



VegNet Vol. 9, No. 16, July 18, 2002



Spider mite control on vine crops

C. Welty

During hot dry weather like Ohio is now having, we usually see outbreaks of the two-spotted spider mite in vine crops. Pumpkins can tolerate moderate levels of mites, but watermelons are particularly sensitive to injury from mite feeding. Miticide options include the older products Kelthane (dicofol), Metasystox-R (oxydemetonmethyl), malathion, and insecticidal soap, and the newer products Agri-Mek (abamectin), Danitol (fenpropathrin) and Capture (bifenthrin). Dimethoate is an option for melons but is not allowed on squash or cucumbers; it has been the preferred product for mite control on soybeans. Vydate (oxamyl) is registered for use on all vine crops for aphid control; although its label does not list mites as a target pest, Vydate is known to provide mite control on other crops such as eggplant and apples.

A search of published reports on mite control in watermelon during the past few years resulted in one report. In a trial conducted in Maryland in 1998, Kelthane gave the best control followed by Danitol, and Agri-Mek gave poor control. The trial also compared these products in 10 versus 25 gallons of water per acre, and control was consistently better with 25 than with 10 gal/A.



Insecticide News and Pest Observations

C. Welty

Several more crops have been added to the Avaunt label: eggplant, Brussels sprouts, Chinese broccoli,

Chinese cabbage (napa), Chinese mustard cabbage, and kohlrabi. Avaunt is a DuPont product that contains indoxacarb. It controls caterpillars such as cabbage looper, imported cabbageworm, diamondback moth, and tomato fruitworm. Avaunt has been available since December 2000 for use on cole crops, lettuce, tomato, peppers, and sweet corn.

Large numbers of Japanese beetle are active. Sweet corn growers should be aware that Japanese beetle can clip silks before pollination. Large flights of true armyworm have occurred in the past week in northwest Ohio; the main crop at risk from armyworm larvae is sweet corn in seedling or early whorl stages. Beetle activity has been increasing in pumpkins, including new second generation striped cucumber beetle, as well as spotted cucumber beetle and western corn rootworm beetle. Aphid colonies are being found on pumpkins.

The pest highlights during the past week as detected by traps were similar to the previous 2 weeks; corn earworm is now active at most sites in southern Ohio, and European corn borer activity continues to decline at most sites as we wait out the period between generations.

Corn earworm: In pheromone traps in the past week, cooperators reported 1 corn earworm moth in Highland County (same as previous week), 2 in Montgomery County (down from 4), 1 in Clark County (same as previous week), 2 in Miami County (down from 8), 2 in Franklin County (down from 3), 0 in Wayne County (Wooster research; same as previous week), 0 in Wayne County (Wooster commercial), 0 in Wayne County (Dalton), 0 in Summit County, 0 in Huron County, 0 in Sandusky County south (same as last week), 4 in Sandusky County west, and 0 in Wood County (same as previous week). Any farms with fresh-silking sweet corn should beware of whether or not this pest is present in the area. Specific guidelines for spray intervals during silking if corn earworm moths are present is found in the sweet corn chapter of the 2002 Ohio Veg Production Guide. For current conditions in southern Ohio, silking sweet corn should be sprayed at 5-day intervals.

European corn borer: Cooperators report that the number of moths caught in pheromone traps for European corn borer for the past week were 0 moths in Highland County (down from 2), 0 in Montgomery County (same as previous week), 1 in Clark County (same as previous week), 2 in Miami County (up from 1), 16 in Franklin County (up from 0), 0 in Wayne County (Wooster research; same as previous week), 0 in Wayne County (Wooster commercial), 0 in Summit County, 0 in Huron County, 0 in Sandusky County south (down from 5), 0 in Sandusky County west (down from 4), and 0 in Wood County (down from 3). The number of European corn borer moths in blacklight traps in the past week was 8 in Franklin County (up from 0 last week), 0 in Sandusky County (down from 2), and 0 in Wood County (down from 8).

Squash vine borer: moths continue to emerge but we seem to be past peak emergence. In pheromone traps for squash vine borer, cooperators reported 1 moth in Clark County (S. Charleston; down from 2 last week) 19 moths in Clark County (Springfield; down from 30 last week), 7 in Franklin County (Grandview; down from 16), and 6.0 in Franklin County (OSU campus; mean of 2 traps, down from 3.0), 5 in Union County (same as last week), and 0 in Wood County (down from 3).

Variegated cutworm moths are still active. Pheromone traps for this pest this week caught 62 moths in Franklin County (up from 48) and 11 moths in Huron County (down from 24), and 8 in Wood County (up from 5). Black cutworm traps caught 1 moth in Huron County (up from 0) and 11 in Wood County (up from 5). Fall armyworm moths have not yet been detected; trap counts were 0 in Franklin and Wood Counties this week and the previous 3 weeks.



Vegetable Field Days

Muck Crops Field Day, July 25, 10 AM - Noon

Projects on view include: Timing and rate of Prowl to control weeds in green onions; Nematodes for control of carrot weevil; Cultivar evaluations of eggplant, radish, sweet corn, bell pepper and edible soybean (edamame); Irrigation to optimize weed control in lettuce; IR-4 Bifenthrin residue trials on carrots and beets; Fungicide evaluation; Insecticide screening in green onions; cover crop evaluation and more.

The Muck Crops branch is 2 miles south of Willard on SR 103 south. For complete details and directions, contact: Rick Callendar at 419-935-1201 or email: callendar.1@osu.edu

.....

Vegetable Crops Field Day, August 1, 3:30 - 6:00 PM

The program includes: Tomato breeding, pepper diseases and control; Cabbage variety trials, Cover crop mulches for pumpkins; Vegetable weed control; Herbicide carryover effects on various vegetable crops. There is an optional tour from 1-3 PM. Also, a dinner at 6 PM

The branch is at 1165 Country road 43, Fremont, OH. For complete details and directions, contact: Mark Koenig at 419-334-6340 or Matt Hofelich at 419-332-5142.



The 7 Day Outlook*

By Robert Precheur

Warm and dry for the next few days.

Best chance of rain from thunderstorms over the next 7 days is Friday the 19th but a trough over the TN valley will probably suck the energy out of OH and lower chances for more widely developed storms. Slightly cooler, less humid weather is expected by Saturday. Mostly dry next week with temperatures in the mid to upper 80's. Growers will need to supply water during critical growth stages over the coming week as rain chances remain low.

AKRON-CANTON

DAY DATE	SAT 20	SUN 21	MON 22	TUE 23	WED 24	THU 25
TEMP						
MIN/MAX	63 83	66 85	71 86	67 84	66 84	64 84
WIND	4 6	4 7	6 8	6 7	5 8	6 8
PREC.						
PROB.	24	30	39	50	32	33
						41

CLEVELAND

DAY DATE	SAT 20	SUN 21	MON 22	TUE 23	WED 24	THU 25
TEMP						
MIN/MAX	63 81	66 85	69 87	67 83	65 84	66 84
WIND	4 5	4 8	6 8	6 8	5 8	7 9
PREC.						
PROB. 24	22	35	51	30	32	41

COLUMBUS

DAY DATE	SAT 20	SUN 21	MON 22	TUE 23	WED 24	THU 25
TEMP						
MIN/MAX	67 86	67 88	69 89	69 86	67 87	67 87
WIND	2 4	2 5	3 6	3 6	3 5	4 7
PREC.						
PROB. 24	46	46	50	33	34	41

CINCINNATI

DAY DATE	SAT 20	SUN 21	MON 22	TUE 23	WED 24	THU 25
TEMP						
MIN/MAX	67 84	69 87	72 91	71 88	70 87	67 84
WIND	4 6	4 7	6 8	5 7	6 7	6 9
PREC.						
PROB. 24	61	52	50	35	35	40

DAYTON

DAY DATE	SAT 20	SUN 21	MON 22	TUE 23	WED 24	THU 25
TEMP						
MIN/MAX	65 85	67 88	70 89	70 86	68 87	67 87
WIND	3 5	3 7	5 7	4 6	4 7	5 8
PREC.						
PROB. 24	50	47	49	32	34	41

TOLEDO

DAY DATE	SAT 20	SUN 21	MON 22	TUE 23	WED 24	THU 25
TEMP						
MIN/MAX	61 85	65 87	69 86	66 84	64 85	64 82
WIND	3 5	3 8	5 8	5 7	5 8	8 9
PREC.						
PROB. 24	22	38	49	27	32	41

YOUNGSTOWN

DAY DATE	SAT 20	SUN 21	MON 22	TUE 23	WED 24	THU 25
TEMP						
MIN/MAX	59 82	62 85	69 86	64 84	61 84	62 84
WIND	4 5	4 7	5 8	5 7	5 6	6 8
PREC.						
PROB. 24	23	35	51	32	32	41

* 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.



What's New At The VegNet Web Site

Slide Presentations

Pepper Variety Slides 2001 | HTML Slide Show
Pumpkin Variety Slides 2001 | HTML Slide Show
Go to the VegNet homepage.

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. In coming weeks, we will have presentations on cover crops for disease control and pumpkin fungicide use. Check back often.

- **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 available. 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]**

● **[Online Edition of the 2001 Ohio Vegetable Production Guide - Now Available](#)**

● **Sweet Corn Disease Resistance Ratings**

The following are summarized lists of Dr. Pataky's work at the Univ. of IL on disease reactions of sweet corn. In these summaries, all experimental and processing varieties have been removed and only named varieties which were rated for common rust or MDM are included. The first list are those named varieties rated for common rust. The second list are only those named varieties rated for Maize Dwarf Mosaic virus (MDM).For a complete report, E-mail: Bob Precheur: precheur.1@osu.edu

[Common Rust of Sweet Corn](#)
[MDM of Sweet Corn](#)

● **Do You Know Us?**

Find out what we've been up to. The OSU Vegetable Team Report is available in PDF file format for downloading from the VegNet homepage.

● **Sources of Pheromone Traps Used in Vegetable Pest Management.**

Do you need to find traps, lures or suppliers, click on the Vegetable IPM button on the left side of the homepage, then click on the 'Sources' document in the Vegetable IPM section.

● **IR-4 News**

Also in the Vegetable IPM section, you can link to the IR-4 website. Read the results of the 2000 food use workshop, monthly and quaterly newsletters. Find out the latest on pesticide registrations for minor crops. Learn about biopesticides plus much more. Click on the Vegetable IPM button on the VegNet homepage and then click on the IR4 link in the Vegetable IPM section.



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

[University Extension](#)

We appreciate very much the financial support for this series 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.

Issued in furtherance of Cooperative Extension work, Acts of May 8 and June 30, 1914, in cooperation with the U.S. Department of Agriculture, Keith L. Smith, Director, Ohio State University Extension.

All educational programs and activities conducted by Ohio State University Extension are available to all potential clientele on a nondiscriminatory basis without regard to race, color, creed, religion, sexual orientation, national origin, sex, age, handicap or Vietnam-era veteran status.