

UMass Extension

CENTER FOR AGRICULTURE

UMass Soil & Plant Nutrient Testing Laboratory

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USE THIS FORM FOR PLANT NUTRIENT SAMPLE SUBMISSION FOR SMALL FRUIT. See page 2 for sampling instructions and description of services.

Main contact:	Send copy to:	Method of receiving results <input type="checkbox"/> US Mail (please include \$2 per order for postage & handling) <input type="checkbox"/> E-mail Send copies to:
Name:	Name:	
Business Name:	Business Name:	
Street Address:	Street Address:	
City, State, and Zip	City, State, and Zip	
Phone:	Phone:	
E-mail address:	E-mail address:	

LAB # (Leave blank)	Sample ID (You create this)	Test requested	
		Standard (\$30)	or Standard w/o N (\$22)
		<input type="checkbox"/>	<input type="checkbox"/>

Order Total \$ _____

<p><u>Sample Information</u> Crop, management and soil information Date Sampled: _____ Crop: _____ Variety: _____ Age: _____ Plant spacing or population: _____ Growth stage for grapes: <input type="checkbox"/> bloom <input type="checkbox"/> véraison Lime: _____ tons/ac applied on: _____ (date) Fertilizer applications rate(s) and date(s): _____ _____ _____ Soil Series (if known): _____</p>	<p><u>Complete this section for problem diagnosis</u> If leaves are discolored, does color variation occur <input type="checkbox"/> along leaf margins <input type="checkbox"/> interveinal <input type="checkbox"/> in spots <input type="checkbox"/> over entire shoot Leaves first affected at shoot: <input type="checkbox"/> tip <input type="checkbox"/> base <input type="checkbox"/> over entire shoot Symptoms first seen: _____ (month & growth stage) Describe additional symptoms: _____ _____ _____</p>
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.Sampling Instructions

General Sampling Procedure:

For a routine evaluation of plant status, we compare nutrient levels to data collected in scientific literature. It is extremely important to collect samples at the growth stage and from the plant part for which plant nutrient data is available.

Specific sampling instructions for most small fruit grown in New England are provided here. For those not listed, it is generally best to sample the most recently developed leaves from the upper portion of the plant.

Samples should reflect areas with uniform management and soil type. Where differences occur within a block, sampling should be refined to represent these changes. Samples should represent only one cultivar, but should be collected from several different plants within the block.

When you suspect a nutrient deficiency, always attempt to collect one sample from plants in the affected area and a second sample from plants of the same variety in an area showing normal growth. This will allow for direct comparison of nutrient levels and may aid in diagnosing specific nutrient deficiencies.

When collecting tissue samples, avoid diseased or dead plant material, tissue damaged by equipment or insects, and plant tissue stressed by excessive heat, cold, or moisture.

After collecting your composite sample, rinse the tissue with clean water to remove pesticides, foliar applied nutrients, and soil particles. Place wet samples on a clean paper towel to dry. Once dry, carefully place sample in a **small paper bag labeled with your sample ID** and complete the submission form. Hand deliver or mail the sample, submission form, and a check or money order payable to UMass to the address listed at the top of this form.

Grapevines

Samples should be collected at Full Bloom or Véraison

- Full Bloom: collect 80 to 100 petioles from leaves located opposite the first or second flower cluster from the bottom of the shoot (only 1 to 2 petioles from any vine sampled).
- Véraison (70 to 100 days after full bloom): collect 80 to 100 petioles from the youngest fully expanded leaves (usually located 5 to 7 leaves back from the shoot tip).
- Rinse petioles well, air dry and gently place in paper bag.

Strawberries

- Sample the first fully expanded leaves after renovation, generally late-July to early-August.
- Collect 40 to 50 leaves, remove and discard petioles, rinse leaves well, air dry and gently place in paper bag.

Brambles

- Sample leaves on non-fruiting canes in early- to mid-August.
- Collect 50 to 60 leaves, remove and discard petioles, rinse leaves well, air dry and gently place in paper bag.

Blueberries

- Sample leaves during the first week of harvest.
- Collect 40 to 50 leaves, remove and discard petioles, rinse leaves well, air dry and gently place in paper bag.

Cranberries

- Samples should be collected between mid-August and mid-September.
- Collect the top 2 inches of at least 50 randomly selected new upright tips (leaves and stems, mixed flowering and vegetative). Remove berries.
- Rinse tissue well, air dry, and gently place in paper bag.

Plant Nutrient Test Descriptions & Fees

Standard Nutrient Test: \$30.00

A determination of the Total Tissue P, K, Ca, Mg, Zn, Cu, Mn, Fe, and B. Analysis by ICP Spectroscopy of acid wet digestion in Nitric Acid, Hydrochloric Acid, and Hydrogen Peroxide in a block digester. Also included Total Nitrogen by catalytic combustion.

Standard Nutrient Test without Total Nitrogen: \$22.00 Same as standard tissue test but without Total Nitrogen.