Wisconsin Department of Agriculture, Trade & Consumer Protection

Wisconsin Pest Bulletin

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Weather and Pests

Warm, humid conditions prevailed during the past week. Some welcomed rains occurred in many areas of the state but other locations are still very dry. Crops are progressing well and generally appear to be in good condition. Nearly all corn and soybeans have been planted, first crop alfalfa is being harvested, and oats emergence is nearing completion. The weather in the last reporting period continued to favor the development of both migratory and resident pest insects. Scores of adult potato leafhoppers seemingly arrived overnight and are expected to begin producing nymphs by next week. European corn borer moths are appearing in higher numbers in some black light traps, which indicates night-time temperatures have been suitable for flight activity.

Growing Degree Days through 05/31/07 were

| | GDD 50F | 2006 | 5-Yr | 48F | 40F |
|-------------|---------|------|------|-----|------|
| Dubuque, IA | A 691 | 532 | 570 | 730 | 1249 |
| Lone Rock | 650 | 514 | 539 | 668 | 1178 |
| Beloit | 661 | 569 | 564 | 669 | 1207 |
| Madison | 603 | 484 | 506 | 625 | 1122 |
| Sullivan | 582 | 510 | 514 | 575 | 1085 |
| Juneau | 570 | 462 | 483 | 585 | 1071 |
| Waukesha | 551 | 450 | 462 | 565 | 1050 |
| Hartford | 553 | 444 | 450 | 568 | 1051 |
| Racine | 508 | 402 | 405 | 523 | 996 |
| Milwaukee | 511 | 410 | 401 | 526 | 999 |
| Appleton | 536 | 447 | 415 | 531 | 988 |
| Green Bay | 460 | 382 | 349 | 469 | 918 |
| Big Flats | 580 | 497 | 486 | 576 | 1050 |
| Hancock | 567 | 485 | 472 | 557 | 1018 |
| Port Edward | ds 559 | 500 | 459 | 557 | 1019 |
| La Crosse | 687 | 570 | 563 | 708 | 1236 |
| Eau Claire | 600 | 541 | 502 | 616 | 1099 |
| Cumberland | 545 | 463 | 423 | 542 | 997 |
| Bayfield | 371 | 300 | 272 | 359 | 750 |
| Wausau | 503 | 433 | 401 | 494 | 931 |
| Medford | 492 | 440 | 388 | 484 | 921 |
| Crivitz | 437 | 382 | 359 | 435 | 853 |
| Crandon | 447 | 382 | 351 | 426 | 832 |



Looking Ahead

Soybean aphid - Soybean aphids have begun to colonize V1-V2 south central Wisconsin soybean fields. Aphids were found on 3.3% (3/60) of the plants checked in one of two fields surveyed near Sun Prairie in Dane County. One plant had a single adult (alate) while another plant had 14 alates and nymphs (one of the alates was winged). In addition, visual inspection of a brown stem rot soybean plot at the West Madison Research Station revealed three of 60 plants with alates plus nymphs and another five plants with nymphs only. Thus, 13.3% (8/60) of the plants were infested. A total of 41 nymphs were counted, for a mean of 0.68 per plant. The range was 1 to 13 aphids per plant (information provided by Dave Hogg, UW-Madison Entomology Department).

Scouting fields closely from the time aphids arrive until the crop reaches early reproductive stages is the best way to determine if and when aphid populations justify an insecticide application. The action threshold for soybean aphids remains at 250 aphids per plant with populations that are actively increasing. This threshold is based on an average numbers of aphids per plant on 20-30 plants sampled throughout 80% of the field. Do not treat fields unless this precise threshold is met or exceeded.

Potato leafhopper - Migratory adult leafhoppers arrived in high numbers just prior to the holiday weekend. Where counts of 1-2 adults per 10 sweeps were found last week, numbers have increased to about 2 per sweep. Scouting for potato leafhopper is extremely important in second crop regrowth. Using a 15" sweep net, take 20 sweeps in five separate areas of the field and calculate the average number of leafhoppers per sweep. The economic threshold for potato leafhopper in 6-12" alfalfa is 1.0 adult or nymph per sweep and increases to 2.0 adults or nymphs per sweep in 12-14" fields. Expect the first potato leafhopper nymphs of the season to appear during the first week of June.

European corn borer - Look for black light trap captures to increase sharply in the week ahead as the first peak flight of corn borer moths approaches. Near Dubuque and La Crosse the threshold at which the first flight is expected to peak, 631 GDD (base 50°F), was surpassed on May 29. A light first flight is expected. European corn borer counts this week were as follows: Chippewa Falls 2 moths, East Troy 12 moths, Janesville 7 moths, Lancaster 5 moths, Manitowoc 2 moths, Marshfield 10 moths, Mazomanie 35 moths, Reedsburg 0 moths, and Sparta 25 moths.

Bean leaf beetle - The annual spring survey for overwintered bean leaf beetles in alfalfa continued northward into Ozaukee, Washington, Fond du Lac, Sheboygan, Juneau, Monroe and La Crosse counties this week. Survey specialists collected a total of 53 beetles from 15 of 22 sites in these counties. While only a small number of adults (0-4 per field) were collected from the centrally located counties relative to sites in southern Wisconsin, the presence of beetles in the central and west central regions suggests bean leaf beetles successfully survived the winter months in these districts. This is the first time overwintered beetles have been detected in La Crosse County during the spring survey.

As more acreage of first crop hay is harvested and soybeans continue to emerge, overwintered beetles will depart alfalfa fields and enter soybeans where first generation eggs will be laid. Light to moderate amounts of defoliation (>15% on 33-38% of plants) have already been detected in Dane County soybeans, which indicates adults are feeding in soybeans and egg laying is underway.

Periodical cicada - Reports indicate cicadas have begun to emerge near Lake Geneva in Walworth County and in lowa County. The vast majority of Wisconsin's population is not expected to start emerging until next week or the following. Residents in the southeastern region of the state are likely to experience the highest numbers of cicadas, although scattered populations should also appear in Dane and Richland counties. According to www.cicadamania.com, Brood XIII cicadas have already emerged in Illinois and Indiana. While their sheer numbers and incessant singing may be an annoyance, this rare event is expected to last just six to eight weeks.

Orchard and nursery owners with young trees or shrubs should take measures to prevent damage that may occur when too many cicadas feed on plants or lay eggs in the twigs. The simplest way to protect small trees and shrubs is to cover them with screening, cheesecloth or tulle fabric when the cicadas begin to emerge. Plants should be kept covered for at least four weeks or until most of the cicadas have died off.



Periodical cicada

www.cicadamania.com

Pea aphid - The presence of winged forms in south central alfalfa fields suggests the migration from alfalfa to pea fields is approaching. Highly susceptible pea fields should be monitored closely in the next week or two as winged pea aphids begin moving from alfalfa to peas.

Forages

Alfalfa weevil - Nearly all hay that has not been harvested in the southern three tiers of Wisconsin counties is infested with economic populations of alfalfa weevil larvae. First crop hay should be harvested as soon as possible to minimize further loss. Regrowth in alfalfa fields that have already been cut is still very susceptible to tip injury by late instar larvae. A majority of the larvae swept in the south have reached the third and fourth instars, the stage at which they are capable of consuming a large amount of foliage. Pupation is underway in the southern districts.

Potato leafhopper - Nymph production is expected to begin next week, if high temperatures continue. The first nymphs of the season are customarily detected during the first week of June. Following a major migration late last week, adult leafhoppers have become abundant in south central fields. Counts in Dane and Sauk counties currently average 1-2 adults per sweep. Look for a considerable increase in leafhopper populations to occur once nymph production ensues in the week ahead. Under normal summer temperatures, only 10 days are needed for potato leafhopper populations with overlapping generations to double in size.



Potato leafhopper adult and nymph

Penn State

Pea aphid - An increase in the number of winged individuals during the last reporting period suggests the annual aphid migration to pea fields should soon begin. Scouting peas in the week ahead, or when 50-75% of pea plants are flowering, is strongly advised.

When looking for pea aphids, be sure to sample several sites within a field as densities may be variable. Pea aphids that have recently migrated into peas from a nearby alfalfa field are likely to be detected in higher numbers in the margins of new fields. Examine 20 stems in five separate areas of the field for a total of 100 stems per field. If inspecting stems is too time consuming and sweeping is impractical, aphids may be dislodged and counted more easily by cutting stems close to the ground and shaking them against a piece of white paper or into a white pan.

The threshold for pea aphids in peas is 2-3 aphids per 8" of the plant tip at flowering. In alfalfa the threshold is 10 aphids per stem at two weeks prior to harvest. In terms of sweeps, the threshold is somewhere between 10 and 35 pea aphids per sweep. There is some uncertainty about action threshold in peas due to the virus transmission potential. The traditional threshold of 35 aphids per sweep does address the possibility of virus transmission; however, the revised threshold of 10 aphids per sweep now used by pea growers may be too low in light-virus years. It is recommended that pea aphid populations be monitored closely in the two weeks ahead. Do not apply an insecticide unless the action threshold is exceeded.

Alfalfa blotch leafminer - Comma-shaped leaf mines have grown more noticeable in south central alfalfa fields where 2.5-21% of the plants in fields surveyed had mines, pinholes, or both. Uncut first crop hay fields show the heaviest densities of leaf mines. Fields in which 40% of the plants have signs of pinhole feeding should be harvested as soon as possible to prevent additional damage.

Soybeans

Bean leaf beetle - Defoliation caused by the overwintered generation of bean leaf beetles is widespread but light in most V1 soybean fields. Surveys in Dane County earlier in the week found 5-15% defoliation affecting 33-38% of the plants sampled. No more than one beetle per foot of row was observed in any of the fields checked. Although defoliation is both common and widespread, the infestations noted did not warrant an insecticide treatment. Yield loss resulting from injury to leaves and cotyledons usually does not occur until densities of the beetles are as high as 16 beetles per foot of row in VC-V1 soybeans and 39 per foot of row in V2+ soybeans. When using the number of beetles per plant instead of the number per foot of row, the economic threshold is 2.0 to 4.4 beetles per plant at VC, 3.1 to 6.8 beetles per plant at V1, and 4.9 to 10.7 beetles per plant at V2. Expect defoliation to increase as more beetles migrate to emerging soybeans from nearby forage crops.



Bean leaf beetle feeding on unifoliolate leaf Kevin Black, Growmark, Inc.

The spring survey for overwintered bean leaf beetles in alfalfa continued into Fond du Lac, Ozaukee, Washington, Sheboygan, Juneau, Monroe and La Crosse counties where beetles were detected at the rate of 0-12 per 200 sweeps in 15 of 22 fields checked. As of May 31, survey specialists have collected a total of 504 bean leaf beetles from 81 of 107 (76%) fields sampled in the southern two-thirds of the state. Initial results of testing the beetles for Bean Pod Mottle Virus (BPMV) will be presented in next week's issue.

Soybean aphid - Soybean aphids have started to colonize Wisconsin soybean fields. Very light numbers of aphids (<13 per plant) were found on May 25 at the West Madison Research Station where a total of 41 alates and nymphs were detected on eight of 60 plants checked (13.3% infestation). On May 30, surveys in Dane County found a total of 15 aphids on two of 60 plants checked (3.3% infestation) in one field and no aphids in another. In all of the fields checked, the sampling method was somewhat biased in that the larger plants were selected. The plants examined had one node of fully expanded leaves with the second node beginning to expand but still folded (V1).

Start spot-checking soybean fields in the week ahead. Soybean aphids are usually first found on the unexpanded leaf tissue or on the undersides of the newest growth. More rigorous scouting efforts should be initiated in June and July once reproduction begins to accelerate. The best treatment time is at beginning bloom (usually late July to early August) to beginning pod stages if aphids are present at threshold and actively increasing in R1 to R4 soybeans. Spraying at R6 or beyond has not been documented to increase yield. For 2007 soybean aphid management recommendations, visit the UW Soybean Plant Health website at: http://www.plantpath.wisc.edu/soyhealth.



Soybean aphids on newest trifoliate

Photo © University of Wisconsin.

Corn

European corn borer - Since the first flight of corn borers officially began on May 12-13 in southern Wisconsin, black light traps from Janesville to Manitowoc have reported light

captures of moths. Counts ranging from 0 to 35 moths were registered at trapping sites during the last week. Female corn borer moths were swept from Dane and Sauk County alfalfa fields and several were spotted at a Columbia County porch light. First generation eggs are being laid on susceptible hosts in areas where 450 GDD (base 50°F) have accumulated, as far north as Crandon in Forest County. The first egg mass of the season was found on May 30 in a western Dane County sweet corn field. Black light traps are expected to document the first peak flight of European corn borer moths around 631 GDD, which could occur near Madison today, near Hancock by June 3, near Cumberland by June 4, near Wausau by June 6, and near Crivitz by June 8. Counts of corn borer moths recorded in the next week will indicate the magnitude of the first flight of moths and possibly the subsequent first generation of larvae. Recent mild evening temperatures have been very favorable for this night-flying species.



Female (left) and male (right) corn borer moths

Marlin E. Rice

Weeds

A majority of young corn stands in southwest Wisconsin remain relatively free from major weed problems. Towering stalks of cow parsnip (*Heracleum maximum*) along with red clover (*Trifolium pratense*) joined dame's rocket (*Hesperis matronalis*) as the most conspicuous weeds flowering in roadside ditches. Cattle are grazing in pastures, which suggests it is a good time to think about common pasture weeds and their impact on pasture quality.

Weeds proliferate in pastures because cattle avoid these often noxious species, while at the same time, cattle may aid in seed dispersal. For healthy, productive grazing livestock, a healthy and productive pasture is key. Maintaining healthy pastures requires keeping weeds under control and promoting growth of favored grasses. One pasture weed that has received a lot of attention in the past few years is multiflora rose, *Rosa multiflora*.

Multiflora rose - Once planted for livestock control, to

provide food for wildlife, and as a solution to erosion, multiflora rose is now a major problem in pastures, roadside ditches, old fields and open woods. This invasive species out-competes forage plants needed by cattle and grows in dense, impenetrable thickets. Management options include goat grazing, repeated mowing, digging up individual plants and herbicide application on cut or mowed regrowth.

This plant grows as a thorny perennial shrub and bears showy white to pink flowers that appear in May and June. Bright red fruits develop during summer months and remain on the plant through the winter. Birds readily feed on the fruits of multiflora rose, which enables the quick dispersal of seed after passing though their digestive tracts. Germination of the seeds is actually enhanced after passing through this process.



Multiflora rose

Donna Race

Fruit

Codling moth - High counts of codling moths were reported for the third successive week throughout the southern one-half of the state, while the first moths of the season were registered in Bayfield County orchards. Pheromone trap counts ranged from 0-25 moths for the period May 25 to June 1. Abovethreshold moth captures were recorded at many orchards, including one in Bayfield County, where counts of six and 12 moths were reported in two traps. As a reminder, a capture of five or more moths per trap in a week's time warrants control measures. If only one of several traps exceeds the action threshold, spot treating the problem area should be sufficient.

Spotted tentiform leafminer - Numbers have declined to the lowest levels in five weeks, which suggests a majority of STLM populations are still in the late larval stages or pupal stage of development. The pause in activity won't last for long. Moths of the second flight are expected to begin in southern orchards where 539-750 GDD (base 50F) will accumulate in the week ahead. Much of southern and west central regions of the state have already surpassed the lower range of this threshold. Apple insect trapping cooperators should replace lures at this time and look for a marked increase in pheromone trap counts next week.

Vegetables

Colorado potato beetle - Fourth instar larvae are active in southern and west central Wisconsin where 400 GDD (base 52°F) have been surpassed. Near Hancock, second instar larvae are expected to molt into third instar larvae by the end of this week. The larger third and fourth instar Colorado potato beetle larvae are capable of consuming substantial amounts foliage.

Bean leaf beetle - Overwintered adults have begun to migrate into legumes. Scouting shell peas and sugar snap peas for defoliation in the week ahead is strongly encouraged.

Early corn earworm trapping - Early-season corn earworm trapping began this week. Cooperators will be monitoring corn earworm flight activity using wire mesh Hartstack traps baited with corn earworm lure. While most migratory corn earworm moths do not begin to arrive until July or August, some cooperators will monitor the smaller, usually less damaging early flight of moths that arrives in June and early July. Early-season monitoring is used to learn more about the corn earworm life cycle, helps to track annual population dynamics, and indicates when early infestations may develop. During early monitoring last year, counts of 18 moths in three nights were observed in Sparta and Lancaster and 16 in four nights in Manitowoc. Corn earworm trap counts will be shared with the University of Minnesota and also posted on the VegEdge website at http://www.vegedge.umn.edu/.

Apiary

Apiary update - Specialists with the DATCP apiary program have been inspecting hives throughout the state for several weeks. Spring inspections found that a majority of hives appear to be in good condition, with normal levels of winter loss of ranging from 20-30%. Inspectors are on high alert for symptoms consistent with Colony Collapse Disorder (CCD) given the strong possibility that this new bee illness could be found in Wisconsin this season. Approximately five hives in Lafayette, Barron and Polk counties were found to have some of the characteristic symptoms of CCD. However, there are numerous uncertainties when it comes to accurately diagnosing CCD. Presently there is no standardized laboratory test to determine if a hive has CCD, and many of the symptoms are general and could be caused by a number of other factors. The suspect hive frames may be submitted to the USDA Bee Research Lab in Utah for additional testing.

Beekeepers who observe any of the symptoms associated with CCD, including 1) the complete absence of adults and little or no buildup of dead bees in the colonies or at the hive entrances (occasionally the queen and a small number of survivor bees are present in the brood nest), 2) the presence of capped brood, or 3) the presence of food stores, both honey and bee bread, which have not been immediately robbed by other bees, are urged to contact Liz Meils, State Apiarist, at 608-224-4572 or send an email to Elizabeth.Meils@wisconsin.gov. A DATCP apiary inspector will schedule a visit and provide an inspection at no charge.



Honeybee

www.insectimages.org

Nursery, Forest and Landscape

Weir's cushion rust - This spruce needle disease, caused by *Chrysomyxa weirii*, was found in Bayfield County on Colorado Blue Spruce. Weir's cushion rust is common in both the eastern and western United States and was first diagnosed in Wisconsin in 2002.

Infection begins on the current year's shoots. Infected needles exhibit yellow bands or spots that appear in the summer and fall. The following spring the spots produce pustules and release bright orange spores, which disseminate into the new growth. The previously-infected needles turn brown and eventually fall off while the newlyinfected needles will develop yellow bands or spots during the summer.



Weirs cushion rust

Anette Phibbs DATCP

This spruce-on-spruce fungus is very aggressive and easily spread by air-borne infectious spores. To protect

spruce nursery or Christmas tree stock, a preventative fungicide spray regime is recommended. The best time to treat with a fungicide for control and prevention is when 10% of the buds have opened. A total of three applications must be applied at 7 to 10-day intervals. This fungicide treatment will also help control Rhizosphaera needlecast. If treatment is delayed at bud break, fungicide treatments will not be effective.

Weir's cushion rust is of great concern because of its ability to easily spread in the spring. Disease symptoms should not be present on any nursery stock that is sold and moved off premises for sale. DATCP strongly recommends growers or dealer reject stock with this disease, and implement control measures on infected stock.

Other nursery inspection finds this week include:

Southeast region: Nutrient deficiency on 'Miss Canada' lilac and leaf scorch on boxwood and purple leaf sand cherry in Washington County. Chlorosis and black spot on roses in Dodge County.

East central region: Powdery mildew, spider mites and black spot on roses, aphids on 'Honeygold' apple and 'Little Princess', 'Anthony Waterer' and 'Japonica Shirobana' spirea, virus on 'Double Pink' and 'Double Red' peony, Hosta Virus X (HVX) on 'Gold Standard' hosta, shothole disease on purple leaf sand cherry and *Prunus cistena*, fletchers scale on taunton spreading yew, dothistroma on Austrian pine, cedar apple rust on dwarf 'Yellow Delicious' apple, needleminer on arborvitae and Colorado blue spruce and hollyhock rust on hollyhock in Manitowoc County.

Aphids on cistena plum and spirea, spruce needle drop on spruce, shothole disease on purple leaf plum, HVX on 'Eskimo Pie', 'Gold Edger' and 'Ginko Craig' hosta, spruce needle drop on Colorado blue spruce, needleminer on arborvitae, leaf gall on birch and maple, spider mites on honeysuckle, leaf scorch on birkwood viburnum and 'Lady in Red' hydrangea, and powdery mildew on columbine in Outagamie County.

Northwest region: HVX on 'Honeybells' and 'Royal Standard' hostas, aphids on 'Magic Carpet' spirea and dothistroma on Austrian pine in St. Croix County.

Trunk cankers on Stanley plum, thrips on 'Humelo' lambs ear and aphids on 'Neon Flash' spirea in Chippewa co. Cedar apple rust on dwarf 'Yellow Delicious' apple, HVX on 'Gold Standard' hosta, Rose mosaic virus (RMV) on 'Love', 'Mr. Lincoln', 'Oklahoma' and 'Sun Rose' hybrid rose, virus on 'Dol Pink' peony, aphids on 'Neon Flash' spirea, Tobacco rattle virus (TRV) on bleeding heart, HVX on 'Gold Standard' hosta and powdery mildew on 'Mirandy' hybrid rose in Eau Claire County.

Eastern spruce gall adelgid, spruce needle miner and rhizosphaera needlecast on black hills spruce, Weir's cushion rust on Colorado blue spruce, cyclaneusma canker and spruce needleminer on Colorado blue spruce and white pine blister rust and bark beetles on white pine in Bayfield County.

Northeast region: HVX on 'Elegans', 'Gold Standard' and 'Sieboldiana' hosta, spruce needle drop on Colorado blue spruce and tip blight and oystershell scale on lilac in Marathon co. HVX on 'Gold Standard hosta and Rose Mosaic virus (RMV) on 'First Prize' tea rose in Shawano County.

Gypsy Moth

Gypsy moth spray program - Btk and NPV treatments for gypsy moth caterpillars are finished for the year. This season treatment began on May 10 and was completed in about two weeks.

"Leaf and caterpillar development were ahead of schedule due to warm weather conditions," said Chris Lettau, gypsy moth program coordinator.

The last Btk spray was on May 25 in Ashland, Bayfield and Burnett counties. Throughout the Btk spray season, about 50,400 acres were treated with 25,229 gallons of Btk.

Pheromone flakes treatment is scheduled to begin in southern Wisconsin in mid-June and move northward through July or August. The tiny, flat, green flakes have the scent of the female gypsy moth, which confuses male moths as they search for a mate. Residents living in or near treatment areas will receive an informational postcard before spraying begins.

For more information about gypsy moth spraying, call the toll-free gypsy moth hotline at 1-800-642-MOTH or see the website gypsymoth.wi.gov. Information also can be found at the DATCP Web site www.datcp.state.wi.us. Click on Gypsy Moth Spraying under Agency Topics on the main page to view maps of spray sites, a spray chart and more.

Exotic Pest of the Week

Black swallow-wort - *Cynanchum louiseae*, commonly known as black swallow-wort, appears in the TOP TEN targeted upland plants to report and prevent as designated by the Wisconsin DNR and Wisconsin State Herbarium. This highly invasive plant already occurs in isolated patches across the state. Native to Europe, black swallowwort was intentionally brought into a botanical garden in Massachusetts and later escaped in 1864. Since then, it has spread to California, Connecticut, New York, New Hampshire and Wisconsin.

Black swallow-wort, not to be confused with other native *Cynanchum* species found in Wisconsin, invades suitable habitats and soon displaces native and rare species. Preliminary studies have also shown a decline in grassland bird populations in areas with dense growth of black

swallow-wort. This weed species ousts both plants and wildlife.

Cynanchum louiseae is a perennial herbaceous vine with oval-shaped leaves and dark purple to black, star-shaped flowers with five petals. Fruits turn from green to light brown at maturity. This plant spread by rhizomes, making removal and control difficult to achieve. Populations of black swallow-wort may be reported to Clarissa Hammond, DATCP Weed Specialist, at (608)224-4544 or Clarissa.Hammond@wisconsin.gov.



Black swallow wort

Stephen Darbyshire

Black Light Trap Counts through June 1

| | ECB ¹ | TA ² | BCW ³ | SCW ⁴ | CelL ⁹ | ForL ¹¹ | VCW ¹³ |
|---|------------------|-----------------|------------------|------------------|-------------------|--------------------|-------------------|
| Southwest Lancaster | 5 | 2 | 1 | 1 | 0 | 0 | 1 |
| Reeasburg South central Arlington | 8 | 0 | 2 | 0 | 0 | 0 | 0 |
| Mazomanie | 35 | 0 | 1 | 0 | 0 | 0 | 0 |
| Southeast Janesville East Troy | 7 12 | 15 0 | 0 3 | 0 0 | 6 0 | 1 0 | 0 0 |
| West central Sparta Chippewa Falls | 25 2 | 2 4 | 0 2 | 5 0 | 7 9 | 0 0 | 0 0 |
| Central Marshfield | 10 | 14 | 0 | 1 | 8 | 0 | 2 |
| E ast Central Manitowoc | 2 | 9 | 0 | 1 | 2 | 0 | 0 |

¹ European Corn Borer; ² True Armyworm; ³ Black Cutworm; ⁴ Spotted Cutworm; ⁹ Celery Looper, ¹¹ Forage Looper, ¹³ Variegated cutworm

* Indicates trap malfunction during the week

Apple Insect Trap Counts from May 25 to June 1, 2007

| County | Site | Date | STLM ¹ | RBLR ² | CM ³ | OBLR⁴ |
|-------------|----------------|-----------|-------------------|-------------------|-----------------|----------------|
| Bayfield | Gellerman | 5/25-5/31 | 14 | 0 | 0 | |
| Bayfield | Lobermeier | 5/25-5/31 | 25 | 67 | 0 | |
| Bayfield | Bayfield Apple | 5/25-5/31 | 295 | 0 | 6 | |
| Bayfield | Bayfield Apple | 5/25-5/31 | 441 | 0 | 12 | |
| Dane | Deerfield | 5/25-5/31 | 10 | 0 | 17 | 12 |
| Dane | Stoughton | 5/25-5/31 | 16 | 19 | 5 | 6 |
| Dane | West Madison | 5/25-5/31 | 0 | 0 | 12 | 2 |
| Dodge | Brownsville | 5/25-5/31 | 12 | 4 | 3 | 0 |
| Fond du Lac | Malone | 5/25-5/31 | 1 | 10 | 1 | 0 |
| Grant | Sinsinawa | 5/25-5/31 | 25 | 0 | 0 | 11 |
| Green | Brodhead | 5/25-5/31 | 0 | 0 | 0 | 14 |
| Iowa | Dodgeville | 5/25-5/31 | 13 | 0 | 25 | 5 |
| Iowa | Mineral Point | 5/25-5/31 | 3 | 0 | 2 [?] | 1 [?] |
| Jackson | Hixton | 5/25-5/31 | 10 | 0 | 1 | 0 |
| Marquette | Montello | 5/20-5/27 | 10 | 2 | 3 | 0 |
| Marinette | Wauzaukee | 5/25-5/31 | 93 | 3 | 18 | 0 |
| Ozaukee | Mequon | 5/24-5/30 | 0 | 0 | 0.3 | 0 |
| Pierce | Beldenville | 5/25-5/31 | 14 | 6 | 3 | 3 |
| Racine | Raymond | 5/25-5/31 | 3 | 0 | 1 | 1 |
| Richland | Hill Point | 5/24-5/30 | 35 | 0 | 8 | 2 |
| Waukesha | New Berlin | 5/25-5/31 | 11 | 0 | 7 | 1 |

¹ Spotted tentiform leafminer; ² Redbanded leafroller; ³ Codling moth; ⁴ Obliquebanded leafroller.

EXOTIC PEST OF THE WEEK Black swallow-wort, *Cynanchum louiseae*



Department of Agriculture, Trade & Consumer Protection Divsion of Agricultural Resouces Management PO Box 8911 Madison WI 53708-8911

