

RAIN

By R. Precheur

Today will be the 6th consecutive day of severe thunderstorms to hit central OH and many other parts of the state. In the Columbus area, most residential streets contain fallen branches or are blocked by large tree limbs. Parts of some suburbs are still without power as the area tries to recover from the first round of storms.

Over the past 24 hours, very heavy rain has fallen and counties receiving over 3 inches of rain based on Doppler estimates include: Van Wert, Mercer, Allen, Auglaize, Shelby, Hardin and Logan counties. This rain band extends to the northeast and portions of counties receiving 1-3 inches include: Wyandot, Seneca, Crawford, Richland, and Ashland. In the southeast, counties receiving over 2-3 inches include: Fairfield, Hocking, Athens and Vinton.

For the period from Jul 1 to July 8, the hardest hit counties receiving 8-12 inches of rain include: southern Paulding, Van Wert, Mercer, Auglaize, Shelby, Logan, northern Miami, and western Champaign. Portions of counties receiving at least 4 inches of rain or more include those already mentioned plus western Clark, Wyandot, Union, northwest Delaware, Portage, Summit, Cuyahoga and Lorain.

Aster Yellows and Aster Leafhopper Control

Casey Hoy and Sally Miller

In general, aster leafhoppers have been late in arriving and low in abundance this year. After several fruitless attempts to collect leafhoppers for testing during May and early June, aster leafhoppers were collected from the Celeryville and Hartville muck on June 24 and 24 leafhoppers from each location were tested for aster yellows infection using the PCR technique. All samples from Hartville were negative, while one sample from Celeryville was positive, for an estimated infectivity rate of 4%. No infected plants were observed in a walking survey of lettuce fields in Celeryville in late June. According to the Minnesota "Aster Yellows Index", 7 leafhoppers per 100 sweeps of a sweep net would indicate that insecticide applications are needed in a lettuce field at this level of infectivity. Adult leafhoppers can easily be sampled with a sweep net, lightly brushing the top of the foliage as the net is passed back and forth above the crop. The aster leafhopper has six black spots on the front of the head. The body color is more olive green compared with the bright green of the potato leafhopper, which can also be found in lettuce fields. Nymphs, which do not have wings, are pale yellow or beige. Past research has determined that insecticide applications during May and June are very important in season-long control of the disease during years when the phytoplasma is present.

Within any given lettuce field, research has identified two key times for applying insecticides to control the leafhopper vectors of aster yellows: approximately 10-14 days after transplanting and approximately 14 days before harvest. The first application would protect the treated lettuce field from infection by incoming adults, so the insecticide used should have a long period of residual activity. The second application would protect neighboring younger lettuce fields by killing any infected leafhoppers that could otherwise carry the disease out of the treated field, so the insecticide used should be fast-acting and effective but needn't have long residual activity. Our previous research on aster leafhopper dispersal demonstrated that planting lettuce at least 60 yards from any earlier infected lettuce plantings also could greatly slow the spread of the disease.

Insecticide News

C. Welty

Admire and Provado:

In June 2003, Bayer announced approval of several supplemental labels. The label for Provado 1.6F has root, tuberous, and corm vegetables as a new crop group, which includes radishes, beets, and turnips, with a 7-day preharvest interval. Provado can now be used on okra (added to fruiting vegetable group), watercress (added to leafy vegetable group), and dry beans (added to legume group). Admire 2F can now be used on greenhouse cucumbers and tomatoes (mature plants), and on root crops including radish, beet, turnip. Admire can now be used on okra (added to fruiting vegetable group), dry beans (added to legume group), mizuna and mustard spinach (added to cole crop group), watercress (added to leafy vegetable group). Crops such as sweet potato that were formerly in the root and tuber crops section on the Admire label are now in the tuber and corm vegetable section of the label.

Intrepid:

As of June 2003, sweet corn is now included on the label for Intrepid 2F, which is an insect growth regulator made by Dow. The active ingredient is methoxyfenozide. It is labeled for the control of European corn borer, southwestern corn borer, true armyworm, and western bean cutworm.

Poncho:

Bayer's seed treatment insecticide Poncho was registered for use on sweet corn in May 2003. The active ingredient is clothianidin, which is in the neonicotinoid group. Poncho is similar to Gaucho but with a wider pest spectrum. Poncho will be offered to corn growers at different rates: Poncho 250 controls chinch bug, black cutworm, flea beetle, wireworm, seed corn maggot and white grub; Poncho 1250 controls the above pests plus corn rootworm.

Warrior:

In March 2003, Syngenta announced that several crops have been added to the label for Warrior insecticide. New vegetable crops added are sweet corn, bell and non-bell peppers, eggplant, and snap beans.

Bacterial Wilt on Pumpkins
C. Welty, R. Riedel, & R. Precheur

In a field trial with 6 replicates of 20 varieties of pumpkins under heavy pressure from striped cucumber beetle at Columbus, we are seeing consistent differences in occurrence of bacterial wilt symptoms. Preliminary data shows that varieties with the least sign of bacterial wilt are: Autumn King, Gold Bullion, Hybrid Pam, and Lil Ironsides. Varieties with the most severe bacterial wilt symptoms are Wee-B-Little, Jack-B-Little, Magic Lantern, and Baby Pam.

SECTION 18 FOR HURON COUNTY
From PEP-Talk, July 2003

Outlook herbicide (dimethenamid-P) has been given a Section 18 emergency exemption for use on dry bulb onions in Huron County (Ohio) until July 30, 2003. The label and EPA letter are on our website (<http://pested.osu.edu>) for growers to download. It is on the "General Information" page under Section 18s.

Diazinon Cancellation By Syngenta
From PEP-Talk, July 2003; Source:EPA Pesticide Program Update, June 16, 2003

EPA has received a request from Syngenta Crop Protection to voluntarily cancel the registrations for all of its remaining products (agricultural and outdoor non-agricultural) containing diazinon, an organophosphate pesticide.

Retailers will be able to sell outdoor NON-agricultural (such as lawn and garden) end-use products containing diazinon made by Syngenta until December 31, 2004. Product that has already been purchased can be used according to label directions until stocks are exhausted.

Sales of agriculture end-use products containing diazinon made by Syngenta may continue until stocks are exhausted. Product already purchased can be used according to label directions until stocks are exhausted.

All sales and distribution to retailers ends on August 31, 2003. The notice and information about diazinon use with Syngenta's cancellation is available at <http://www.epa.gov/fedrgstr/EPA-PEST/2003/May/Day-30/p13436.htm>

Diazinon Status

Welty and Kick-Raack

In the article above, the details of Syngenta's diazinon cancellations are given. At present, only Syngenta has requested cancellation of all their diazinon containing

products. Other manufacturers that produce diazinon for agricultural uses are Makhteshim-Agan, Gowan, and Drexel. Agricultural products with diazinon thus should remain available.

OHIO PESTICIDE PRODUCT DATABASE

From PEP-Talk, July 2003

A pesticide product look-up of Ohio's registered pesticide products is now available through the internet. Maintained by Purdue University, the National Pesticide Information Retrieval System (NPIRS) is available at <http://state.ceris.purdue.edu> The pesticide search can be done by pest, product name, EPA registration number or other criteria.

Crop Reports

Hal Kneen, R. Precheur

Southeast Ohio Report of July 2 and July 8, 2003

July 2: Talk about changing weather patterns. Scattered thunderstorms occurred Tuesday night, July 1, the first rainfall since June 19 flooding rainfall of 3 1/2 inches. Sweet corn crop needs irrigated. Starting to harvest bare ground sweet corn (Temptation, Sweet Chorus, Seneca Daybreak). Well filled out, but short 6-7 inches.

No European Corn Borers or Corn Earworms moths caught in helio- traps this past week, between flights. Some ears had a few worms, missed sprays or timing

July 8: Drought is adversely affecting irrigated sweet corn, pepper, and tomato fields. Parts of Meigs County have not received rain in 20 days. Most growers wanting some of the Spring rains now. Irrigated fields, especially on plastic tomatoes are looking good. Growers picking tomatoes for the wholesale market, some fields are delayed due to wet Spring, Buckeye Rot is being seen in many fields especially where standing water was in June. Septora Leaf Blight and Early Blight has been seen on tomato plants.

Another week without european corn borer and corn earworm moths in Letart Ohio.

Melon vines started to run last week. Problems with ragweed in the fields.

Major cabbage crop has been harvested. A good year for cabbage both in tonnage and price.

Green beans are being harvested, and there is good demand.

A borer found by a grower in his hot peppers keyed out to be stalk borer. It had distinctive striping with purplish/brownish band around the mid section. It bore into the stem and headed upward into the growing point. Only about 1/2 inch in length (younger caterpillar). Looks like three sets of prolegs near lighter colored head. From Controlling Vegetable Pests (Ortho Book), it states that it overwinters as eggs in grass and weeds and moves onto giant ragweed and corn when it hatches in the Spring. It may also attacks tomatoes, potatoes, rhubarb and asparagus. Both are nearby but not in the field with the peppers. Does not appear to attack regular bell peppers, affecting 10% of the hot peppers.

Control measures similar to armyworm:- Warrior is now labeled for bell and hot peppers, Orthene, pyrethroids, carbamates.

Central OH

Plastic sweet corn was ready for picking by the July 4th holiday. Bare ground corn was close behind. Some se varieties planted in mid-May were just starting to shoot tassels last week. Many growers were irrigating important crops last week before the heavy rains set in by July 4th. The pumpkin crop was off to a good start.

The 7 Day Outlook

R. Precheur

July 9, 2003; SHOWERS AND THUNDERSTORMS WILL BE THE MAJOR WEATHER FEATURES FOR THE STATE FOR AT LEAST THE NEXT COUPLE OF DAYS. AN EAST-WEST STATIONARY FRONT OVER CENTRAL PARTS OF THE STATE WILL BE THE MAIN FOCUSING MECHANISM FOR GENERATION OF SHOWERS AND THUNDERSTORMS TODAY. THE SOUTHERN HALF OF OHIO WILL BE THE MOST THREATENED AREA TODAY WITH MUCH OF THE STATE ON EQUAL GROUND TONIGHT. DUE TO ALREADY SATURATED GROUND FROM PREVIOUS DAYS OF RAIN FLOODING COULD ALSO BECOME A PROBLEM. THE STATIONARY FRONT WILL BEGIN TO LIFT TO THE NORTH LATER TODAY AND TONIGHT AS LOW PRESSURE MOVES EAST INTO THE CENTRAL GREAT LAKES TONIGHT AND THURSDAY. WET WEATHER WILL BE A GOOD BET OVER MOST AREAS OF THE STATE ON THURSDAY AND RIGHT INTO THURSDAY NIGHT AS A COLD FRONT SLICES SOUTHEAST THROUGH THE STATE.

Akron Canton

Day/Date | FRI 11| SAT 12| SUN 13| MON 14| TUE 15| WED 16
Temp Min Max| 65 65| 61 73| 64 73| 67 75| 68 77| 69 76
POP 24 hrs | 57| 28| 36| 42| 40| 41

Cincinnati-KCVG

Day/Date | FRI 11| SAT 12| SUN 13| MON 14| TUE 15| WED 16
Temp Min Max| 68 76| 63 78| 65 79| 68 81| 69 82| 70 81
POP 24 hrs | 41| 21| 45| 35| 32| 30

Cleveland

Day/Date | FRI 11| SAT 12| SUN 13| MON 14| TUE 15| WED 16
Temp Min Max| 66 69| 63 74| 66 75| 68 76| 69 78| 70 77
POP 24 hrs | 48| 30| 36| 40| 39| 42

Columbus

Day/Date | FRI 11| SAT 12| SUN 13| MON 14| TUE 15| WED 16
Temp Min Max| 67 72| 63 77| 67 78| 69 80| 70 82| 71 80
POP 24 hrs | 51| 26| 45| 43| 43| 41

Dayton

Day/Date | FRI 11| SAT 12| SUN 13| MON 14| TUE 15| WED 16
Temp Min Max| 66 71| 63 77| 67 76| 69 79| 70 80| 70 79
POP 24 hrs | 35| 28| 51| 41| 41| 41

Findlay

Day/Date | FRI 11| SAT 12| SUN 13| MON 14| TUE 15| WED 16
Temp Min Max| 63 71| 62 76| 65 76| 68 78| 68 80| 69 77
POP 24 hrs | 26| 24| 41| 31| 33| 36

Ashtabula

Day/Date | FRI 11| SAT 12| SUN 13| MON 14| TUE 15| WED 16
Temp Min Max| 64 68| 61 71| 62 73| 65 74| 67 75| 67 72
POP 24 hrs | 56| 28| 28| 36| 33| 37

Lorain

Day/Date | FRI 11| SAT 12| SUN 13| MON 14| TUE 15| WED 16
Temp Min Max| 66 69| 63 73| 65 74| 66 76| 68 78| 69 76
POP 24 hrs | 45| 30| 38| 39| 39| 42

Mansfield

Day/Date | FRI 11| SAT 12| SUN 13| MON 14| TUE 15| WED 16
Temp Min Max| 63 68| 62 72| 66 73| 67 75| 68 77| 68 75
POP 24 hrs | 45| 25| 38| 36| 36| 38

Toledo

Day/Date | FRI 11| SAT 12| SUN 13| MON 14| TUE 15| WED 16
Temp Min Max| 63 73| 62 78| 65 76| 68 79| 68 80| 69 78
POP 24 hrs | 22| 24| 38| 26| 28| 34

Wilmington

Day/Date | FRI 11| SAT 12| SUN 13| MON 14| TUE 15| WED 16
Temp Min Max| 66 71| 64 75| 66 76| 66 78| 68 78| 69 78
POP 24 hrs | 46| 28| 51| 45| 43| 41

Zanesville

Day/Date | FRI 11| SAT 12| SUN 13| MON 14| TUE 15| WED 16
Temp Min Max| 66 71| 60 75| 63 76| 66 79| 67 80| 67 80
POP 24 hrs | 59| 26| 41| 44| 44| 41

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 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 Herbicides & 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](#)

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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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