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Select Receives Approval for Vegetable and Strawberry Uses
by John Masiunas, From: IL Fruit and Vegetable Newsletter

The herbicide Select (clethodim, manufactured by Valent) has received US EPA approval for use on potato, sweet potato, tomatoes, peppers (bell and non-bell), carrot, radish, strawberry, squash, pumpkin, muskmelon, watermelon, cucumbers, onions, and garlic. Select is a postemergence herbicide for the control of annual and perennial grasses. It does not control sedges or broadleaf weeds. Apply Select to actively growing grasses at the recommended height. Application timing varies depending on the grass species and its size. In mixed stands, apply when the first grass reaches the recommended growth stage for treatment. If the grasses are growing under stress, such as from lack of moisture or low temperatures, than regrowth by tillering may occur.

Select generally provides better perennial grass control than Poast (sethoxydim). Rates vary depending on whether or not the grass is perennial. Select should be applied at 4 fl.oz./acre to annual grasses and 8 fl. oz./acre to perennial grasses. Timing of Select application varies depending on grass species and its height. For example, apply Select to quackgrass when it is 4 to 12 inches tall, while Select should be applied to rhizome johnsongrass when it is 12 to 24 inches tall. A second application may be necessary to perennial grass, but wait at least 14 days after the first application before making a re-application. On these vegetable crops and strawberries the do not apply more than 32 fl. oz. of Select per acre per season; except for radish where the maximum amount is 16 fl. oz.

There are some restrictions and limitations for using Select on vegetable and strawberries. You should always use crop oil concentrate at 1 quart per acre when apply Select. Only with potatoes can you include liquid fertilizer or ammonium sulfate (AMS) . AMS improves the activity of Select on difficult-to-control grasses such as quackgrass, rhizome johnsongrass, and volunteer cereals. There is a preharvest interval for each crop. For example, the preharvest interval for tomatoes, peppers, and eggplant is 20 days while for squash, pumpkins, cucumbers, and melons the preharvest interval is 14 days. Always read the label, including the special supplemental label, before applying Select.

AREA PRODUCE AUCTION UP AND RUNNING
Brad Bergefurd

The Bainbridge Produce Auction will officially kick off the 2001 growing season with an excellent supply of high quality, locally grown bedding plants, perennials, nursery stock, cut flowers, hanging baskets, and early season produce including

greenhouse grown tomatoes and much , much more!! Wholesale Produce Auctions will be held every Friday beginning at 4:00 pm, with hay and straw sales beginning at 3:30 pm at the 4053 State Route 41 south, Bainbridge Ohio location. Everyone interested in buying or selling some of the areas finest "Home Grown" produce are invited to visit the produce auction.

To expand Agriculture production and marketing opportunities for area farmers, farm families from the Bainbridge, Ohio have expanded the Bainbridge Produce Auction to better serve sellers and buyers. Working with Brad Bergefurd of the OSU Extension Enterprise Center, in June of 1999 the Bainbridge Produce Auction facility was built by the farmers. The Grand Opening of the Wholesale Produce Auction occurred in July and Produce Auctions were held every Monday, Wednesday and Friday throughout the past two growing seasons.

The Bainbridge Produce Auction is located 4 miles south on State Route 41 just off of U.S Route 50, west of Bainbridge. Auctions will be held on every Friday beginning at 4:00 pm until July. For more information regarding the Bainbridge Produce Auction, contact : Brad Bergefurd,
Extension Agent Horticulture,
OSU Extension Enterprise Center,
1864 Shyville Road,
Piketon, Ohio 45661,
1-800-860-7232
or email bergefurd.1@osu.edu.

Cucumber beetles & bacterial wilt on pumpkins C. Welty

As Ohio pumpkin growers are learning to manage the relatively new problem of bacterial wilt, questions have come up about how cucumber beetles act as vectors of the disease. Almost all that is known about this disease is from work on melons and cucumbers, which have a long history of this disease. We assume that the vectoring is done the same way on pumpkins as on melons. We have observed that the disease seems to develop more slowly on pumpkins than on melons, and infected pumpkin plants do not always die.

A study of bacterial wilt on pumpkins after artificial inoculation was done under greenhouse conditions in Indiana several years ago. An important finding in this study was that pumpkins are highly susceptible to bacterial wilt during the cotyledon stage, and somewhat susceptible during the 2-leaf to 4-leaf stages. Both the striped cucumber beetle and the spotted cucumber beetle are vectors of bacterial wilt. The spotted cucumber beetle is also known as the southern corn rootworm beetle. Three other beetles that are often found feeding on pumpkins are not vectors: the pale-striped flea beetle, the western corn rootworm beetle, and the northern corn rootworm beetle.

There are two steps to vectoring bacterial wilt. A wound must be made into the vascular system of the plant; this most typically is done by beetles feeding on cotyledons, stems, or leaves. Once a wound is present, then the bacteria are

transmitted from beetle feces. Moisture on the leaf helps move bacteria from the feces into the wound. Plants are most susceptible to infection within about 2 hours of wounding. Disease transmission can occur whether the beetle defecates before or after the feeding wound is made. Wilt is more likely to develop on plants where there is a lot of feeding damage compared to plants with a light amount of feeding. The process just described is what occurs when a beetle that is carrying the bacterium in its gut feeds and defecates on a plant. The other critical fact in understanding this disease is that only about 1% of the overwintering beetle population carries the bacterium, according to many years of research in Indiana melons. The summer generation of striped cucumber beetle, which shows up in late July, has about 10% infective beetles.

Beetle vectored bacterial wilt is thus different than aphid vectoring of watermelon mosaic virus in several ways. The pathogen travels only via mouthparts in aphids but mostly via feces in cucumber beetles. Transmission is immediate in the case of aphid-borne viruses but slightly slower with bacterial wilt just because two steps are involved. If beetles are disturbed and leave the plant after they begin to feed but before defecating, then disease transmission will not occur.

Management of cucumber beetles as vectors of bacterial wilt is thus most critical during the first two weeks after seedlings emerge. Systemic insecticides (Furadan 4F or Admire 2F) applied to soil at planting offer the most reliable control. For foliar insecticide application, our tentative thresholds for cucumber beetle control on pumpkins are:

- Cotyledon and 1-leaf stage: 0.5 beetle per plant.
- 2-leaf to 4-leaf stage: 1.0 beetle per plant.
- 5-leaf stage to first fruit set: 20% defoliation.
- After fruit set: fresh beetle feeding on fruit.

Crop Reports
Brad Bergefurd

SOUTHERN OHIO

Weather has been keeping vegetable growers on edge this week. Last week (Tuesday and Wednesday April 10 and 11) some northern growing regions of southern Ohio received in excess of 5 inches of rain within a 24 hour period causing many fields to flood and soils to become saturated, other areas received around 1 - 1.5 inches of rain halting all field operations. Early Green beans and sweet corn plantings are up, but the forecast for record freezing temperatures has growers concerned. (NOTE: Most areas did escape injury last evening Tuesday night April 17, with a low of 31 degrees). Growers are still transplanting cabbage, broccoli, kale and collard greens. Seeding of muskmelons and watermelon continues in the greenhouse. Plastic planted sweet corn is showing 2 true leaves whereas bare ground planted sweet corn is just beyond spike stage. Beds are being shaped and plastic being laid for pepper plantings. High tunnel tomatoes are blooming or setting fruit.

Insect Trap Report
C. Welty

Wood County (Hoytville), 4/10 - 4/17:
black cutworm = 0 (down from 1 last week);
true armyworm = 11 (up from 5 last week)

The 7 Day Outlook*

AKRON-CANTON

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

TEMP

MIN/MAX | 44 65| 50 73| 54 76| 52 72| 50 70| 45 63|

WIND | 8 11| 8 12| 8 10| 8 10| 8 11| 8 11|

PREC.

PROB. 24 | 72 | 62 | 52 | 51 | 51 | 48 |

CLEVELAND

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

TEMP

MIN/MAX | 44 64| 52 73| 54 73| 51 69| 49 68| 45 63|

WIND | 7 11| 9 11| 8 10| 7 10| 7 10| 7 9|

PREC.

PROB. 24 | 75 | 65 | 55 | 53 | 51 | 47 |

COLUMBUS

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

TEMP

MIN/MAX | 45 67| 52 75| 57 78| 56 74| 51 71| 47 66|

WIND | 6 9| 6 8| 6 7| 5 8| 6 9| 6 8|

PREC.

PROB. 24 | 68 | 56 | 50 | 50 | 50 | 46 |

CINCINNATI

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

TEMP

MIN/MAX | 50 72| 56 76| 59 79| 57 76| 53 68| 47 69|

WIND | 9 13| 11 12| 9 10| 9 12| 9 11| 9 11|

PREC.

PROB. 24 | 60 | 49 | 49 | 50 | 49 | 44 |

DAYTON

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

TEMP

MIN/MAX | 46 67| 52 75| 56 78| 55 73| 51 65| 47 63|

WIND | 8 11| 8 10| 8 8| 7 10| 7 10| 7 9|
PREC.
PROB. 24 | 68 | 56 | 51 | 53 | 50 | 45 |

TOLEDO
DAY DATE | FRI 20| SAT 21| SUN 22| MON 23| TUE 24| WED 25|
TEMP
MIN/MAX | 44 62| 50 74| 53 73| 50 70| 48 67| 43 62|
WIND | 9 12| 11 12| 8 10| 8 10| 7 13| 11 11|
PREC.
PROB. 24 | 78 | 67 | 57 | 58 | 50 | 44 |

YOUNGSTOWN
DAY DATE | FRI 20| SAT 21| SUN 22| MON 23| TUE 24| WED 25|
TEMP
MIN/MAX | 41 63| 51 73| 54 77| 50 70| 49 70| 45 64|
WIND | 6 10| 8 11| 7 8| 7 9| 8 10| 7 9|
PREC.
PROB. 24 | 71 | 63 | 53 | 51 | 51 | 48 |

* 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

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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