

Disease Update:

R. M. Riedel

1. We have been getting samples of Fulvia Leaf Mold and Botrytis Grey Mold from greenhouse tomatoes recently. Both of these diseases develop well when relative humidity in the houses are above 80 percent. Grey Mold can be controlled with chlorothalonil or mancozeb. No effective fungicides are available for control of Botrytis in the greenhouse. Sanitation (removing dead tissue from the plants and greenhouse floors), minimizing wounding of the plants and control of relative humidity, particularly at night when the house cools will help limit development of this disease.

2. An emergency use label for Nova on pumpkins has been submitted to the Ohio Department of Agriculture. This material is quite effective for Powdery Mildew control on this crop. Latest news is that a federal label may be coming soon. A federal label or an emergency label will be required before Nova can be used on pumpkins in 2000.

Insect News:

C. Welty

European corn borer: The adults (moths) of corn borer have continued to emerge over the past week and are being detected in our blacklight trap at Fremont although with lulls during periods with cold nights. The number of corn borer moths caught per week at Fremont has been: 7 in week 5/3-5/9; 37 in week 5/10-5/16; 32 in week 5/17-5/23. These numbers are still fairly low and it is likely that we have not yet had peak emergence of the moths. In other years at Fremont the peak is usually in early June and during the peak week we usually trap about 400 corn borer moths although it can range from 100 to 1000 moths.

Sweet corn growers who do not use aerial (airplane) insecticide application can delay scouting until later; control by conventional ground sprayers is best if the spray targets corn borer larvae during the emerging-tassel stage (usually in mid-June). Growers who do use aerial application should scout earlier and have the more difficult task of looking for egg masses rather than larvae, because aerial application is best if it targets eggs just as they are hatching. Corn borer eggs are laid on the underside of corn leaves, often next to the leaf midrib, in masses of flat white eggs that overlap so that they look like fishscales.

Insecticide Notes:

C. Welty

The active ingredient acephate has been available for many years under the trade name Orthene, made by Valent. Another acephate product is now available under the trade name Address, made by Rohm & Haas Company. Address is available in 90S and 75S formulations. Rohm & Haas now has a B.t. product called Ketch DF, which is used at a rate of 0.5 to 2 lb per acre on many vegetable crops for caterpillar control. Like all B.t. products, the active ingredient of Ketch is the bacterium *Bacillus thuringiensis*.

Cabbage Field Program:
OSU Vegetable Team

The OSU Vegetable Team will offer a cabbage scout training program on Tuesday, 20 June, 6:30 - 9 PM 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. All are invited. This should be of interest to industry fieldmen, consultants, growers, and extension agents. There is no cost or pre-registration.

Any questions about the program can be directed to:
Celeste Welty by phone (614-292-2803)
or email (welty.1@osu.edu).

Using The Weather Links At The VegNet Website Ohio
By R. Precheur

Part 2. Using The Forecast and Surface Analysis Maps

Moving down the Weather Links page after the radar links, we come to a series of forecast maps.

TODAY, TOMMOROW, DAY 3:

The first maps (from COLA/IGES), give forecasts for the eastern United States for 'Today', 'Tomorrow' and 'Day3'. These maps are simple and straight forward but provide a good amount of detail and information. When viewing the maps you will see two small maps of the left hand side that show the predicted high and low temperatures on a color coded map. The larger map on the right hand side illustrates cloud cover, precipitation type and amount also via a color code. The caption on the top of the map indicates the valid time for the forecast.

Next, National Forecast Maps from: weather.gov

This relatively new website has lots of information on weather, including radar and satellite images. I have selected three links that give you 24, 36, and 48 hour forecast maps. These maps are probably intended for the weather enthusiast since they use

meteorological symbols but they can easily be interpreted by the first time user. Centers of high pressure and cold fronts are shown in blue. Low pressure centers and warm fronts shown in red. The yellow lines that circle around the highs and lows are isobars or locations of similar air pressure. The directions of these lines generally indicate wind patterns. Clockwise around highs and counterclockwise around lows. The yellow numbers associated with a high or low indicates the air pressure in millibars. For example, 1024 would indicate a high pressure area and a number 997 would indicate a low pressure area. The two numbers on an isobar line indicate the last two digits of the number to the closest pressure center. Moving away from high's the number will decrease and moving away from low's the numbers will rise. Areas circled by a green line and with hash marks indicate areas of precipitation. The aqua blue symbols associated with the green areas indicate the type of precipitation whether it be a shower, drizzle or thunderstorm. A link to a key map explaining these symbols is provided on the links page. You will also see the word 'TROF' on the map usually located over or near a pink-orange dashed line. Troughs generally indicate a bend in wind patterns and many times are associated with areas of unsettled weather.

Be sure to look at the bottom of the map to see the time, day and date the map was issued. VT on the bottom line means Valid Time for the forecast map. The "Z" after the times indicates Zulu or Greenwich Mean Time. For daylight savings subtract 4 hours, subtract 5 hours during standard time to get correct local time. The maps use a 24 hour clock. This is probably much more information than you want to deal with during a busy growing season, but once you become familiar with these maps, you can scan them very quickly and have better information than provided by other sources which can help you plan the next two days ahead.

Surface Analysis

Surface data from stations around the region and country are reported and updated hourly. This gives you an accurate picture of current weather conditions. [NOTE: The OH and US Surface analysis maps from OSU are currently offline but should return mid-summer].

IN & OH Satellite Surface Map (From Unisys).

This image combines a satellite picture of OH and IN with a radar image showing clouds and areas of precipitation.

Composite Satellite Surface Map (From Unisys).

A combination of maps showing: locations of Highs and Lows, barometric pressure in millibars and radar showing precipitation. One of the best maps, be sure to check this out! Each reporting station on a map is represented by a circle. The circle represents cloud cover. The open (black) circles represent clear skies and filled circles represent cloudy skies. Varying degrees of fill represent how much cloud cover there is. The line coming out of the circle is called a wind barb. This represents the wind direction and speed. The line points into the wind (the direction the wind is coming from) and the number of barbs determine the wind speed in 10s of knots (roughly MPH). A small barb is 5 knots. Around the station circle are several numbers which are explained below:

Temperature:

The value located in the upper left corner is the temperature in degrees Fahrenheit.

Dew Point Temperature:

The value located in the lower left corner is the dew point temperature in degrees Fahrenheit. This is a very important number for vegetable growers especially in the spring and fall. Temperatures at night generally fall to the dew point. If on a cool still night (high pressure centered over your location), this number is at or below 32 degrees, there is a good chance there will be a frost or freeze. If this number is in the upper 30's or low 40's, a frost or freeze will be avoided unless you are in a cold pocket.

Sea Level Pressure:

The value located in the upper right corner represents the last three digits of the sea level pressure reading in millibars (mb). For example: 998 means 999.8 mb or 046 means 1004.6 mb

Crop Reports

Hal Kneen and Ron Becker

SouthEast:

Much needed rainfall fell over the weekend scattering from four tenths of an inch to one and one half inches over the county. Additional 1-1 1/2 inches of rain fell Tuesday night and early morning. This will especially help non- irrigated fields as our area has been dry since late April. Staked tomatoes are being staked, trellised and suckered. First fruit is beginning to set. Dime and quarter size fruit have formed. Those growers with trickle irrigation have noticeable larger plant growth and fruit set compared to unirrigated neighbor's fields. Sweet corn continues to be planted and is emerging within 3- 5 days. Side dressing with additional nitrogen is being applied at the 8 inch stage. Most cabbage heads are now at the softball stage or just a tad larger with one grower already picking 7 inch diameter, 3 pound heads which is desired by local markets. General harvest expected in early June.

Wayne County,

From May 18: Sweet corn fields we have been scouting have had flea beetle infestations ranging from 2-37%. Billbug and cutworm are also being found causing light-moderate leaf damage. Only two cut plants have been found so far. Cabbage has had light infestations of aphids, imported cabbage worm, thrips, grasshoppers and flea beetle. Though not a vegetable, I think it is also important to note that we found two spotted spider mite on several leaves of a raspberry planting. We are going to try to control them using a beneficial mite release. This pest caused major problems in tomatoes and vine crops in our fields last year. Other vegetables are either not yet in the ground or are under row cover at this point. Most growers expect to put most crops in the ground this next week.

The 7 Day Outlook*

AKRON-CANTON

DAY DATE| FRI 26| SAT 27| SUN 28| MON 29| TUE 30| WED 31|
TEMP
MIN/MAX| 50 72| 54 74| 55 74| 50 66| 50 74| 56 78|
WIND | 5 8| 6 10| 8 10| 8 10| 6 10| 7 9|
PREC
PROB 24| 2 | 67 | 75 | 43 | 38 | 36 |

CLEVELAND

DAY DATE| FRI 26| SAT 27| SUN 28| MON 29| TUE 30| WED 31|
TEMP
MIN/MAX| 49 71| 53 73| 54 70| 50 69| 50 73| 56 77|
WIND | 4 7| 7 9| 7 9| 6 9| 6 8| 6 8|
PREC
PROB 24| 2 | 69 | 74 | 43 | 38 | 36 |

COLUMBUS

DAY DATE| FRI 26| SAT 27| SUN 28| MON 29| TUE 30| WED 31|
TEMP
MIN/MAX| 52 76| 57 76| 59 72| 55 70| 51 77| 58 81|
WIND | 3 6| 5 7| 5 8| 5 8| 4 7| 4 6|
PREC
PROB 24| 13 | 74 | 73 | 38 | 36 | 35 |

CINCINNATI

DAY DATE| FRI 26| SAT 27| SUN 28| MON 29| TUE 30| WED 31|
TEMP
MIN/MAX| 57 78| 62 78| 61 74| 56 71| 57 79| 62 85|
WIND | 5 9| 9 11| 9 11| 7 9| 6 9| 6 9|
PREC
PROB 24| 39 | 76 | 70 | 32 | 33 | 34 |

DAYTON

DAY DATE| FRI 26| SAT 27| SUN 28| MON 29| TUE 30| WED 31|
TEMP
MIN/MAX| 55 76| 58 76| 58 72| 52 70| 53 78| 58 82|
WIND | 4 7| 7 10| 7 10| 6 9| 6 8| 5 7|
PREC
PROB 24| 26 | 78 | 71 | 34 | 34 | 33 |

TOLEDO

DAY DATE| FRI 26| SAT 27| SUN 28| MON 29| TUE 30| WED 31|
TEMP
MIN/MAX| 48 72| 53 74| 53 71| 49 69| 49 75| 56 80|
WIND | 4 8| 7 11| 8 10| 7 10| 6 9| 5 9|
PREC
PROB 24| 9 | 79 | 71 | 39 | 37 | 35 |

YOUNGSTOWN

DAY DATE| FRI 26| SAT 27| SUN 28| MON 29| TUE 30| WED 31|

TEMP

MIN/MAX| 45 72| 49 74| 52 71| 49 67| 48 73| 53 78|

WIND | 4 7| 5 8| 7 8| 7 9| 5 8| 4 7|

PREC

PROB 24| 0 | 62 | 75 | 46 | 40 | 37 |

* 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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