

TESTING FOR SOIL, PLANT, COMPOST, AND WATER QUALITY

Vern Grubinger, Vegetable and Berry Specialist

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).

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Standard field soil test

- Measures macro- and micro-nutrient levels, soil pH, and sometimes organic matter and salts (electrical conductivity)
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Soil health tests

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Tissue test (also called leaf analysis, or foliar analysis)

- x** Measures what plants actually take up from the soil; still need a soil test for soil pH.
- Best method for assessing fertility status of perennial fruit crops.
- Sample recently matured leaves, fully expanded (except for grapes use petioles).
- [Dairy One tissue test](#), Ithaca NY. For most fruits, the