

VegNet Vol. 9, No. 5, April 18, 2002

More on Cucurbit Herbicides Melons

Doug Doohan

SANDEA

- Last week (VegNet Vol. 9, No. 4, April 11, 2002) you learned about the Section 24C label for Sandea use on a variety of cucurbit crops. The current label (available on the Internet at <http://www.oardc.ohio-state.edu/weedworkshop/>) provides for application of Sandea to cucumbers, winter squash, pumpkins, cantaloupes, honeydew melons and crenshaw melons. Other crops may be added in future years. Sandea may be applied pre-emergence (PRE) or post-emergence (POST). PRE treatments control fewer weed species than do POST treatments; however, common lambsquarters and purslane are controlled with PRE treatments but not with POST. PRE and POST treatments of Sandea will control pigweeds, but nutsedge control is best with POST treatments. POST treatments always require inclusion of a nonionic surfactant at 0.25% V/V - 1 Qt/ 100 Gal). Because 2 applications can be made per growing season, a strategy of interest to many growers might be to use a PRE application to control lambsquarters and purslane followed by a POST application to improve control of nutsedge and late emerging pigweeds. Sandea works slowly. It may take 1 to 3 weeks for sensitive weeds to die. PRE applications may cause severe injury if 1 inch or more rainfall occurs between Sandea application and crop emergence. As with POST treatments, the grower assumes all liability for crop damage. POST a treatment when the crop has 2-5 true leaves is safest for the crop. Chlorosis (yellowing) during the first several days after application is common with POST Sandea. However, chlorosis is temporary and yield is not affected. Ohio research has focused on cucumbers and pumpkins. We have found that pumpkins are more sensitive to Sandea than are cucumbers and slight stunting may occur in addition to chlorosis.

It has taken the support of Gowan Company, the IR-4 Program and many years of research at universities across the country to achieve a new herbicide registration for cucurbits. Using unlabelled herbicides on these crops will jeopardize the future of this new Sandea registration and discourage future research. It is now up to growers to show that there is deep grassroots support for the research and minor use registration programs that have made this possible.

STRATEGY

- After many years of concern about the status of Command, Strategy by United Agri Products has finally resolved grower's problems. Strategy, which is a pre-mix of clomoxone (Command) and ethalfluralin (Curbit), has a national label for grass and broadleaf weed control in cucumbers, melons, pumpkins, squash and watermelons. Strategy is microencapsulated in order to minimize (but not prevent) movement of the herbicide away from the site of application. Because it contains clomoxone,

which is inherently volatile, it is still very important to avoid using Strategy under conditions when spray particles may be carried by air currents to areas where sensitive crops and plants are growing, or when temperature inversions are likely to occur. Do not apply when winds are above 10 mph. Also, Strategy should not be used within 300 feet of towns and housing developments, commercial production of fruit and non-labeled vegetables, commercial greenhouses and nurseries. The most effective way to reduce drift potential is to apply large spray droplets. Achieving larger droplets is a function of spray volume, pressure and nozzle orifice size. Strategy should be applied after seeding and before crop and weed emergence. It should never be incorporated, in contrast to Command, or crop injury will occur. The application rate ranges from 2-6 Pt/A is dependent upon soil texture (see label for breakdown). Rainfall (1/2 inch within 5 days of application) or irrigation (1/2 inch within 2 days of application) is required to activate Strategy. At recommended rates Strategy should control most annual grass weeds. Broadleaf weed control is generally good but ragweed, smartweed and to some extent pigweeds are only partially controlled.

VALID OH 24(c) REGISTRATIONS

Copies of these labels are available to download from the Pesticide Education Program website listed below. (requires Adobe Acrobat software) All labels are listed and the Sandea label is at the bottom of the list.

<http://pested.osu.edu/24c.html>

Crop Reports

By Brad Bergefurd, Hal Kneen and B. Precheur

SOUTHEAST

Starting to plant tomatoes on black plastic beds and some growers are experimenting this year using row tunnels. Tomatoes were also planted in west central OH this week with row covers used to protect them when we return to normal April weather.

Sweet corn is just past the spike stage on bare ground. Plastic corn is up also. Less than 50% planted at this stage.

Cabbage plantings are almost done for all the early plantings.

Heavy rain of almost 2 inches delayed planting in the beginning of the week.

Asparagus beetles are widespread on new shoots and spears.

SOUTHWEST

Some areas received over 3 inches of rain over the weekend. Last night's storms (Wed) brought some areas another .25 to .5 inch with heavy rainfall and winds.

Field work has slowed but some sweet corn was planted Wed. afternoon and some growers are spraying herbicides on sweet corn that was planted last week.

Aphids have been found in a tomato planting. Weeds are beginning to emerge through holes in black plastic mulch. Tomatoes on plastic are being fed through trickle irrigation.

Seeding of melons, watermelons continues in the greenhouse. Planting of potatoes, onions, tomatoes, cabbage, broccoli continues.

BAINBRIDGE PRODUCE AUCTION- 1st sale for 2002

Friday April 19, 4:00 pm

Friday sales at 4pm through April

Route 41 South, 5 miles south of U.S. Route 50

Bainbridge Ohio (Just East of Hillsboro and west of Chillicothe)

Bedding plants, baskets, flowers, early season lettuce, high tunnel strawberries, and other early season produce.

Bulletin Available: Soil Quality in Vegetable and Small Fruit Production

By Matt Kleinhenz

A new bulletin entitled Soil Quality in Vegetable and Small Fruit Production by Matt Kleinhenz and Peter Bierman is available online in html and pdf formats.

The address is: <http://ohioline.osu.edu/b898/index.html>

The 7 Day Outlook*

By Robert Precheur

AKRON-CANTON

DAY DATE | SAT 20| SUN 21| MON 22| TUE 23| WED 24| THU 25|

TEMP

MIN/MAX | 50 64| 43 59| 37 52| 35 57| 41 61| 38 59|

WIND | 7 10| 7 10| 7 9| 6 10| 8 12| 8 11|

PREC.

PROB. 24 | 72 | 77 | 43 | 31 | 46 | 45 |

CLEVELAND

DAY DATE | SAT 20| SUN 21| MON 22| TUE 23| WED 24| THU 25|

TEMP

MIN/MAX | 48 61| 41 57| 37 50| 37 58| 43 60| 39 58|

WIND | 6 8| 8 9| 7 8| 6 9| 7 10| 7 9|

PREC.

PROB. 24 | 73 | 75 | 39 | 33 | 47 | 45 |

COLUMBUS

DAY DATE | SAT 20| SUN 21| MON 22| TUE 23| WED 24| THU 25|

TEMP

MIN/MAX | 54 66| 46 58| 39 54| 38 60| 42 63| 41 61|

WIND | 4 7| 5 8| 6 8| 4 7| 5 9| 6 7|
PREC.
PROB. 24 | 77 | 82 | 44 | 30 | 45 | 41 |

CINCINNATI

DAY DATE | SAT 20| SUN 21| MON 22| TUE 23| WED 24| THU 25|
TEMP
MIN/MAX | 55 69| 50 61| 41 58| 41 65| 45 61| 40 64|
WIND | 9 10| 9 11| 9 10| 6 9| 9 11| 8 11|
PREC.
PROB. 24 | 80 | 86 | 43 | 29 | 43 | 38 |

DAYTON

DAY DATE | SAT 20| SUN 21| MON 22| TUE 23| WED 24| THU 25|
TEMP
MIN/MAX | 53 64| 46 60| 39 54| 38 60| 43 59| 40 58|
WIND | 6 8| 6 8| 7 8| 6 9| 7 11| 7 8|
PREC.
PROB. 24 | 81 | 84 | 41 | 31 | 45 | 39 |

TOLEDO

DAY DATE | SAT 20| SUN 21| MON 22| TUE 23| WED 24| THU 25|
TEMP
MIN/MAX | 47 62| 40 56| 35 54| 36 60| 42 61| 37 58|
WIND | 8 10| 9 11| 8 11| 7 10| 8 14| 10 11|
PREC.
PROB. 24 | 79 | 76 | 34 | 35 | 48 | 42 |

YOUNGSTOWN

DAY DATE | SAT 20| SUN 21| MON 22| TUE 23| WED 24| THU 25|
TEMP
MIN/MAX | 50 63| 41 59| 36 51| 34 56| 40 61| 37 59|
WIND | 6 9| 7 9| 6 9| 6 9| 7 10| 7 9|
PREC.
PROB. 24 | 69 | 74 | 43 | 31 | 46 | 46 |

* 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

Slide Presentations

Pepper Variety Slides 2001 | HTML Slide Show

Pumpkin Variety Slides 2001 | HTML Slide Show

Go to the VegNet homepage.

VegNet Vegetable Schools

A series of slide presentations are now available in order to update you on the latest pumpkin and sweet corn research. We begin with 6 pumpkin topics in Pumpkins 101 and have 10 slide presentations available in Sweet Corn 101. In sweet corn. Powerpoint presentations and html online slide shows are available now. Go to the VegNet homepage.

Pumpkins 101

The use of trap crops and Admire for cucumber beetle control and New varieties for 2001. In coming weeks, we will have presentations on cover crops for disease control and pumpkin fungicide use. Check back often.

Perimeter Trap Cropping. Online html slide show | Perimeter Trap Cropping. PPT, 7 Mbytes

See also the Research Results section on the home page for text version of the report.

Pumpkin Variety Slides 2001 | HTML Slide Show

Sweet Corn 101

Presently only Powerpoint presentations available. Coming Soon: Online HTML slide shows. Check back often Nine topics including:

Aspects of Variety Selection based on Disease Control [ppt 40 KB]

Internet Link To "Reactions of Sweet Corn Hybrids to Prevalent Diseases" Dr. Jerald Pataky www.sweetcorn.uiuc.edu

Producing Early Sweet Corn [ppt 3.5 Mbytes]

Managing Weeds in Sweet Corn [ppt, 9 Mbytes]

Sweet Corn Herbicides & Variety Sensitivity. [ppt 2Mbytes]

Sweet Corn Development and Critical Periods for Irrigation Management [ppt 1.6 Mbytes]

Flea Beetle Management in Sweet Corn [ppt 510 KB]

How To Keep Worms Out of Sweet Corn Ears [ppt 8.3 Mbytes]

Role of Bt Transgenic Hybrids in Sweet Corn Pest Management. [ppt 21.2 Mbytes]

Bt Sweet Corn Efficacy in OH, 1999-2000 [ppt, 208 KB]

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](#)

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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