# Pepper management with limited Orthene C. Welty

As mentioned in VegNet several weeks ago, the new label on Orthene now states a limit of two applications per year on peppers. Growers who usually apply Orthene 3 to 10 times per year for control of European corn borer will need to decide on a strategy other than straight Orthene. Growers who have old Orthene with the old label can use it up without this limit. I have reviewed some data from the east coast that shows using Orthene in the first two sprays followed by any of four other insecticides can give control as good as Orthene alone. The two main factors in choosing a product are likely to be the preharvest restriction and the cost. Two new insecticides, SpinTor and Confirm, give good corn borer control but are quite expensive. Although not yet evaluated under Ohio conditions, I recommend that Ohio pepper growers do the following:

- 1) use Orthene for the first two sprays, at 7-day intervals. The first spray should be applied within a week of when traps show a sharp increase in the number of corn borer moths caught, which is usually in late July in a normal year or early/mid July in a hot year.
- 2) Starting with the third spray, if harvests are not yet begun, use Pounce (8 oz/A) or Ambush (12.8 oz/A) or Baythroid (2.8 oz/A) or Confirm (8 oz/A) at 7-day intervals. Confirm (8 oz/A) plus Ambush (12.8 oz/A) has been shown to work better than either material alone.
- 3) If a material with a shorter PHI is desired once harvests begin, then switch to SpinTor at a rate of 4 oz/acre. Apply SpinTor at 7-day intervals if corn borer pressure is tapering off, or at 5-day intervals if corn borer pressure is high (as can happen in hot years when there is a third generation in early September). SpinTor is labelled at a rate of 4-8 oz/acre. My research trials last year with 3 rates of SpinTor (3 vs 4.5 vs 6 oz/A) showed that all 3 rates gave about the same corn borer control, therefore the lowest end of the rate range is suggested.

Summary of features of insecticides for corn borer control on peppers:Orthene 75SP: not restricted-use, 7-day PHI, an organophosphate, locally systemic Pounce 3.2EC or Ambush 2EC: restricted-use, 3-day PHI, a pyrethroid, not systemic. Baythroid 2EC: restricted-use, 7-day PHI, a pyrethroid, not systemic. Confirm 2F: not restricted-use, 7-day PHI, an insect growth regulator, not systemic. SpinTor 2SC: not restricted-use, 1-day PHI, a naturalyte (insect nerve poison), not

Using The Weather Links At The VegNet Website Ohio

systemic.

By R. Precheur

## Part 1. Weather Radar

Everybody likes to talk about the weather but there is little we can do about it other than complain or enjoy. Keeping an eye on the weather is about the best we can do when it comes time for management decisions on the farm. If I spray a herbicide today, will it have enough drying time before the next shower? Can I plant my melons today? Will it be too windy to spray? Is it time to put out the irrigation? Will today or tomorrow be a good day for harvest?

Without subscribing to an agricultural information provider on the internet, you can get timely, accurate weather information from the weather links provided at the VegNet website to help you in your planning process.

Here is a quick guide on how to use these weather links and the type of information each connection provides: We will start at the top of the weather links page and explain each site as we go down the page. You can find the 'weather links' by going to the VegNet homepage and then click on 'Weather Links' in the menu bar on the left side.

### Weather Radar

The introduction of Doppler radar several years ago has been one of the most important advances in weather prediction. Now, commercial TV stations compete with each other as to who has the best or latest radar information. Weather radar gives precise information on location and intensity of storms and rainfall. When weather becomes severe, it can also predict the location of hail or tornadoes. Since commercial TV stations provide the most up to date free images on the internet, we have provided three links to cover most of OH.

### TV Stations

WBNS-TV-Columbus.

Good coverage for all of OH with a sharp image giving county detail. Click on the radar image to get an enlarged view. You will need an up to date browser to view this link.

WISH-Indianapolis.

See what's coming from IN plus good coverage for most of the Midwest and western OH. First, you will start at the station's main page and then click on 'weather'. The regional radar image and satellite plus radar are excellent. Check out the Futurecast images also.

WKRC-Cincinnati.

Good coverage of southwest OH, southeast IN and northern KY.

Nexrad Radar Images

These are the Doppler radar images you see on most TV weather broadcasts especially when a TV station cannot afford there own radar. The next system is composed of a series of stations across the US. In OH, there are two locations: Cleveland (covering northern and NE OH), and Wilmington (covering SW and southern OH). The images are not in real time but updated 4 times each hour (Images from Intellicast).

At the top of the radar image is a menu with several selections for other images. Here is a brief description of what you see in each image. There is also good help section at this site for more detailed information.

Select "Base Reflectivity"

to see intensity and location of storms.

Select "Radar Summary"

to see direction of movement of the storms and their speed in knots (1 knot = about 1.2 miles/hour). Now, you will have an idea when the storms will reach your area. Cloud heights are also given. Add 2 zeros to the number you see. For example, 200 plus 2 zeros equals 20,000 feet. The higher the cloud tops, the more intense the storms. When a thunderstorm is producing hail, this word will appear on the map. When there are very strong cyclonic winds the word, 'MESO' will appear. Select "Regional Radar"

Similar to 'radar summary' but shows precipitation as rain, freezing rain or snow by using the colors green, pink and blue. This map is particularly useful in the winter allowing you to determine where hazardous road conditions might exist. Select "Daily Precipitation"

Shows the amount of rainfall over the region in a color coded image for the past 24 hours.

Next time: Using the Forecast Maps and Long Term Outlooks

Crop Reports W. B. Evans

### NorthCentral:

This weeks weather has allowed more planting and good crop growth. Soil moisture is adequate for fitting, seeding, and growth. Radish harvest is underway. Early lettuces are filling the rows. Leafhoppers, flea beetles, carrot weevils, and cutworms are being found. Significant flea beetle damage can be found on untreated radish and greens crops. Smartweed and purslane are emerging and growing well during the warmer days. Muck grower's breakfast is next week. For more information, please call Bill Evans at 419-935- 1201. The Envirocaster at the Muck Crops Branch recommends onion growers spray for downey mildew this week. It is also recommending a spray for early blight on potatoes. Growers of course should use local conditions and their own experience to schedule all sprays.

The 7 Day Outlook\*

AKRON-CANTON
DAY DATE| FRI 19| SAT 20| SUN 21| MON 22| TUE 23| WED 24|
TEMP
MIN/MAX| 52 66| 49 68| 49 72| 51 72| 54 77| 57 80|
WIND | 6 8| 6 7| 5 7| 5 8| 6 10| 7 10|
PREC
PROB 24| 81 | 38 | 26 | 34 | 40 | 40 |

**CLEVELAND** 

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DAY DATE| FRI 19| SAT 20| SUN 21| MON 22| TUE 23| WED 24|
TEMP
MIN/MAX| 51 62| 47 68| 49 69| 51 73| 54 76| 57 80|
WIND | 6 7 5 7 5 7 5 7 6 9 7 8
PREC
PROB 24 | 80 | 34 | 26 | 33 | 40 | 39 |
COLUMBUS
DAY DATE| FRI 19| SAT 20| SUN 21| MON 22| TUE 23| WED 24|
TEMP
MIN/MAX| 56 70| 51 70| 52 73| 53 75| 55 79| 59 83|
WIND | 4 7 | 4 5 | 3 5 | 3 6 | 4 7 | 4 6 |
PREC
PROB 24 | 83 | 41 | 28 | 35 | 38 | 38 |
CINCINNATI
DAY DATE FRI 19 SAT 20 SUN 21 MON 22 TUE 23 WED 24
TEMP
MIN/MAX| 59 71| 55 72| 55 75| 57 77| 59 79| 62 83|
WIND | 8 10 | 7 7 | 6 7 | 6 8 | 7 9 | 7 9 |
PREC
PROB 24 | 83 | 42 | 30 | 36 | 35 | 35 |
DAYTON
DAY DATE| FRI 19| SAT 20| SUN 21| MON 22| TUE 23| WED 24|
TEMP
MIN/MAX| 56 69| 51 70| 52 73| 54 75| 57 79| 58 83|
WIND | 6 8 4 5 4 5 4 7 5 9 6 7
PREC
PROB 24 | 85 | 39 | 28 | 34 | 36 | 36 |
TOLEDO
DAY DATE | FRI 19| SAT 20| SUN 21| MON 22| TUE 23| WED
TEMP MIN/MAX| 50 65| 47 70| 49 72| 52 74| 54 79| 57
82|
WIND
        | 8 9 | 7 7 | 4 7 | 5 8 | 5 10 | 6
10|
PREC PROB 24 | 80 | 30 | 26 | 32 | 39 | 37
YOUNGSTOWN
DAY DATE| FRI 19| SAT 20| SUN 21| MON 22| TUE 23| WED 24|
TEMP
MIN/MAX| 49 66| 46 68| 46 72| 49 73| 52 77| 55 80|
WIND | 5 7 | 5 6 | 5 6 | 5 7 | 5 8 | 6 8 |
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PROB 24 | 79 | 37 | 26 | 34 | 41 | 41 |

## \* 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 Susceptiblity 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 Patholoy, 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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