# POAST LABELED FOR BEARING CRANBERRIES

POAST herbicide received a label for application to bearing cranberries for the control of annual and perennial grass weeds. POAST has been labeled for nonbearing cranberries for several years. This provides growers another tool to manage weed pests in cranberry.

The POAST label for cranberry requires a 60 day preharvest interval. This will allow application through mid to late July depending on the bed and cultivar. POAST may not be applied through any sort of irrigation or chemigation system. It should be applied at the rate of 1/2 to 2 pints per acre in 5 to 20 gallons of water. Use cone or flat fan nozzles with a pressure of 40 to 60 psi. Don't apply more than 6 pints of POAST per acre per year. Allow at least 14 days between successive applications of POAST.

For spot treating small infestations use a 1 to 1 1/2% solution with an equal amount of crop oil concentrate. To make 1 gallon of a 1% solution mix 1.3 fluid oz of POAST in 1 gallon of water and add an equal volume of crop oil concentrate.

In order to be effective, POAST must be applied to actively growing grass weeds at the correct stage of growth. These are listed on the product label. The herbicide must be absorbed through the foliage, so addition of crop oil concentrate is required to get adequate coverage and adsorption. Also, grasses that are stressed will not be controlled well. Don't apply POAST if rainfall is expected within one hour following application. If cranberry vines are stressed due to moisture stress, herbicide injury, insect damage, or cold injury, leaf speckling or yellowing may result.

POAST should not be tank mixed with other pesticides unless specifically listed on the product label. POAST will not control sedges, only grasses. A quick test is to pull a stalk and rub the stalk between your fingers. A grass will rub smoothly, a sedge will not. (Remember, sedges have edges, grasses have none.)

The worker protection standard for POAST requires oral notification of employees of application. The restricted entry interval is 12 hours. The signal word is Caution. Handlers and loaders should wear long sleeved shirt and long pants, chemical resistant gloves, and shoes with socks. I recommend that a chemical resistant apron be work when mixing and loading any liquid pesticide, even if not required on the label, for your own protection.

Growers will need to have a copy of the supplemental label in their possession at the time of application. Copies of the POAST label should shortly be available from chemical suppliers. The bearing cranberry label for POAST is possible because of the IR-4 minor use pesticide program. Without IR-4 and support from Land Grant Universities and industry groups this label would probably not be available.

*Teryl Roper, UW-Madison Extension Horticulturist*

If you want knowledge, you must toil for it; if food, you must toil for it; and if pleasure, you must toil for it. Toil is the law. Pleasure comes through toil, and not by self-indulgence and indolence. When one gets to love work, his life is a happy one.

John Ruskin

# IR-4 PROJECT FOR COTTONBALL CONTROL IS UNDERWAY

Cottonball (Monolinia oxycoccus) is a disease that infects a large portion of cranberry beds in Wisconsin. The cottonball disease is most characteristically defined by the cottony-like mycelium found in mature berries close to harvest. To date, Funginex is the only product available for adequate control of cottonball. Unfortunately, Shell Corp. is not going to continue producing the product, and the amount of Funginex currently in the system is all that remains for use. Last season my fungicide trials uncovered a product, Propiconizole, which controls cottonball and is superior to Funginex. The product is sold under the trade name ORBIT on other crops and is produced by Ciba Crop Protection. With the help of the Cranberry Institute and Ciba, IR-4 studies have been initiated on several cranberry properties to begin registration of this product for cranberries by 1998. Based on residue studies this season, it is possible that Wisconsin could issue a section 18 or 24C permit, which would allow use of the product on a special needs basis prior to full registration.

*Johnathan Smith, Northland Cranberries*

# BUMBLEBEES ARE EVERYWHERE

If you attended the 1995 Cranberry School, you no doubt learned a lot about bumble bees from Dr. Rod Macfarlane. Since mid-April, Dr. Macfarlane has been holding meetings with growers across the state to coordinate this season's bumble bee research. To date, we have collected every one of the thirteen species of bumble bees which are typically found in Wisconsin. If you've been looking close for bumble bee activity, the queens are currently foraging on a variety of plants such as bog rosemary, leatherleaf, dewberry, blueberry, dandelion, and pussy willow. Bumble bee boxes have been built for queen nesting, and spread out along the perimeter of the properties. It is our hope that the queens will find these nesting boxes adequate for rearing their brood. This season there appears to be a lot of bumble bees around the properties, and I encourage you to note any bumble bee activity and determine where they are nesting. If you are interested in making bumble bee boxes, or have any questions about bumble bees, Dr. Macfarlane can be reached at 715-887-2312. Those who are working directly with Dr. Macfarlane are learning much about bumble bees, and if all goes well with the research this summer, we will have a lot more answers than questions at the 1996 Wisconsin Cranberry School.

*Johnathan Smith, Northland Cranberries*

# NEW FORMULATION ANNOUNCED

A new liquid formulation of Diazinon is slated for use in 1996. Ciba Crop Protection plans to replace the existing AG-500 diazinon formulation with a new, water-based concentrate called AG-600 EW. This new formulation is solvent free with improved worker safety and better crop safety. The product has excellent handling and mixing characteristics, and equal performance to the AG-500 formulation. Several cranberry researchers and university personnel are continuing evaluations with this new product on cranberries. It is expected that the U.S. registration will be completed in September 1995.

*Johnathan Smith, Northland Cranberries*

# LADY BUG REGIONAL NEWS

The CRAN-banana belt has been our southern growers in Monroe County, but in 1995 we are seeing some competition. The Central Sand growers are neck to neck at the present time with early hooks first spotted on May 26. It is always fun comparing the different soil types

as the progress. Sometimes we see a week to ten days difference!

Every spring we report herbicide stress or carryover signs. 1995 is no different. In some areas we are seeing a hot pink new growth in Evital stress vines, or a yellow to purple cast in the leaf veins. Many areas we hear a crunching sound as we walk the beds. As we pull back vines checking for girdler damage we find little roots, the vines pull back real easily, and in some cases a well established bed starts to float. Some areas are dead. . . . no weeds or vines. In our conversations, I am hearing that in the trash layer at harvest time one can find numerous tips and severed vines. Is this solely harvest stress? What is really happening?

Average regional herbicide application rates:

| Herbicide | Rate |
|---|---|
| 2,4-D | 10 lbs |
| Casoron | 30-40 lbs |
| Evital | 15 to 35 lbs |
| Devrinol | 30-40 lbs |

In my opinion the average pounds per acre do not sound too high. But what about year after year? What sort of carry-over is really present? What soil types need extra care? What about rotating chemistry? Fortunately, a research project with Dr. Lloyd Peterson is beginning to address the effects of herbicides on cranberry roots and vine growth. Results should be available late this winter.

## MOUSE MANIFESTATION

The enormous mouse populations of 1994 brought numerous hawks and other predatory birds to work the beds last fall, but unfortunately, not enough. Now we are seeing the damage those critters caused. Not only trails, but large nesting areas are obvious—severed vines mostly. We have heard horror stories of plugged pipes as well. why is it that mice nest in the middle of the pipe and not right at the end where we can reach them? Make sure that those pipes are always capped—don't give those pests opportunity to make your spring a nightmare.

## OUR NOCTURNAL PEST

By the time this reaches you, the first insecticide application will more than likely be in place. Now be watchful for the nocturnal feeders, it seems that they come a little later than fireworm and Sparganothis fruitworm. They are from the cutworm family feasting on hooks and blossoms, yet difficult to spot because they hide in the trash layer during scouting times. Should you observe a circular area missing all the hoods or early blossoms, check the ground for larvae. Pyrenone did a wonderful job for us last year on this pest.

*Jayne Sojka, Lady Bug IPM*

## USING PHEROMONE LURES AND MOTH TRAPS IN CRANBERRY IPM

Pheromone traps and lures are very economical to use. They provide valuable information for three important pests. In Cranberry IPM, we use sex pheromones and sticky traps to indicate peak flight or end of moth flight of a pest species in an area. We then use this 'flight' data to properly time our control strategies.

**WHAT TRAP SHOULD I USE?** The Pherocon II trap is recommended for monitoring black headed fireworm (BHFW) and cranberry girdler (CG). The pherocon 1C wing trap is recommended for monitoring Sparganothis fruitworm. The wing trap can be used to monitor all three moths, if desired. Using wing traps is slightly cheaper than using the Pherocon II trap if you re-use the tip for the entire season (see below).

The wing trap is preferable when you are catching large number of moths, (i.e. typical sparganothis counts are in the 100's). Counting large numbers of moths is much easier on a grid background. Some companies are now offering the Pherocon II trap and the wing trap bottom with a printed grid. Most people find the Pherocon II trap much easier to deal with

physically when changing traps. For many cranberry growers in MA, counts of CG and BHFW do not exceed 100 moths on their bogs.

**THE LURES.** Lures are very specific for the particular moths and are effective at low densities. Store extra lures in the refrigerator or freezer to preserve their activity. It is a good idea to date the bags when you receive them. If you have viable lures left over from last season, use those first. According to the manufacturers, the Sparg and BHFW lures will remain viable for 2 years and the CG lures will remain effective for 1 year when stored in their original package in the freezer or the refrigerator (32-45°F). Lures for our cranberry pests will remain viable for just one year when stored at room temperature (75°F maximum).

The lure manufacturers recommend changing the lure every 4 weeks, if the weather is very hot and/or windy, the lure may need to be changed more often. The material that catches the moths is quite sticky, so be careful not to get it on your hands. If you want, you can use an instrument, such as tweezers or a pick, to remove or transfer the lures.

**HOW DO I USE THE TRAPS?** Traps should be out on the bog by June 1. Place the appropriate lure in the correct trap. If you are using identical type traps, be sure to label the traps for the moth you are targeting. Secure the trap on a stake or a rod so it will not blow off in strong winds and/or rain storms. Bamboo stakes or steel rods can be used as staking devices for the traps.

- It is recommended to use 1 trap per 10 acres. You can modify this recommendation as conditions warrant. For example, if you have a problem with cranberry girdler, you may want to set out two traps on a particular section. You could set one trap in the conventional leeward side of the bed and one trap in the spot where you have seen damage. You can use the moth counts of the two sites to more accurately estimate the moth flight for that piece.
- The trap should be placed on the upwind side of the marsh. This is the side from which the prevailing summer winds blow. The scent should travel across your vines, not your neighbor's. (or nearby woods.) Position the trap so it is about one foot above the vines.
- Separate individual traps by 100-200 feet where possible. It is advisable to place the traps at least 100 feet from the edge of the marsh. If the piece is narrow, try to center the traps on the piece and place them far apart from each other.

**HOW SHOULD I MONITOR THE TRAPS?** Check your traps at least once a week. Change the bottom of wing traps and the Pherocon II trap every 1-2 weeks or as needed. If your marsh has heavy moth flights, (more common for Sparg), you may need to check and change your traps more often than once per week. Be sure to transfer the lure from one trap to the other.

You must document trap activity. Be sure to write down the date and moth counts as you check your traps and keep them in your records. Do not rely on your memory. This is the crucial information you will need to appropriately plan your management strategies.

*Hilary Sandler, Univ. of Massachusetts, Cranberry Experiment station.*

*This article and the cost information below was taken from Cranberry Station Newsletter, IPM Edition May 26, 1995, 5(5):3-4*

Costs

**Sparg monitoring, 10 Acres, Disposable traps**

| | |
|---|---|
| 8 Pherocon 1C traps | |
| *(case lot @ $2.50 each)* | $20.00 |
| 3 lures (case lot) | $4.20 |
| 1 steel stake (reusable) | $1.00 |
| Total | $25.50 |

**Girdler monitoring, 10 Acres, Pherocon II**

| | |
|---|---|
| 8 Pherocon II traps | |
| (case lot @ $1.40 each) | $11.20 |
| 3 lures (case lot @ $1.75) | $5.25 |
| 1 steel stake (reusable) | $1.00 |
| Total | $17.45 |

# CALIBRATION FOR SPOT TREATMENTS

There is a great need for spot treatment of both herbicides and fertilizer. The major problem with spot treatment with a granular product, however, is accurate delivery rate. I have seen too many dead areas in bogs due to over-zealous spot treatment. When you are shaking out a little of this or that, how do you know you are even close to the desired rate? You can calibrate the shaker/applicator and guess at the area you are applying it over or use specialized shaking containers that help control delivery. However, it is still a guess game. What may help is a visual estimate of granular coverage density on the ground. The squares below represent life sized tracings of a typical application of Casoron at 100, 50, 25 and 12.5 lbs of product/A and a typical fertilizer at 100 lbs/A. Cut this out and post it on your pesticide storage facility to use as a reference. Note the difference between 100 lbs/A of Casoron and fertilizer.

*Kim Patten, WSU, Long Beach, Extracted from "Cranberry vine" February 1995*