



Cranberry Station Newsletter

FEBRUARY 2005

UMASS CRANBERRY STATION

1 STATE BOG ROAD

P.O. Box 569

EAST WAREHAM, MA 02538

<http://www.umass.edu/cranberry>

PESTICIDE SAFETY TRAINING

ELKS LODGE, EAST WAREHAM

WEDNESDAY, MARCH 30, 2005

8:00 AM – 12:00 NOON

This meeting will focus on cranberry pesticide safety issues. **FOUR** contact hours will be offered towards pesticide re-certification. The cost is \$40.00.

Please return attached sign up form (page 3) and check to the Cranberry Station by March 23rd.

Basic pesticide safety including PPE, mixing and loading, and spill management

Newly registered insecticides, how to use them effectively

Tailwater Recovery; construction and usage
Gary Weston

Chemigation Review; safety and efficacy
Matt Beaton

Zone II restrictions in cranberry
Owen Wagner

IPM TRAINING, UMASS CRANBERRY STATION,

WEDNESDAY, APRIL 27TH, 2005

9:00 - 12:00 NOON

This IPM training will review the new cranberry pesticides focusing on reduced risk compounds and blackheaded fireworm management. There will be a chemigation review and a dye test demonstration. **TWO** contact hours will be offered towards pesticide re-certification. The cost is \$20.00 per person.

Please return attached sign up form (page 3) by April 20th to attend.

The following are brief summaries of research presented at the January 2005 UMass Research Update Meeting held in Plymouth, MA.

TOLERANCE OF 4 CRANBERRY VARIETIES TO SPRING APPLICATIONS OF EVITAL

The IPM/Weeds lab conducted a study (funded by AMVAC Corporation) to evaluate the vine injury potential of spring applications of Evital on 4 cranberry varieties. We looked at Early Black, Ben Lear, Howes, and Stevens. In a randomized complete block design with 5 replicates, we tested 0, 30, 60, 90, and 120 lb/A Evital. The herbicide was applied on April 28, 2004 and the plots were visually evaluated during mid-July.

Using a rating scale where 0=healthy and 4=dead, only Stevens showed symptoms of Evital damage (see table below). Numbers followed by different letter are different from each other. The values indicate that vines treated with 90 and 120 lb/A rates had significantly higher damage ratings compared to the control. There was no adverse effect of herbicide application on yield.

Table 1. Symptoms rating for 4 cranberry varieties reated with spring applications of Evital (0=healthy, 2=damaged, 4=dead).

Rate (lb/A)	Ben Lear	Early Black	Howes	Stevens
0	0	0	0	0.0 B
30	0	0	0	0.1 B
60	0	0	0	1.0 AB
90	0.1	0	0	1.5 A
120	0.1	0	0	2.0 A
p-value	ns	ns	ns	<0.01

Table 2. Yield for 4 cranberry varieties treated with spring applications of Evital.

Rate (lb/A)	Ben Lear	Early Black	Howes	Stevens
0	250	147	92	50
30	357	173	43	79
60	245	161	79	96
90	297	141	63	97
120	257	161	53	113
p-value	ns	ns	ns	ns

Early Black, Howes, and Ben Lear showed minimal to no crop injury to spring applications of Evital, up to and including 120 lb/A. Stevens, however, were sensitive. Spring applications of Evital to Stevens should be limited to less than 60 lb/A.

Post-harvest Roundup Sprays

We currently have 2 supplemental labels that permit sprays of Roundup. The summer spray can be made to dry ditches in the rate range of 1-2% solution. Post-harvest sprays are recommended at 0.5-1% solutions. We treated several spots on State Bog in the fall of 2003 to see what kind of injury, both to weeds and crop, might occur with the post-harvest applications.

Demonstration plots of approximately 1 meter square were marked after harvest in 2003. We applied 4 rates (0, 0.5, 1, and 2% solutions) at 2 timings (late October and mid-November). Each rate treatment was only represented once; the study was not replicated. We visually evaluated the plots in mid-summer 2004. We targeted 2 weeds: narrow-leaved goldenrod and nut sedge.

Table 1. Symptoms rating for cv. Howes infested with narrow-leaved goldenrod treated late October with post-harvest applications of Roundup.

Weed control: 0=none, 2=moderate, 4=total.

Vine injury: 0=none, 2=moderate, 4=dead.

NLGR-late Oct-Howes

Rate (%)	% Weed Cover	Control Rating	Vine Injury
0	25-40	0	0
0.5	40-60	2	2.5
1.0	25-40	2	4
2.0	25-40	2	4

Table 2. Symptoms rating for cv. Early Black infested with narrow-leaved goldenrod treated mid-November with post-harvest applications of Roundup.
Weed control: 0=none, 2=moderate, 4=total.
Vine injury: 0=none, 2=moderate, 4=dead.

NLGR-mid-Nov-EB

Rate (%)	% Weed Cover	Control Rating	Vine Injury
0	25-40	0	0
0.5	40-60	0	0
1.0	60-75	0	0
2.0	40-60	0	4

Table 3. Symptoms rating for cv. Howes infested with nutsedge treated mid-November with post-harvest applications of Roundup.

Weed control: 0=none, 2=moderate, 4=total.

Vine injury: 0=none, 2=moderate, 4=dead.

Nutsedge-mid-Nov-Howes

Rate (%)	% Weed Cover	Control Rating	Vine Injury
0	1-5	0	0
0.5	1-5	0	0.5
1.0	6-10	0	2
2.0	10-25	0	4

In general, sprays solutions of 1% or greater can cause vine injury. In our demonstration, 2% sprays caused total browning of the vines, but some re-growth occurred by late 2004. Howes seemed to be more sensitive to injury than Early Black and we saw more weed control in late October applications. This is reasonable since Roundup is carried with the sugars in the plant and the weeds were probably more metabolically active in late October as compared to mid-November.

If you have any other or different experiences with post-harvest Roundup sprays, please let me know.

Hilary Sandler, Cranberry IPM Specialist, ext. 21

Dr. Carolyn DeMoranville
Station Director

Registration Form for Pesticide Safety Workshop
Wednesday, March 30, 2005
8:00 AM - 12:00 Noon
Wareham Elks Lodge

Please register for the meeting using this form

COMPANY _____

CONTACT _____

PHONE _____

NAME OF ATTENDEES _____

Return completed form with payment by
March 23, 2005

Check payable to: UMASS
\$40.00 per person

Return to: Cranberry Station
P.O. Box 569
East Wareham, MA 02538

attach additional sheets as necessary

Registration Form for IPM/CHEMIGATION Workshop
Wednesday, April 27, 2005
Raindate: Thursday, April 28, 2005
9:00 AM - 12:00 PM
Cranberry Station Library

Please register for the meeting using this form

COMPANY _____

CONTACT _____

PHONE _____

NAME OF ATTENDEES _____

Return completed form with payment by
April 20, 2005

Check payable to: UMASS
\$20.00 per person.

Return to: Cranberry Station
P.O. Box 569
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attach additional sheets as necessary

SECTION 18 PERMIT SUBMITTED FOR KERB USE

An Emergency Exemption for the use of Kerb for dodder control on cranberries in MA and RI has been submitted to the respective state agricultural agencies. Upon acceptance in each state, the packet will be forwarded to the EPA in Washington. We anticipate that the Section 18 for Kerb will be renewed for 2005. I will notify local ag suppliers and post information on the web site as it becomes available. Kerb will not be legal to use until the Section 18 permit is granted.

Kerb is still considered to be a necessary component of an integrated approach to control dodder in cranberry. Low-rate applications of Casoron 4G must be precisely and accurately timed with peak dodder germination to be effective. This can be difficult to achieve since the herbicide must be applied by ground rigs (time-consuming and weather-dependent). For these reasons and because efficacious levels of Casoron dissipate fairly quickly in mid-May temperatures, reports of poor or no dodder control with Casoron have been noted in the recent past.

If you have any questions, please feel free to contact Hilary Sandler at x 21.

WORKER PROTECTION TRAININGS

Worker Protection Trainings for cranberry workers in the handler category will be offered in the spring of 2005: April 27, May 25, and June 29.

Contact Martha Sylvia: 508-295-2212, ext. 20 for additional information.

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OFFICIAL BUSINESS