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University of Massachusetts • Cooperative Extension

Cranberry Station Newsletter

November 1994

Cranberry Experiment Station
Glen Charlie Road
East Wareham, MA 02538

Cranberry Station Winter Meetings

Cranberry School - Advanced Topics

January 17 or 18, 1995

8:30 AM to 4:30 PM

Cranberry Station Library

Seating limited - Call the station to register for one day or the other. Pesticide re-certification credits for the cranberry category will be offered - 4 contact hours.

This year, we will offer one program repeated on two days. **Sign up for one day only.** This is to cut down on crowding in the Station Library and offer a better venue for questions. The program will focus on advanced concepts in cranberry culture. In these presentations, we will discuss underlying mechanisms of production and how these relate to successful disease, insect, and weed management as well as to your fertilizer program.

Tuesday or Wednesday, January 17th or 18th

Pathology

How pathogens induce disease in plants'

Entomology

Insecticide resistance

Insect pheromone and their use in management

Insect natural enemies and biological control

IPM

Managing with IPM philosophies

Weeds

Herbicides in the soil

Planning your own research

Nutrition + Physiology

Nitrogen - the most important fertilizer element?

Micronutrients - what do they do + do we need them

Understanding frost injury, Barge sanding

1995 UMASS Annual Cranberry Research and Extension Update

February 7, 1995 in Taunton

Holiday Inn, 9 AM - 4 PM

\$20.00 charge. See page 2 for more details.

*You must **pre-register** and **pre-pay** using enclosed blue registration form.*

Fairy Ring Meeting

December 6, 1994 9 AM - 12 Noon

Cranberry Station Library

See back page for more details.

A Beginner's Cranberry School will be offered in late April for those who need to learn or review the basics of cranberry management. Watch the April Newsletter for more specifics.

1995 University of Massachusetts Annual Cranberry Research and Extension Update Tuesday February 7 at the Taunton Holiday Inn, 9 - 4 PM

This year we will again hold a single meeting encompassing the two meetings previously held at the Elks. Cranberry Station Personnel will present highlights of their 1994 research projects. Pesticide re-certification credits (contact hours) for the cranberry category will be offered - **4 contact hours** for the day. Please: Attendance must be prompt for those who want re-certification credits.

\$20.00 charge includes two coffee breaks and a deli buffet lunch.

You must pre-pay and pre-register using the blue registration form included in this mailing.

Schedule

- | | |
|--|---|
| 9:00 The Cranberry Station Saga Continues (10)
I. Demoranville, Cranberry Exp. Station | 12:00 Deli Buffet Lunch |
| 9:10 Cranberry Disease Studies '94 (30)
F. Caruso, Cranberry Experiment Station | 1:10 Phosphorous, Fertilizer Supplements (20)
C. DeMoranville, Cranberry Exp. Station |
| 9:40 The Latest in Herbicide Trials (20)
B. Devlin, Cranberry Experiment Station | 1:30 Weed Management Studies (30)
MJ Else, University of Massachusetts |
| 10:00 Coffee Break | 2:00 Late Water Update (30)
DeMoranville, Sandler, Averill |
| 10:20 Cranberry Insect Research '94 (30)
A. Averill, University of Massachusetts | 2:30 Coffee Break |
| 10:50 Cranberry Grub Research '94 (20)
J. O'Donnell, University of Massachusetts | 2:50 Cranberry IPM and Rot Studies (30)
H. Sandler, Cranberry Experiment Station |
| 11:10 Fruitworm and Flea Beetles (20)
M. Averill, Cranberry Experiment Station | 3:20 Frost Tolerance Research '93-'94 (30)
C. DeMoranville, Cranberry Exp. Station |
| 11:30 Studies on Phytophthora root rot in NJ (30)
P. Oudemans, NJ (Rutgers) Cranberry Center | 3:50 Paperwork for credits |

LATE WATER SURVEY

This is your chance to direct late water research, please fill out the questionnaire on the back side of the blue insert.

Cranberry Experiment Station, I.E. Demoranville, Director
U-Mass, Glen Charlie Road, P.O. Box 569
East Wareham, MA 02538
(508) 295-2213 FAX (508) 295-6387

November 1994 Issue

Martha M. Averill, Editor

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Cooperative Extension Mailing Signoff


Anne L. Averill, Small Fruit Specialist

NOFA/Mass Winter Conference

January 21, 1995

Plymouth Church Parish Hall in Framingham

The Massachusetts chapter of the Northeast Organic Farming Association will hold its 8th annual Winter Conference on Saturday January 21st, 1995 at Plymouth Church Parish Hall, 87 Edgell Rd., Framingham, MA 01701.

The program promises to be fun and educational with 16 different workshops available on a variety of topics ranging from beginner to advanced. Vendor's exhibits, snacks, a Farmer's Market, the annual meeting, and a pot luck lunch in addition to the program, will help to make this worthwhile event very special.

For more information or registration, please contact Edwin McGlew, 140 Chestnut St., West Hatfield, MA 01088 or call (413) 247-9264.

WHAT'S NEW IN CRANBERRY NUTRITION?

Last week, Joan Davenport and I met with cranberry plant nutrition researchers from Oregon, Washington, and Wisconsin in order to keep up to date on research initiatives around the country. Some of the hot topics:

- > Nitrogen needs, use patterns, movement
- > Phosphorus and potassium nutrition of peat-based, upland, and new bogs
- > What can potassium do for cranberries?
- > Use of sulfur to control bog pH
- > Minor element use
- > Slow release and organic fertilizers
- > Tissue and soil testing

We agreed that we now have enough information on tissue testing that we will be able to produce a fact sheet on this subject for national distribution which will include tissue test standards for North America. This fact sheet will be distributed to you in time for August tissue testing in 1995. It was interesting that the North American standards are not very different from the ones that you have been receiving in the Massachusetts Chart Book.

Almost all of us have been conducting research into nitrogen nutrition in cranberries. At the meeting we began the planning process for the production of a bulletin on nitrogen which will include the results of that research. When this bulletin is finished it will be available to all cranberry growers. I will be previewing some of the information at the Advanced Topics Cranberry School in January (see page 1).

Based on our discussions, I will be initiating studies on P and K use on new plantings in Massachusetts next spring. Similar experiments may be conducted in Oregon by Art Poole and John Hart, in Wisconsin by Jonathan Smith and Tod Planer, and in Washington by Kim Patten. We will also be initiating a study of K and N interactions on established bogs. We hope to get at the amounts of P and K need during establishment and also to begin to study the interaction between K and fruit development and winter hardiness. **I will be needing research cooperators for P and K on new plantings and for K on established bogs in 1995.**

YELLOW VINES REVISITED

During my discussions at the nutrition working group meeting last week, we spent some time talking about "yellow vine". It turns out that we have each been using that term to describe different nutritional problems. This is not surprising in that yellowing of leaves is a common symptom of many nutritional and stress problems: iron deficiency, magnesium deficiency, herbicide stress, etc. In some growing areas (WI and WA especially) yellowed vines have been associated with *high* soil pH. In MA, we think that "yellow vine" may be associated with *low* pH in the soil.

Jonathan Smith (Northland Cranberries) informed me that they saw symptoms similar to 'our' yellow vine (yellow margins with green along the leaf veins) on WI bogs which received too much ridomil due to overlaps during application. If you have had trouble with yellow vine and use ridomil on those bogs, please let Frank or I know so that we can check for correlations between the use of ridomil and the occurrence of yellow vine.

In the meantime, there seemed to be less problem with yellow vine in MA this past season, with most symptoms only showing in old leaves if at all.

FROST TOLERANCE EXPERIMENT

After 2 years of lab and field experiments we are beginning to see some interesting patterns emerge regarding fall (fruit) frost tolerance. 'Early Black' (EB), 'Howes' (H), + 'Stevens' (S) were studied in the fall of 1993 and 1994. Fall frost tolerance was studied using clipped uprights with fruit. These were placed in water and put into the cold chambers for testing. As Franklin reported, EB were tolerant of 23°F at full color (second week October in 1993 and 1994). However, we found that 2 weeks after 23°F tolerance was reached, EB would tolerate short exposures to 20°F or less. H fruit developed deep tolerance (less than 20°F) by November in only 1994. On November 2, 1993 and on November 3, 1994 H fruit were exposed to 5 hours at 19°F: 48% froze in 1993, 6% in 1994. S fruit were the least tolerant of freezing temperatures: they would tolerate only short 23°F exposures (2 hrs) at full maturity (as late as November 3).

CAROLYN DEMORANVILLE

Fairy Ring Meeting

December 6, 1994 9 AM to 12 Noon Cranberry Station Library

Last year we had an informal informational meeting on Phytophthora root rot and its control. This year, I thought it would be worthwhile to conduct a similar meeting on fairy ring disease and its control, paying particular attention to the success or failure of Carbamate treatments. I will discuss research I have conducted on the disease, and I hope growers will relate their experiences as well. If you have any particular items you would like to see on the agenda, please call me.

FRANK L. CARUSO, EXTENSION PLANT PATHOLOGIST

COOPERATIVE EXTENSION
U.S. DEPARTMENT OF AGRICULTURE
UNIVERSITY OF MASSACHUSETTS
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Cranberry Mailing List Renewal

Please return by January 27, 1995 to stay on our mailing list.

We are updating our Extension Service Cranberry Mailing List as we annually do. If you wish to remain on our mailing list please fill out this form and return to:

Cranberry Experiment Station
P.O. Box 569
East Wareham, MA 02538

NAME _____

COMPANY _____

ADDRESS _____

TOWN+STATE _____

ZIP _____ - ____

Check	Owner	<input type="checkbox"/>
One:	Partner	<input type="checkbox"/>
	Foreman	<input type="checkbox"/>
	Employee	<input type="checkbox"/>
	Other	<input type="checkbox"/>

Is this a change of address?

Phone number _____

Name of selling agent _____

Thank you for your consideration.
Irving Demoranville - Department Head

Registration form for the

UMASS Annual Cranberry Research and Extension Update Meeting

Tuesday, February 7, 1995 9 AM -4 PM Taunton Holiday Inn

Name _____

List additional attendees:

Address _____

Town _____

Zip _____

Phone _____

Registration is \$20.00 per person
Make checks payable to
University of Massachusetts

*Return completed form with payment
no later than January 27, 1995*

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

Late Water Survey

1. How many acres to you own?_____ manage?_____ What varieties?_____
2. Have you used late water in the last 15 years? circle one: yes no *if no go to #8*
3. How many acres have you treated with late water?_____
4. Do you use late water on a regular schedule? circle one: yes no *if no go to #6*
5. How often do you use late water *on each bog* - how many years between 2 late water uses on 1 bog?
circle one: every 2 years every 3 years every 4 years more than 4 years
6. How often do you use late water *on any of your bogs*?
circle one: every year 1 out of 2 years 1 out of 3 years less often
7. Why do you use late water?
8. What would lead you to use late water more often (or at all)?
9. List any research questions regarding late water on which you would like us to work.