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Extension Soil & Plant Nutrient Testing Laboratory

Soil and Plant Nutrient Testing Laboratory
203 Paige Laboratory
161 Holdsworth Way
University of Massachusetts
Amherst, MA 01003
Phone: (413) 545-2311
e-mail: soiltest@umass.edu
website: soiltest.umass.edu

Soil Test Report

Prepared For:

Michael Smith
Robbins Farm Garden
10 Lockeland Ave
Arlington, MA 02476-6319

mjsmith999@comcast.net
617-633-8459

Sample Information:

Sample ID: RFG Bed A

Order Number: 84439
Lab Number: S251117-108
Area Sampled: 60 sq ft
Received: 11/17/2025
Reported: 11/21/2025

Results

Analysis	*Value Found*	*Optimum Range*
Soil pH (1:1, H2O)	6.1	
Modified Morgan extractable, ppm		
Macronutrients		
Phosphorus (P)	7.2	4-14
Potassium (K)	30	100-160
Calcium (Ca)	848	1000-1500
Magnesium (Mg)	99	50-120
Sulfur (S)	10.0	>10
Micronutrients *		
Boron (B)	0.1	0.1-0.5
Manganese (Mn)	1.1	1.1-6.3
Zinc (Zn)	5.4	1.0-7.6
Copper (Cu)	0.2	0.3-0.6
Iron (Fe)	4.1	2.7-9.4
Aluminum (Al)	81	<75
Lead (Pb)	4.4	<22

Analysis	*Value Found*	*Optimum Range*
Cation Exch. Capacity, meq/100g	11.1	
Exch. Acidity, meq/100g	6.0	
Base Saturation, %		
Calcium Base Saturation	38	50-80
Magnesium Base Saturation	7	10-30
Potassium Base Saturation	1	2.0-7.0
Scoop Density, g/cc	1.22	
Optional tests		
Soil Organic Matter (LOI), %	4.8	
Soluble Salts (1:2), dS/m	0.09	<0.6

* *Micronutrient deficiencies rarely occur in New England soils; therefore, an Optimum Range has never been defined. Values provided represent the normal range found in soils and are for reference only.*

Soil Test Interpretation

Nutrient	Very Low	Low	Optimum	Above Optimum
Phosphorus (P):				
Potassium (K):				
Calcium (Ca):				
Magnesium (Mg):				

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Recommendations for Home Vegetable Garden

Limestone (Target pH of 6.5)	Nitrogen, N	Phosphorus, P2O5	Potassium, K2O
	lbs / 100 sq ft		
10	.25 - .3	0.2	0.5

Comments:

-Do not topdress with more than 5 lb limestone per 100 sq ft at one time. Split the above application between early spring and mid-autumn.
*To supply Nitrogen, apply EITHER 2 - 2.5 lbs. Dried Blood (12-0-0) OR 0.6 - 0.7 lbs. Urea (45-0-0) per 100 square feet. Application should be split between early spring and mid-June.
*To supply Phosphorus, apply EITHER 1.7 lbs. Bone Meal (4-12-0) OR 0.4 lb. Triple Phosphate (0-45-0) per 100 square feet.
*To supply Potassium, apply 0.8 lbs. Potash (0-0-60) per 100 square feet.
-For instructions on converting nutrient recommendations to fertilizer applications in home gardens and landscapes, see Reference "Step-by-Step Fertilizer Guide for Home Grounds and Gardening" (listed below).
-The lead level in this soil is less than 22 ppm, which falls below the listed optimum level. However, many variables affect this result, and safety thresholds vary by location and soil use. There is still a potential risk of lead exposure for soils used for growing food or as play areas for children. Our Total Sorbed Metals test provides an accurate measurement of soil lead. For more information about lead levels in soil, see the fact sheet entitled "Soil Lead: Testing, Interpretation, & Recommendations," listed under General References at the end of this report.

References:

Home Lawn and Garden Information	http://ag.umass.edu/resources/home-lawn-garden
Step-by-Step Fertilizer Guide for Home Grounds and Gardening	https://ag.umass.edu/SPNTL-4

General References:

Interpreting Your Soil Test Results	http://soiltest.umass.edu/fact-sheets/interpreting-your-soil-test-results
Soil Lead: Testing, Interpretation & Recommendations	http://ag.umass.edu/soil-plant-nutrient-testing-laboratory/fact-sheets/soil-lead-fact-sheet
For current information and order forms, please visit	http://soiltest.umass.edu/
UMass Extension Nutrient Management	http://ag.umass.edu/agriculture-resources/nutrient-management