Fertilizer Noted and Tips

As we have finally begun to see some warm weather, many bogs are showing at least a half inch of new growth. This is commonly the time for first fertilizer applications. With that in mind, I am sharing the following fertilizer items for consideration:

♦ Based on numerous field studies in MA and other growing regions - 45 lb/A of P<sub>2</sub>O<sub>5</sub> (20 lb/A actual P) is sufficient to support high cranberry yields. P<sub>2</sub>O<sub>5</sub> is best applied in a 1:1 or 1:2 ratio of N: P<sub>2</sub>O<sub>5</sub>.

♦ Good results have been observed with fertilizer having a 1:1 or 1:2 ratio of N to P<sub>2</sub>O<sub>5</sub>. Examples include 15-15-15 and 10-10-10 (1:1) or 12-24-12 and 10-20-20 (1:2). Since we generally base rate on the N content, using a greater than 1:2 ratio will load more P than is needed.

♦ Some growers have experimented with higher N fertilizers in an effort to save application costs. For example, 20-10-10 delivers 20 lb N per 100 lb fertilizer, while 12-24-12 only provides 12 lb N per 100 lb. Such materials have a place, particularly on beds with high N requirements, but care should be taken to ensure that adequate P and K are being applied. Tissue testing should be a regular practice when modifying your fertilizer regimen. A sample collected in August will give you a ‘report card’ on how well your program is supplying plant needs.

♦ If you applied slow release fertilizers in mid- to late May - you may yet see the results. Expect delayed effects due to the cold spring. Likewise, expect less release of organic N forms in the soil — this may lead to a need for increased N applications later. However, use caution - if the plants are not responding due to weather and you add more fertilizer, you may be unpleasantly surprised by a surge of growth as the temperatures rise.

Hope to see you at our bogside workshops this summer.

Carolyn DeMoranville

July Bogside Chat

A discussion of cranberry production issues with the Staff of the Cranberry Station
Place: Cranberry Station, E. Wareham
Date: July 8, 2003
(in case of heavy rain - July 9)
Time: Meet at 5:00 p.m., chat until 6:30 p.m.

Chart Book Omission

The fungicide Cuprofix MZ Disperss was omitted from the 2003 Chart Book. It is registered for fruit rot control at 7.5 – 14.0 lbs per acre. Applications can be started at mid-bloom and repeated at 7 – 10 day intervals. The Pre-harvest interval is 30 days. Do not apply more than 47.3 lbs product per acre per growing season. The restricted entry interval is 24 hrs. The fungicide is a combination of copper sulfate and mancozeb, and this formulation is easier to get into solution than some of the other fungicides containing copper. If you have any questions about it, call me.

Frank L. Caruso
USE OF CHLOROTHALONIL IN ZONE II RECHARGE AREAS

If your cranberry bed is located within the primary recharge area (Zone II or IWPA) of a public drinking water supply well that puts out over 100,000 gallons of water per day you can apply chlorothalonil to manage fruit rot only under the following conditions:

(1) there must be no viable alternative to the use of the fungicide
(2) the fungicide is being applied as part of a DFA approved Integrated Pest Management (IPM) program
(3) the Department of Food and Agriculture is notified of any applications of a product on the groundwater protection list

I will address the preceding three items with regards to our specific situation in cranberries. The chlorothalonil formulations (Bravo, Echo, Equus) are clearly our best fungicide for the control of fruit rot (field rot and storage rot). This is based on numerous field trials conducted in several cranberry-producing states. If you have a cranberry bed with a history of fruit rot problems or a bed that has had fruit rot problems in recent years due to reduced fungicide inputs as a result of economic concerns, the chlorothalonil products are the only fungicides that will effectively reduce fungal inoculum in a short time period. That means there are no viable alternatives. One thing that is applicable here is the percentage of ground cover (vine coverage) on the bed under consideration. If the bed has less than 50% ground cover (renovation or newly constructed beds), the requirements are more stringent because much of the fungicide is soil-applied.

The DFA has approved the current Cranberry Chart Book as an Integrated Pest Management program (“department approved sources” as stated on their website). You should have good records of the pesticides you apply and the target pests during the growing season. These would be similar to the forms required by your handler as your berries are delivered at the conclusion of the season. If you submit any samples to the plant pathology diagnostic lab, letters summarizing the results of the sample should be part of your records for the year.

At the conclusion of the growing season, you are required to submit your pesticide records to the DFA. You do not need to notify them of any chlorothalonil applications in these Zone II situations during the growing season. The final report should indicate where chlorothalonil was used in a Zone II area.

This writeup should also be included in your records for the growing season and submitted with your pesticide report. If you have any questions, contact me or Jeff LaFleur at the CCCGA (508-759-1041, ext. 11). The CCCGA will be producing a grower advisory on this issue with the regulatory details soon.

FRANK L. CARUSO

IPM PHONE MESSAGE

The IPM Phone Message is up and running for the 2003 season. It is available by calling the station (x60) or on our web site. It will be updated at least once per week as new developments are noted. If you have any comments about how to improve this service, please contact me at x21, leave a message on extension 60, or email me at hsandler@umext.umass.edu.

HILARY SANDLER

UMass Cranberry Station
1 State Bog Road, P.O. Box 569
East Wareham, MA 02538
(508) 295-2212 FAX (508) 295-6387
JUNE 2003 Issue
Deborah Cannon, Editor

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UMass Extension Mailing Signoff

Carolyn DeMoranville, Director
SPECIAL LOCAL NEEDS PERMIT GRANTED FOR STINGER

On May 21, 2003, the MA Department of Food and Agriculture Pesticide Bureau Subcommittee approved the use of Stinger under 24c labeling in Massachusetts. Stinger is available for selective postemergence control of broadleaved plants. The supplemental label has special conditions and a waiver of liability for use. DowAgrosciences intends that the label and product be distributed to crop owners or their agents who agree in writing to the terms of the Waiver of Liability. If you have used Stinger in the past, this process is similar to the paperwork that you have dealt with before. You must sign the liability waiver prior to use of the product. The signed waiver must be returned to the State Regulatory Affairs Manager at DowAgrosciences.

The directions for use are similar to those permitted under the Section 18 emergency exemptions. At this point is the season, wait until at least 1 week after bloom to use Stinger. If applying by spray, do not over spray the weeds! Apply just enough material to wet the leaves. Stinger is a residual herbicide and more is not better in this case. Stinger can injure cranberry vines, and it may take one or more years for the vines to recover. Do not apply within 5 hours of rainfall. Stinger has a 50-day PHI and a 12-hour REI.

Low-rates of Stinger will control susceptible weeds like wild bean, pitchfork, and ragweed. Higher rates may be needed to control aster, clover, dandelion, narrow-leaved goldenrod, and Joy Pye weed. Higher rates should suppress annual sowthistle and Canada thistle. Make 1 to 2 applications per year, not to exceed 1 pint per acre. Use a 2% solution for wipes; use 0.25-0.5 oz per gallon for sprays. Very low concentrations (1/16 oz/gal. or less) have been effective on wild bean. Stinger cannot be applied through the irrigation system or by aircraft. Do not apply to areas where surface water is present or within 5 feet of any water moving off or through the cranberry field.

Copies of the Supplemental Label are available by request (we can FAX you a copy) from the Cranberry Station (x10 or x21) or from your local ag suppliers.

HILARY SANDLER

ERRATUM

In the April newsletter, we wrote that you should not use Evital if the bog was sanded this winter. We do not have data to verify if this is a good practice on not. Sanding can be done on top of an Evital application, but it is generally not recommended especially on bogs with drainage problems. Sanding on top of applications of 50 lb/A or less has given good results in the past. Be careful on sensitive varieties like Stevens and McFarlins.

Growers have told me that they have been experimenting with and/or using other rates and timings. If you have positive or negative feedback about sanding and Evital use, please let me know (x21) or hsandler@umext.umass.edu.

HILARY SANDLER

FINAL KEEPING QUALITY FORECAST

The Keeping Quality Forecast (KQF) for June 2003 is for GOOD TO VERY GOOD.

We calculated 7 of a possible 16 points to arrive at this forecast. This is the most points we have had since we had 8 points in 1997. The factors that contributed to this year’s forecast were: (1) 4 points awarded for sunshine from 2002 as discussed in the April 2003 newsletter; (2) 2 points awarded for March sunshine hours; (3) 1 point awarded for May precipitation. I have never seen so many close calls for some of the other point getters. We missed getting 2 points for April temperature by 0.2°. We missed getting 1 point for April precipitation by 0.03 inches. We missed getting 2 points for May temperature by 1.4°. Because of all of these near misses, I am confident that the keeping quality will lean towards being very good. This appears to be a good year to reduce your fungicide rates and the number of fungicide applications. However, if this cool and wet weather continues, these are ideal conditions for fungal infection. You should keep that in mind as you plan your fruit rot fungicide programs. As usual, call me if you have any questions or concerns.

We will be looking very closely at the current KQF this year in a project funded by the USDA/CSREES Pest Management Alternatives Program. We’ll have more to tell you about after this growing season concludes.

FRANK L. CARUSO
JUNE BOGSIDE CHAT
COMING SOON!!

A discussion of cranberry production issues with the Staff of the Cranberry Station
Place: Hamblin’s Bogs, off Bog Road, Marstons Mills
Hosts: John Hamblin
Date: June 17, 2003
Time: Meet at 9:30 a.m., chat until 11:00 a.m.

Cranberry grower, John Hamblin will be hosting a bogside chat with members of the Cranberry Station Staff and all interested Massachusetts growers on June 17, 2003 at 9:30 a.m. We will be covering production issues for early season bog management, including weeds, diseases, insects (including weevil and fruitworm), and general horticulture issues (fertilizer, etc.). If you wish to participate, please meet at the Hamblin bog off Bog Road in Marstons Mills.

Directions to John Hamblin’s bogs in Marstons Mills:
From the west: Take Route 6 (Mid Cape Highway) east to Exit 4
Take a right at the end of the ramp onto Chase Road
**Follow Chase until it intersects Farmersville Road (approx. 2 miles)
Take Left onto Farmersville Road
Take a nearly immediate right onto Newtown Road
Go approx. 1 mile
Take a left onto River Road
Take a left onto Bog Road
Take a right before the storage building
Take the dirt road through a short woodsy area into the bogs
Meet at first larger bog

From the east: Take Route 6 west to Exit 4
Take a left at the end of the ramp onto Chase Road
Follow from ** above