

Cranberry Station Newsletter

JULY 2002

UMASS CRANBERRY STATION

1 STATE BOG ROAD

P.O. BOX 569

EAST WAREHAM, MA 02538

<http://www.umass.edu/umext/programs/agro/cranberries>

Managing weeds with RoundUp

Many growers will be wiping with RoundUp during the summer months. Control of well-established perennial weeds with RoundUp usually takes several years of applications. Be consistent and persistent!! Here are some tips for getting the most out of your efforts.

Get good coverage. Maximize herbicide control by contacting as many plant surfaces as you can, at least 2-3 leaves per stem. Cover as many stems as possible. RoundUp does not translocate well between plants, so control will depend on how many plants you actually contact.

Use the right concentration. When using a wiper application, dilutions of 4 to 5 parts water to one part herbicide work best for our conditions. Using more than 9 parts water to one part herbicide may not provide good control unless your coverage is VERY good. Concentrations for spray applications (under supplemental labels) are lower than for wipers (0.5-2%; see below).

Time your application. You may apply RoundUp anytime weeds are growing except 30 days prior to harvest. Since RoundUp moves with the sugars in the plant, transport of the herbicide to the root system is maximized when applications are made late in the plant's life cycle (when it is finished flowering and/or preparing for winter). For many of our weeds, the later you apply in the season, the better the control you can expect.

Weeds will be easiest to control when they are growing well. Avoid applying RoundUp to diseased or stressed plants. Try to avoid injuring the plants during application as this will reduce efficacy. Applying RoundUp to recently mowed or clipped plants may be ineffective. Try to time your RoundUp applications AFTER the plant has flowered and is moving carbohydrates to the root system for winter storage.

Types of application methods. *Wipe.* For the majority of the year, RoundUp must be applied as a wipe (e.g., hockey stick application, machine roller). As mentioned above, use 4-9 parts water to 1 part herbicide. Mix in a dye to track your applications. You do not need to add surfactants

or other materials if you are using RoundUp Ultra. Allow 1-2 hr for the herbicide to become rainfast. Herbicide mixtures should be made up fresh (daily is best) to maximize effectiveness. Be careful not to drip the herbicide as RoundUp will kill any green plant.

We have two supplemental labels that permit spray applications. *Dry ditch application.* You may spray dry ditches during the summer months. Drop ditch water prior to application and after application, allow at least 2 days to pass before allowing water back into the ditches. Apply within 1 day of drawdown so weeds do not become stressed. The 30-day PHI must be observed with this application. Use a 1-2 % solution and spray to wet, not to run-off. *Post-harvest sprays.* We do not have a lot of experience using this particular method. The primary purpose of this supplemental label is to provide weed control in areas where the weeds are in dense patches and the vines are mostly non-existent. You are not permitted to treat more than 10% of your bog with this method in any single season. The herbicide should be applied when vines are dormant to minimize injury to any vines that in the area. If using a hand-held sprayer, use 0.5-1% solution of RoundUp; on a larger scale, use 2-4 qt per acre. Spray to wet the vegetation, not to run-off.

Mixing with Weedar 64. We have obtained our renewal 24-C for Weedar 64. The 24-C had expired in 2001 and was not renewed until after the 2002 Chart Book was released. Therefore, refer to your 2001 Chart Book for more Weedar 64 information. First, mix up your RoundUp solution (4-5 parts water or more:1). Then, add 4 parts RoundUp solution to 1 part Weedar 64. As always, use caution with Weedar 64 on hot, humid, sunny days as vapors may drift and cause off-target damage to desirable plants. Weedar 64 is the only 2,4-D product that may be used on-bog!

Supplemental labels are available from your local ag supplier or from the Station upon request. If you have other questions, please feel free to contact me at ext.21 or hsandler@umext.umass.edu.

HILARY SANDLER
CRANBERRY IPM SPECIALIST

CRANBERRY STATION UPDATE

Cranberry weevil: Kudos to all the folks that worked to make Avaunt insecticide available as an emergency treatment for resistant cranberry weevil. It took a great team effort to make this happen in so timely a fashion. Thanks to Anne Averill and Marty Sylvia for product testing and coordinating the emergency exemption submission, Jeff LaFleur (CCCGA) and Jere Downing (CI) for paving the way with the regulatory agencies, Brad Mitchell and his staff (MA DFA Pesticide Bureau) for supporting the registration on the State level and advocacy with EPA, Dupont for supporting this use of their product on cranberries, Marty Sylvia for coordinating grower use compliance in documenting product use patterns (a condition of the crisis registration), and Marty and Joey Mason for working with growers day and night. Anne and Marty, working with IR-4, will conduct residue trials in support of future use of Avaunt and are seeking other promising materials that might be added to the choices for control of cranberry weevil. These efforts are supported by research funds garnered by CCCGA and Anne through the MA DFA Specialty Crop Grants Program.

Welcome Justine: Dr. Justine Vanden Heuvel, a recent graduate of the University of Guelph in Ontario, Canada, has joined the Cranberry Station Faculty as Environmental Physiologist. Justine, a whole plant physiologist, plans to study resource allocation in cranberry plants. Some of the areas she will focus on include fruit set, cranberry physiology during floods, partitioning of carbon among plant parts (including the fruit and components of the fruit such as anthocyanins and other 'health' components), and cold hardiness. See page 4 for Justine's first newsletter article.

Lab renovations: We continue to survive (barely) the turmoil involved in modernizing the lab building. As I write this, the painters are at work — I am taking this as a sign that work is nearing completion! When finished, in addition to spiffy new office spaces, restrooms, and hallways, we will have air conditioning and all new electrical service, allowing us to run our equipment without blowing out the power daily. We will also have improved the safety in the labs by upgrading fume hoods, the drench shower, and eyewash stations. Plan to attend our grand unveiling at the

CCCGA summer meeting on August 20th. We plan to have a ribbon cutting and tours of the building as part of the festivities.

Position Available

Cranberry Station Farm Manager, Assistant to Farm Superintendent

Location: University of Massachusetts Cranberry Experiment Station

Job Description: Under the direction of the Cranberry Station Director, manage State Bog and Rocky Pond Bog (18 acres); maintain buildings (custodial) and building security; maintain grounds and greenhouses; oversee and manage Station vehicle fleet; perform administrative duties including keeping bog and weather records; apply pesticides; supervise one hourly employee.

Required qualifications: Experience in agricultural work, MA drivers license, ability to prioritize and organize tasks, ability to supervise staff, basic computer skills, and knowledge of farm equipment and basic plumbing/electrical/carpentry.

This is a fully benefited, full-time position including vacation, retirement, medical and dental. Salary: \$528.06/wk. To receive a detailed job description and application packet, call Deb at 508-295-2212, ext. 10 or apply in person at the Cranberry Station, One State Bog Road, East Wareham. Applications will be accepted until the position is filled.

The University of Massachusetts is an affirmative action/equal opportunity employer. Women & members of minority groups are encouraged to apply.

CAROLYN DEMORANVILLE
ACTING DIRECTOR

Carolyn DeMoranville,
Assistant Extension Professor, Acting Director

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BEACH PLUM FIELD DAY

Presented by:
**Cornell University &
 UMass Extension**

Sponsored by:

A grant from the Northeast Region Sustainable Agriculture Research & Education Program (SARE)

-Do you want to diversify by producing a new fruit crop?

-Would a native fruit be a selling point for your business?

-Are you looking for new ideas to pass along to growers?

Beach plum (*Prunus maritima*) is a fruiting shrub native to coastal dunes of the Northeastern United States. Since colonial times, people have collected wild fruit to make preserves and jelly. Interest in commercial production is growing. We've undertaken 15 small-scale production trials in the Northeast to help increase yields and improve growing practices.

Our goals are to develop an integrated system for a sustainable beach plum industry. This includes fruit production, processing the crop into value-added products, developing niche markets for these products, and educating growers, processors and marketers.

Field Day Agenda
product samples
field tour
fruit quality improvement
consumer focus group results
pest management

Date and Location

August 13, 2002 (10:00 AM-12:00 NOON)
 Coonamessett Farm, 227 Hatchville Rd., East Falmouth, Massachusetts

Registration

To receive a registration packet please leave your name, address and phone number with:

Maureen Beardsley
 Department of Horticulture, Cornell University
mb39@cornell.edu or 607-255-3090

For more information on this project please visit www.beachplum.cornell.edu

or contact the project manager:

Richard Uva, Cornell University Department of Horticulture
 607-255-2746
rhu1@cornell.edu

**Bogside Chat at the
 Cranberry Station**

July 9th 5 to 6:30 pm
 (if heavy rain - July 10th)

Topics to be discussed:

Cranberry weevil and fruitworm management
 Summer weed control
 Mid-season disease management
 Cultural practices and nutrition

1 contact hour will be offered

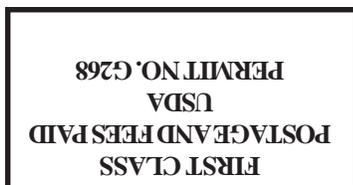
ENVIRONMENTAL PHYSIOLOGY

My name is Justine Vanden Heuvel, and I am the new Environmental Physiologist here at the Cranberry Station. At the time of writing, I am in my third week here, so I am just starting to get a feel for the cranberry industry. I've been out to see some growers already and am looking forward to meeting more of you soon.

The major goal of my research is to increase yield (fruit set) without increasing inputs on the bog. There are likely several causes of low fruit set in cranberry, however most researchers feel that the major cause is carbohydrate stress. Since flooding is one of the major causes of stress, I'll be concentrating on that to begin with. Once we understand the effect of flooding on the carbohydrate status of the vine, we can work on appropriate timing and duration of floods so that yield is not reduced.

A graduate student from UMass Amherst, Michelle Bothelo, will be working with me on the flooding project starting in September. We'll be looking for several 'Stevens' and/or 'Early Blacks' sites to sample from, beginning next spring, so if you'd like to offer your bog please get in touch with me. The impact of our work on your day-to-day operations would be negligible, as we'd just be removing a few vines from your bog on a weekly basis, and would be not be applying any treatments.

If you would like to get in touch with me to introduce yourself, chat about the physiology of cranberries, or suggest some possible research areas, I'd like to hear from you. Please give me a call at 508-295-2212 x28, or email me at justinev@umext.umass.edu.



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