ARE YOU INTERESTED IN HOLDING LATE WATER THIS YEAR?

The Physiology lab has been investigating how flooding effects the growth and yield of vines. Last year we closely studied a number of late water (LW) floods being held on MA bogs. To study a flood, we measure carbohydrates in the uprights both before and after the flood. Carbohydrates are the energy source that the vine uses for growth and fruit production, so if carbohydrates in the vine decrease during the flood, it probably reduces yield. We also measure water temperature, depth, dissolved oxygen concentration, and water clarity during the flood to determine which of these parameters has the strongest effect on the health of the vines.

Of the data we have analyzed so far, 4 of the bogs were Early Black and 1 was Stevens. Of those 5 bogs, 4 came through the flood very well, with either very little carbohydrate loss, or a gain in carbohydrates during the flood. The single bog that did poorly was an Early Black bog that did not hold water well. As a result, the water was shallow and quite warm (>75°F). The warmer the water in a flood, the more quickly the vine uses its carbohydrates, and less energy is available for fruit growth.

If you are interested in holding LW, this may be a decent year to do it, as the vines have not been stressed by a difficult winter, and little sanding occurred this year. However, if the bog had a bumper crop last year, the vines will still be stressed and you should not hold a prolonged flood. If you held a long flood in the fall, particularly before mid-October, it may not be a good year for you to hold late water.

If you do hold LW, apply the flood when the buds are still red and tight. Try to keep the water temperature as cool as possible during the flood – remember that deeper floods will be able to maintain a cooler temperature.

Justine Vanden Heuvel
Environmental Physiology

SITES NEEDED FOR WEED RESEARCH

Broadleaf weeds. I am looking to continue our investigations into the efficacy of Simple Green for weed control. Specifically, I would like to work on bogs that have infestations of narrow-leaved goldenrod, loosestrife, cinquefoil, bedstraw, or moss. It would be preferable to have patches that are only infested with one of these weeds, if possible. If you have portions of a bog that have any of these weeds and would allow me to do testing with Simple Green on your bog, please call me at the station. Applications would most likely go out in June and July. I would like to find patches about 20 x 40 feet, minimum.

Dodder. I am also looking for 1 site to test unregistered herbicides for their potential for dodder control. The plot size would be approximately 40 x 80 ft (~3200 sq ft); less than 0.1 acre. I need a site where dodder is not controlled. Typically, escapes from preemergence herbicide control should be apparent by June. These applications would be applied in June and July. Please note that since these compounds are unregistered, the fruit from this area would need to be removed prior to your harvest.

If you have any suitable sites, please give me a call. Thank you for your cooperation in advance.

Hilary Sandler
Cranberry IPM Specialist
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. 2PM in the station library.

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

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.
CAN SANDING REPLACE PRUNING? WHAT ABOUT THOSE WATER LEVEL FLOATS? CRANBERRY STATION AND GROWERS BEGIN NEW PROJECT

This season, the faculty of the Station and a team of growers will begin a three year project to study how common management practices can best be combined to achieve the ‘ideal’ plant canopy on a bog. The ideal canopy is one where upright density is adequate to support high yields yet open enough to allow light and air penetration to minimize disease, maximize fruit color, and allow good penetration of ag chemicals.

Grower participants will implement different regimens of sanding, pruning, fertilizers, drainage, and irrigation scheduling. Station staff will help the growers to evaluate outcomes and determine which combinations of practices give the best result. A major portion of the project will focus on the integration of sanding and pruning or the potential to substitute pruning for sanding or to at least use pruning to extend the intervals between sanding. The pruning and sanding questions will be researched on both water-harvested and fresh fruit bogs.

We will also look at the use of water level floats to schedule irrigation and plan to conduct workshops where growers can gain hands-on experience in making and installing the floats. Another practice that will be investigated will be the potential to limit interior ditches in order to reduce the cost of ditch maintenance.

This is a project where grower participation is mandated by the funding agency (SARE - Sustainable Agriculture Research and Education) and in which we are looking to develop information that will be widely adopted. In order to assure that outcome, we will be looking at the costs of the practices and comparing to the benefits achieved.

If these are questions that you have been tossing around and you are interested in being a part of this project, please give me a call or e-mail me to learn more about how you can participate.

Carolyn DeMoranville
508-295-2212 x 25
carolynd@umext.umass.edu

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
East Wareham, MA 02538

attach additional sheets as necessary
PRELIMINARY KEEPING QUALITY
FORECAST  2005

As of April 1, there are 4 points out of a possible 10 that favor keeping quality in the 2005 Massachusetts cranberry crop. Two points were awarded for favorable sunshine hours for the month of March and two points were awarded for a favorable March mean temperature. The forecast is for FAIR TO GOOD keeping quality. The final keeping quality forecast (issued after June 1) could be upgraded if we have a cool and dry April and May. Based on the present forecast, fungicide applications and the rate of fungicides applied could possibly be reduced except in those beds with a history of above-average fruit rot. Due to the decent condition of the vines coming out of the winter and the ample quantity of available water, this would be a good year to consider holding late water. If you have any questions, please contact me at 508-295-2212 ext. 18

Frank Caruso
Plant Pathology