

Vegetable insects:

C. Welty

European corn borer should be found in small larval stages this week in sweet corn. The adults are still active, as detected by traps, but are now past their peak abundance. Our blacklight trap at Fremont (Northwest Ohio) caught 108 corn borer moths this past week, which is down from 134 moths the previous week. The peak was 31 May to 2 June. The best plant stage for scouting for corn borer depends on how insecticide is applied at any given farm. If granules can be applied to whorl-stage corn, then corn should be scouted for corn borer damage (small holes in leaves) at the whorl stage and treated if at least 30% of plants are damaged. If granules can not be applied but a boom sprayer or airblast sprayer will be used, then delay scouting until the emerging-tassel stage and treat if at least 10% of plants are infested.

Corn earworm moths are being caught in pheromone traps. At Columbus (central Ohio) the number of moths trapped was 2 this week and 10 last week. At Fremont, no corn earworm moths were caught this week or last week but 2 were caught in mid-May. As soon as any early sweet corn starts silking, the need for insecticide sprays can be determined by checking whether corn earworm moths are being caught that week.

Slugs

(by Dr. Ron Hammond, reprinted from Ohio CORN newsletter, 5/30/00)

Slug damage has been reported from both corn and soybean fields in many parts of the state. Growers should be checking their fields for slug problems, especially in those fields with a past history of problems. If injury is severe and the plants are not outgrowing the damage, treatment might be necessary. The most common molluscicide for growers in Ohio is Deadline MPs. If an application is made with this bait, it should be broadcast over the field at 10 lbs per acre. Even coverage is essential to get good control. At 10 lbs per acre, you should get about 4-5 pieces of bait per square foot. Deadline MPs will hold up very well through rainfall. Our tests indicated that MPs will not breakdown, even with 3 plus inches of rainfall. Reports have been received that Deadline Bullets are still available, this is an older formulation of Deadline. There are a few differences between the MPs and the Bullets which might affect performance. The Bullets are bigger pieces of bait compared with the MPs. At a similar rate (10 lbs per acre), you will get fewer pieces of Bullets per square foot compared with the MPs. If a grower can buy the Bullets at a reduced price, the rate of application should be pushed to 15-20 lbs per acre to ensure an adequate number of pieces per square foot. Also, Bullets will not hold up as well as MPs when significant rainfall occurs. Deadline MPs is the preferred formulation; if the Bullet formulation is used, greater care is needed to get the best control.

(Note for VegNet: Deadline MPs (mini-pellets) are registered for use on most veg crops at a rate of 20-40 lb/A.)

PSNT - Presidedress Soil Nitrate Test Recommendations for Sweet Corn

Adapted by R. Precheur from a fact sheet by: Dr. Joseph Heckman, Soil Fertility and Dr. Donald Prostak, Pest Management, Rutgers Cooperative Extension, FS 760

In last week's VegNet, Matt Kleinhenz talked about dealing with the challenges brought on by excessive rainfall. In the area of soil fertility, one tool available for sweet corn growers is an inseason soil test that provides information about the nitrogen supplying capacity of a soil. Soils are sampled when sweet corn plants are 10 to 20 inches tall or about a week to ten days before the sidedress nitrogen application, a critical stage in the development of sweet corn. Soil nitrate nitrogen usually accumulates during the spring and peaks at the 12 inch growth stage of corn. This is a period of maximum accumulation of nitrate nitrogen by sweet corn. Therefore, the PSNT measures soil nitrate nitrogen at a critical growth stage. This test will help sweet corn growers determine how much nitrogen should be applied in the sidedress application. This test is different than the usual soil test so be sure to check with your soil lab to see if they offer this service. The methods for taking and drying the sample are also different and you must use the proper procedures before using this test. Basically, the samples are taken at a 12 inch depth. Collect about 20 core samples at random from the center of the row in the test area. Crumble the cores and mix thoroughly before taking a subsample. Because microbes can change soil nitrate levels rapidly, dry the samples quickly by spreading them into a thin layer that will dry overnight. Once dry, you can crush the soil into finer particles. Send the sample to the lab or use a commercially available soil nitrate test kit. The soil nitrate nitrogen will be reported in ppm. From tables that I have or available from your soil test lab you can determine how much sidedress nitrogen is recommended for application. If you have never used this test before, use it on a limited or trial basis to see if it accurately predicts your field conditions. Some calibration may be necessary for your situation.

For more detailed information, you can get a copy of the Rutgers fact sheet by going to the following web page.

<http://www.rce.rutgers.edu/pubs/ag/plantscience/soilsandfertilizers.html>

The file is in a "pdf" format which means you will need Adobe Acrobat reader to view it after you have downloaded the file. Acrobat Reader is available from many sites and it may already be included in an email package that you use.

Two University labs that offer this service are Michigan State and Penn State as well as many commercial labs. Following is some information from a Penn State web page about the test and who to contact:

'To use this program, a standard multiple soil test kit must be purchased from a county Penn State Cooperative Extension office or from the Laboratory and a PSNT information sheet requested. The results for nitrate-nitrogen along with recommendations will be telephoned or faxed to the grower or designated

individual within 24 hours of receipt by the lab. A hard copy of the results and recommendations will also be mailed.'

Agricultural Analytical Services Lab,
Penn State University,
University Park, PA 16802,
Tel: 814-863-0841 ,
Fax: 814-863-4540 ,

Please send questions and comments to: amw2@psu.edu

June Vegetable Days
R. Precheur

* June 13, 6:00 p.m. until dark. Meigs/Washington County Vegetable Twilight Tour, Letart Falls, Ohio. Contact: Hal Kneen, OSU Extension Agent, Meigs County, 740-992-6696 kneen.1@osu.edu

* June 20, 6:30 - 9 PM. Cabbage Field Program:

The OSU Vegetable Team will offer a cabbage scout training program on Tuesday, 20 June, in the Fremont area. The exact locations are not yet finalized but either the starting or ending location will be the OARDC Vegetable Crops Branch on SR 53 just south of Fremont. Final locations will be announced in a later issue of VegNet. This will be a field program with the purpose of learning to identify pests and beneficial insects, to demonstrate scouting procedures, and to discuss integrated chemical and biological control strategies, particularly for diamondback moth.

Any questions, contact: Celeste Welty
phone (614-292-2803) or
email (welty.1@osu.edu).

* June 27, AM, Vegetable Weed Day at The Vegetable Crops Branch, Fremont, OH.

>>> Note: You must pre-register for this event since the number of participants is limited. There will be no same day registration.<<<

For complete details, contact: Doug Doohan at:
330-202-3593 or
email doohan.1@osu.edu

* June 29, 10:00 a.m. to 12:00 p.m. Muck Crops Field Day,
Muck Crops Branch, Celeryville
Contact: Bill Evans, Branch Manager,
419-935-1201,
evans.346@osu.edu

TomCast Report
K. Scaife

This year, the Tomcast network is not in operation but we will have a few locations recording DSV's which we will report here on a weekly basis. The first location to report this year is Fremont. The total DSV's as of 7 June are 10. Last week, 31 May: 8 DSV's.

Daily accumulations for Fremont will be reported on the Tomcast page at the VegNet website but updated only once or twice a week.

Crop Reports
Hal Kneen and Ron Becker

SouthEast:

Meigs/Washington Counties Annual Vegetable Twilight Tour will be held in Meigs County at the O'Brien Farm located on Adams Road, Racine Ohio. Registration begins at 6 p.m. and the tour starts at 6:30 p.m. rain or sun. Tour covers field production of staked tomatoes, peppers, sweet corn, melons and a neighboring cabbage field. Both trickle and irrigation gun will be discussed. This event is open to the public and is sponsored by Ohio State University Extension.

Light hail storm went thru Letart Falls area Friday night causing some bruising of tomato fruit and some stem & leave damage.

Tomatoes continue to grow and require trellising and suckering. Additional acreage is being planted for later harvest.

Sweet corn has begun to tassel in both clear plastic and plain ground grown fields. Caught only 3 corn earworm and 2 European Corn borer thru June 5 in the Racine helio traps.

Wayne and Holmes Counties,

Insect activity is heavy in Wayne and Holmes Counties. Flea beetles are going over threshold in sweet corn, potatoes and cabbage as well as causing some damage on tomatoes.

Sweet corn is also showing activity from corn borer, common armyworm, cutworm and stalkborer. Slugs are to the point of needing treatment in many crops, especially where the crop is under plastic or was planted in last years hay stand. thrips are also active in many crops. Several fields of cabbage have had to be treated for imported cabbage worm. In beans we are finding bean leaf beetle, Mexican bean beetle and potato leaf hopper. Two spotted spider mite is being found on eggplant, strawberries and raspberries. Aphids, Colorado potato beetles, cucumber beetles (both striped and spotted), striped flea beetles and stinkbugs are also active.

The corn borer trap had 28 moths in it this week(0 last week, though the moths were found in the fields). The worst leaf feeding so far from ECB in sweet corn has only been 3% with most of our sweet corn in the 4-10 inch range.

The 7 Day Outlook*

AKRON-CANTON

DAY DATE| FRI 09| SAT 10| SUN 11| MON 12| TUE 13| WED 14

TEMP

MIN/MAX| 62 84| 63 85| 61 82| 61 81| 62 81| 60 80

WIND | 6 8| 5 8| 5 7| 5 7| 6 8| 6 9

PREC

PROB 24| 10 | 15 | 34 | 30 | 37 | 42

CLEVELAND

DAY DATE| FRI 09| SAT 10| SUN 11| MON 12| TUE 13| WED 14

TEMP

MIN/MAX| 63 82| 64 85| 62 80| 61 81| 61 81| 62 79

WIND | 6 7| 5 8| 5 8| 5 7| 5 8| 6 9

PREC

PROB 24| 13 | 16 | 36 | 30 | 37 | 43

COLUMBUS

DAY DATE| FRI 09| SAT 10| SUN 11| MON 12| TUE 13| WED 14

TEMP

MIN/MAX| 61 88| 63 87| 64 82| 62 82| 62 81| 62 82

WIND | 4 6| 3 6| 3 5| 2 5| 3 6| 4 7

PREC

PROB 24| 2 | 12 | 29 | 30 | 36 | 42

CINCINNATI

DAY DATE| FRI 09| SAT 10| SUN 11| MON 12| TUE 13| WED 14

TEMP

MIN/MAX| 62 84| 63 88| 67 85| 66 84| 66 84| 63 80

WIND | 6 9| 6 8| 5 8| 5 8| 6 8| 7 10

PREC

PROB 24| 0 | 11 | 26 | 30 | 36 | 42

DAYTON

DAY DATE| FRI 09| SAT 10| SUN 11| MON 12| TUE 13| WED 14

TEMP

MIN/MAX| 61 87| 64 88| 66 82| 64 81| 65 82| 64 82

WIND | 5 7| 5 7| 4 6| 4 6| 5 7| 6 9

PREC

PROB 24| 1 | 11 | 29 | 30 | 36 | 42

TOLEDO

DAY DATE| FRI 09| SAT 10| SUN 11| MON 12| TUE 13| WED 14

TEMP

MIN/MAX| 62 86| 62 87| 61 80| 60 80| 60 82| 60 80

WIND | 6 8| 6 8| 6 7| 5 7| 6 9| 7 9

PREC

PROB 24| 12 | 15 | 36 | 31 | 38 | 43

YOUNGSTOWN

DAY DATE| FRI 09| SAT 10| SUN 11| MON 12| TUE 13| WED 14

TEMP

MIN/MAX| 59 82| 61 86| 59 82| 58 81| 57 81| 58 79

WIND | 5 7| 5 7| 6 6| 5 6| 5 7| 5 8

PREC

PROB 24| 14 | 17 | 36 | 30 | 37 | 43

* LEGEND:

TEMP MIN/MAX - forecasted minimum and maximum temperature for time periods midnight to noon and noon to midnight.

WIND - MEAN WIND SPEED(KTS) FOR TIME PERIODS periods midnight to noon and noon to midnight.

PREC. PROB. 24 - probability of precipitation for the 24 hour period.

What's New At The VegNet Web Site

Pumpkin Production Chart

Originally available only in the print version of the 2000 Ohio Vegetable Production Guide, this WEB version can be found in "The Pumpkin Patch" The chart is a quick guide and timeline to key factors necessary for a successful pumpkin crop.

Another NEW! VegWeb Fact Sheet.

Table on Susceptibility of sweet corn hybrids to Stewart's Bacterial Wilt as rated by Jerald Pataky (Univ. of Illinois). Adapted by Dr. Celeste Welty, Extension

Entomology, OSU Columbus. This table was published in last week's VegNet Newsletter. A WEB edition is now available from the VegNet homepage. More information on Stewart's wilt and its history in Ohio will be available soon.

Vegetable Faculty WEB Pages.

Dr Matt Kleinhenz has recently posted his faculty webpage. At the site you can find his research projects, results and review his presentations made this past winter. A link from VegNet will be provided soon. To visit Matt's homepage, go to:
<http://www.oardc.ohio-state.edu/kleinhenz/>

From Dr. Brent Rowell, Univ of KY,
email: browell@ca.uky.edu

Our new KY Vegetable Recommendations book is on the web now. A print version is also available. The introductory section on marketing might be of interest to southern OH tobacco growers.

<http://www.ca.uky.edu/agc/pubs/id/id36/id36.htm>

The marketing section is also available as a separate publication.

<http://www.ca.uky.edu/agc/pubs/id/id134/id134.htm>

Visit: "The Library, Online Edition of the 2000 OH Vegetable Production Guide, NOW AVAILABLE.

The OH Vegetables Production Guide ranks #22 in top downloads from OSU Extension Ohioline with over 1,000 downloads. Most of the new features are available in the online edition including the New Insecticide Efficacy tables. The new Pumpkin Production Chart is not there but I hope to have it posted soon in "The Pumpkin Patch" section of the VegNet website.

NEW! VegWeb Fact Sheets.

This new feature offers some valuable information on certain aspects of vegetable production that you can print out directly in your home or office. The first two are by Dr. Mac Riedel, OSU Plant Pathology, and are available from the VegNet homepage.

Fungicides Labeled for Pumpkins

Confused by the many new fungicides now available for pumpkins. Check out this fact sheet to see how to use these fungicides.

Fungicide Activity For Control of Tomato Diseases Which fungicide is best for a particular tomato disease.

Available from the Vegetable Crops Homepage, [Click Here!](#)

The 1999 Pumpkin Review and Slide Show.

Yield Data plus pictures of pumpkin cultivars from this year's trials. Also, see pumpkin varieties rated for powdery mildew resistance. There are many new and interesting pumpkin varieties in all size categories.

Visit: 'The Pumpkin Patch' for pictures and yield data.

The 1999 Green Pepper Evaluation and Slide Show.

Yield Data Slide Show From The Muck Crops Branch at Celeryville,

From The Enterprise Center

Comparison of Disease Control on Fresh Tomatoes using TOMCAST and SKYBIT to Time Fungicide Applications.

Evaluation of WaterMelon Cultivars for Southern Ohio, 1999

1999 Ornamental Corn Evaluation
Evaluation of Eastern Style Muskmelons for Southern Ohio, 1999
[Link To Research Summaries From The Enterprise Center at Piketon.](#)

[Return to Vegetable Crops Homepage | Ohio State University Extension](#)

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Where trade names are used, no discrimination is intended and no endorsement by Ohio State University Extension is implied. Although every attempt is made to produce information that is complete, timely and accurate, the pesticide user bears the responsibility of consulting the pesticide label and adhering to those directions.

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