

Cranberry

Crop Management Newsletter

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Cranberry Crop
Management
for Wisconsin

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Cottonball Control in 2003: Phase Out of Orbit, Phase In of Abound

Since 1996 cranberry growers in Wisconsin have had a Section 18 “emergency” registration for the fungicide Orbit (propiconazole) to control the disease cottonball. However, managing cottonball in 2003 won’t be business as usual. Orbit has fallen out of favor with EPA, and it’s unlikely that a regular registration will ever happen. This is not the fault of the cranberry industry or anyone associated with it, but rather there are new concerns regarding the cancer risk of Orbit and related fungicides. In the mean time, the fungicide Abound (azoxystrobin) has been registered and should be with us for many years (see separate article on Abound). Because the future of Orbit is shaky and because we now have an alternative, EPA was not keen issuing a Section 18 for Orbit this year. However, after some negotiations, Orbit will be permitted on a limited basis: *The maximum number of sprays of*

Orbit in 2003 will be TWO rather than the previously permitted four. Other things are the same as in previous years: 4 to 6 fl oz/acre, permitted April 15-July 31, preharvest interval of 45 days, no chemigation, and you must reply to a survey regarding Orbit use.

Cottonball has two phases: primary infection (shoot blight, tip blight) occurs when shoots show about ¼ to 1 inch of new growth; secondary infection (fruit rot, hard rot) occurs during bloom. In theory, if we controlled primary infection, we wouldn’t have any secondary infection. In reality, however, a little bit of shoot blight happens even when you spray elongating shoots. Research has shown that spraying only during bloom is as effective as spraying elongating shoots and again during bloom. Therefore, I recommend spraying only during bloom, unless cottonball in the previous year was really bad (more than 20% of fruit). Based on the results of one

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trial under very high disease pressure, the highest labeled rate of Abound (15.4 fl oz/acre) was not quite as good as the high rate of Orbit (6 fl oz/acre) in controlling primary infection, but Abound was as good as Orbit in controlling secondary infection. Since most of you who spray for cottonball do so only during bloom, transitioning from Orbit to Abound should be smooth.

However, two things have me concerned about the transition. First, from the numbers I've seen, Abound will cost more than Orbit. Second, the efficacy data is from only one year. I'm afraid that these two factors will cause growers to continue with one or two Orbit sprays in 2003 (very few growers use more than two sprays), and ignore Abound. That will be fine for 2003, but what if we lose Orbit altogether in 2004 (a very likely scenario)? Then, you'd have to rely on Abound, with no previous experience using it. Therefore, I encourage growers to use 2003 as a transition year. Here are some specific recommendations on how to spend your two permitted Orbit applications in 2003 and transition to Abound:

- Orbit is slightly better than Abound in controlling primary infection. Therefore, if you have severe primary infection, make at least one of the Orbit sprays during shoot elongation (best time is when majority of shoots show about ½ inch new growth).
- Orbit and Abound are similar in controlling secondary infection. If you typically make two bloom sprays, consider one Orbit and one Abound. Or, spray some beds with Orbit and some with Abound, and take a few moments during harvest to rate the fungicides' performance. Do some experimenting with Abound so that you won't have to give up Orbit "cold turkey" in 2004.
- If you apply only one spray, do so no later than 25% bloom. Spray some beds with Orbit and some with Abound.
- Do not stock up on Orbit. This may be your last year to use it.
- Bravo is effective against the fruit rot phase of cottonball, but it must go on during bloom. Some research and grower experience in Wisconsin shows yield reductions with Bravo. Therefore, I'd recommend using Bravo on cottonball only if you were also battling significant levels of other fruit rots. Bravo is better than Abound or Orbit in controlling the other fruit rots.
- Call or e-mail me if you have questions about controlling cottonball.

Patty McManus, UW-Madison Extension Plant Pathologist

It is necessary to the happiness of man that he be mentally faithful to himself.

Thomas Paine

Abound—New Fungicide for Cottonball and Fruit Rot Diseases

The fungicide Abound is now registered on cranberries for control of fruit rots, cottonball, and Lophodermium twig blight (rare or absent in Wisconsin). Abound is a liquid flowable containing 22.9% of the active ingredient, azoxystrobin. It is in the strobilurin class of fungicides and is deemed “reduced-risk” by EPA based on its relatively low toxicity to mammals and other non-target organisms. The restricted-entry interval is 4 hours and the preharvest interval is 3 days. The rate is 6.2 to 15.4 fl oz/acre. A maximum of 6 applications per season is permitted. To slow down the development of fungicide resistance, no more than two sequential sprays of Abound should be used before switching to an unrelated fungicide. See the label for additional safety information and use instructions.

Abound is a broad-spectrum fungicide and is active against many of the fungi in the fruit rot complex. It is primarily active on the surface of plants (protectant) with limited systemic activity. Three fruit rot fungi are listed on the label, but for simplicity, and until new information is available, consider it effective against the fruit rot complex. Abound does not have the long track record in controlling fruit rot that Bravo has, and it has not been as consistently effective as Bravo. However, there is no

evidence of phytotoxicity with Abound, even when sprayed during bloom. Watch further newsletters for specific information on controlling fruit rot. Use of Abound for cottonball control is addressed in a separate article.

Patty McManus, UW-Madison Extension Plant Pathologist

Stinger Status

For the past several years Wisconsin cranberry growers have been able to use the herbicide Stinger under a Section 18 Emergency exemption. This exemption had to be renewed annually. In the meantime, IR-4, Dow Agrosciences, and the US-EPA were working towards a full label for Stinger on cranberry. We had heard earlier this year that a full label was forthcoming so Wisconsin did not request a Section 18 exemption.

This spring Dow AgroSciences requested a 24C label. This is a special local needs label. The cranberry use may not appear on the package label. Rather than expiring annually, this label won't expire until 31 December 2007. You will need to have a copy of the label in your possession before making an application of Stinger.

The label provisions are similar to previous years. You will still need to sign the liability waiver. However, you won't have to report use to me. The preharvest interval is still 50 days. Rates are from 2.67 to 8 oz per acre per

application. Annual applications must not exceed 1 pint (16 oz) per acre.

Stinger should be applied in at least 10 gallons of water per acre. Other use restrictions include:

- Application may be made only by a certified pesticide applicator or someone working directly under their supervision.
- Don't apply to weeds that are tolerant to Stinger such as yellow loosestrife, sedges, rushes, grasses and violets.
- Avoid spray drift by using coarse sprays with large droplets and low pressures and by spraying when wind is less than 5 mph.
- Do not apply directly to water or within 5 feet of water moving off or through the cranberry bed.
- Fully follow Worker Protection Standard requirements on the label.

Obtaining this special local needs label for Stinger on cranberry is great news. It shows the benefits of working together with IR-4 and regulatory agencies to obtain use of a material that has proven to be an effective weed management tool.

*Teryl Roper, UW-Madison Extension
Horticulturist*

In vain do they talk of happiness who never subdued an impulse in obedience to a principle. He who never sacrificed a present to a future good, or a personal to a general one, can speak of happiness only as the blind do of colors.

Horace Mann

Electronic Newsletter

Several years ago this newsletter and other information were shared electronically via a listserv hosted at the University of Wisconsin-Extension. After a couple of years of successful operation the list was beset with a number of virus problems. At least two growers lost data and spent much time and money ridding their computers of viruses transmitted through the list. Improvements in the University virus protection software and the more common use of virus protection software on individual computers coupled with a greater awareness by users of how computer viruses spread have greatly reduced the problems.

I have once again set up an e-mail list at the University. The name of the list is "VirtualMarsh-list". If you would like to be added to the list please send me an e-mail (trroper@wisc.edu) and I will add you to the list. The e-mail MUST contain your first and last name. The list is not moderated, but you must belong to the list to post. Messages other than the newsletter may be posted. However, this is **not** a forum similar to the cranberry stressline.

While the University has greatly improved their ability to catch and block viruses each individual computer should have virus protection software installed, active, and up to date. It is your responsibility to protect your computer against viruses. We will do what we can here, but the final

protection is in your hands. Numerous virus protection software packages are available for less than \$100. Further, these packages must be kept updated with the latest definitions to provide full protection.

I will post the newsletter to the list the same day as I take it to be copied and mailed. People who receive the newsletter electronically will get it 2-4 days before it will arrive via the mail. In the beginning I will post the full text of the newsletter. In the future I may simply include a link to where the newsletter is posted on the Internet. I will avoid attachments.

As always, the newsletter will be posted on the website of the Department of Horticulture at the University of Wisconsin-Madison. The general URL is:
<http://www.hort.wisc.edu/cran/>

The newsletter is generally posted as both HTML and as an Adobe Acrobat File. The acrobat file maintains the formatting of the print version.

We are working on a search function for the newsletter in an attempt to facilitate finding information in past issues. We are presently having some technical difficulties in getting the function to work. We hope that by tweaking the server software that we can get the function to work. This would allow you to search all years of the newsletter for a keyword such as "stinger" or "orbit" or "blackheaded fireworm". This will further serve to make the information provided in the newsletter accessible for the long-term.

The Proceedings of the Wisconsin Cranberry School are now posted on the cranberry page at the Steenbock Library on the UW-Madison campus.

<http://www.library.wisc.edu/guides/agnic/cranberry/cranhome.html>

In addition, the proceedings are searchable by keyword. The 2003 proceedings are not yet on-line, but they will be yet this summer. Incidentally, the Steenbock cranberry page received over 40,000 unique visitors last year. Many requests for cranberry information come through the site each year.

This newsletter is funded by grants from the Wisconsin Cranberry Board, Inc., Ocean Spray Cranberries, Inc., Cliffstar and Clement Pappas. I thank them for their generosity. We believe this newsletter provides a service that is not available anywhere else. These grants allow the newsletter to be printed and distributed at no direct cost to growers. It is difficult for the university to handle numerous small checks and often those who need the information most are the least able or likely to pay for the information.

If your address is not correct please send me a note, phone call, or e-mail indicating the correct address. We try to keep the list up-to-date, but that is a difficult job. We hope you enjoy the newsletter and that it is a valuable source of information on growing cranberries.

*Teryl Roper, UW-Madison Extension
Horticulturist*

Newsletter Volume XVII

With generous funding from the Wisconsin Cranberry Board, Ocean Spray Cranberries, Clement Pappas, and Cliffstar Corporation we can once again publish the Wisconsin Cranberry Crop Management Newsletter. We send this newsletter to all known cranberry marshes in Wisconsin at no direct cost. We make every effort to maintain an accurate mailing list. If the address on this newsletter is wrong please contact Teryl Roper (608-262-9751) with the correct address. If you would like to receive the newsletter electronically please send me an e-mail (trroper@wisc.edu) and I will add you to the list.

Wisconsin Cranberry Crop Management Newsletter

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Marsh Meetings

UW-Extension specialists will be conducting on-farm visits around the state on June 9-11. Exact locations have not yet been determined. Watch this newsletter and the WSCGA newsletter for more information. If you have questions or concerns you would like to see addressed at these sessions please contact Dan Mahr, Patty McManus, or Teryl Roper and we'll try to have an answer ready for your question.

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