



**UMASS
EXTENSION**

Cranberry Station Newsletter

JUNE 2006

UMASS CRANBERRY STATION

1 STATE BOG ROAD

P.O. BOX 569

EAST WAREHAM, MA 02538

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

MORE LEAF SPOT PRESENT THIS SPRING

In my travels, I have observed a higher incidence of red leaf spots on last year's leaves, particularly on Early Black vines. This spotting is caused by two fungal pathogens, *Protoventuria* and *Pyrenobotrys* (most of the symptoms we are seeing are caused by this fungus). Some of these diseases can be found in virtually any cranberry bed any growing season. Occasionally, the incidence is particularly high in some years, and I do not know what factors are responsible for this occurrence. The infections occurred last year, and it may be related to the especially cool and rainy May we experienced in 2005. I have never known these fungi to cause any spotting on the fruit. The diseases are effectively held in check by the fungicide applications aimed at fruit rot management. There is no reason why you need to be stressed by the high incidence of these leaf spots; they will not damage your final crop. However, if you have a particular issue you'd like to discuss, call me.

FRANK L. CARUSO
PLANT PATHOLOGY

JUST A REMINDER

THE IPM CODE A PHONE
MESSAGE IN UP AND RUNNING

508-295-2212 EXT. 60

OR

YOU CAN FIND THIS INFORMATION
ON OUR WEB PAGE:

WWW.UMASS.EDU/CRANBERRY

WEDNESDAY'S FLOODING EPISODE

By all reports, most locations in the cranberry growing area received 6-8 inches of rain in 12 hours on June 6-7, putting many beds under water (State Bog had two sections affected). Early varieties were in the advanced hook stage for the most part while later varieties had much less hook showing. Assuming that the water drained off within 48 hours while the temperatures stayed in the 50's and low 60's, there should not be any damage to the uprights and the flowers. Fungicide applications are not immediately necessary; you should apply fungicide as you would for fruit rot management once the flowers open. If the beds flooded have a history of problems with *Phytophthora* root rot, an application of Ridomil, Aliette or Phostrol should be seriously considered. Don't hesitate to call any of us at the Station, should you have any concerns about this recent event, the fourth highest rainfall amount in 24 hours ever recorded at the Station. The three higher totals were all associated with a tropical storm or hurricane in September.

FRANK L. CARUSO
PLANT PATHOLOGY

WORKER PROTECTION TRAININGS

Worker Protection Trainings for cranberry workers in the handler category will be offered on June 28, 2006, 2PM in the station library. The Cost is \$5.00 per person. Checks payable to UMass.

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

WHAT FACTORS DETERMINE CRANBERRY YIELD?

Teryl Roper of the University of Wisconsin has been writing a series of articles about crop nutrition and physiology for the Wisconsin Cranberry Crop Management newsletter. The articles are a review of work by researchers around North America and are an excellent resource to review the factors that can influence plant growth and cropping in cranberry. The newsletters are available on the web at: <http://www.hort.wisc.edu/cran/>

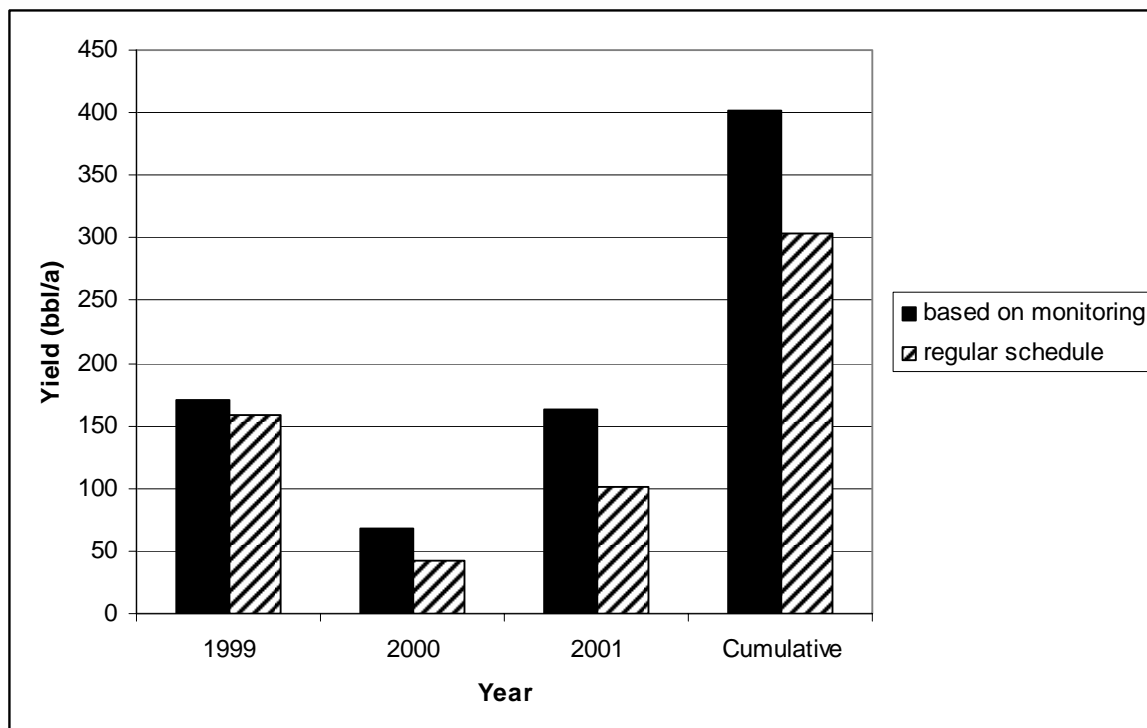
Once at this site, click on "Cranberry Crop Management Newsletters" under the Publication Archives heading then choose 2006. The first three issues for this year are posted and contain the first three articles in the series.

The most recent article examines factors that impact fruit set, including pollination. Obviously, fruit set is critical to yield. However, it is also of critical importance that the plants retain the fruit that are set. One factor that can influence fruit retention is water management.

Bruce Lampinen and I conducted a study to look at the effects of irrigation scheduling on yield. We compared a grower practice of basically irrigating every three days with irrigation scheduled using tensiometers and water level floats. For most of the season, the soil was wetter in the grower practice area and less wet in the area where we controlled irrigation based on monitoring.

The effect of irrigation on fruit retention and yield are shown in Figure 1 and 2. When the bog was maintained with wetter soil, yield was significantly less in two of the three years studied. Yield differences could be attributed to differences in fruit retention. In all three years, the irrigation practices had similar percent of uprights that flowered. However, in the wetter treatment, fewer fruit were retained. Consistently, in the wet treatment, more of the flowering uprights had no fruit at harvest and fewer had one or two fruit.

Figure 1. Cranberry yield with scheduled irrigation based on soil moisture monitoring (black bars) and with irrigation every 3 days (gray bars). Differences in 2000 and 2001 were statistically different.



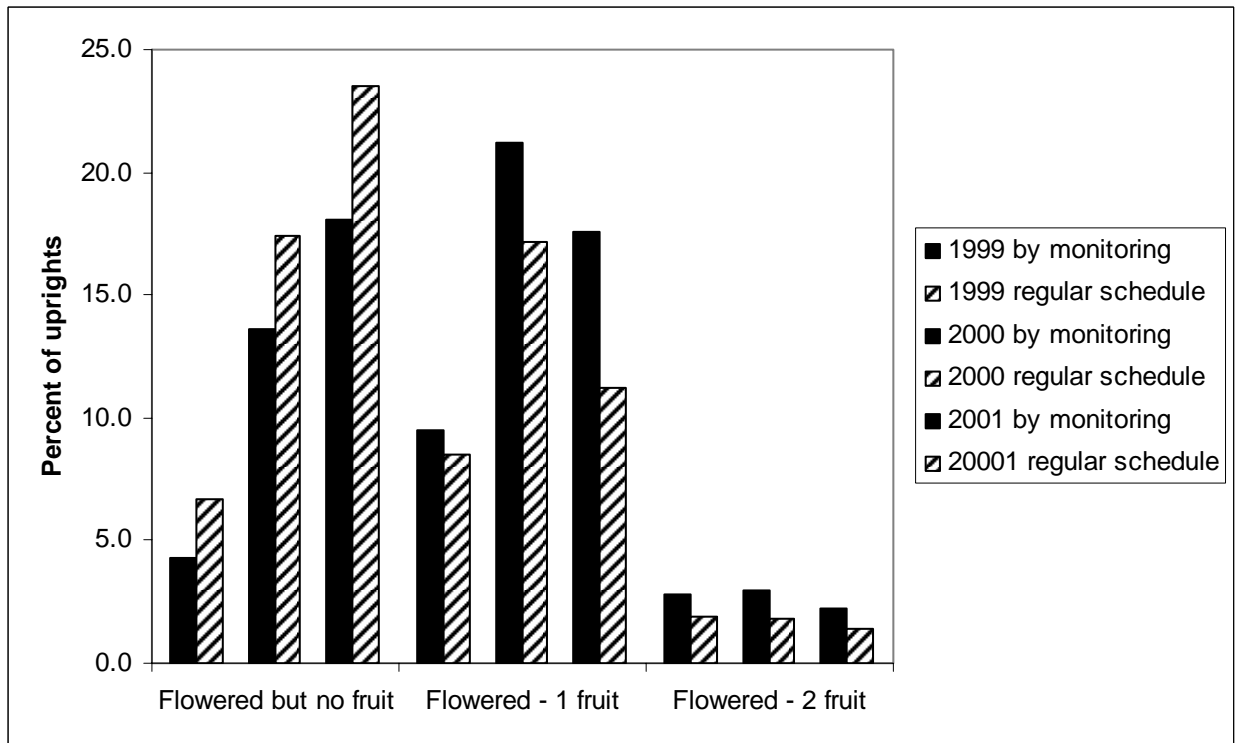


Figure 2. Cranberry fruit retention scheduled irrigation based on soil moisture monitoring (black bars) and with irrigation every 3 days (gray bars).

In addition to this study, Bruce also showed that yellow-vine syndrome could be induced in the greenhouse but maintaining soil either too wet or too dry. Stevens were particularly sensitive to overly wet soil.

So as we move into the bloom and set period, I encourage you to pay particular attention to water management. When it comes to irrigation — some is good, but more is not always better. Directions for use of tensiometers and water level floats are available at the Station.

CAROLYN DEMORANVILLE
PLANT NUTRITION

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Deborah Cannon, Editor

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**CRANBERRY FRUITWORM,
SPARGANTHIS FRUITWORM
AND FERTILIZER MANAGEMENT
MEETING**

WEDNESDAY, JUNE 21, 2006

10AM - 12 NOON

This Cranberry Station workshop is free and will be held in the station library. **ONE** contact hour will be offered toward pesticide re-certification.
NO SIGN UP NECESSARY.

Dr. Carolyn DeMoranville
Station Director

FINAL KEEPING QUALITY FORECAST

The Keeping Quality Forecast for June 2006 is for **FAIR** keeping quality.

We calculated 4 of a possible 16 points to arrive at this forecast. This is the first year we have had so few points since 2002 (when we had one point!). We were awarded 2 points for March sunshine, 1 point for March precipitation, and 1 point for April precipitation. This is a year that you should not reduce your fungicide rates and/or the number of fungicide applications. However, if you have a bed that had late water held this spring, you can reduce your fungicide inputs in that situation. As usual, call me if you have any specific questions or concerns about a particular bed.

FRANK L. CARUSO
PLANT PATHOLOGY

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