

Label News - Herbicides:
Doug Doohan

Recently Ohio Department of Agriculture has granted Section 24(c) labels for Command 3ME on peppers, cabbage, and cucumbers and for Matrix on transplanted tomatoes. Growers intending to use these products must have a copy of both the Section 24(c) label, and the federal label. Adhere to all directions on both labels. Section 24(c) labels will not have explicit instructions regarding safety and environmental precautions, optimum stage of growth of weeds, and sprayer clean up etc.

Command 3ME - Micro encapsulation (ME) doesn't eliminate the potential for volatilization with Command but it greatly reduces the likelihood relative to Command 4EC. Reduction of volatilization with 3ME is sufficient to eliminate the need for mechanical incorporation; however, all other precautions relative to rotational crops, and use near sensitive crops still apply. In particular Command 3ME must not be used within 1200 feet of towns and housing developments, commercial vegetable production (except peppers, pumpkins, succulent peas, sweet corn, sweet potato and winter squash), commercial fruit/nut production, commercial nurseries or commercial greenhouses. Minimize spray drift and avoid making applications when spray particles can be carried by air currents to areas where sensitive crops occur, and avoid applications when temperature inversions exist.

Command 4EC can still be used on these crops according to the previously established Section 24(c) registrations. Because Command 3ME contains less active ingredient per gallon than Command 4EC, use rates are slightly higher. The 4EC and 3ME products both have potential to cause temporary bleaching of labeled crops, and cultivars may vary in their tolerance. However, the crop should grow through temporary bleaching with no adverse impacts.

NOTE: FMC Corp. intends that these Section 24(c) registrations apply only to Ohio growers. Growers must have a copy of the label and upon use of the product, FMC Corp. considers the user to have accepted all terms and conditions of the label (including a signed waiver and release from all liability of FMC for failure of the product to perform, or crop damage resulting from use).

- Peppers (EXCEPT BANANA PEPPERS) - Apply 0.67 to 2.67 pints/ A, preemergence to weeds and prior to seeding or transplanting. Use the lower rates on coarse soils and the higher rates on fine soils.

- Cabbage - Apply preemergence to weeds and prior to seeding or transplanting. For direct seeded cabbage apply 0.67 pints/ A. For transplant cabbage, apply 0.67 to 1.3 pints/ A. Use the lower rates on coarse soils and the higher rates on fine soils.

- Cucumbers - Apply 0.4 to 1.3 pints/ A, preemergence to weeds and prior to seeding or transplanting. Use the lower rates on coarse soils and the higher rates on fine soils.

Matrix can be used for weed control in transplant tomatoes in Ohio, effective May 31, 2000. Apply Matrix at 1 ounce/ A, tank-mixed with Sencor (metribuzin) at 2 ounce/ A, to young (less than 1 inch in height or diameter), actively growing weeds. Transplant tomatoes must be acclimated to the field for 1 - 3 days prior to application. A Non-Ionic Surfactant (NIS) must be included with Matrix, at a concentration of 0.125 to 0.25% v/v (1 to 2 pint/ 100 gallons of water). Do not cultivate within 7 days prior to applying Matrix or control may be reduced. Cultivation may be required 7 to 14 days after application of Matrix to optimize control of suppressed weeds and weeds that were beyond the maximum size at application. Rainfall or sprinkler irrigation of 1/3 to 1 inch or water following a postemergence application will activate Matrix in the soil and provide residual control of subsequent flushes of annual weeds. If plastic mulch is used, spray only the row- middles, using a reduced application rate proportional to the area actually sprayed. A second application of Matrix can be used if necessary, 14 to 18 days after the initial application to maximize control of treated perennials and second flushes of annual weeds. No more than 3 ounces / A, and the Pre Harvest Interval for Matrix on tomatoes is 45 days.

'Select' for Annual and Perennial Grass Control In Tomatoes

R. Precheur

While visiting tomato farms in Meigs county yesterday, several growers were asking about the use of Select for postemergent grass control in tomatoes. The question was answered at the twilight meeting when a flyer was passed out indicating that Select manufactured by Valent controls annual and perennial grasses in both fresh and processing tomatoes. Grass species controlled include: giant, green and yellow foxtail, bluegrass, annual bluegrass, goosegrass, fall panicum, quackgrass, barnyard grass, seedling johnsongrass and large crabgrass. Check the label for application rates, gallonage, and restrictions. There is a 20 day pre harvest interval. There is no carryover or rotational problems. The product is also approved for onions and dry beans.

Fungicide and Disease Update

R. M. Riedel

1. A federal label for Nova has been given for cucurbit crops. The 18E application for Ohio has been withdrawn. Growers will need to keep abreast of the new label when it becomes available.
2. We have received Bacterial Wilt on Squash already. Symptoms are not typical of bacterial wilt on muskmelon which growers may be familiar with. On squash and

pumpkin the symptoms will be water soaking and scald of tissue along the margin of the leaf and between major vein on the leaf blade. Only a few leaves may be initial involved and disease development can be slow, particularly when air temperatures are above 30C. Striped and spotted cucumber beetles vector this bacterium. They must be controlled to control the disease. Cuke beetle feeding is heavy in many parts of OH so be sure to check your crop.

Insect Notes:

C. Welty

Squash vine borer:

adults were first detected in pheromone traps in Columbus on 8 June; 20 moths have been trapped in the week since then. The adults are day-flying moths that look somewhat like wasps. The females will be laying eggs on the lower stems of summer and winter squash, gourds, and pumpkins. The traditional recommendation for controlling this pest is a weekly spray of insecticide directed at the base of plants, as long as eggs are hatching, which can be from mid-June until late July. A lower-input approach is to use 2 sprays one week apart, one at the time of peak egg hatch, which we assume is about the same time as peak adult catch in traps. The peak of adult activity last year in central Ohio was from 26 June until 5 July.

European corn borer:

We are seeing prolonged emergence of corn borer moths. Our blacklight trap at Fremont caught 132 moths during the past week, which is up from 108 the previous week and about the same as 2 weeks ago when 134 were caught. Pheromone trap counts for corn borer moths in the past week were 7 in Meigs County, 7 at Columbus, 52 in Summit county, 9 at Celeryville, 2 at Fremont. Although evidence of larvae feeding in sweet corn is being found now, more egg laying is likely to continue as long as moths are active. As mentioned in last week's newsletter, control of this pest is warranted if >10% of plants are damaged at the time that tassels are emerging from the whorl. Insecticide sprays are much more effective once tassels are pushing up out of the whorl than earlier due to greater exposure of the larvae.

Corn earworm:

the number of corn earworm moths caught in pheromone traps during the past week was 2 at Meigs County, 2 at Columbus, 0 in Summit county, 2 at Celeryville, 0 at Fremont. Although these numbers are low compared to what they are likely to be in late summer, the earliest plantings of sweet corn are likely to be infested at harvest if there is any presence of the earworm moths when silks appear. I suggest a more conservative schedule for the earliest corn than for later corn: if earworm moths are active in the area once the earliest corn begins silking, insecticide on a 5-day schedule is needed if high temperatures are below 80F or on a 4-day schedule if temperatures are above 80F.

Variegated cutworm:

Pheromone trap counts for the past week were 21 at Columbus, 11 at Fremont. If transplanted tomatoes or peppers have feeding damage on leaf edges or stems but no pest is found on the plants, be sure to dig around soil at plant base to see if

variegated cutworm or other cutworm species are found. Variegated cutworm climbs plants at night and hides in the soil during the day.

Cabbage worms:

In northwest Ohio, the main pest being found now is diamondback moth. In cabbage seen on the twilight tour in Meigs County last night, the imported cabbageworm was the only species found. Growers who had trouble controlling diamondback moth last year are encouraged to use B.t. products (DiPel, Javelin, Agree, CryMax, Lepinox, MVP, and others) for worm control this year. B.t. is toxic only to caterpillars and allows survival of a tiny parasitic wasp that attacks diamondback larvae.

Field Program Next Week on Cabbage Pest Scouting

Tuesday evening, 20 June 2000,

6:30 to 9:00 PM,

Fremont, Ohio

Presented by the Ohio State University Vegetable Crops Team

Meet at 6:30 PM at the OARDC Vegetable Crops Branch, 1165 C.R. 43 (3 miles southwest of Fremont, off State Route 53). We will look at cabbage at the research farm, then proceed to a commercial field at either the Molyet Farm or the Sachs Farm (about 3 miles east of the research farm). The second location will not be decided until the day before the program, depending on pest pressure.

The program is open to everyone. It should be of interest to anyone who makes decisions about the need for insect control on cabbage or anyone who scouts for cole crop pests. There is no registration fee or pre-registration procedure.

Topics: identification of insect pests, recognition of natural enemies, scouting procedures, thresholds, choosing insecticides, biological control by conserving natural enemies, using a collard trap crop for managing diamondback moth

Questions? contact Celeste Welty,

phone 614-292-2803 or

e-mail welty.1@osu.edu

The Tuber Times: A New Publication

Matt Kleinhenz

A new publication by Matt Kleinhenz, The Tuber Times, covers Potato Growing Tips and News from the World of Research. The publication will be issued quarterly. The first issue will be included in a special edition of VegNet that will follow this email message. Fax readers of VegNet should get a copy on Friday. A WEB version is available, see VegNet #15, Special Edition.

Crop Reports

Brad Bergefurd, R. Precheur and Hal Kneen

SouthEast:

The earliest tomato fields and varieties already have fruit with some color but most are about 3-4 inches in diameter. Harvest is still a few weeks away. Tying and training continues and most growers are irrigating and using fertigation. Heavy rain showers are spotty and short lived. Weather is very hot and humid with fog and heavy dew to mid morning but no major disease problems are present yet Sweet corn fields progressing nicely with some being irrigated. Corn on plastic will be ready in about 10-14 days if warm weather persists. Ears are of very good size and silk starting to turn brown. Cabbage harvest and pumpkin planting continues. Bell peppers just starting to flower. The annual Meigs/Washington Vegetable Tour was held last night with over 75 vegetable growers in attendance. Highlights of the tour included staked tomatoes, sweet corn, peppers, cabbage and cucumbers

Southern and Southwestern

Tomato and pepper crops look good. Early tomatoes have good fruit set, mid plantings are in bloom. Harvest of summer squash began about 1 week ago, with major harvest beginning today or tomorrow. Pumpkin planting is winding down. Harvest of Kale and collards, broccoli and cabbage has been continuing for about three weeks now. Early harvest of cucumbers and green beans began 2 weeks ago. Melons are larger than the size of softballs.

Bacterial Wilt has shown up in a summer squash field, with very little sign of cucumber beetle. Pepper planting finished up about 2 weeks ago. Growers have been using trickle irrigation for 2 weeks now due to very dry conditions. Last week pea sized hail and 60 mph winds went through Northern Fayette County destroying 1900 acres of one farmers crops. Knee high Sweet corn was cut down to the ground. Newly planted raspberry plants were cut off at the ground and all new growth was defoliated.

So far disease and insect pressure is light. Light Looper damage on cole crops and bean beetle is being sprayed for in Green beans.

Horticulture Field Night , Saturday July 8th, Piketon Research Center, 5 till 9 pm.

Wagon tours of over 500 research plots. Supper for all !!

TomCast Report

K. Scaife

At Fremont,. The total DSV's as of 13 June are 16. Last week, 7 June 10 DSV's. Daily accumulations for Fremont will be reported on the Tomcast page at the VegNet website but updated only once or twice a week.

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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