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Cranberry

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PROLINE FUNGICIDE FOR FRUIT ROT CONTROL

By Patty McManus

UW-Extension Fruit Crops Specialist & Plant Pathologist

A new fungicide, Proline 480SC from Bayer Corp., is registered for use on cranberries. The active ingredient is prothioconazole, which is in the same fungicide class (sterol demethylation inhibitor) as two other cranberry fungicides, propiconazole (Orbit, Tilt, Propimax) and fenbuconazole (Indar). Proline has a broad spectrum of activity and has performed very well on the fruit rot complex of fungi. In fact, in every trial in which we've tested it, it has been as good or better than the old standard, Bravo (chlorothalonil). Notably, Proline has been effective at sites where our most important fruit rot pathogens including *Colletotrichum*, *Coleophoma*, and *Phyllosticta vaccinii* (early rot), are present. Moreover, we have not observed any negative effects, such as flower/fruit injury, reduced yield, or diminished fruit color following application of Proline. Although *Monilinia* is among the fungi listed on the Proline label, we have no data on its efficacy toward cottonball, caused by *Monilinia oxycocci*.

Some additional facts on Proline and other considerations:

- Check with your handler on export issues.
- Restricted-entry interval is relatively short (12 hours), but the pre-harvest interval is long (45 days).

- On the Proline label, cranberry is listed under "low growing berry subgroup, except strawberry." Don't let "highbush cranberry," which is listed under the "bushberry" subgroup fool you.

NEW FOR 2014

- Proline 480SC is a liquid suspension concentrate to be applied at the rate of 5 fluid ounces per acre.
- A maximum of two applications is allowed per year.
- As with other fruit rot fungicides, the most effective spray timing is at full bloom and early fruit set stages.
- Application may be by ground equipment or through chemigation but not by air.
- The label states that Proline should be used with a low rate of non-ionic surfactant. In our trials, however, we tested Proline without an adjuvant.
- I am not aware of any incompatibility issues between Proline and other pesticides, adjuvants, or fertilizers, but remember that the more things that go into a spray tank all at once, the greater the risk of crop injury.
- As always, read the label carefully to avoid surprises. ❖❖❖

CITIZEN SCIENCE PROJECT TO CORRELATE GROWING DEGREE DAYS WITH CRANBERRY PHENOLOGY

By Elissa Chasen and Shawn Steffan
USDA-ARS Vegetable Crops Research Unit

In collaboration with Wisconsin cranberry growers, we have initiated a “citizen science” project to correlate growing degree days with cranberry phenology. Although it is being organized by the USDA Cranberry Entomology Lab (the Steffan Lab), the project grew directly out of interest from cranberry growers. Citizen science means that data is collected according to a standardized protocol by means of public participation. It is a fantastic way to utilize all of the available resources that are scattered between university staff and amongst cranberry growers (meaning both people and measuring instruments). By having multiple sites with systematic data collected of local temperatures and plant phenology, and a consistent method of degree day calculation, we can create a robust data set that will allow us at the university to more confidently attribute cranberry plant phenology with specific degree day units. We plan to associate degree days with plant progress through key stages, such as bud break, roughneck, hooking, flowering, and fruit set. Understanding this connection will help improve management timings for a variety of practices including pesticide and fertilizer applications and even harvest. ❖❖❖



EARLY SEASON GROWERS' WORKSHOPS May 13, 2014 Wisconsin Rapids or FMS-Mather Division Hwy 173

WSCGA, USDA ARS, and UW Extension are sponsoring two sessions for growers, as the growing season gets underway. The two Grower Workshop sessions will be held Tuesday, May 13. The morning session will begin at 9:30 AM at Elm Lake Cranberry in Wisconsin Rapids. Starting at 2:00 PM, the afternoon workshop will be held at FMS – Mather Division on Hwy 173.

Topics will include:

- *Pesticide Use and Pollinator Protection*
—Christelle Guedot
- *New Chemical Registrations and Use of Old*
—Jack Perry
- *Herbicides and Weed Management in Cranberry*
— Jed Colquhoun
- *Use of Growing Degree Days for Management on My Marsh* — Shawn Steffan
- *Observations from the Field*
— Cranberry Crop Consultants
- No registration is required. Participants are encouraged to bring along their own chairs. ❖❖

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CRANBERRY CRUNCH

By Suzanne Arendt

RedForest Crop Consulting, LLC

Cranberry price declines have afflicted many growers for multiple years now and 2014 prices will most likely remain suppressed. Many growers received \$10 to \$15 per barrel for their 2013 crop and forecasting looks like this year may return similar prices. The 2014 marketing order in its simplest form will require a 15% set aside to try to align supply and demand better. Although a necessary effort, I believe that unless there is an environmental catastrophe, 15% will not be a large enough set aside to rebound prices acceptable for our farmers in one growing season. So, as we look back a few years and forward a couple of years many growers are and will continue to struggle to pay down debt and return profitability to their farms. More tough decisions will need to be made by growers to keep down the growing cost per barrel. However, handlers continue to require higher quality fruit creating additional stress on the grower financially to achieve their goals.

So, where can growers save money? Many growers have been extremely creative and have already been doing more with less for the last few years. And in some cases spending more money in the short term is required to save money in the long run. A conundrum for sure.

Budget:

The first thing growers can do is create and maintain a budget if they don't already have one. Breaking down the expenditure and returns into specific categories can aid in establishing baseline costs and can help highlight areas where there may be opportunities to cut costs. Creating a spreadsheet can be accomplished through accounting programs or by searching the worldwide web for free spreadsheets to download.

Sanding:

Most growers are on a three-year sanding rotation. During these tough economic times, extending the interval to 4, 5, or 6 years or more has

been implemented. I, personally, haven't seen a detriment to moderate extensions of the interval but certainly the more years beyond a few of the recommended three years can result in lower yields and increased challenges including more "wood" exposed in the canopy, less new upright and root growth, and less suppression of some pest problems.

Insurance:

Commercial policies:

Increase deductibles can save money in the short term.

Reduce coverage: for example, if you don't have a history of hail, eliminate hail insurance but maintain catastrophic insurance.

Reduce the number of trucks allowed on road and save money on licensing those vehicles as well.

Eliminate drivers with bad driving records to drive company vehicles off the farm.

Explore options with your insurance agent and get other quotes. Make them work for you to ensure your long-term success and protection.

Health insurance:

Increase portion that employee pay and reduce coverage is an obvious solution; however, it does put more stress on your employees that you may not want to inflict.

Eliminate employee positions and requiring more from the rest of the remaining crew. Doing more with less can be painful, but it may be necessary for your long-term survival.

Compare insurance plans and try to understand the Affordable Care Act and how it affects your insurance rates per individual at their particular ages.

Ask your insurance company for a

CRANBERRY CRUNCH (*Continued*)

By Suzanne Arendt
RedForest Crop Consulting, LLC

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premium for every age. Determine how many plans are available for your small company. Ask your insurance agent for a booklet of health plans. Three options is the standard that your agent will give you; however, you can get over 30 different plans if you ask. The best plans are structured to contain multiple plan options. Healthcare.gov can show you a variety of policy options from different insurance companies. Again, make your insurance agent work for you. Talk to your neighbors and friends and ask them what questions they asked their insurance agent to achieve some real cost savings that can benefit you and your employees.

Fuel:

Gas and diesel prices have soared since 2011, and there are certainly not many ways we can save money in this area. Converting some pumps to electric may help but is costly in the short term. Implementing a maintenance schedule for tractors, mowers, pumps, weed trimmers and all equipment that uses fuel can help set benchmark figures for future evaluations. Using meters or other data loggers and maintaining a spreadsheet in CranTrak or other written logs will aid in collection of this data. Regular upkeep such as changing oil filters, air filters, and ensuring tire pressure is at the optimum level can aid in long-term savings at short-term low costs. Train employees how to properly run equipment in the most cost effective manner to ensure the tax on the equipment is minimized while being time efficient with labor costs.

Pre buy a certain percentage of your fuel at locked in prices while maintaining the option to buy later if prices decline during the season. In some years, this is a gamble worth taking.

Developing an irrigation regime that optimizing the health and vigor of the plant can require a lot of field work and changing old habits, but is one that can save the grower a lot of money over time and can increase yields. To aid in altering irrigation schedules, logs should be kept at the pumps, utilization of field moisture meters such as Theta probes, Hortau, and tensiometers along with visual observations of vine vitality, canopy and undercanopy wetness touch tests, and digging your hand into the ground will all help tweak your irrigation program to allow for cost savings and potentially increase in yields.

Herbicides:

You can save money in the long term by having a herbicide program. By eliminating a program your problem weeds will only get worse and cause more years of struggling to manage weed populations. You can cut back a little, alternate your program on a two-year cycle, and spot treat priority areas.

Map and identify top priority weeds so you can pinpoint areas of concern and monitor your efforts over time. Try to understand how the weeds grow and reproduce. Know whether you have a grass, sedge, rush or broadleaf weed and apply herbicides that target those weeds. Ensure that your timing of applications are correct not only to effectively manage weeds but also to reduce phyto toxicity effects to the cranberries. Product patents expire and then other companies reproduce them at lower costs so you can take advantage of those savings by buying generic. Please be advised that if you have a problem, there will be no recourse for you with generic products. Look into potential rebate programs offered by companies if you use pesticides from the same maker throughout the season. Only add adjuvants when required or specifically recommended by consultants or UW Extension agents.

Cranberry Crunch (Continued)

By Suzanne Arendt

RedForest Crop Consulting, LLC

(Continued from p. 4)

IPM programs:

Hiring a consultant to help manage your farm pests problems is usually worth the minimal cost in the current year and over time. Typically, the fee you pay your consultant is less than the money they save you in pesticide costs and land stewardship benefits. Talk with your consultant and try to come to the best agreement that works for both of you (ex. A payment plan) because just as you are in financial constraints, your consultant is probably facing similar economic challenges. Discuss the possibilities of implementing cultural practices on a portion or all of your marsh to control pests. Consider



having your consultant alter the economic thresholds allowing slightly more pest pressure can ensure that your pests are managed without causing long-term control problems. Quality of fruit continues to be a priority for handlers; and if there are incentives attached to higher quality fruit, your consultant can help you achieve these incentives by tailoring your IPM program to allow for this on certain acres of the farm, while managing other areas differently.

- Saving money on your farm is necessary and not always easy to do. Paying down debt or interest only to the banks with low returns on your crop is stressful and difficult for many. The cranberry industry needs to work together to return prices to profitable levels for everyone. Moderate peaks and valleys are expected in agricultural pricing and we need to stabilize the cranberry pricing to eliminate the very high highs and the very low lows. It's possible, but we all need to work together. ❖❖❖

References to products in this publication are for your convenience and are not an endorsement of one product over similar products. You are responsible for using pesticides according to the manufacturer's current label directions. Follow directions exactly to protect the environment and people from pesticide exposure. Failure to do so violates the law.

Address Correction

If you have any address corrections, additions, or deletions, please let us know.

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(We will also remove your name from the paper copy list.)

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