



Cranberry Station Newsletter

NOVEMBER 2008

UMASS CRANBERRY STATION

1 STATE BOG ROAD

P.O. BOX 569

EAST WAREHAM, MA 02538

<http://www.umass.edu/cranberry>

Fall fertilizer?

This is one of those years that has growers asking - should I apply fall fertilizer? The answer for many growers may be a cautious yes. That being the case - how should you decide if this is needed on your bog and if so, what should you use? First look at your vines, crop, and fertilizer use so far this year. Follow the decision tree below to decide if fall fertilizer is right for you:

<u>Question</u>	<u>Answer</u>	<u>Fall fertilizer?</u>
Are your vines lush or long?	Yes	No
Did you have a big crop?	No	No
Have you already applied more than 30 lb N (50 lb for hybrids)?	Yes	Probably not
Deep organic soil with little need for early fertilizer normally	Yes	Probably not

But if your fertilizer use was modest, the vines are not pumped up, and you had a great crop, then consider using fall fertilizer. Choose a material and apply it between early and mid-November when the soil has dried from harvest but well ahead of the winter flood.

So what to use and how much? My best recommendation is to apply 5 lb/acre N, little or no P and as much K as you can find among the available fertilizer choices. The N will build up the vines, P is not needed in the fall (natural release from the soil is occurring), and added K may enhance hardiness. Also, N and K are the two elements that are removed in the greatest quantity in harvested fruit; P is present at much lower concentrations in the berries.

Most growers try to apply in 100 pound increments for ease and uniformity of application, so let's discuss fall fertilizer choices on that basis. First, in order to conform to the 20 lb/acre P recommendation, calculate how much P you have applied so far this season.

Here are some examples:

You used 300 lb/acre 18-8-18 — $300 \times 0.08 \times 0.44 = 10.56$ lb P/acre

You used 250 lb/acre 18-8-18 — $250 \times 0.08 \times 0.44 = 8.8$ lb P/acre

You used 300 lb/acre 13-13-13 — $300 \times 0.13 \times 0.44 = 17.16$ lb P/acre

Now look at your choices of fertilizer and determine how much N, P, and K (in pounds) would be applied in 100 lb of fertilizer material.

Choice	N	P	K
5-15-30	5	6.6	24.9
3-13-26	3	5.7	16.6
5-10-10	5	4.4	8.3
18-8-18	18	3.5	14.9
8-32-16	8	14.1	13.3
6-24-24	6	10.6	19.9
10-10-10	10	4.4	8.3
13-13-13	13	5.7	10.8
5-6-20*	5	2.6	16.6

 *custom blend

Right away we see that some are just too high in N. For example the 18-8-18 would need to be applied at only 28 lb/acre to give 5 lb/acre N, while the 13-13-13 would go on at 38 lb/acre and the 10-10-10 at 50 lb/acre. While it might be possible to get good application at the 50 lb/acre rate, lower rates are definitely not feasible.

Some of the choices would give around the 5 lb/acre N rate with 100 lb/acre of fertilizer but would add much more P than is desired, creating an environmental risk; these are 8-32-16 and 6-24-24. While both give about the right N and fairly high K, seasonal P will exceed 20 lb/acre even if you used 18-8-18 during the season (see previous page) with these choices. If you choose the 8-32-16 at 75 lb/acre (to get the N down closer to the recommended 5 lb/acre), you still add more than 10 lb P/acre and now only about 10 lb K/acre.

The best off-the-shelf choices are 5-15-30 (good N, lots of K, moderate P) or 3-13-26 if you want less than 5 lb/acre N. I do not recommend using 3-13-26 at higher than 100 lb/acre rates to boost N since then you are paying for more materials to apply and again increasing P. The 5-10-10 is a good choice but a bit lower in K. This should be fine if your vines aren't stressed or crunchy. If they are, I would prefer the 5-15-30 to get the additional K.

The best material for low P in the table is the 5-6-20 custom blend. This gives very low P, target N and substantial K.

What about fish fertilizer? An application of 5-10 gal/acre can replace granular fall fertilizer. If you have pop-up sprinklers and can apply this post-harvest, that is an additional option. Remember, this fertilizer is taken up through the roots, so water it in enough to wash it to the soil.

Finally, what about zero P fertilizers? These are predominantly formulated for turf and most have 25-30 lb N in a 100 lb/acre application (first number is 25 to 30). Since you only need about 5 lb N/acre, you would have to use these in very small amounts (~20 lb/acre fertilizer). This is just not feasible with our application methods.

The bottom line — if you choose to use fall fertilizer, my top recommendations are 100 lb/acre of either 5-15-30, 5-10-10, or 5-6-20 (this is my top choice - if you can get it).

CAROLYN DEMORANVILLE

**Registration Form for Cranberry Management Update
Thursday, January 22, 2009 7:30 AM - 4 PM
Radisson Hotel Plymouth Harbor**

Please register for the meeting using this form.

COMPANY _____

CONTACT _____

PHONE _____

**Return with payment by:
January 14th, 2009**

NAMES OF ATTENDEES _____

Include check made out to:
UMASS
In the amount of:
\$20 per person.

Return to:
**UMass Cranberry Station
P.O. Box 569
East Wareham, MA 02538**

Attach additional sheets as necessary.

**CRANBERRY STATION NEWSLETTER & REVISED 2009 CHART BOOK RENEWAL
YOU MUST RETURN THIS FORM EACH YEAR TO STAY ON OUR MAILING LIST!!**

The Cranberry Station Newsletter is provided **FREE to all MA growers, cranberry researchers and IPM consultants nationwide.** Annual subscription fee of \$15 is required for out-of-state growers and industry personnel. All persons wishing to receive this newsletter (whether paying or not) must complete and return this renewal form to maintain a subscription. Include a check (made out to UMass) with the renewal form if you are out-of-state or are industry personnel. **All subscriptions sent by email, including out-of-state and/or industry personnel are FREE.**

**Everyone must respond to this notice by Dec. 31, 2008
or your name will be taken off of our mailing list for 2009!**

NAME _____

Please check one:

COMPANY _____

Owner _____

ADDRESS _____

Employee _____

TOWN _____

Researcher _____

ZIP _____

Consultant _____

Industry _____

Private sector _____

PHONE _____

**Return to: UMass Cranberry Station
P.O. Box 569
East Wareham, MA 02538**

EMAIL _____

Total number of acres _____

Please Choose One!!! Postal delivery _____ or Email _____

PLEASE REMEMBER TO FILL OUT THE FRONT
SIDE AND RETURN

**CRANBERRY MANAGEMENT UPDATE
RADISSON HOTEL PLYMOUTH HARBOR
Thursday - Jan. 22, 2009
7:30 AM - 4:00 PM**

This meeting offers an opportunity for the Cranberry Station faculty and staff to present the results of our research to the grower community, focusing especially on project results that have reached the grower-implementation stage.

The full meeting program will be announced in the next newsletter. However, we have confirmed two guest speakers at this time. Dr. Peter Oudemans of Rutgers University will present his research regarding fairy ring. Marc Ballaud of Aquatic Weed Control Technology, Inc. (Sutton, MA) will discuss options for preventing and controlling aquatic weeds in irrigation ponds.

\$20.00 charge includes a morning coffee, mid-morning coffee and snacks, and handouts.

4 contact hours are being requested for Pesticide recertification credits in the cranberry category.

SIGN-UP ON PAGE 3

**Training Workshops to Prepare for
Pesticide Applicator License Exams**

This workshop, which is sponsored by Pesticide Education, UMass Extension, is designed to help individuals **prepare** for the pesticide applicator license exam. This workshop provides a review of the study manuals and is not intended to replace a thorough reading of the study manuals on your own. Dates for this training here at the Cranberry Station Library are set for January 29 - 30; March 5 - 6; and May 7 - 8.

To register for these workshops: contact Natalia Clifton at 413-545-1044.

**2009 UMASS GARDEN CALENDAR
NOW AVAILABLE !**

Single copies of the **2009 UMASS GARDEN CALENDAR** are \$12.00 each. This price includes shipping & handling. To order your calendar today go to www.umassgardencalendar.org.

CROPSAFETY SURVEY !!!

During the first week of November, you will be receiving a survey to assess your thinking about fresh produce safety. UMass Extension and the UMass Department of Nutrition, with funding from the Massachusetts Department of Agricultural Resources (MDAR), have teamed up to implement a Good Agricultural Practices (GAP) certification program for fruit and vegetable growers in Massachusetts. To achieve this goal, your help is needed. We hope you will take the 15 minutes or so to complete it. The results from this survey will direct the designing of a GAP food safety program that meets the needs of Massachusetts fruit and vegetable growers like you, i.e. the educational resources developed for the growers during the program will reflect the results of the research efforts of the project.

If you do NOT receive a copy by the 24th of November, 2008 and are interested, please contact David Nyachuba at 413-545-0552 or email him at dgn@nutrition.umass.edu.

Thank you.

**RICH BONANNO & DAVID NYACHUBA
UMASS EXTENSION & UMASS DEPARTMENT OF NUTRITION**

**CAROLYN DEMORANVILLE
STATION DIRECTOR**

SEE INSIDE!!!!

- * FALL FERTILIZER
- * WINTER MEETING SIGN – UP FORM
- * 2009 NEWSLETTER RENEWAL FORM
- * PESTICIDE TRAINING WORKSHOP DATES
- * UMASS GARDEN CALENDAR WEB-SITE
- * CROP SAFETY SURVEY NOTICE

MARK YOUR CALENDARS!!!

2009 UMass Cranberry Station Meetings

**January 22 - Cranberry Update Meeting
Radisson Hotel - Plymouth**

**April 03 - Pesticide Safety
Elk's Hall - E. Wareham**

CALLISTO SURVEY COMING SOON!!

Please be on the lookout for a survey arriving in your mailbox in early November. I am trying to collect information on your experiences using Callisto for weed control in 2008. The survey will ask for some specifics about your dates, rates and methods of application, so please keep your records handy when filling out the survey. **Please return the survey as soon as you can**; a self-addressed stamped envelope will be provided. All information will be collated and I will present the results of the survey at the January Update meeting in Plymouth.

Information gathered from this survey will help us in many ways including designing research to answer new questions, writing good language for future Callisto labels, and providing recommendations to you for the best way to use this new herbicide.

Thank you for your cooperation ahead of time!!

**HILARY SANDLER
IPM/WEED SPECIALIST**

UMASS EXTENSION
UNIVERSITY OF MASSACHUSETTS
P.O. BOX 569
EAST WAREHAM, MA 02538
OFFICIAL BUSINESS