

A newsletter for the cranberry growers of Clement Pappas & Co., Inc.

Uniform Irrigation Key to Good Fruit Size

By Brooke Peterson



Photo courtesy of Mike Rucier

Adequate and uniform soil moisture is key to obtaining good fruit size. If the bloom is late (e.g. Wisconsin), that puts even more downward pressure on potential fruit size. Cool wet weather can be followed by hot dry weather. Regardless of which growing area you are in, you need to be doing 'what you can' to optimize the remaining potential for good fruit size in order to maximize yield.

One key to good fruit size, emphasized by Dr. Carolyn Demoranville from the MA Cranberry Research Station is to maintain good uniform moisture in the cranberry bed. Good uniform soil moisture is

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Dimitri Pappas joins Clement Pappas & Co., Inc. as General Counsel

Most cranberry growers have met Dean and Peter Pappas. The following comments are excerpted from an article by Dean Pappas that appeared in the May edition of the 'Pappas Pipeline' company-employee newsletter.

Dean introduces members of the third generation of the Pappas family.

It is with great pleasure that I announce that my son Dimitri has accepted the position of General Counsel with the Clement Pappas Company. Dimitri joins his cousin, Clement, who is our Plant Manager in Ontario, California, as the second member of the third generation of the Pappas family to join the Clement Pappas Company.

Both of these young men have distinguished themselves at every step in their short careers. Clement is a cum laude graduate of Lawrenceville and Duke University, where he excelled majoring in both engineering and economics. He worked for Arthur Anderson as a project engineer before joining the Clement Pappas Company.


Dimitri is a magna cum laude graduate of Princeton University and a graduate of Harvard Law School. He has been an associate at Ballard, Spahr, Andrews and Ingersoll, a large Philadelphia law firm. During the past year he was on loan to the Philadelphia Board of Education, assisting them with contracting policies and practices. He has written articles that have been published in the Food and Drug Law Journal and the Journal of Affordable Housing.

Young people with these academic credentials usually do not work for food processing companies such as Clement Pappas. They typically go to Wall Street where they can earn considerably more money than we are



able to pay. Clement and Dimitri are here because they see a great opportunity for growth and success for both the company and for themselves. They are committed to our mission and goals: producing consistently high quality products that represent good food value.

It is possible that in the future we will have other members of the third generation joining the Clement Pappas Company. My daughter Aleni has just completed her Masters at New York University in Food Management and is assuming a management position with a large brokerage firm in the food industry.

Peter's middle son, Edward, after having worked for a laboratory for two years, has begun a Master's program at Rutgers in Food Science. Peter's youngest son, Zachary, has worked part time at the company when he has time available from his college studies. 

Stinger Herbicide: OK to Use Again, 1-Week Post Bloom

The latest Cranberry Institute Newsletter corrects an error on the 2004 Cranberry Pesticide Charts. The 2004 Charts mistakenly state that foliar applications of Stinger, the new herbicide registered in the U.S. last year for use on cranberry, “must be made prior to bud break or after harvest”. For WI, MA and NJ, the charts should state, “Do not apply Stinger from one week prior to one week after bloom”. Cranberry plants are more sensitive to Stinger applied in the spring, prior to bloom, before and/or during the crop’s annual flush of growth, and so the application rates should be adjusted accordingly. For WA and OR, the charts should state, “Do not make broadcast foliar applications of Stinger between budbreak and fruit-set”. ☞

Receiving Station Updates

Article and photos by Rob Hiller

Each year the cranberry receiving stations need to be prepared to process a lot of fruit in a short time. That means that the equipment and facilities have to be maintained in top condition. Renovations are under way at the Mass Receiving Station to install bin shakers on each line in the facility. This will allow each bin to have its maximum weight capacity thus reducing the number of bins

needed. Other projects include coating the roof with epoxy, repairing and painting the older key line, more improvements to the computer system, and installation of a state-of-the-art electrical capacitor system to help conserve our power needs.



Allen King modifies the cranberry line to accommodate the new bin shakers



Cranberry grower and part-time Clement Pappas employee, Darren Morris, applies a coating to the receiving station roof.

Improvements are also slated for the Gardner Receiving Station in Wisconsin. A new pond and cleaning line will complement the improvements made to the binning line last year. Construction will start in July. ☞

Summer Meetings:

- 8/4 WSCGA Summer Field Day, Wisconsin Rapids, WI
- 8/20 WSU Cranberry Field Day, Cranberry Res. Stn., Longbeach, WA
- 8/22 CMC Meeting on Generic Promotion Program, Longbeach, WA
- 8/23 CMC Summer Meeting, Astoria, OR
- 9/11 MA Clement Pappas Grower Picnic

Uniform Irrigation Key to Good Fruit Size

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determined by the amount and frequency of irrigations and the CU (coefficient of uniformity- a measurement of the evenness of water applications).

Cranberries can use up to 0.20- 0.25 acre-inch of water per day during the hottest driest, windiest weather (1 inch in 4-5 days). The standard recommendation is for vines to receive an inch per week from either rain, capillary action from groundwater, irrigation or some combination of these. However, in the highest demand conditions, utilization can be closer to 1.5 inches or even more. If provided by irrigation, water should be applied in at least ½ inch increments to ensure good infiltration into the soil.

While adequate irrigation is essential, too much can also be a problem. Research in MA showed that in beds that are overly saturated, fruit set was reduced compared to nearby areas of the bed where irrigation was only applied when warranted based on monitoring the water table and soil moisture (using tensiometers).

What can you do specifically? Make sure that the vines are not stressed. Make sure that you are irrigating frequently enough. Early morning irrigations minimize the amount of time that the plants are wet. What about the CU (coefficient of uniformity)? Naturally, the best fix is a well-designed irrigation system that minimizes “donuts” around sprinklers. Short of installing a new sprinkler system, manage system pressure and check nozzles for wear. Uniformity will be greatest under low-wind conditions. The most important thing is to closely monitor soil moisture and react accordingly. ☞



**THE
CRANBERRY
INSTITUTE**

Working for Everyone's Benefit

*By Jere Downing,
Executive Director, Cranberry Institute*

The Cranberry Institute was first established in the early 1950's to serve as a marketing arm of the cranberry industry. At that time, most of the fruit was sold fresh during the fall and early winter, and the range of juice products had not yet been developed.

In the late 1980's, the Cranberry Institute was reactivated following a several year break and reorganized around a different mission. A new Board of Directors was created and a professional management firm based in Georgia was consigned to administer the day-to-day activities. The new mission was intended to serve all the growers and all the handler/processors as an arm's length advocacy organization (sort of a combined grower/trade association) representing the entire industry.

I was hired by the Board of Directors in 1991 as the Executive Director with an office in MA to transition from the professional management firm. The key expectations of the CI at that time were to fund and coordinate research dealing with cranberry production, serve as a coordination point for the company members and the area grower associations, and to provide a source of communication through meetings, conference calls, and newsletter to all growers and company stakeholders. We are currently a two-person staff: I am the Executive Director; Mark Fields is the Manager – Research and Communication. We also work with Dr. Martin Starr, Health Advisor, as a consultant.

The core mission of the Cranberry Institute since it's reactivation and reorganization in the late 1980's has been aimed at projects that benefit the growers in crop production while avoiding environmental controversy. Many of the environmental projects are less well known because the outcomes were favorable. A few examples: Groundwater monitoring in 6 major growing areas showed very few pesticide detects out of thousands of samples; Wildlife Utilization surveys in several growing regions documented the abundant and diverse wildlife that inhabits the land encompassed by the entire farms, not just the beds; Stream and Pond Invertebrate surveys demonstrating that waters utilized by cranberry growers were rich in aquatic



life and not negatively impacted by agricultural chemicals; Spray Drift Monitoring indicated that application techniques including aerial, boom, and chemigation did not result in significant off-target movement of spray particles, however, mist bloomers could result in drift movement beyond the beds.

Growers have probably been best made aware of the CI's efforts to obtain new pesticide registrations as well as maintain important existing registrations for cranberry production. Working closely with university researchers and extension specialist, as well as the USDA cooperative program known as IR-4, and coordinating funding with the area grower associations has resulted in a number of new registrations in recent years. While some chemicals have been discontinued for cranberries (and many other crops), we have maintained many current registrations while at the same time successfully added new ones. Our good relationship with EPA's

Office of Pesticides by partnering with the Pesticide Environmental Stewardship Program has given us the opportunity to work within the registration system and educate EPA managers and reviewers to the cranberry production techniques and pest problems. Our efforts to work with the pesticide registrants has also helped obtain new registrations: Stinger herbicide is a good example where communicating to Dow the growers' willingness to sign liability waivers allowed the product to be registered on cranberries. Meeting with EPA and the registrant to get a chemigation statement on the new Intrepid label is another example.

Cranberry Health Research and Communication is the newest component of CI's program. With our funding partner, the Wisconsin Cranberry Board, CI has co-funded and coordinated 25 or so health research projects over the past 5 years. This area of research is much more complicated than crop research, and credibility is essential to a successful communication program to health professionals and the general public. We are learning that the cranberry is a powerhouse of health benefits, it's one of the fruits highest in antioxidant content which slows the aging process and offers heart health, while at the same time cranberry is unique in protecting from urinary tract infections and blocking bacteria in other parts of the body. All of this information is based on a solid research program, numerous scientific publications and presentations. We are working very closely with the Cranberry Marketing


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The Cranberry Institute



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Committees Generic Cranberry Promotion Program to get the word out on cranberry's powerful health benefits to the health care community and consumers in a concerted effort to help boost cranberry sales and consumption.

Support for all of these activities as well as maintaining a stable, productive organization comes from the cranberry handlers/processors who we call our Supporting Members. These are the companies that buy your cranberries, Clement Pappas being one of our solid Supporting Members, and they support our industry-wide organization on behalf of their growers. We are a totally volunteer dues organization, so our consistent support from the member companies has been based on our ability to conduct meaningful and successful programs for the growers and the member companies.

Visit our website at www.cranberryinstitute.org and see our bimonthly newsletter CI News, as well as articles in area association newsletters and this newsletter from Clement Pappas Co. 

Pesticide Application Histories

 Don't forget that each year, prior to delivering berries to the Receiving Stations, Clement Pappas needs a copy of your pesticide application history for the year. No pesticide application history- no fruit delivery. Having this information in hand is essential as we assure our customers that we are delivering a safe product to them. Each grower should have already received a copy of the pesticide application history form. If you need a form or have questions on this process, contact Jayne Sojka, Lady Bug IPM, at 715-884-2734. 



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