Integrated Cranberry Crop Management for Wisconsin

## Cranberry

### **Crop Management Newsletter**

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## EARLY SPRING PESTS AND LONG TERM CONTROL MEASURES

In talking with many of you this spring you have concerns about a set aside in 2005. You have questioned me on how to cut expenses now in the event that this becomes a reality next year. First I would like to emphasize that we need to cross that bridge when/if it comes. Cutting insecticides in 2004, decreasing fertilizer, or any scheme that you are not comfortable with warrants some serious thought. Let's not reinvent the wheel – experience speaks louder than anything I can say! We have been down this road not too many years ago, so let's revisit some of the issues:

- 1) Some growers chose to cut the rates of insecticides in the past Guess what happened? In cutting the rates the insects may not have been controlled as well sometimes we had to retreat. We can experience pest resistance and with limited variety of insecticides we just can not afford that as a challenge.
- 2) One year some of us decided that we would only address Cranberry Fruitworm (CFW) once instead of following years of research of two applications of insecticide against this pest. Our goal was to

save money and if we had to toss away crop why not let the pests eat it instead!

The CFW were ravenous, they ate tons of our Wisconsin fruit and then we had a breeding ground that we had to contend with for years! We are just now feeling comfortable with the lower levels of this particular pest. Save money? – I think not!

- 3) That 1st generation is so critical to control. Timing and coverage is vital for the whole scheme of things in 2004. Spanworm, and loopers may have only one generation but I'll tell you what if you do not get control of that single generation, the following year can be an Alfred Hitchcock nightmare. Sparganothis fruitworm and Black Headed Fireworm have two generations and if you do not get that 1st one in check, you know from experience that those critters will be slipping into your precious berries come fruit set or webbing tips and berries together. – A tough battle to fight!
- 4) As far as fertilizers go, you all know best. I have observed that what you do today has its long term effects. (That goes to say in both excess and reductions) I recall growers cutting back with fertilizers, pollinators, and chemicals in general and didn't

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even make their quota for the year.

The BOTTOM LINE is....let's wait and see if there is a set aside for sure in 2005. Meanwhile please keep your marsh healthy and the insects in check.

Jayne Sojka/Lady Bug IPM

## ORBIT TO BE AVAILABLE FOR USE BEFORE BLOOM

I just received word from EPA that the fungicide Orbit (propiconazole) will be permitted for use against cottonball during the budbreak/shoot elongation stages. It will *not* be permitted during bloom. You will have to rely on Abound (azoxystrobin) for bloom sprays. The Orbit approval letter has not yet been signed and submitted to Wisconsin Dept. of Agriculture, Trade, and Consumer Protection, however. In order to use ORBIT legally, you must have a copy of the letter or special label in hand. This article is simply to inform you so that you can plan accordingly.

I have asked Pat Kandziora at DATCP to fax the approval to the WSCGA office, Ocean Spray, and Northland as soon as she receives it. I will be travelling next week, so your best bet for getting it in hand is to contact WSCGA or your handler. Ms. Kandziora can be reached at 608-224-4547 (phone) or pat.kandziora@datcp.state.wi.us.

Patty McManus

The height of human wisdom is to bring our tempers down to our circumstances—and to make our calm within, under the weight of the greatest storm without.

Daniel Defoe

### REDUCING PHOSPHORUS APPLICATIONS

One concern that has garnered much attention during the planning process for the whole farm plans is phosphorus application to cranberries. Because cranberry production is so intertwined with surface waters the concerns about phosphorus leaving cranberry marshes and affecting surface waters are valid and need addressing. With some of the planning funds that were available we are working with three growers who have histories of good production to reduce the phosphorus applications to portions of their marshes. In each case we have paired beds that are adjacent to one another, planted to the same cultivar during the same year, and otherwise managed identically. We have worked with each grower to modify their existing fertilizer program to reduce the amount of phosphorus fertilizer being applied. We'll be following the changes in tissue P, soil P, and yield in these beds over the next three years. We anticipate that yields will be maintained under our reduced phosphorus program.

If you are interested in conducting a bit of "on-farm" research you could set up a similar experiment on your farm. Choose some of your typical beds, perhaps not the beds that give the highest yield and certainly not those that yield poorly. On a couple of those beds figure out how you can reduce the amount of phosphorus fertilizer being applied without reducing the number of phosphorus applications. Keep the amount of nitrogen and potassium the same for the pairs of beds.

If your fertility program relies heavily on materials like 6-24-24 you can simply substitute alternative fertilizers like 9-20-19 or 13-13-13. These are readily available and at a comparable cost. As a

rule of thumb we recommend that fertilizers should have an N:P ratio not exceeding 1:2.

The goal of these demonstration projects is to reduce  $P_2O_5$  applications to about 50 pounds per acre per year. Small plot research over three years showed no yield response to higher application rates. These large plot trials will validate the small plot trials done previously. When doing fertilizer work, remember that fertilizer applied this year will affect next year's crop. Don't expect any differences during the first year or even two years. It will take three to four years to see any differences.

The following table shows one possible approach to reducing phosphorus applications. I'm not advocating that this is necessarily the best or only approach, just a place to begin thinking about how to modify your fertilizer program. This program provides 41 pounds of N, 59 pounds of P2O5, and 125 pounds of K2O.

Fertilizer	Rate	Date
9-20-19	70#	Cabbage
0-0-22	100#	Head
21-0-0	25#	Hook
9-20-19	70#	Mid-bloom
13-13-13	50#	Late bloom
9-20-19	70#	Set
13-13-13	50#	set +7-10
0-0-62	75#	+7-10 days

Teryl Roper, UW-Madison

# STINGER 3A FOR COMPOSITE AND LEGUME WEED CONTROL IN CRANBERRIES

Stinger 3A is a new herbicide available to control certain broadleaf weeds in cranberries. The label is a 24(c) Special

Local Need label, and is available in most cranberry producing states. Obtain a copy of the label from your local county agricultural agent or farm supply dealer. Attached to the label is a Waiver of liability. Fill out, sign, and mail the Waiver of Liability Certificate according to the directions. Read and follow all Specific Use Restrictions on the label.

Stinger 3A controls Composite and Legume weeds in cranberries. Composite weeds include annuals such as ragweed, fireweed (American burn weed), beggars ticks (pitchforks), and perennials such as asters species, goldenrod species, and Canada thistle. Legume weeds include annuals such as vetch species, perennials such as wild bean and clover species. Stinger 3A should be applied as a single or split application by a ground driven boom sprayer calibrated to deliver between 20 and 50 gallons per acre. Application should be made as target weeds emerge, or soon afterward, before perennials exceed two to four inches tall, and before annuals exceed two inches tall or develop more than four to six true leaves. The cotyledons, or halves of the seed, do not count. Stinger will have little or no affect on most weeds that are not in the Composite or Legume plant families.

Apply Stinger 3A at the rate of 2.66 to 8.0 fluid ounces of product per acre (0.0625 to 0.188 lb ai/acre) when a single application is planned. When more than one application is sprayed, do not exceed 1 pint of Stinger per acre (0.375 lb ai /acre) per year. Do not apply within 50 days of harvest.

Stinger 3A is a growth regulator type herbicide. Typical injury symptoms in sensitive plants includes twisting, curling, stretching, feathering, cupping and other abnormal leaf growth, swelling of the growing point and no new growth, and finally plant death. Seedlings die more

quickly than larger established weeds. Cranberries affected by Stinger 3A will look more silver in color from a distance. The leaves of the new growth will be oriented vertically rather than horizontally around the stem so the underside of the leaves, which is more silver in color, is visible rather than the top of the leaves.

Cranberries are more sensitive to Stinger before bloom. Use ONLY the lower rate of 2.66 fluid ounces per acre of Stinger 3A when applications are made in the early spring before growth begins, during the period of rapid shoot growth in late May and June, and before bloom. Use the higher rate of 5.33 fluid ounces per acre of Stinger 3A for most weed problems when applications are made in the summer after bloom. Apply

the highest labeled rate of 8.0 fluid ounces per acre to control heavy aster, goldenrod, or Canada thistle infestations. Applications in late July and August must be made with attention to the projected harvest date to maintain the 50 day pre-harvest interval (PHI).

Stinger is a residual herbicide. The Stinger rate per acre cannot be controlled when applying spot treatments "sprayed to wet". This type of application may result in moderate or severe crop injury, therefore **spot treatments "sprayed to wet" are NOT recommended**.

Brad Majek, Rutgers University, Bridgeton, NJ

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