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A variety of tests are available to assess soil in the field and greenhouse, plant tissue, compost and water used for agriculture. Test results provide data that can inform management decisions aimed at optimizing crop quantity and/or quality, as well as fertilizer and soil amendment costs.

Conducting tests on a regular basis, even when production looks good visually, can identify when adjustments may be beneficial despite the lack of visual cues. Further, having test results when production is optimal provides a baseline that can be useful to diagnosing problems that may arise in the future.

Each type of test has a specific sampling protocol that must be followed to get results that most accurately reflect the status of the material sampled. Below university (or university affiliated) lab services that are reputable and closely affiliated with Extension support.

There are many private labs offering extensive services; if working with a private lab to test soil, ask if they can use the same soil test extract as your local university lab (in VT, modified Morgan).

Below are tests typically offered by university (or university affiliated) labs that are reputable and closely affiliated with Extension support. There are also many private labs offering testing services; if working with a private lab, ask if they can use the same soil test extract as your local university lab (e.g. modified Morgans).

Standard field soil test

- Measures macro- and micro-nutrient levels, soil pH, and sometimes organic matter and salts (electrical conductivity)
- Treats soil samples with an extract to simulate nutrient release over the growing season. Lab procedures (e.g. extracts) differ, so it is best to stick with the same lab over time to compare results. In the Northeast, most labs use modified U
- [UVM Agricultural and Environmental Testing Lab](#) \$17. Heavy metals screen (cadmium, chromium, copper, nickel, lead, zinc) add \$10. [Example of UVM field soil test results](#).
- [UMaine Analytical Lab](#). \$20. [Example of UMaine field soil test results](#).
- [UMass Soil Testing Lab](#), \$20. Does not include organic matter.

Soil health tests

- [Cornell Assessment of Soil Health](#) \$90 to \$165. Includes standard field test (chemical measurements), plus physical and biological assessments: soil texture, active carbon, aggregate stability, soil respiration, organic carbon, total carbon, total nitrogen and predicted soil protein content and available water capacity. Interpretation of surface and sub-

