VegNet Vol. 9, No. 20 August 14, 2002

Insect and trap report

C. Welty

Sweet corn and pepper pests

The European corn borer population is on the rise in northern Ohio but falling in central and southern Ohio as determined by numbers of moths caught in traps during the past week. As recommended for the past 2 weeks, pepper and sweet corn growers need to use a preventive insecticide program during this period to keep European corn borer larvae from invading pepper fruit and sweet corn ears. The corn earworm population remains low at all sites where trap reports were made this week. It could increase dramatically any time now, particularly if we have a storm system move up from the southeastern USA.

Trap report for European corn borer: The number of European corn borer moths in blacklight traps in the past week was 33 in Franklin County (down from 49), and 307 in Wood County (up from 106). The number of moths caught by cooperators in pheromone traps for European corn borer for the past week were 33 in Clark County (down from 115), 37 in Miami County (down from 71), 7 in Franklin County (same as previous week), 3 in Wayne County (Wooster research; up from 2), 1 in Sandusky County south (down from 10), 40 in Sandusky County west (up from 28), and 8 in Wood County (up from 5).

Trap report for corn earworm: In pheromone traps in the past week, cooperators reported 1 in Clark County (same as previous week), 1 in Miami County (down from 2), 1 in Franklin County (down from 3), 1 in Wayne County (Wooster research; down from 3), 0 in Sandusky County south (same), 2 in Sandusky County west (down from 1), and 0 in Wood County (same as previous week).

Trap report for fall armyworm: moths were detected in higher numbers this week; trap counts were

57 in Franklin County (up from 3), and 8 in Wood County (up from 0). The detection of moths in traps is a signal not to spray, but to scout fields for signs of fall armyworm larvae.

As usual, trap counts for this week and previous weeks are posted on the internet (http://ohioline.osu.edu/~ipm/traps/02vegrpt.htm) and can be accessed via the VegNet web site

Air Pollution Damage on Pumpkins and Other Vine Crops

Bob Precheur

Growers may be starting to notice some unusual leaf color patterns on their pumpkins and other vine crops. We first noticed these symptoms about two weeks ago and since then the area affected has increased in size. Our small bush type pumpkins seem to be affected more than the large pumpkin types. Symptoms first appeared a few days after an ozone alert was issued by the weather service. There have been 2 or 3 alerts so far this season. At first, symptoms appear to be similar to spider mite damage but no mites have been found after several inspections.

Symptoms vary dependent on the pollutant. Ozone damage appears on the upper leaf surface which usually have a yellow netted appearance due to loss of chlorophyll. The leaves may also exhibit a bronze like color and the main leaf veins remain green. Ambient oxidant injury is initiated as a diffuse chlorotic mottle on the upper surface which deepens until the leaf turns almost white. Leaf veins remain green. Our pumpkin symptoms appear to be similar to ambient oxidant injury. A watermelon sample was recently submitted to the Plant and Pest clinic and the leaf symptoms also appear to be air pollution injury.

Sensitivity to ozone among cucurbits varies with watermelon and squash the most sensitive. Pumpkin and muskmelon are intermediate in sensitivity. Cucumber is the most tolerant to ozone injury. Depending on the timing and extent of injury, yield may or may not be affected. In the case of our pumpkins, we expect no yield reduction since most of the fruit are full size and starting to show color.

Reference: Recognition of Air Pollution Injury to Vegetation: A Pictorial Atlas. Edited by: Jay S. Jacobson, A. Clyde Hill. Air Pollution Control Association. Pittsburgh, PA. 1970.

The 7 Day Outlook*

By Robert Precheur

Cold front washes out over the state today. Better rain chances by Sunday night and Monday. The high pressure ridge over the east will persist in some fashion for the next 6 to 9 days and wind direction will be mostly from the southwest. The latest Palmer index indicates most of northern OH and extreme south central OH, south of Columbus is now considered to be under a moderate drought.

AKRON-CANTON

DAY DATE	FRI 16	SAT 17	SUN 18	MON 19	TUE 20	WED 21
TEMP MIN/MAX	66 84	67 84	69 82	65 82	63 81	62 83
WIND	7 8	5 9	7 9	6 7	5 8	5 8
PREC. PROB. 24	47	49	52	34	34	39

CLEVELAND

DAY DATE	FRI 16	SAT 17	SUN 18	MON 19	TUE 20	WED 21
TEMP MIN/MAX	70 85	69 84	69 84	64 82	63 81	64 82
WIND	7 8	6 10	7 9	6 8	5 8	6 9
PREC. PROB. 24	43	48	52	33	34	40

COLUMBUS

DAY DATE	FRI 16	SAT 17	SUN 18	MON 19	TUE 20	WED 21
TEMP MIN/MAX	68 89	69 85	68 84	66 84	64 84	65 86
WIND	4 6	3 7	4 6	3 6	3 5	4 6
PREC. PROB. 24	53	53	49	35	34	39

CINCINNATI

DAY DATE	FRI 16	SAT 17	SUN 18	MON 19	TUE 20	WED 21
TEMP MIN/MAX	68 84	70 85	69 86	67 84	67 84	65 83
WIND	6 8	6 8	6 8	5 7	5 7	6 8
PREC. PROB. 24	60	54	47	37	34	38

DAYTON

DAY DATE	FRI 16	SAT 17	SUN 18	MON 19	TUE 20	WED 21
TEMP MIN/MAX	65 87	67 86	68 85	66 83	64 84	64 86
WIND	6 7	5 9	7 8	5 7	4 7	5 7
PREC. PROB. 24	53	53	48	36	34	39

TOLEDO

DAY DATE	FRI 16	SAT 17	SUN 18	MON 19	TUE 20	WED 21
TEMP MIN/MAX	66 85	67 84	69 80	63 81	61 82	62 82
WIND	7 8	5 10	7 9	5 7	4 7	5 8
PREC. PROB. 24	40	52	51	34	34	40

YOUNGSTOWN

DAY DATE	FRI 16	SAT 17	SUN 18	MON 19	TUE 20	WED 21

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TEMP
 MIN/MAX | 66  83| 66  83| 70  82| 61  82| 60  81| 61  82|
WIND     |  5   7|  5   7|  6   8|  5   7|  4   7|  5   8|
PREC.
 PROB. 24|   46  |   47  |   53  |   33  |   33  |   39  |


* 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 midnight to
noon and noon to midnight.

PREC. PROB. 24 - probability of precipitation for the 24
hour period.
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What's New At The VegNet Web Site

Problem Of The Week

A pictorial comparison of Squash Vine borer damage and Bacterial Wilt in pumpkins. While the symptoms are similar, there are some key differences. Check it out. Click on the 'Problem of the Week' button of the left side.

Highlights From the Pumpkin and Muck Crops Field Days

Couldn't make it to Celeryville on July 25th or forgot about The Pumpkin Field Day on August 7th, then take a look at just a few of the highlights from these two field days. Click on the 'Talk Between The Rows' button on the VegNet homepage.

2001 Slide Presentations

Pepper Variety Slides 2001 | HTML Slide Show
Pumpkin Variety Slides 2001 | HTML Slide Show
Go to the Library Section under Research Reports.

VegNet Vegetable Schools

A series of slide presentations are now available in order to update you on the latest pumpkin and sweet corn research. We begin with 6 pumpkin topics in Pumpkins 101 and have 10 slide presentations available in Sweet Corn 101. In sweet corn. Powerpoint presentations and html online slide shows are

available now. Go to the VegNet homepage.

Pumpkins 101
The use of trap crops and Admire for cucumber beetle control and New varieties for 2001. We have presentations on cover crops for disease control and pumpkin fungicide use.

- **Perimeter Trap Cropping. Online html slide show | Perimeter Trap Cropping. PPT, 7 Mbytes See also the Research Results section on the home page for text version of the report.**
- **Pumpkin Variety Slides 2001 | HTML Slide Show**

Sweet Corn 101
Presently only Powerpoint presentations availabe. Coming Soon: Online HTML slide shows. Check back often Nine topics including:

- **Aspects of Variety Selection based on Disease Control [ppt 40 KB]**
- **Internet Link To "Reactions of Sweet Corn Hybrids to Prevalent Diseases" Dr. Jerald Pataky www.sweetcorn.uiuc.edu**
- **Producing Early Sweet Corn [ppt 3.5 Mbytes]**
- **Managing Weeds in Sweet Corn [ppt, 9 Mbytes]**
- **Sweet Corn Heribicies & Variety Sensitivity. [ppt 2Mbytes]**
- **Sweet Corn Development and Critical Periods for Irrigation Management [ppt 1.6 Mbytes]**
- **Flea Beetle Management in Sweet Corn [ppt 510 KB]**
- **How To Keep Worms Out of Sweet Corn Ears [ppt 8.3 Mbytes]**
- **Role of Bt Transgenic Hybrids in Sweet Corn Pest Management. [ppt 21.2 Mbytes]**

Bt Sweet Corn Efficacy in OH, 1999-2000 [ppt, 208 KB]

Return to Vegetable Crops Homepage | Ohio State University Extension

We appreciate very much the financial support for thisseries of vegetable reports which we have received from the board of growers responsible for the Ohio Vegetable and Small Fruit research and Development Program. This is an example of use of Funds from the "Assessment Program".

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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