Integrated Cranberry Crop Management for Wisconsin

Cranberry

Crop Management Newsletter

Volume XVIII
Number 1
May 5, 2005

Contents:

COTTONBALL CONTROL IN 2005—ORBIT AND ABOUND

A Section 18 emergency registration for use of Orbit (propiconazole) on cranberry in Wisconsin has been approved by EPA, and a copy of the label is included in this newsletter. You must have a copy of this label to legally use Orbit. A maximum of two applications of Orbit are permitted between April 13 and June 15, 2005. The rate is 4 to 6 fl oz per acre in 20 to 50 gallons for ground application, or in 5 gallons for aerial application. The pre-harvest interval is 45 days, and chemigation is not permitted. In recent years EPA has not permitted sprays of Orbit during bloom, because an alternative fungicide, Abound, is available for use during bloom. Therefore, the purpose of the Orbit Section 18 is to have a product available for the budbreak and early shoot elongation period (see discussion below). I understand that if we have a late spring, shoots are still in the early elongation stages in northern Wisconsin in mid-June. Nevertheless, we have to abide by the June 15 expiration date.

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. However, 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 (Abound), unless cottonball in the previous year was really bad (more than 20% of fruit). Based on the results of one 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, you will not need to use Orbit.

If you did have a significant cottonball problem in 2004, then budbreak and early shoot elongation sprays probably are warranted. The first application should be made when over half the shoots show more than ¼ inch of new growth, and the second application 7 to 10 days later. Although it's convenient to spray the whole marsh on one day, it's better

for disease control to treat different varieties according to their development. The first bloom spray of Abound should go on at about 10 to 20% bloom, with a second application about 7 days later. Remember—the early flowers are more likely to set fruit and therefore are more likely to get the fruit rot phase of cottonball (you can't get cottonball unless a fruit develops!). The fungus follows the same route that pollen takes in getting to the ovary which matures into the berry. ***Therefore, to control cottonball, bloom sprays are critical, and spraying after bloom is a waste of time and money!*** In research trials we have never seen negative effects of Abound on yield, and I have never heard complaints from growers who use it during bloom. Abound is somewhat effective on other fruit rot pathogens, but more on that in a later article.

Patty McManus, UW-Madison Extension Plant Pathologist

THE COLOR OF SPRING

What a sight to behold as the forest comes alive. Trees slip from bare branches to a red tinted bud or the green-yellow hue of a willow with a splash of white as we see pin cherries in bloom. The brown turning into shades of green, reds, a bit of yellow and white blossoms with promise of even more color as spring continues. All of nature is waking up.

We too have spring fever. Our cranberry plants are slipping away from the iced blanket that protected them all winter to full sun shine assisting them in their warm weather awakening. Gotta love Wisconsin in the Spring!

At this writing you more than likely have all pipe laid and are planning your early herbicide applications. Remember that with Casoron it is critical to water it in ASAP after application. You may be surprised at the results.

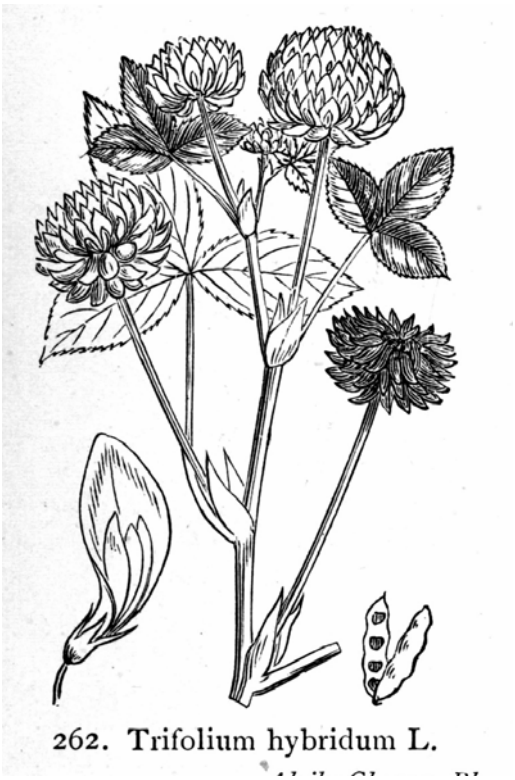
Alsike clover and Hop clover

Let's talk specifically about Alsike Clover and Hop Clover. Be real careful if you plan to use Stinger as a HOT SPOT treatment for these early challenges. These clovers are members of the legume (pea) family. Look at the illustrations of these two clovers and make a note of the differences. Alsike Clover (*Trifolium hybridum* L.) is more a sprawling plant and the flower is white early in the spring and then turns pink during June, July, and August. Hop clover (*Trifolium dubium*) has a dainty yellow flower. Clover is normally associated with higher pH soils. The first thing a grower should do is check the pH in the area that is growing clover. Perhaps sulfur would assist in controlling this challenge. The best success story is using Stinger after harvest. The temperature must be at least 55°F several days prior to and after application.

Bird's foot trefoil is also a member of the legume family. It typically likes poorly drained soils, but will adapt to droughty, infertile and acidic soils. In and around the cranberry bed this species attracts all kinds of insects and I have observed deer and rabbits feeding on it. Unfortunately it spreads like wildfire once it gets a foot hold in beds. We have been experimenting with Stinger on this species and have found it to be effective. Casoron stunts the weed, but pulling the young seedlings out and bagging the weeds is always a good control measure!

Enjoy the spring season.

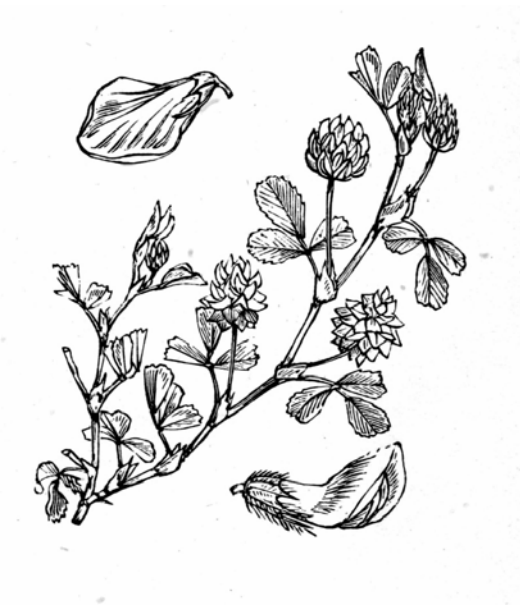
Jayne Sojka, Lady Bug IPM



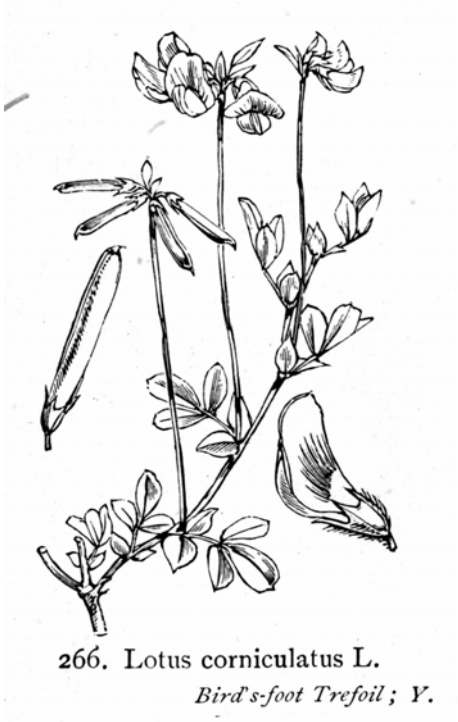
Alsike Clover (*Trifolium hybridum* L.)

Kind words cost no more than unkind ones, . . . and we may scatter the seeds of courtesy and kindliness around us at so little expense. If you would fall into any extreme let it be on the side of gentleness. The human mind is so constructed that it resists vigor and yields to softness.

Jeremy Bentham



Hop Clover (*Trifolium dubium*)



Bird's foot Trefoil (*Lotus corniculatus*)

Affection can withstand very severe storms of vigor, but not a long polar frost of indifference.

Sir Walter Scott

VOLUME EIGHTEEN

With kind financial support of the Wisconsin Cranberry Board and some of the cranberry handlers the Wisconsin Cranberry Crop Management Newsletter will continue with volume 18. We will publish twice monthly during the summer months. We will try to bring your timely articles that reflect current conditions on the marsh. We always welcome input and questions from readers as that will help us provide timely useful information.

We will provide a paper copy to each known cranberry marsh in Wisconsin. In addition to the paper copies you can receive an earlier copy via e-mail on the Virtual Marsh e-mail list. We have had no virus problems with the list and because only members of the list can post to it we have had no spam on the list. If you would like to be added to the list please send your e-mail address to me at trroper@wisc.edu and I'll add you to the list.

The newsletter is also posted on the web as both HTML and pdf files. Back issues are also searchable. To access the newsletter archives go to: www.hort.wisc.edu/cran

ELECTRONIC RESOURCES

Much information about cranberry production is available in electronic form on the Internet. One useful portal to this information is the cranberry AgNic site that is hosted at the Steenbock Library on the UW-Madison campus. The URL for this site is: http://www.library.wisc.edu/guides/agnic/cranberry/cranhome.html

This year we have also added a website with cranberry pesticide information. This site contains copies of labels for all pesticides registered for use on cranberry as well as tables showing which products work on which pests. http://www.hort.wisc.edu/cran/PestWeb/Pesticide.htm

The archives for this newsletter and the Proceedings of the Wisconsin Cranberry School are available on my site at the Department of Horticulture. The URL for this site is: http://www.hort.wisc.edu/cran/

The WSCGA home page has useful links to a variety of resources relating to cranberry production. The URL is: http://www.wiscran.org/