Important Diseases Showing Up Early R. M. Riedel

We are seeing a lot of early diseases this year. Specifically we are seeing the following:

- 1. Early Blight on fresh market and home garden tomatoes is well advanced for this time of year. Fresh Market tomatoes are particularly susceptible to this disease. If more than 3% of the foliage is affected it may be very difficult to control the disease while weather remains moist and warm. For the commercial grower, a good program of chlorothalonil or azoxystrobin will give good control. Early Blight will be more serious on plant short of N.
- 2. Septoria Leaf Blight generally is a serious disease late in July. This year we have seen it on fresh market and processing tomatoes in southern, central and northwest Ohio in the last week. This disease affects only foliage and stems--not the fruit. But if more than 50% of the foliage is damaged before fruit is sized, yields will suffer. Commercial growers can use azoxystrobin to control this disease. This fungicide must be alternated with chlorothalonil or mancozeb fungicides to control development of fungal resistance to azoxystrobin. Neither of this latter fungicides are particularly good at controlling Septoria Leaf Blight, however. In the past Benlate has been tank mixed with chlorothalonil to give adequate control. Benlate may be hard to find this year, though.
- 3. Phytophthora Blight on Cucurbits is a problem early this year too. Fields with drainage problems may require use of a fungicide to help control this disease. Ridomil Gold has been the most effective material. Quadris (azoxystrobin) has been useful in control where it has a label.

Late Blight in Tomato Transplants Source: Alan MacNab and R. M. Riedel

Late blight was recently detected and confirmed on tomato transplants in a greenhouse in southwestern PA. Some plants likely were planted in some gardens before the problem was detected. When the problem was detected, all remaining plants were destroyed. PDA is working on isolation for further testing (US type, etc). I suspect that potato tubers infected last season (seed potatoes, cull piles, or compost bins) are the source but we do not have evidence at this time. I am warning growers in southwestern PA that late blight inoculum likely is lurking somewhere nearby, and that fungicide protection will be necessary whenever BLITECAST indicates conditions favor development of disease.

Although we are shocked to detect late blight so early in the season, I am glad we have the early warning. Last season, fungicide programs gave us excellent control in

PA, and I do not know of any commercial loss where fungicides were applied as recommended.

I hope this advanced warning helps prevent losses in 2001.

Aster Yellows and Aster Leafhopper Control Casey Hoy and Sally Miller

Aster leafhoppers were collected from the Celeryville muck on June 14 and tested for infection by aster yellows using the PCR technique. Of 80 leafhoppers collected, two samples were positive for aster yellows phytoplasma, for an estimated infectivity of 2.6% According to the Minnesota "Aster Yellows Index", it would take 10 leafhoppers per 100 sweeps of a sweep net to require insecticide applications in a lettuce field at this relatively low 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 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. Last summer's 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.

Crop Reports Hal Kneen

#### SOUTHEASTERN OHIO

Weather of high 80's and scattered rains have dramatically changed the growing habits of tomatoes., peppers, melons and sweet corn- they are growing fast and furiously. Tomatoes are beginning to enlarge and some varieties (Sunstart, Sunsation) are having their first fruit ripen for local farmer markets. Fruit are forming on muskmelons and second set on peppers. Sweet corn is tasselling and creating ears.

Plastic grown corn will begin to be picked this week. Most bare soil grown corn won't be ready until the first week of July, perhaps some by 4th of July.

Cabbage continues to be picked with prices in the \$7-8 dollar per crate. Marketers seem to want 20-22 head per crate size, little market for larger heads. About one in ten cabbage heads is throw away due to rot when picking.

June 28, Muck Crops Day, Celeryville OH. Rick Callendar

Activities and Topics will include:

Lettuce, sweet corn, radish and green pepper germplasm trials;

USDA IR4, Extending Pesticide Labels, residue studies;

Disease management in parsley;

Aster leafhopper control for virus management in lettuce;

Integrated weed management in green and dry bulb onions;

Optimal irrigation rate and timing for herbicide efficacy in lettuce;

Screening celery lines for fusarium tolerance;

Understanding and managing carrot weevils; Evaluation of entomopathogenic nematodes for control of carrot weevil larvae;

Persistence of entomopathogenic nematodes in muck soils;

Additional programs conducted by the Huron county Soil and Water Conservation District

For complete details, directions and information, contact:

Rick Callendar

Phone: 419-935-1201

or email: muckcrops@willard-oh.com

The 7 Day Outlook\*
AKRON-CANTON

DAY DATE | FRI 22| SAT 23| SUN 24| MON 25| TUE 26| WED 27| TEMP
MIN/MAX | 59 70| 54 74| 56 82| 61 88| 65 88| 64 86|
WIND | 6 8| 5 7| 5 7| 4 6| 5 7| 5 7|

PREC.

PROB. 24 | 75 | 33 | 17 | 24 | 28 | 33 |

CLEVELAND

DAY DATE | FRI 22| SAT 23| SUN 24| MON 25| TUE 26| WED 27| TEMP

MIN/MAX | 60 70| 55 74| 56 81| 59 87| 63 87| 65 85|

WIND | 6 8| 5 7| 4 7| 4 7| 5 7| 5 8| PREC.

PROB. 24 | 74 | 31 | 16 | 24 | 27 | 33 |

# **COLUMBUS**

DAY DATE | FRI 22| SAT 23| SUN 24| MON 25| TUE 26| WED 27| TEMP

MIN/MAX | 60 75| 55 78| 56 82| 61 86| 65 89| 66 87|

WIND | 4 6| 3 5| 3 5| 2 5| 3 5| 3 6|

PREC.

PROB. 24 | 68 | 26 | 16 | 25 | 29 | 34 |

## **CINCINNATI**

DAY DATE | FRI 22| SAT 23| SUN 24| MON 25| TUE 26| WED 27| TEMP

MIN/MAX | 59 74| 56 77| 59 85| 64 87| 68 88| 67 86| WIND | 6 8| 5 7| 5 7| 5 8| 6 7| 6 8| PREC.

PROB. 24 | 57 | 19 | 15 | 25 | 29 | 34 |

## **DAYTON**

DAY DATE | FRI 22| SAT 23| SUN 24| MON 25| TUE 26| WED 27| TEMP
MIN/MAX | 59 74| 54 77| 57 84| 64 86| 68 90| 66 87|
WIND | 5 7| 4 6| 3 5| 3 6| 4 6| 4 6|
PREC.
PROB. 24 | 59 | 20 | 14 | 24 | 28 | 34 |

## **TOLEDO**

DAY DATE | FRI 22| SAT 23| SUN 24| MON 25| TUE 26| WED 27| TEMP

MIN/MAX | 55 71| 52 77| 55 85| 61 88| 65 88| 63 85|

WIND | 6 8| 4 7| 3 6| 2 6| 3 8| 5 8|

PREC.

PROB. 24 | 65 | 22 | 14 | 23 | 28 | 33 |

# YOUNGSTOWN

DAY DATE | FRI 22| SAT 23| SUN 24| MON 25| TUE 26| WED 27| TEMP

MIN/MAX | 57 70| 53 73| 53 82| 55 88| 60 88| 62 85|

WIND | 6 7| 5 7| 4 6| 4 6| 5 6| 5 6|

PREC.

PROB. 24 | 78 | 37 | 18 | 24 | 28 | 33 |

#### \* 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.

In Tomorrow's VegNet, Insect Update and the Moth Trap Report

What's New At The VegNet Web Site Sweet Corn Tour and Workshop June 19, 4-8 PM

Click Here for more information!

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.

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.

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.

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