

VegNet Vol. 7, No. 21, July 27, 2000

Insecticide News

C. Welty

Orthene on peppers:

On 19 July, the Ohio Department of Agriculture approved a special local need label (also known as a '24C' label) for Ohio that allows 4 applications per year on peppers rather than two applications per year as on the current federal label. Orthene is used on peppers for control of European corn borer and aphids. Applicators need to have a copy of the 24C label in their possession if they use more than 2 applications. A copy of the label can be requested from the OSU extension entomology office, via phone 614-292-9783 or via email to welty.1@osu.edu.

Miticide update:

In the VegNet newsletter on 7/19/00 there was a paragraph about pesticides available to control two-spotted spider mites. A new registration that should have been included was Danitol 2.4EC. Danitol is a pyrethroid insecticide/miticide made by Valent. The label for Danitol was expanded in March 2000 to include melons, cabbage, broccoli, cauliflower, and brussels sprouts. It was previously registered for use on tomato but several additional pests, including mites, are now included on the tomato label. Danitol has a 7-day PHI on these crops and is used at 10.7 fl oz per acre for mite control.

Insect News

Celeste Welty

Corn earworm:

Counts of corn earworm moths during the past week were: 4 at Meigs County, 8 at Highland County, 0 at Clark County, 1 at Franklin county, 0 and 1 at Wayne County, 2 at Summit County, 1 at Sandusky County.

European corn borer:

Counts of European corn borer moths during the past week were: 27 at Gallia County, 9 at Meigs County, 5 at Highland County, 8 at Clark County, 4 at Franklin County, 2 and 4 at Wayne County, 1 at Summit County, 6 at Sandusky County.

Update on Diseases:

S. Miller and R. Rowe

Late Blight

Late blight was confirmed a few weeks ago in New York, this week in Pennsylvania and is also a big problem in Michigan and Wisconsin. This is not surprising due to the cool, wet weather we have been experiencing this summer. So far we have not heard reports of late blight in Ohio. However, the weather conditions indicate that growers should be diligent about applying protectant fungicides to potatoes and tomatoes. It is important to keep the new growth covered with the protectant fungicide of choice, whether it is chlorothalanyl (e.g. Bravo), maneb or mancozeb. Apply fungicides on a 7-10 day interval and scout fields regularly for late blight. Tomato fungicide programs alternating Bravo and azoxystrobin (Quadris) are also effective against late blight. With potatoes, make sure that vines are completely dead for 2-3 weeks prior to harvest. Fungicide applications should be continued until vines are dead.

Late blight appears on potato or tomato leaves as pale green, water-soaked spots, often beginning at leaf tips or edges. The circular or irregular leaf lesions are often surrounded by a pale yellowish-green border that merges with healthy tissue. Lesions enlarge rapidly and turn dark brown to purplish-black. When humidity is high and leaves are wet for an extended period, a cottony, white mold growth is usually visible on lower leaf surfaces at the edges of lesions. In dry weather, infected leaf tissues quickly dry up and the white mold growth disappears. Infected areas on stems appear brown to black and entire vines may be killed in a short time when moist weather persists.

On potato tubers, late blight appears as a shallow, coppery-brown, dry rot that spreads irregularly from the surface through the outer 1/8 - 1/2 inch of tissue. On tuber surfaces, lesions appear brown, dry, and sunken, while infected tissues immediately beneath the skin appear granular and tan to coppery-brown. When tubers are stored under cool, dry conditions, lesion development is retarded and, upon prolonged storage, lesions may become dried and slightly sunken. Secondary bacteria and fungi frequently enter late-blight lesions, usually resulting in a slimy breakdown of entire tubers. Late blight can also develop on green tomato fruit, resulting in large, firm, brown, leathery-appearing lesions, often concentrated on the sides or upper fruit surfaces. If conditions remain moist, abundant white mold growth will develop on the lesions and secondary soft-rot bacteria may follow, resulting in a slimy, wet rot of the entire fruit.

Bacterial Diseases (S. Miller and N. Taylor)

This weather is also favoring the cool weather-loving *Pseudomonas*-type bacteria that cause leaf spots on a variety of vegetable crops. Bacterial speck of tomato is reported to be serious in many parts of Ohio, and a relatively rare *Pseudomonas* leaf spot disease on peppers has also been seen. A bacterial disease of greens (collards, turnip greens) has been very serious in northern Ohio. On collards the symptoms are typical of peppery spot, caused by *Pseudomonas syringae* pv. *maculicola*, (see below)

Symptoms On Collard Greens

but on turnip greens the symptoms are quite different. On top of the leaves, the symptoms resemble downy mildew. However, there is no sporulation evident on the undersides of the leaves, which is expected for downy mildew.

Symptoms On Turnip Greens

The causal bacteria have not been identified but tests are underway. For tomatoes, the standard recommendation is repeated applications of mancozeb plus copper at 7-10 day intervals. Greens tend to be damaged by copper applications so unfortunately there is little to be done beyond cultural practices such as allowing plants to dry before handling them in any way.

Shadeout in Ohio for use on tomatoes
Joanne Kick-Raack

Diana Roll at ODA has asked me to pass along the following information. E. I. Dupont has decided to register the herbicide Shadeout in Ohio for use on tomatoes. We currently have a 24c registration on Matrix which is the same active for use on tomatoes. The 24c is still in effect.

Vegetable Field Days
Young Grower Tour Still Has Room - August 3:

Ohio Vegetable and Potato Growers Association & Ohio Fruit Growers Society Young Grower Tour, in northeast Ohio, 8:30 a.m. to 7:30 p.m. This bus tour includes a broad variety of fruit and vegetable operations that use different marketing strategies. Stops include Farmer Produce Auction - Mt. Hope, Graf Growers - Akron, Hilgert's Berry Farm and Market - Mogadore, K.W. Zellers and Son - Hartville and Hartville Kitchen for dinner. The tour is designed for growers 40 years of age and younger, and others are welcome if interested. Cost is \$10 per person and registrations are accepted on a first come, first served basis. Contact Jennifer Hungerford at (614) 249-2424 or growohio@ofbf.org for registration information.

Crop Reports
Hal Kneen and Thomas Harker

SouthEast:
No rainfall since July 19. Growers have been happy as vegetables continues to ripen without splitting, especially melons and tomatoes. Sweet corn continues to need irrigation, some ears showing signs of water deficits. Temperatures have been very moderate, highs in upper 70's and lower 80's and night time temperatures in lower 60's. Late tomato growers unhappy, would like to see warmer temperatures especially at night.

Wholesale tomato market price fell dramatically on Monday, July 24,2000. Prices were down to \$2.50-3.00 for a ten pound pack. Combining low prices with early blight disease in minimally fungicide protected fields and several growers stopped picking for the wholesale market. Unpicked fields go to local homeowners for

canning at you pick prices of \$3.00 a bushel. Suspect price will go up as supply decreases and demand remains constant for next couple of weeks before Northern Ohio & Michigan tomatoes reach their peak. Local market sales good to excellent for tomatoes. More retailers are wanting 20-25 pound lugs instead of ten baskets and more size and color consistency. Question is, will growers pack to what retailers want?

Sweet corn continues to be in short supply locally for farm markets due to planting problems earlier in the Spring. European corn borer and corn earworm numbers are down from last week. Continuing normal spray schedule as insect pressure only low to moderate.

Cantaloupe are ripening and selling strongly, \$0.50-1.50 each depending upon size in local market areas. Most are picked up at the grower with sweet corn, tomatoes, and peppers. Some powdery mildew spotted especially in weedy fields. Growers now realize the need for better weed control due to disease and inability to find ripening fruit among the weeds. Watermelon will be ready for the weekend.

Consider inviting local TV stations to your vegetable operation. John Marra, Cabell County Extension Agent and local TV celebrity for WSAZ-NBC affiliate out of Huntington/Charleston WV visited with a Meigs County wholesale grower, Jim O'Brien. For four days, news shows were spiced up with in field and packing house pictures of locally grown tomatoes, peppers, sweet corn and melons. The pull through sales at local markets have helped keep local wholesale prices higher.

SouthWest:

Field cultivating, spraying and harvesting continues. Growers have been irrigating the last two weeks do to the lack of rainfall in the region. Tomato harvest is starting to pick up. Sweet corn growers are in full swing with their harvest continuing. Sweet corn being harvest this week seems to be clean of worms. Some muskmelons are starting to be harvested. Peppers and all summer squash harvests are getting larger. Some growers are starting to pick their black berries.

TomCast Report
K. Scaife

At Fremont,. The total DSV's as of 25 July are 56. Last week, 19 July: 54 DSV's. .

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](#)

We appreciate very much the financial support for this series 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.

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