

# Cranberry

## Crop Management Newsletter

  
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### This Issue:

#### 2012 Tissue Sampling and Analysis

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### 2012 Tissue Sampling and Analysis

By Rebecca Harbut, UW-Extension Fruit Crops Specialist

As we all know, this season got off to a VERY early start and plant development continues to be early. Typically, we would collect our tissue samples between August 15-Sept 15, as this has been the time that plant nutrient status seems to be the most stable. However, this is far from a typical year! If we go by Growing Degree Days, we are currently about 2 weeks ahead of last year (Table 1), so I would suggest that tissue sampling begins the first week of August. We saw a similar situation (though not as extreme!) in 2010 when we had an early spring and most of the tissue samples indicated low N levels. This was likely due to collecting samples at a later growth stage than typical, when tissue N status has started to decline. We are tracking the nutrient status of vines and will continue to do so in order to help interpret the tissue analysis this year.

**Table 1. Growing Degree Day Accumula-**

Date	2011	2012
July 1	990	1498
July 15	1345	1651
August 1	1864	

#### What to collect.

The proper plant part to sample for tissue analysis in cranberry is new upright growth. If you collect both current season growth and one-year-old growth, your samples may show a deficiency since nutrient levels tend to be lower in one-year-old growth. The age of tissue can have a profound effect on the results obtained and on the interpretation of the results.

**How to collect.** Only a few handfuls of uprights are taken as samples for tissue analysis.

At the laboratory only about a teaspoon of dried and ground tissue is actually analyzed. The sample must be representative of the entire bed. Don't take samples only from one corner or along one edge of a bed. It is best to start in one corner and walk to the opposite corner collecting 4 or 5 samples along the way. Alternatively, you could walk in a zigzag pattern across a bed.

Try to sample uprights that represent the bed. The uprights you collect should look like the remaining uprights in the bed. Don't sample overly vigorous or sickly vines. If you are sampling for a particular problem, also collect normal vines for comparison.

Once the tissue sample has been collected it should be prepared for shipment or delivery to the lab. Any soil or foreign material should be dusted off the sample. DO NOT WASH the uprights as this will remove soluble nutrients and will give a false analysis. Place the sample in a small paper bag or paper envelope. If the sample is to be mailed, allow the sample to air dry for one day to prevent mold from forming during shipment. Place the dry sample in a paper envelope for shipping. Do not use plastic or cellophane bags since these retain moisture and promote molding. Try to ship samples early in the week to avoid samples deteriorating in warm post offices over the weekend. Plant samples that are delivered to the lab do not need to be air dried if they are delivered within a day after sampling. Please submit an information sheet with each sample describing the crop type, date sampled, and other information necessary to make the best interpretation of the lab results.



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Cranberry Crop Management Newsletter  
Wood County UW-Extension  
400 Market Street, Courthouse  
PO Box 8095  
Wisconsin Rapids, WI 54495-8095

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## UW-Extension Cranberry Specialists

Jed Colquhoun  
UW-Extension Fruit Crops Weed Scientist  
1575 Linden Drive  
Madison, WI 53706  
(608) 890-0980  
jed.colquhoun@ces.uwex.edu

Rebecca Harbut  
UW-Extension Fruit Crops Specialist  
297 Horticulture; 1575 Linden Drive  
Madison, WI 53706  
(608) 262-6452  
rebecca.harbut@ces.uwex.edu

Patty McManus  
UW-Extension Fruit Crops Specialist  
319B Russell Labs; 1630 Linden Drive  
Madison, WI 53706  
(608) 265-2047

Matthew Lippert, Agricultural Agent  
Wood County Courthouse  
400 Market Street; P. O. Box 8095  
Wisconsin Rapids, WI 54495-8095  
(715) 421-8440  
matthew.lippert@ces.uwex.edu

Shawn Steffan, Research Entomologist  
USDA-ARS  
UW-Madison, Dept of Entomology  
1630 Linden Drive  
Madison, WI 53706-1598  
(608) 262-3227  
steffan2@wisc.edu

Juan E. Zalapa, Research Geneticist  
299 Horticulture, 1575 Linden Drive  
USDA-ARS Vegetable Crops Research  
Madison, WI 53706  
608-890-3997

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