Soil Test Report

Agricultural & Environmental Testing Laboratory and UVM Extension

Prepared For:

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Results

Sample Information:
Order #: 15518
Lab ID: \$23-03000

Raised Bed #5

Area Sampled: 30 sq ft
Received: 8/2/2023
Reported: 8/7/2023

VT County: Chittenden

| Nutrient | Very Low | Low | Medium | High | Excessive |
|--------------------|----------|-----|--------|------|-----------|
| Phosphorus (P): 36 | 66.4 | | | | |
| Potassium (K): 1 | 93 | | | | |
| Magnesium (Mg): 7 | 715 | | | | |

Phosphorus is excessive! High levels pose a risk to water quality but are not a danger to human health.

| Analysis | Value Found | Optimal Range (for most crops) | |
|-----------------------------|----------------|--------------------------------|--|
| Soil pH (2:1, water) | 7.5 | 6-7 | |
| Modified Morgan extractable | e, ppm | | |
| Phosphorus (P) | 366.4 | 10-15 | |
| Potassium (K) | 193 | 100-130 | |
| Calcium (Ca) | 5985 | >1000 * | |
| Magnesium (Mg) | 715 | 50-100 | |
| Soil Organic Matter % | 17.5 | * | |
| CEC, meq/100g | 36.4 | * | |
| | | | |

| Analysis | Value Found | Typical Ranges in VT (ppm)** |
|----------------|----------------|------------------------------|
| Iron (Fe) | 3.6 | 2.4-10.6 |
| Manganese (Mn) | 27.1 | 2.1-9.3 |
| Boron (B) | 1.7 | 0.10-0.60 |
| Copper (Cu) | 0.1 | 0.16-0.30 |
| Sulfur (S) | 17.0 | 5-17 |
| Zinc (Zn) | 6.2 | 0.4-3.2 |
| Sodium (Na) | 54.0 | 6-21 |
| Aluminum (Al) | 3 | 8-107 |

^{*} Ca content, organic matter %, and CEC are dependent on soil texture. They tend to be high in soils with a lot of clay and low in soils with a lot of sand.

^{**} Ranges shown represent 90% of > 7000 recent soil test results. Micronutrient deficiencies are rare in VT when soil pH is in the optimal range. Al and Na are not nutrients but are shown because at high levels they can cause plant toxicity.

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Recommendations for Home Vegetable (mixed) (HMIX)

Home

| Limestone (Target pH of 6.8) | Nitrogen | Phosphate, P2O5 | Potash, K2O |
|------------------------------|------------------|------------------|------------------|
| lbs / 1000 sq ft | lbs / 1000 sq ft | lbs / 1000 sq ft | lbs / 1000 sq ft |
| 0 | 3 | 0 | 0 |

Comments:

Soil tests normally do not measure nitrogen because its availability changes rapidly depending on temperature, moisture and microbial activity. Instead, N application rates are based on plant uptake needs. See enclosed fact sheet for more information. If your micronutrients are low, the addition of compost or a volcanic material such as Azomite may be beneficial. To convert fertilizer or lime pounds per acre to pounds per 1,000 sq ft, divide by 40; for lb per 100 sq ft, divide lb per acre by 400 Soil test values for phosphorus and potassium are above optimum. Only a source of nitrogen is necessary this year.

Your soil pH is above optimum for most crops. It may go down on its own over time; to reduce pH more quickly, apply elemental sulfur (S) at a rate of 400 lb./acre.

For guidance on fertilizer options and rates, see the tables in the references below.

References:

Interpreting UVM Soil Test Results http://www.uvm.edu/vtvegandberry/factsheets/InterpretingSoilTests.pdf

New England Vegetable Management Guide https://nevegetable.org/

If you are a home gardener and have questions about this soil test report, submit your questions along with your soil test reports by filling out the online form @ https://www.uvm.edu/extension/mastergardener/helpline