Soil Testing

Cape Cod Cooperative Extension's Horticulture Clinic provides soil solution or active acidity pH measurement and pH adjustment recommendations only. More robust soil testing is suggested and provided by UMass Soil and Plant Nutrient Testing Laboratory and includes recommendations for fertility and pH adjustment. UMass Soil and Plant Nutrient Testing Laboratory's routine soil analysis includes measurements of P, K, Ca, Mg, Fe, Mn, Zn, Cu, B, Pb, Al, active and reserve acidity, Cation Exchange Capacity and base saturation. A routine soil analysis should be conducted approximately every three years and may aid in diagnosing plant nutritional problems, provide fertility recommendations for optimal growth and inform nutrient use to reduce environmental losses that contribute to poor water quality.

UMass Soil and Plant Nutrient Testing Laboratory; https://ag.umass.edu/services/soil-plant-nutrient-testing-laboratory

Soil pH is a measure of hydrogen ion activity in the soil. Soil pH influences many aspects of crop (plant) production, including availability of nutrients and toxic substances, activity and diversity of microbial populations, and soil chemistry. A soil pH of 7.0 is neutral, above 7.0 alkaline and below 7.0 is acidic. Soils in the Northeast are typically acidic due to moderate to high levels of rainfall and frequently require pH adjustment thru liming. For the most accurate soil pH adjustment recommendation use the UMass Soil and Nutrient Testing Laboratory's routine soil analysis which includes a measurement of soil reserve acidity or buffer pH.

Sampling Instructions

The most critical step in soil testing is collecting the sample. A poorly collected sample could result in inaccurate recommendations.

Step 1: Choose the area to be tested. Areas may be chosen by plant type, management or soil (when soil type differs drastically). Common areas to be tested separately would include lawn, vegetable garden, flower beds, etc.

Step 2: Collect soil samples. Using a clean container or bucket and a spade, auger, or sampling tube. Collect 10 or more sub-samples per area to be tested. Sub-samples should be collected to a depth of 6-8 inches, representing the depth evenly.

Step 3: Mix sub-samples. Thoroughly mix sub-samples together. Break up clumps of soil and remove stones, roots, and mulch materials.

Step 4: Dry sample. Air dry the sample and submit approximately 1 cup of soil. Package soil in a clean container such as a Ziploc bag.

Step 5: Clearly label samples and include a properly filled out form. Mail or deliver.
Samples can be dropped off at our office located at:
1358 Route 28
South Yarmouth, MA 02673
Place sample and form in black mailbox
Or mail to
Cape Cod Cooperative Extension
Horticulture Clinic
PO Box 367
Barnstable, MA 02630

Horticulture & Agriculture | Soil Submission Form

www.capecod.gov/hortclinic

BARNSTABLE COUNTY
CAPE COD COOPERATIVE EXTENSION

Client Information – *Please fill out completely*

First Name: _____ **Last Name:** _____ **Date:** _____

Email: _____ **Phone:** _____ **ZIP:**_____

Address: _____ **Town:** _____ **State:** ____

- **Follow instructions for taking a soil sample to avoid inaccurate recommendations or delay in testing.**
- **Samples should include approximately 1 cup of dry soil**
- **Clearly mark samples with your name and a sample ID that you create.**
- **Designate a crop from the list below for each sample.**

Vegetable
Asparagus only
Lawn
Flowers, Roses, & Herbs
Tree Fruit
Small Fruit
Blueberry only
Trees, Shrubs & Vines
Acid Loving Plants (H. macrophylla – BLUE)

Sample ID	Crop	pH results	Optimum pH	Remarks

Office use only

Date tested _____ Tester initials _____ Comments _____

Remarks
A – No need for pH adjustment, do not add limestone or wood ash at this time.
Additional comments

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