

VegNet Vol. 9, No. 18, August 1, 2002

Pumpkin Field Day, August 7th, 4-6 PM

J. Jasinski

Please note that we now have been given 1 Crop Management and 1 Pest Management CCA credit for folks attending the field day.

Everyone is welcome to attend the Pumpkin Field Day at the Western Branch Research Station in South Charleston, August 7th, 4-6 PM. At the field day will be OSU researchers Mac Riedel, Bob Precheur, Celeste Welty, Jim Jasinski, and Andy Wyenandt to talk about their work at the station and help answer any questions you might have. The field day will be informal but will cover many topics including the use of Sandea and Strategy herbicides in pumpkins, fungicide and variety plot work, giant pumpkin production, the use of Admire, perimeter trap crops, and Kairomone traps to reduce cucumber beetles, and cover crops used in pumpkin production.

There are nearly 8 acres of pumpkin research at the farm. This is one of the greatest concentrations of pumpkin research in the State; don't miss your chance to see it all! CCA credit has been approved in the categories of Pest and Crop Management.

Directions to the Western Branch: The Western Branch is located on the south side of S. R. 41, between I-70 and the town of South Charleston. A flyer with a map is posted at http://www.ag.ohio-state.edu/~swest/ipm/images/PFDay807.jpg

For more details, please contact Jim Jasinski, 937-454-5002 or email: jasinski.4@osu.edu.

Insect and trap report

C. Welty

Sweet corn and pepper pests

This past week we were expecting a large increase in the number of European corn borer moths caught in traps but the trend thus far is the same as last week, with some activity by corn borer moths but not the big surge that should be coming soon. Other key news this week is that the corn earworm population has just increased dramatically in southeastern Ohio but remains low to zero in central and northern Ohio. In areas where field corn is silking, these two pests are likely to cause light to moderate damage to peppers because fresh-silking corn is more attractive to them than peppers. In areas where the field corn is past silking, these pests will find sweet corn and peppers as suitable hosts for egg laying. Corn borer eggs take about 4 days to hatch when temperatures are hot as they currently are.

Pepper growers should begin their control program this week for European corn borer. With the current situation of European corn borer moths active but still at low density, pepper growers are advised to apply insecticide such as Baythroid or Pounce or Confirm or SpinTor but do not use Orthene until egg hatching is at peak levels.

Silking sweet corn should be sprayed with insecticide at intervals based on current pest activity. The spray interval should be 2 days at sites (such as Racine) where more than 91 corn earworm moths are caught per trap per week, or every 4 days at sites (such as in central Ohio) where 3 to 7 corn earworm moths are trapped per week. In northern Ohio where no corn earworm moths are being caught but European corn borer moths are emerging, a 5-7 day schedule is needed. These intervals need to be adjusted if moth numbers increase or decrease.

European corn borer: the number of moths caught by cooperators in pheromone traps for European corn borer for the past week were 24 moths in Meigs County (up from 20 the previous week), 0 moth in Highland County (down from 1), 10 in Montgomery County (up from 7), 16 in Clark County (up from 2), 5 in Miami County (down from 7), 14 in Franklin County (up from 8), 0 in Wayne County (Wooster research; same as previous week), 0 in Wayne County (Wooster commercial; same as previous week), 1 in Wayne County (Dalton; same as previous week), 1 in Summit County (up from 0), 1 in Huron County (up from 0), 2 in Sandusky County south (up from 1), 16 in Sandusky County west (up from 6), and 10 in Wood County (up from 4). The number of European corn borer moths in blacklight traps in the past week was 42 in Franklin County (up from 38), 1 in Sandusky County (same as previous week), and 9 in Wood County (down from 10).

Corn earworm: In pheromone traps in the past week, cooperators reported 125 corn earworm moths in Meigs County (up from 14 the previous week), 3 moths in Highland County (up from 1), 5 in Montgomery County (up from 4), 0 in Clark County (down from 1), 5 in Miami County (up from 2), 0 in Franklin County (down from 4), 2 in Wayne County (Wooster research; up from 0), 0 in Wayne County (Wooster commercial; same), 0 in Wayne County (Dalton; same), 0 in Summit County (same), 0 in Huron County (same), 0 in Sandusky County south (same), 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.

Fall armyworm moths were detected for the first time this week; trap counts were 2 in Franklin County (up from 0), and still 0 in Wood County. The detection of moths in traps is a signal not to spray, but to scout fields for signs of fall armyworm larvae. This pest is more sporadic than European corn borer and corn earworm but can cause significant problems in sweet corn as well as in peppers and tomatoes. In sweet corn, fall armyworm infestations usually begin in whorl-stage corn especially in low spots in the field. They chew large ragged holes in leaves and their feeding in whorls and tassels is very messy due to large amounts of frass. Treatment is recommended in sweet corn if more than 10% of plants are infested during the emerging- tassel stage.

Other insect pests

Cucumber beetles are reported as extra abundant in many areas with striped cucumber beetle and western corn rootworm beetle as most common, along with some spotted cucumber beetle and northern corn rootworm beetle. Fields where Admire was used at planting nearly 8 weeks ago have many dead beetles showing very long-lasting effects of this insecticide.

Squash vine borer: moths are near the end of their emergence period so egg laying is probably over for the year. In pheromone traps for squash vine borer, cooperators reported 5 moths in Highland County (up from 0), 6 moths in Clark County (Springfield; down from 20), 0 in Franklin County (Grandview; down from 1), and 1.5 in Franklin County (OSU campus; mean of 2 traps, down from 2.5), 5 in Union County (same), and 1 in Wood County (up from 0).

Variegated cutworm moths are still active. Pheromone traps for this pest this week caught 9 moths in Franklin County (down from 30), 58 moths in Huron County (up from 25), and 4 in Wood County (up from 1).

Black cutworm traps caught 9 moths in Huron County (up from 0) and 4 in Wood County (down from 11).

News from the Pumpkin Field

R. Precheur

Powdery Mildew:

Yesterday, as expected, powdery mildew lesions were found on standard cultivars and powdery mildew tolerant cultivars. August 1st is usually the start date for protective fungicide application. The first spray should be Quadris or Bravo plus Nova @ 5 oz/A. Alternate chemicals if Quadris is in your program on a 7 to 10 day schedule.

Cuke Beetle Feeding:

Some beetle feeding on the skin of large fruit was noticed yesterday. This situation should be watched carefully and protective measures may be necessary to prevent these fruit from becoming unmarketable.

Virus:

Some plants are showing symptoms of mosaic virus. Cultural practices are not effective in controlling this problem. We are evaluating cultivars with tolerance but none are available at this time.

Spider Mites:

We thought we had a group of plants with typical mite damage but the adults could not be found on the leaves. With the hot, dry weather, continue to scout for this pest and if mites are found, follow the recommendations given in VegNet #16.

Crop Reports

Hal Kneen

SOUTHEAST

Scattered rains occur almost daily as daily temperatures mount into the high eighties and lower nineties. Unfortunately, rain hits one field and completely misses a field a quarter mile away. Irrigation is still being run to insure better uniformity of sweet corn, melons, peppers and tomatoes.

Racine cantaloupes are ripening while watermelon are still a week away. Peppers, tomatoes, sweet corn are continue being harvested. Late plantings of tomatoes are looking good. Bell pepper fruit set is poor in non-irrigated fields for late August harvest, good crop of early bell peppers were harvested.

Early blight is showing up on tomatoes. Effects of sweet corn diseases (Stewart's wilt, Maize Dwarf Mosiac Virus) are showing up in lower yield averages. Some renewed grower interest in reducing johnsongrass, better insecticide application and getting better disease-resistant varieties. Refer to the Midwestern Vegetable Variety Report for 2001 for Tables on resistant varieties from Dr. Jerald Pataky from the Univ. of IL.

Farm Markets, Farmers' Markets and Farm Product Auctions May be Eligible to Register with ODA for Exemption from Retail Food Establishment License

By John Wargowsky, Ohio Farm Bureau Director of Labor Services

Sub. S.B. 136 was passed by the Ohio General Assembly and signed by Governor Taft in Nov. 2001. This law will fix numerous negative impacts of previously passed legislation (HB 223) for farmers; beekeepers, maple syrup and sorghum processors; direct agricultural marketers and those involved in cottage food production activities. As of this date, we are working with the Ohio Department of Agriculture (ODA) to develop rules that will become part of the Ohio Administrative Code.

The exemptions for farm markets, farm product auctions and farmer's markets are based upon the foods being offered for sale. A synopsis of these specific exemptions are detailed below:

A person at a farmer's market that offers for sale only one or more of the following:

* Commercially prepackaged food that is not potentially hazardous, on the condition that the food is contained in displays, the total space of which equals less than one hundred cubic feet on the premises where the person conducts business at the farmers market; fresh unprocessed fruits or vegetables; maple syrup, sorghum, or honey; products of a cottage food production operation.

A farm product auction, on the condition that only one or more of the following are offered for sale:

- * Eggs from an exempt farm (500 or less hens); poultry from an exempt farm (1,000 or less chickens/year); non- amenable meats (rabbit, bison, etc.); fresh unprocessed fruits or vegetables; maple syrup, sorghum, or honey; products of a cottage food production operation.

 A farm market that offers for sale only one or more of the following:
- * Commercially prepackaged food that is not potentially hazardous, on the condition that the food is contained in displays, the total space of which equals less than one hundred cubic feet on the premises where the person conducts business at the farm market; fresh unprocessed fruits or vegetables; maple syrup, sorghum, or honey; products of a cottage food production operation; cider and other juices manufactured on site at the farm market; eggs on the condition that the person offering to sell them annually maintains five hundred or fewer birds; poultry on the condition that the person offering to sell them annually raises and slaughters one thousand or fewer chickens; non- amenable meats (rabbit, bison, etc.) on the condition that the person offering to sell the meat raises and slaughters the animals.

Please note that the above-mentioned Farm Markets, Farmer's Markets and Farm Product Auctions are exempt only if registered with the Ohio Department of Agriculture. The registered exempt facilities will be inspected by ODA. Farm Markets, Farmer's Markets and Farm Product Auctions that do not meet the requirements for exemption are to be licensed as Retail Food Establishments by the local health department. These registration forms are available at www.ohiofruit.org or www.ohiovegetables.org by clicking on Grower News then Legislative and Regulatory Issues. The organizer or person in charge of a Farmer's Market or Farm Product Auction is responsible to register with ODA. It is not necessary for each participant to register. The owner of a Farm Market is responsible to register with ODA.

Additional information regarding the new Mobile Retail Food Establishment License, Cottage Food Operations and exemption information for small producers of maple syrup, sorghum and honey may also be found at www.ohiofruit.org or www.ohiovegetables.org by clicking on Grower News then Legislative and Regulatory Issues or by going to the Ohio Department of Agriculture web site at http://www.state.oh.us/agr/ and following links forFood Safety. ODA's web site also includes details aboutjuice/cider rules and the clarification that apple cider IS NOT a potentially hazardous food.

The 7 Day Outlook*

By Robert Precheur

Temperatures are to be above normal for the next 6-10 days. A large ridge will continue to develop in the OH valley early next week, so expect more hot and dry weather like we have seen over the past few days.

El Nino hype. Don't make plans based on El Nino reports in the press. Water in the pacific along the South American coast is actually cooler than normal and this area is beginning to expand westward. There is slightly warmer than normal water in the central Pacific along the equator. There are many websites showing ocean temperatures and these latest pictures should be compared to a true El Nino year as in 1999. It is still possible that a stronger El Nino pattern could develop this fall and winter.

AKRON-CANTO	NC											
DAY DATE TEMP	SAT	03	SUN	04	MON	05	TUE	06	WED	07	THU	08
MIN/MAX WIND												
PREC.	J	١٠	-1	١٠	4	١٠	4	١٠	J	١٠	4	١٠
PROB. 24	33	3	20)	28	3	35	5	3 :	1	34	
CLEVELAND												
DAY DATE TEMP	SAT	03	SUN	04	MON	05	TUE	06	WED	07	THU	08
MIN/MAX WIND												
PREC.	4	5	4	0	4	7	4	8	5	/	5	/
PROB. 24	30)	20)	29	9	35	5	3:	1	34	1
COLUMBUS												
DAY DATE TEMP	SAT	03	SUN	04	MON	05	TUE	06	WED	07	THU	08
MIN/MAX												
WIND PREC.	2	5	2	5	2	5	2	5	3	5	3	5
PROB. 24	34	1	22	2	29)	33	3	3 :	1	34	1
CINCINNATI												
DAY DATE TEMP	SAT	03	SUN	04	MON	05	TUE	06	WED	07	THU	08
MIN/MAX											71	
WIND PREC.	5	/	5	/	4	/	5	/	5	/	5	/
PROB. 24	32	2	22	2	30)	3 1	1	3 :	1	33	3
DAYTON												
DAY DATE TEMP	SAT	03	SUN	04	MON	05	TUE	06	WED	07	THU	08

VEDUN - CVMUUN

MIN/MAX WIND PREC. PROB. 24	3	5	3	5	3	5	3	6	4	5	4	5
TOLEDO												
DAY DATE	SAT	03	SUN	04	MON	05	TUE	06	WED	07	THU	08
MIN/MAX WIND PREC.												
PROB. 24	2	1	22	2	31	L	34	1	30)	33	3
YOUNGSTOWN												
DAY DATE TEMP	SAT	03	SUN	04	MON	05	TUE	06	WED	07	THU	08
MIN/MAX WIND PREC.												

* LEGEND:

PROB. 24

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

28

35

31

20

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 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]

- 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.





University Extension

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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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