



**Soil and Plant Nutrient Testing Laboratory**

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**USE THIS FORM FOR PLANT NUTRIENT SAMPLE SUBMISSION FOR TREE FRUIT FOR UMASS RECHARGE. See page 2 for sampling instructions, fees, and description of services. Complete Recharge information requested below.**

<b>Main contact:</b>	<b>Principal Investigator:</b>	<b>Method of receiving results</b>  <input type="checkbox"/> US Mail (please include \$2 for postage & handling)  <input type="checkbox"/> E-mail  <input type="checkbox"/> Copy Results to PI
Name:	Name:	
Business Name:	UMass Department:	
Street Address:	Street Address:	
City, State, and Zip	City, State, and Zip	
Phone:	Phone:	
E-mail address:	E-mail address:	

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

**Sample Information:**  
**Crop management and soil information**  
 Date Sampled: \_\_\_\_\_  
 Crop: \_\_\_\_\_ Variety: \_\_\_\_\_  
 Rootstock: \_\_\_\_\_ Age: \_\_\_\_\_ (years)  
 Tree spacing or population: \_\_\_\_\_  
 Tree vigor is:  poor  moderate  vigorous  
 Lime: \_\_\_\_\_ tons/acre applied on: \_\_\_\_\_ (date)  
 Fertilizer rate: \_\_\_\_\_  lbs./tree  lbs./acre  
 Application date(s): \_\_\_\_\_  
 Were foliar nutrients applied this season:  Yes  No  
 If yes, list rate(s) and date(s): \_\_\_\_\_  
 Soil Series (if known): \_\_\_\_\_

**Complete this section for problem diagnosis**  
  
 If leaves are discolored, does color variation occur:  
 along leaf margins  interveinal  in spots  over entire leaf  
  
 Leaves first affected at shoot:  tip  base  over entire shoot  
  
 Symptoms first seen: \_\_\_\_\_ (month & growth stage)  
  
 Describe additional symptoms: \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

GL Unit	Speed Type	Account Code	Fund Code	Amount	GL Unit	Speed Type	Account Code	Fund Code	Order #
A					A	104913	699900	51069	

<b>Dept. ID:</b>	<b>Project/Grant:</b>	<b>Signature:</b>
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**Sampling Instructions:**

For a routine evaluation of nutritional status, results will be compared with those from the scientific literature. It is extremely important that samples are collected at the growth stage and from the plant part for which plant nutritional data have been evaluated.

Leaf samples should be collected around 60 to 70 days after petal fall (between late July and early August for apples). Mid-shoot leaves should be collected from current season terminal shoots on the periphery of the tree.

Sampled trees should represent the general conditions of the orchard in terms of vigor, crop load, etc. For problem diagnosis, it is often helpful to collect and analyze separate samples from both affected and unaffected trees or areas. This allows a direct comparison of nutrient levels and may aid in diagnosing specific nutrient deficiencies.

When collecting tissue samples you should avoid diseased or dead plant tissue; tissue that has been damaged by equipment or insects; tissue that has been stressed by excessive heat, cold, or moisture

Each tissue sample should consist of about 50 leaves collected from several trees in the area being sampled. Do not mix leaves from different varieties, soil conditions, tree vigor, or fruit load.

Thoroughly rinse leaves to remove pesticides, foliar applied nutrients, and soil particles. Place sample on clean paper to dry. Place air-dried sample in a small paper bag labeled with your sample ID and complete the submission form. Hand deliver or mail sample, submission form, and a check or money order payable to UMass to the address listed at the top of this form.

**Plant Nutrient Test Descriptions & Fees**

**Standard Nutrient Test: \$30.00**

A determination of the Total Tissue P, K, Ca, Mg, Na, 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. Total Nitrogen is determined by catalytic combustion.

**Standard Nutrient Test without Total Nitrogen: \$22.00**

Same as standard tissue test but without Total Nitrogen