

Cornell Cooperative Extension Ulster County Multiple Sample Soil pH Testing

\$3.00 for the first sample, \$1.00 for each additional sample.

Contact Information:

Date: _____

Phone: _____

Name: _____

Address: _____

Email

Address: _____

Please answer the following questions to the best of your knowledge:

What do you intend to grow? _____

When was fertilizer last applied? _____ What kind? _____ How much? _____

Was lime applied? _____ When? _____ How much? _____

Test Results:

| Sample Number | Item you intend to grow | pH | Ideal pH | Texture (loam, sandy, clay) |
|---------------|-------------------------|----|----------|-----------------------------|
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Recommendations:

| Sample Number | Acid | Alkaline | Add organic matter | Adjustments |
|---------------|------|----------|--------------------|-------------|
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Always follow the package label instructions. The recommendations given here are general guidelines.

Guidelines for Modifying Soil pH

Soil pH is a measure of the soil's acidity. This acidity affects the plants stability to take up available nutrients. For many plants, the optimum pH is between 6.0 and 6.8. However some plants, such as rhododendrons, azaleas, and blueberries have very specific pH needs and your soil may require modification.

To ensure that you have the pH for what you want to grow first step is to have your soil pH tested. Once you know your starting point you can begin to make modifications. It is very difficult to make a major change in soil pH with one application. We recommend that you re-test your soil in approximately 6 months to gauge effectiveness. It is also wise to re-test every few years to make sure your soil has maintained the intended pH.

Testing also includes a determination of your soil type: loam, sandy, or clay. Soil amendments will be suggested to produce the best quality soil for what you intend to grow. The heavier the soil, the more amendments will be needed. More amendments may be needed after a repeated test at six months.

Alkaline Soils-If your soil tested as alkaline you will be given a separate handout on how to lower your soils pH.

Acidic Soils (pH of less than 6.5)-To raise soil pH you will need to add lime. It could take one to two years for the soil pH to reflect a change. When applying lime, finely ground lime offers more control over the quantity being released and gives a quicker reaction. Pelletized limestone is easier to handle and produces less dust. It is best to apply lime before planting. No wait is necessary before putting in plants or seed.

Existing planting: Never apply more than 5 pounds per 100 square feet to a pre-existing planting.

Pre-planting: Use the chart below for pounds of ground limestone per 100 square feet to raise the pH to 6.5, incorporate into upper 6 inches of soil.

| Existing pH | Lbs. of lime for Sandy Loam | Lbs. of lime for Loam | Lbs. of lime for Clay |
|-------------|-----------------------------|-----------------------|-----------------------|
| 4.5 | 12.6 | 25.3 | 34.8 |
| 4.6 | 12.4 | 24.8 | 34.1 |
| 4.7 | 12.0 | 24.1 | 33.1 |
| 4.8 | 11.7 | 23.4 | 32.2 |
| 4.9 | 11.2 | 20.3 | 30.7 |
| 5.0 | 10.6 | 21.1 | 29.0 |
| 5.1 | 9.9 | 19.8 | 27.2 |
| 5.2 | 8.9 | 17.7 | 24.3 |
| 5.3 | 7.2 | 14.3 | 19.7 |
| 5.4 | 5.3 | 10.7 | 14.6 |
| 5.5 | 4.2 | 8.4 | 11.6 |

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|-----|-----|-----|-----|
| 5.6 | 3.6 | 7.2 | 9.8 |
| 5.7 | 3.1 | 6.2 | 8.6 |
| 5.8 | 2.6 | 5.1 | 7.1 |
| 5.9 | 2.0 | 4.0 | 5.6 |
| 6.0 | 1.7 | 3.3 | 4.5 |

Organic Material You could also use untreated wood ashes to raise the soil pH. Do not use more than 2 pounds per 100 square feet of soil per year. More than that will overload the soil with potassium, which could hinder the plants ability to access the essential nutrients.