Revised BMPs for 2000

As part of a project funded by CCCGA and the MA-DFA, the Best Management Practices Guide for Massachusetts Cranberry Production, originally formulated and distributed in 1996, has been revised and expanded. As with the original BMPs, these documents have been extensively reviewed and edited by growers, grower organization representatives, and NRCS staff. Highlights of the new BMPs include completely revised and expanded information regarding pest management and handling, irrigation management, water conservation, management of pest animals, and harvest and post-harvest management activities.

Through the financial support of CCCGA, DFA, and UMass Extension, the BMP Guides are provided to MA residents free of charge -- they will be mailed to you in the next few days. All others may purchase the guide for $10 plus postage ($2.50 for US addresses, $3.00 for Canadian addresses). Direct requests to Deb Cannon at 508-295-2212, x10 and indicate whether you need just the revision or the complete set (see below).

The new and revised practices are printed on gray paper (originals were on tan). Some of the original BMPs have been updated -- their original versions should be discarded.

To make a complete set discard the following from the original tan set:

- Introduction
- Cranberry Bog Construction and Renovation
- Erosion and Sediment Control
- Pesticide Application
- Sanding
- Water Management

Retain these tan BMPs and add to the gray set to complete the packet:

- Disease Management
- Insect Management
- Integrated Pest Management
- Neighbor to Neighbor
- Nitrogen Management
- Nutrient Management
- Phosphorus Management
- Prevention of Fuel and Oil Spills
- Weed Management

This should give you a complete set of 25 documents -- 24 BMPs and the new Introduction. If you receive the gray set and do not have the tan set, call Deb Cannon to order the original BMPs to add to your packet.

We hope that the BMPs will help you to produce cranberries efficiently while conserving resources and protecting the environment. These are designed to be living documents and they will continue to be revised periodically. If you have any comments or suggestions for improvement or additions, please direct them to Carolyn DeMoranville (x25) or Hilary Sandler (x21).
STATION TIDBITS

- Handouts are available for pick up for anyone who registered for the Cranberry Production Training (Sheraton Inn, Plymouth) and was unable to attend.
- Handouts for the Research Update Meeting (Sea Crest, Falmouth) are available on the Web or at the Station.
- Please check out our New Web Site: http://www.umass.edu/umext/programs/agro/cranberries
- Keeping Quality Reports will be available on the web as soon as all weather data is available.
- Pesticide exam package now available on the web: http://www.massdfa.org/pesticide/htm
- Cranberry Insects of the Northeast, a new publication by Anne Averill and Martha Sylvia is available at the Cranberry Station for $28.00.

WORKER PROTECTION TRAININGS
CRANBERRY STATION LIBRARY
MAY 31 & JUNE 28 2-4 PM

Worker Protection Trainings for cranberry workers in the Handler category will be offered: May 31 and June 28. Anyone working on the bog must be trained unless they are a family member or already have a pesticide license. There will be a $5.00 charge that includes training book and EPA verification card. Contact Debbie (ext. 10) or Marty (ext. 20) to sign up.

TWILIGHT BOGSIDE WORKSHOPS
5 -7 PM

This season, we will be hosting twilight bogside workshops in May, June, and July. These workshops will replace the old ‘open-lab’ morning workshops held in previous years but will cover similar topics and current happenings. We hope that by having the workshops in the early evening, more of you will be able to participate. A list of topics and workshop dates follows. In addition to those speakers scheduled, all of the Station Faculty will make an effort to attend. Let us know if there are other topics you wish us to address. We are always open to suggestions.

Workshop 1 Tues., May 16
(rain date May 18)
5:00 to 7:00 PM Location - State Bog

<table>
<thead>
<tr>
<th>Topic</th>
<th>Presenter</th>
</tr>
</thead>
<tbody>
<tr>
<td>Irrigation</td>
<td>Bruce Lampinen</td>
</tr>
<tr>
<td>Weeds - dodder</td>
<td>Tom Bewick &amp; Hilary Sandler</td>
</tr>
<tr>
<td>Sparganothis</td>
<td>Anne Averill</td>
</tr>
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</table>

Workshop 2 Tues., June 13
(rain date June 15)
5:00 to 7:00 PM Location - TBA

<table>
<thead>
<tr>
<th>Topic</th>
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<tbody>
<tr>
<td>Diseases</td>
<td>Frank Caruso</td>
</tr>
<tr>
<td>Fertilizers</td>
<td>C. DeMoranville</td>
</tr>
<tr>
<td>Cranberry fruitworm</td>
<td>Anne Averill</td>
</tr>
</tbody>
</table>

Workshop 3 Wed., July 5
(rain date July 6)
5:00 to 7:00 PM Location - TBA

<table>
<thead>
<tr>
<th>Topic</th>
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</thead>
<tbody>
<tr>
<td>Weeds - post emerg.</td>
<td>Hilary Sandler</td>
</tr>
<tr>
<td>Fall floods</td>
<td>C. DeMoranville</td>
</tr>
<tr>
<td>Current topics</td>
<td>TBA</td>
</tr>
</tbody>
</table>

IPM PHONE MESSAGE

The IPM Phone Message (ext. 61) will begin posting information as soon as the scouting season begins. It is anticipated that messages will be starting in mid-May. The Phone Message is available 24 hours a day, 7 days a week. The message will also be posted on the Web page. This year, the messages will be much shorter than in past years. The content will focus solely on which pests are out and any specific problems. Additional IPM information (such as management and treatment options, pest life cycles, etc.) will be published in future issues of the Cranberry Station Newsletters.
**POSITION AVAILABLE**

Experienced cranberry grower/employee to assist in establishment and maintenance of containerized cranberry “bogs”. The successful candidate will also participate in maintenance and treatment of greenhouse cranberry plants and work on other ongoing projects as needed.

I am looking for somebody with experience in cranberry growing, basic carpentry/construction skills, and experience operating tractors/bobcats, etc. This project involves constructing frames lined with landscape pond liners to hold bog units (approx. 4 x 4 ft) for flood treatments (carpentry/construction experience). The units will be established in the State Bog so that they can be irrigated and flooded. Cranberry sods will be removed from existing areas and transplanted into the containers (tractor/bobcat experience).

In a related study, we have established 1200 pots of cranberries in the greenhouse. This position will include working with these plants as well. Other responsibilities will include applying fertilizers to plots and gathering data in field trials.

Position available immediately until suitable candidate is found. Terms: **$10/hour, up to 40 hours/week** but less ok - through summer, flexible scheduling available, no benefits. If interested call Carolyn DeMoranville at 508-295-2212, ext. 25 for an interview.

EXPERIMENT SITES NEEDED FOR PLANT NUTRITION PROGRAM

Sites are needed for fertilizer trials on NPK ratios and low P rates. These experiments are designed to define low rates of fertilizer that support productivity but may reduce costs by lowering inputs.

Sizes of plot areas:

- 65 x 50 ft for NPK ratio study
- 40 x 40 ft for low P rate study
- 60 x 40 ft for low P rate/P:N ratio study

Requirements:

- grower applies no N, P, or K to plot area
- we fertilize plots and collect fruit samples prior to harvest
- study lasts for 3 years

I am also looking for sites to examine the effects of sulfur additions (to lower soil pH) on plant nutrient uptake. Plot area would be 35 x 40 ft, you could fertilize normally, we would add S treatments and evaluate for 3 or more years. Ideal sites would have soil pH above 5.

If you can help out with any of these trials, please call Carolyn DeMoranville at 508-295-2212, x25 or e-mail: carolynd@umext.umass.edu.

Second Conference on the Organic Growing of Cranberries

Invitation to Current and Potential Organic Growers

**When:** Friday May 12, 2000  8:30 AM to 4:30 PM

**Where:** Library - Cranberry Experiment Station, East Wareham MA

**Conference fee** (includes breaks): $5 payable at the door

**Contact for more information:** Cranberry Hill, phone 508-888-9179

**Agenda**

- 8:15 AM Registration
- 8:30 AM Welcome
- 8:45 AM - noon Presentations - research/extension information - Cranberry Station staff questions from growers
- noon - 1:30 PM Lunch (on your own)
- 1:30-2:30 Organic certification requirements - NOFA/MA
- 2:30-4:30 Marketing
SECTION 18 NEWS
SPINTOR 2F AVAILABLE FOR SPARGANOTHIS FRUITWORM CONTROL

The emergency Section 18 registration that we submitted for the insecticide SPINTOR 2F, has been granted for the 2000 growing season via EPA and MA Department of Food and Agriculture. This is a fast acting biorational insecticide, but keep in mind that it is highly toxic to aquatic invertebrates and bees. It can be applied aerially or via chemigation.

Required paperwork: You may proceed directly to your AG supplier for product and required paperwork. You do not need to work through us at the Cranberry Experiment Station this year to obtain SpinTor. It is critical that you fill out the Grower Reporting Form for the Pesticide Bureau if you use this product. Those who buy SpinTor and who do not submit paperwork truly compromise any future Section 18 emergency permits for the industry.

Application: For growers with organophosphate (e.g. Lorsban) resistant Sparganothis fruitworm, this compound may be important for management of outbreak populations. Five to ten oz./A in three applications per season can be made, but not exceeding a total of 29.5 oz. per season. Lower rates of SpinTor will work fine where coverage is expected to be good.

Optimal timing: There are two generations of Sparganothis per year. For first generation, problems will be discovered by looking for larvae through sweep net sampling starting in mid-May. For second generation, pheromone traps should be deployed in the first week of June and treatment applied 10-14 days after peak moth capture.

IMIDAN: A NEW INSECTICIDE REGISTERED FOR INSECT MANAGEMENT

Uses and advantages: Imidan 70-W is now available for management of black-headed fireworm, brown and green spanworms, gypsy moth and cranberry fruitworm. Imidan is an organophosphate insecticide, a group that also includes Lorsban, Diazinon, Guthion, and Orthene. Imidan is widely used in other crops. In the big picture of organophosphate insecticides, Imidan has a short re-entry interval, a low mammalian toxicity, is available in water-soluble bags, and has been reported to be less harsh on natural enemies that may be important as biological control agents of pest insects. However, owing to aquatic toxicity, the label recommends that water be held for 4 days following application.

Efficacy: I do not have experience using Imidan on cranberry pest insects. For cranberry fruitworm, we will be carrying out large-plot demonstration work with Imidan in 2000. For cranberry fruitworm, the efficacy work in Massachusetts was completed a number of years ago. In these trials, Imidan provided excellent control. Performance data sets against black-headed fireworm from British Columbia, Washington, and New Jersey all consistently show very high control.

Application: Gowan is recommending that a sticker, e.g. Bond, be added to applications. It can be applied either via chemigation or air. The label suggests that lower rates may be used against black-headed fireworm and gypsy moth, while a higher rate is suggested against cranberry fruitworm and spanworms.

ANNE AVERILL, ENTOMOLOGY
THE SPARGANOTHIS PROBLEM

History: Since 1996, we have been following the expansion of a growing area in the Middleboro-Carver where larvae of Sparganothis fruitworm are not controlled by chlorpyrifos (Lorsban) or acephate (Orthene) applications. In the past 4 years, we typically found that unsuspecting growers in this area had made well-timed, good-coverage sprays of these organophosphates in May/June for Sparganothis control, and then, while sweeping, found very high numbers of Sparganothis larvae within a few days of the application. At these sites, the Sparganothis populations typically were impressively high for two years and then declined, irrespective of management approaches utilized.

Recommendation: Growers close to the area of hypothetical organophosphate resistance (see map) may want to think about Sparganothis early in the season, sweeping in May and determining if larvae are present. Avoidance of Lorsban and/or utilization of new alternative sprays is likely to be the key in management if the Lorsban-resistant populations have spread to new bogs. If control of Sparganothis is required, the substitution of Confirm 2F and SpinTor 2SC applications will substantially reduce the populations and importantly, will preserve the high numbers of wasps and flies that serve as natural enemies of this pest species.

ANNE AVERILL, ENTOMOLOGY
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