Integrated
Cranberry Crop
Management
for Wisconsin

Cranberry

Crop Management Newsletter

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Why Research?

Agricultural commodity groups have a long history of supporting production related research at land grant universities. Almost every state has a commodity commission of some sort that collects research funds from growers and then competitively allocates them to researchers to conduct research that will benefit growers.

Federal legislation that established land-grant colleges and agricultural experiment stations in every state set the stage for research with the purpose of supporting agriculture in the United States. Faculty members were hired to do research on various crops. As the work progressed researchers began to specialize. Some studied insect pests; others studied diseases, or soil fertility, or economics and marketing, or breeding and genetics. Departments were developed to create better collaboration among colleagues working in similar areas. The Cooperative Extension Service was created to take the research results to growers and to serve as liaisons between growers and researchers.

Federal funds were allocated to support agricultural research through the agricultural experiment stations. These funds supported technical staff, graduate students and other supplies and expenses such as travel. Over time as our economy has changed and as the political climate and agendas have changed funds for agricultural research has declined. States also allocated funds for agricultural research and these funds have also declined over time. Further, existing funds have often been redirected to molecular biology programs that are able to attract outside research grants and that are highly productive measured by papers published in scholarly journals, scientists trained, and patents obtained.

Today support for applied research that will directly benefit producers largely comes from commodity groups. One could argue that producers are the primary beneficiaries of this research so it is appropriate that they should pay for it. One could also argue that the American public pays less for food than in any other country and should pay for this benefit through tax supported research.

Agricultural research conducted over the past century has made American agriculture the most productive and efficient in the world. In some cases this productivity has led to

overproduction and low prices. However, it would be unfair to assume that all agricultural research is aimed at increasing production. Most current research is aimed at increasing profitability, not productivity.

The cranberry IPM program that Dr. Mahr started some 20 years ago clearly was aimed at improving profitability. As growers monitor pest populations in their beds and know how the populations compare to economic thresholds the timing of pesticide applications is improved and the number of applications will (hopefully) decline. Thus the grower saves the cost of the pesticide plus the associated application costs.

My research on phosphorus is aimed at reducing the amount of phosphorus fertilizer applied to cranberries. Over time this should reduce the costs of fertilizing beds and increase grower profits.

Dr. McCown's breeding program has emphasized breeding cranberries with improved color while maintaining productivity. Cultivars that are "grower friendly" like 'Stevens' but that have improved color would allow growers to consistently receive handler's color incentives, thus improving profitability. Breeding programs in other states emphasizes disease resistance that will reduce fungicide applications and save growers money.

With pesticides going through the re-registration process research funds have served to retain registrations and to provide data to support registration of new materials. This work doesn't increase yields, but allows growers to continue to manage major pests in an economical way.

Today agricultural research is not directed primarily at increasing yields. I am convinced that given our current cranberry genetics that we are approaching our maximum sustainable yields. What we need to look at now is improving profitability by reducing costs and improving efficiency.

The research community is very appreciate of funding provided by the Wisconsin Cranberry Board, The Cranberry Institute, and the handlers. These funds have allowed continued research that supports the cranberry industry. With continued research to solve industry problems the cranberry industry should be viable for the foreseeable future.

Teryl Roper, UW-Madison

Roundup Reminders

With flowering over and fruit setting growers will once again be thinking about wiping weeds with Roundup. Be sure to read the product label before you begin an application. A few points warrant reminders:

- Coverage is the most important variable. You must have good coverage of the weed's leaf surface in order to get enough material throughout the plant to kill it completely. Dyes added to the wiping solution help you tell where you have wiped.
- Increasing concentration does not make Roundup more effective. Concentrations that are too high may be detrimental as they can kill the contacted tissue before enough is translocated to kill the roots. A 10 to 20% Roundup solution works for most people.
- Cut stump applications are allowed for woody brush. Cut the plant off then treat the stump with a Roundup solution. Making an emulsion with lanolin and then applying to the stump will help keep the Roundup on the surface so it is absorbed for a longer period of time.

- Adding ammonium sulfate per the label specifications can help entry of the active ingredient and will improve performance.
- Roundup requires a 6 hour rainfree period following application to get into the plant. Don't apply if rain is imminent.
- Remember the 30 day PHI.
- Wear appropriate PPE. This includes a long sleeved shirt and long pants and shoes plus socks. Waterproof gloves are not required, but are prudent.
- Keep the wiper surface clean. If dirt, weeds or other debris covers the wiper too little solution will accumulate on weed leaves.

Teryl Roper, UW-Madison Extension Horticulturist

The pure, the bright, the beautiful
That stirred our souls in youth,
The impulses to wordless prayer,
The streams of love and truth,
The longing after something lost,
The spirit's yearning cry,
The striving after better hopes—
These things can never die.

The timid hand stretched forth to aid
A brother in his need;
A kindly word in grief's dark hour
That proves a friend indeed;
The plea for mercy softly breathed,
When justice threatens high,
The sorrow of a contrite heart—
These things shall never die.

Let nothing pass, for every hand
Must find some work to do,
Lose not a chance to waken love—
Be firm and just and true.
So shall a light that cannot fade
Beam on thee from on high,
And angel voices say to thee—
"These things shall never die."

Charles Dickens

PRE-HARVEST INTERVALS

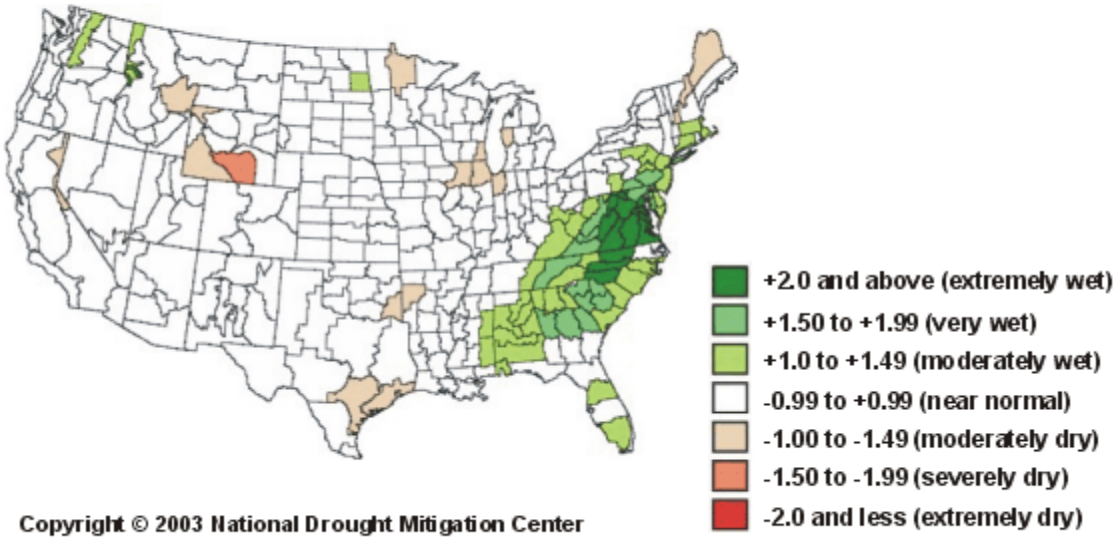
While harvest is still some time off, now is the time to think about pre-harvest intervals to assure that any pesticide residues remaining on fruit are within the legal tolerances. A listing of the pre-harvest intervals and re-entry intervals for pesticides labeled for use in Wisconsin is found on page 11 of *Cranberry Pest Management in Wisconsin* (A3276). You'll want to review this information throughout the year as you make decisions about what pesticides to apply and when. Part of the table is reproduced below.

Pesticide	Preharvest interval (days)
Aliette	3
Abound	3
Bravo	50
Carbamate	<28 d after mid bloom
Confirm	30
Diazinon	7
Dithane & EBDC's	30
Funginex	60
Fusilade 2000	365
Guthion	21
Imidan	14
Lorsban	60
Mancocide	30
Marlate	14
Orbit	45
Orthene	75
Poast	60
Ridomil gold	45
Roundup	30
Select	30
Sevin	7
Stinger	50
Touchdown	365

Please note that most of the pre-emergent herbicides are not listed in this table because if applied during the dormant period either in late fall or early spring the pre-harvest interval is not relevant.

Teryl Roper, UW-Madison Extension Horticulturist

6-month SPI through the end of June 2003



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