

Some Like It Hot, But Not Everybody
R. Precheur

The recent spell of very warm temperatures and high heat indexes have been making the news and while some savor this weather, others head indoors to cool off. The same is true for vegetable crops and a quick review of favorable temperatures for pollination and fruit set might be in order at this time in case you see unusual things in your field.

Vine crops.

This has been almost perfect weather for muskmelon, watermelon and sweet potatoes. Growth has been rapid and each day you can see differences in the fields. Challenges presented by warm weather include daily harvest of rapidly ripening fruit and making sure you plantings of vine crops are receiving a sufficient amount of water to maintain growth and quality. So far, winds have been light and evaporation and soil drying is not as bad as it could be during some hot spells. We haven't reached the high 90's yet and that scenario doesn't look like it's in the near future. Remember a few years ago when it was so hot that bees remained at the hives in an effort to keep them cool.

Sweet Corn.

Poor fill on the ear usually results from poor pollination. Pollination is poor when air temperatures are above 96 degrees under hot dry winds and when soil moisture is low.

Peppers.

Temperature requirements for peppers are usually higher than tomatoes. Fruit set of bell peppers does not occur when means are below 60 degrees and above 90 degrees. Maximum set of bell peppers occurs between constant temperatures of 60 to 70 degrees. Temperature tolerance varies with variety and hot peppers usually set well in warm weather.

Tomatoes:

Poor fruit set occurs if the maximum day temperature reaches 100 degrees a few days before or after anthesis (pollen release). If minimum night temperatures are 77-80 degrees before or after anthesis, poor fruit set will be the result. Again, varieties will differ in their response to night temperature.

As Dr. Joe Barstedi with accuweather.com says: "Enjoy your weather, it's the only weather you got".

References: Vegetable Crops, Thompson and Kelly; World Vegetables, M. Yamaguchi

MOTH TRAP REPORTS (~7/24 to 7/31)

C. Welty

corn earworm, pheromone trap

Meigs County (Racine): 23 (up from 7 last week)

Highland County (Hillsboro): 0 (same as last week)

Miami County (Troy): 3 (up from 2 last week)

Franklin County (Columbus): 1 (up from 0 last week)

Huron County (Celeryville): 0 (same as last week)

Sandusky County (Fremont-South): 0 (down from 3 last week)

Wood County (Hoytville): 0 (same as last week)

European corn borer, pheromone trap

Meigs County (Racine): 9 (up from 7 last week)

Highland County (Hillsboro): 1 (down from 4 last week)

Miami County (Troy): 18 (up from 11 last week)

Franklin County (Columbus): 34 (up from 17 last week)

Huron County (Celeryville): 4 (up from 0 last week)

Sandusky County (Fremont-South): 5 (up from 0 last week)

Sandusky County (Fremont-West): 1 (up from 0 last week)

Wood County (Hoytville): 4 (up from 0 last week)

European corn borer, blacklight trap

Franklin County (Columbus): 53 (up from 11 last week)

fall armyworm, pheromone trap

Franklin County (Columbus): 2 (up from 1 last week)

Wood County (Hoytville): 0 (same as last week)

squash vine borer, pheromone trap

Highland County (Hillsboro): 23 (up from 8 last week)

Clark County (S. Charleston; mean of 2 traps): 0.0 (same as last week)

Franklin County (Columbus; mean of 3 traps): 4.0 (down from 7.7 last week)

variegated cutworm, pheromone trap

Franklin County (Columbus): 28 (down from 35 last week)

Huron County (Celeryville): 7 (down from 30 last week)

Wood County (Hoytville): 28 (down from 47 last week)

black cutworm, pheromone trap

Huron County (Celeryville): 6 (up from 5 last week)

Wood County (Hoytville): 16 (up from 15 last week)

true armyworm, pheromone trap

Wood County (Hoytville): 2 (down from 3 last week)

Note: full season trap records are posted at: [http://www.ag.ohio-](http://www.ag.ohio-state.edu/~ipm/traps/traps.htm)

state.edu/~ipm/traps/traps.htm A link is provided from the VegNet homepage, just click on the Vegetable IPM button.

The 7 Day Outlook*

Keep an eye on the weather towards the middle and latter part of next week. A tropical wave affecting Florida this weekend, may head towards the OH valley and affect field

operations. It's still a long way off and much could change.

AKRON-CANTON

DAY DATE | SAT 04| SUN 05| MON 06| TUE 07| WED 08| THU 09|
TEMP
MIN/MAX | 65 83| 64 84| 65 88| 67 86| 65 85| 64 87|
WIND | 4 6| 4 6| 4 6| 4 6| 5 6| 4 7|
PREC.
PROB. 24 | 49 | 24 | 22 | 29 | 30 | 33 |

CLEVELAND

DAY DATE | SAT 04| SUN 05| MON 06| TUE 07| WED 08| THU 09|
TEMP
MIN/MAX | 64 81| 64 83| 65 88| 67 85| 65 84| 65 85|
WIND | 4 5| 3 6| 4 7| 4 7| 5 7| 5 8|
PREC.
PROB. 24 | 42 | 21 | 21 | 28 | 30 | 33 |

COLUMBUS

DAY DATE | SAT 04| SUN 05| MON 06| TUE 07| WED 08| THU 09|
TEMP
MIN/MAX | 66 83| 64 85| 66 88| 67 88| 67 88| 67 89|
WIND | 2 5| 2 4| 2 5| 2 5| 2 5| 3 5|
PREC.
PROB. 24 | 55 | 28 | 25 | 31 | 31 | 33 |

CINCINNATI

DAY DATE | SAT 04| SUN 05| MON 06| TUE 07| WED 08| THU 09|
TEMP
MIN/MAX | 66 82| 66 86| 69 91| 70 89| 69 87| 68 88|
WIND | 4 7| 4 6| 4 6| 4 7| 5 6| 5 8|
PREC.
PROB. 24 | 56 | 30 | 28 | 33 | 32 | 34 |

DAYTON

DAY DATE | SAT 04| SUN 05| MON 06| TUE 07| WED 08| THU 09|
TEMP
MIN/MAX | 64 84| 64 85| 66 89| 68 88| 68 89| 65 89|
WIND | 3 5| 3 5| 3 5| 3 6| 4 5| 4 6|
PREC.
PROB. 24 | 51 | 27 | 25 | 31 | 31 | 33 |

TOLEDO

DAY DATE | SAT 04| SUN 05| MON 06| TUE 07| WED 08| THU 09|

TEMP

MIN/MAX | 62 84| 62 85| 66 88| 66 85| 65 85| 63 86|

WIND | 4 6| 2 5| 1 6| 3 7| 4 7| 4 7|

PREC.

PROB. 24 | 34 | 18 | 21 | 28 | 30 | 33 |

YOUNGSTOWN

DAY DATE | SAT 04| SUN 05| MON 06| TUE 07| WED 08| THU 09|

TEMP

MIN/MAX | 60 83| 61 85| 62 89| 64 86| 62 85| 61 85|

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

PREC.

PROB. 24 | 46 | 23 | 21 | 28 | 29 | 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.

What's New At The VegNet Web Site

In "Problem of the Week", see....

Early Powdery Mildew symptoms on summer squash leaves.

Sunscald on slicing cucumbers.

Bacterial Wilt on summer squash from early symptoms until death.

Just click on the "Problem of the Week" button in the left hand menu.

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 quarterly 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](#)

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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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