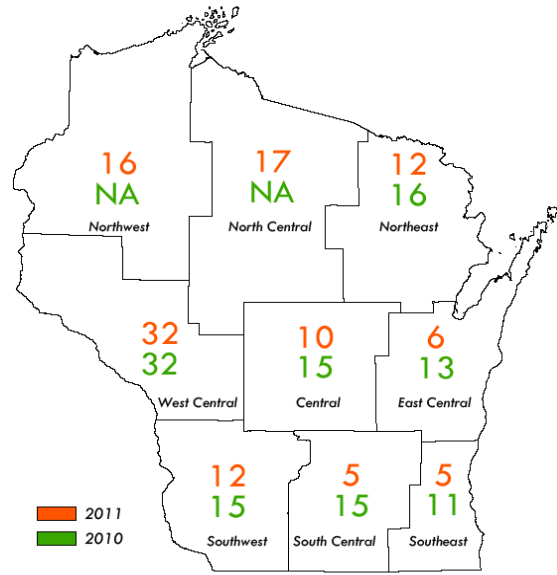
Densities remained below economic levels this season. The annual survey conducted in July and August showed the state aphid count to be 12 per plant. This average compares to 16 aphids per plant last year and is only marginally higher than the record low density of 11 per plant documented in 2004. Soybean fields were sampled in two intervals, first in late July and again in August, for a total of 284 observations in 142 fields. Aphid densities were below 103 per plant in all surveyed fields, with the exception of a single Portage County site which had an average count of 451 per plant on July 29. Natural control agents, insecticidal seed treatment, high temperatures, and several heavy precipitation events all limited soybean aphid population growth in 2011.

Soybean Aphid Survey Results August 2011



Wisconsin Department of Agriculture, Trade and Consumer Protection

Average Number of Soybean Aphids per Plant



Wisconsin Department of Agriculture, Trade and Consumer Protection

Table 2. Soybean aphid survey results 2003-2011 (Average no. aphids per plant).

District	2003	2004	2005	2006	2007	2008	2009	2010	2011
NW	566	1	306	56	13	90	49	—	16
NC	93	7	113	22	109	—	89	—	17
NE	170	25	42	58	13	34	22	16	12
WC	632	9	198	101	356	121	112	32	32
C	680	43	175	44	170	142	94	15	10
EC	968	5	124	159	10	66	16	13	6
SW	149	2	44	55	302	14	6	15	12
SC	993	11	75	30	188	98	72	15	5
SE	1268	6	91	23	54	23	3	11	5
State Ave.	758	11	118	69	164	70	53	17	12