



UMass Soil and Plant Nutrient Testing Laboratory

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PLANT NUTRIENT ORDER FORM FOR VEGETABLE CROPS See page 2 for sampling instructions, fees, 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"/> Email 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) <input type="checkbox"/>	Standard w/o N(\$22) <input type="checkbox"/>

Order Total \$ _____

<p>Sample Information Crop, management, and soil information Date Sampled: _____ Crop: _____ Variety: _____ Growth Stage: _____ Plant Spacing or population: _____ Lime: _____ tons/ac applied on: _____ (date) Fertilizer application rate(s) and date(s): _____ _____ _____ Soil series (if known): _____</p>	<p>Complete this section for problem diagnosis 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 leaf Leaves first affected <input type="checkbox"/> 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 below: _____ _____ _____ _____</p>
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Cash	

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 the most common commercially grown vegetables in New England are provided here. This is not a complete list. **Contact the lab for crops not listed here to be sure plant nutrient data is available and for sampling instructions.**

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, and 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. Do not sample seed because it does not reflect the nutrient status of the whole plant.

After collecting your composite sample, it is a good idea to rinse the tissue with clean water to remove pesticides, foliar applied nutrients, and soil particles. Place wet samples on a clean paper towel to air 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 check or money order payable to UMass to the address listed at the top of this form.

Plant Tissue Nutrient Test Descriptions & Fees

Standard Tissue 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 Tissue Test Without Total Nitrogen: \$22.00

Same as standard tissue test but without N

Crop – Plant part collected – Growth Stage

Beans – 10-15 uppermost recent fully-developed trifoliolate leaves – Summer

Beets – 20-25 mature leaves from new growth – 4-6 weeks after seeding OR 8-10 weeks after seeding

Broccoli or Cauliflower – 12-15 mature leaves from new growth – At heading

Brussels Sprouts – 12-15 mature leaves from new growth – Maturity

Cabbage – 15-20 whole tops – 2-6 weeks old

Cabbage – 12-15 wrapper leaves – 2-3 months old

Cabbage – 15-20 midribs from wrapper leaves – Mature plants

Cantaloupe or Muskmelon – 12 unfurled leaves (5th leaf from tip) – Flower start to small fruit OR Small fruit to harvest

Carrots – 15 mature leaves from new growth -Middle of growing season

Carrots – 15-20 oldest leaves – Mature plants

Celery, Field – 12-15 petioles from most recent fully-developed leaves – 6 week old plants

Celery, Field – 12-15 mature leaves from new growth – Mature plants, non-flowering

Celery, Greenhouse – 12-15 mature leaves from new growth – 6 weeks after transplanting

Collards or Kale – 12-15 mature leaves from new growth – Middle of growing season

Corn, Sweet – 10-15 fully mature leaves from below the whorl – Prior to tasselling

Corn, Sweet – 10-15 entire leaves at the ear node – At tasselling

Cucumber – 12 leaf blades (5th leaf from tip) – Flower start to small fruit OR Small fruit to harvest

Potato – 25-30 most recent fully-developed leaves – Plants 30 cm tall OR Tubers ½ grown

Pumpkin – 15-20 mature leaves from new growth – Middle of growing season

Radish – 30-35 most recent fully developed leaves – Middle of growing season

Spinach, Field – 15-20 most recent fully developed leaves – 25-30 days old OR Mature plants

Summer Squash – 12 blades from most recent fully-developed leaves – Summer

Tomato – 15-20 compound leaves adjacent to top inflorescences - Mid-bloom

Watermelon – 10-12 unfurled leaves – Flower start to small fruit

Watermelon – 12-15 mature leaves from new growth – Mature plant, small fruit stage

Watermelon – 12-15 unfurled leaves (5th leaf from tip) – Older fruit to harvest

Zucchini – 12-15 mature leaves from new growth – Mature plants, non-fruiting