University of New Hampshire Cooperative Extension

Home Grounds and Gardens

Soil Report
Beds

Test Data

				Optimum Range (See Below)
pH - Soil	6.40			
Calcium, Mehlich 3 (Ca)	1682.70	(ppm)	H	800 - 1200
Magnesium, Mehlich 3 (Mg)	244.00	(ppm)	H	60 - 120
Potassium, Mehlich 3 (K)	327.00	(ppm)	H	170 - 280
Phosphorus, Mehlich 3 (P)	342.00	(ppm)	VH	30 - 50
Lead, Mehlich 3 (Pb)	12.10	(ppm)	VL	
Org. Matter, LOI-360 (OM)	6.88	(%)		

Optimum Range Key

VL - Very Low	L - Low	M - Medium	H - High	VH - Very High

Lead Screening Results

Generally, it is considered safe to use garden produce grown on soils with UNH soil test lead values of less than 180 ppm (This is equivalent to the US EPA total lead level of 400 ppm using their testing procedure). The lead level in your soil sample is 12, and is in the **Very Low** range. Based on your results:

- No special precautions are necessary

These lead comments pertain only to vegetable gardens. If any of this area is to be used for vegetable production in the future, these comments would apply.

Recommendations

Annuals (pH range 5.8 - 6.5)

Conventional Fertilizer Recommendations

Lime: An appropriate pH range for most annuals is 5.8 - 6.5. No lime is recommended at this time.

Comments

Slow-Release Fertilizer: If using a fertilizer with at least 50% water-insoluble (slow-release) nitrogen, you may use up to 2 lbs of actual nitrogen in your preplant application. Supplemental fertilization should then not be necessary in most years.

OR

Organic Fertilizer Recommendations

Lime: An appropriate pH range for most annuals is 5.8 - 6.5. No lime is recommended at this time.

Fertilizer: Phosphorus levels are high and no additional phosphorus is recommended at this time.

Potassium levels are high. No potassium fertilizers are recommended at this time.

Nitrogen source: (for Annuals and new Perennial plantings)

Your organic matter is greater than 5%, ample nitrogen will be provided to the crop as it decomposes. For rapid growth early in the season, apply one of the following to supply .1 lbs or nitrogen/100 square feet:

- .75 lbs dried blood
- 1.5 lbs soybean meal or cottonseed meal
- 2 lbs fish emulsion

Comments

Other organic sources of phosphorus and potassium may be used in place of those recommended above.

Perennials and Groundcovers (pH range 5.8 - 6.5)

Conventional Fertilizer Recommendations

New Planting

Lime: An appropriate pH range for most perennials is 5.8 - 6.5. No lime is recommended at this time.

Fertilizer: Your soil has high levels of phosphorus and potassium and no application of these nutrients is needed at present.

Shallowly incorporate (lightly rake in) .6 - .8 lbs of calcium nitrate (15-0-0) or calcium ammonium nitrate (17-0-0) or .3 - .5 lbs of ammonium nitrate (33-0-0) per 100 sq. ft. before planting.

Existing Plantings

Lime: An appropriate pH range for most perennials is 5.8 - 6.5. No lime is recommended at this time.

Fertilizer: Your soil has high levels of phosphorus and potassium and no application of these nutrients is needed at present.

Apply the fertilizer to the soil surface in spring.

No supplemental fertilizer is usually required during the growing season for perennials, unless slow growth or yellowing is noticed.

If needed, apply half the above amount of calcium nitrate or ammonium nitrate once or twice during the growing season by broadcasting on the soil surface and watering immediately afterward.

Comments

Slow-Release Fertilizer: If using a fertilizer with at least 50% water-insoluble (slow-release) nitrogen, you may use up to 2 lbs of actual nitrogen in your preplant application. Supplemental fertilization should then not be necessary in most years.

OR

Organic Fertilizer Recommendations

New Planting

Lime: An appropriate pH range for most perennials is 5.8 - 6.5. No lime is recommended at this time.

Fertilizer: Phosphorus and levels are high and no additional phosphorus is required.

Potassium levels are high. No potassium fertilizers are recommended at this time.

Nitrogen Source

Your organic matter is greater than 5%, therefore ample nitrogen will be provided by the existing organic matter as it decomposes. For rapid growth early in the season, apply one of the following to supply .1 lbs of nitrogen/100 sq. ft.:

- .75 lbs dried blood
- 1.5 lbs soybean meal or cottonseed meal
- 2.0 lbs fish emulsion

Existing Plantings

Lime: An appropriate pH range for most perennials is 5.8 - 6.5. No lime is recommended at this time.

Fertilizer: Phosphorus levels are high and no additional phosphorus is recommended at this time.

Potassium levels are high. No potassium fertilizers are recommended at this time.

Nitrogen source if using Compost:

- An application of 1-2" of good quality compost as mulch will provide the required nitrogen.

Nitrogen source if not using compost or manure. Apply one of the following sources, in the spring and rake in lightly:

- .75 lbs dried blood, or
- 1.5 lbs soybean meal or cottonseed meal, or
- 2.0 lbs fish emulsion

Comments

Fish emulsion fertilizer is a another source of phosphorus and potassium. Apply to the soil surface and water in.

Mulching with a thin layer of compost will also provide these nutrients.

See the fact sheet Fertilizing the Organic Garden for more information.

General Comments

UNHCE recommends that soil tests be performed every two years to ensure that proper recommendations are made.

The recommendations made in this report are based on the current conditions of your soil. The addition of amendments or fertilizers may alter your soil conditions.

Specific fertilizer analyses are recommended for the purpose of simplicity. No endorsement of products is intended nor discrimination against similar products not mentioned.

For help in determining the suitability of other fertilizers and calculating application rates for them, please call the Education Center & Info Line at 877-EXT-GROW, Mon-Fri 9 a.m. - 2 p.m. answers@unh.edu

References

For more information, please refer to the following:

Growing Flowering Perennials

Lead Screening for NH Soils: Minimizing Health Risks

Understanding your soil test

Slow-Release Fertilizers for Home Gardens and Landscapes

Fertilizing the Organic Garden