

Technical Assistance for Community Gardens

NRCS NJ Soils



Technical Assistance

Fruit and vegetables are an important source of nutrition and growing them locally can foster a sense of community and accomplishment. With the renewed interest in community gardening and urban agriculture, NRCS New Jersey is committed to helping communities ensure the safety of and improve the quality of locally-produced fruits and vegetables. We work with landowners to help protect and conserve soil and water resources in urban and suburban areas, as well as the rural environment.

The Soils Staff provides free technical assistance to community gardens in New Jersey. Our soil assessment service can help you evaluate conditions in your gardens to achieve successful outcomes for yourself and your community.

X-ray Fluorescence (PXRF Analysis)

Healthy and successful community gardens require suitable site and soil characteristics. Soils in urban areas often contain high traces of lead and other trace metals which can be hazardous to plants, animals, and humans.



The portable X-ray Fluorescence (PXRF) analysis can determine the concentration of lead and other trace metals onsite; the spatial variability and presence of any “hot spots,” and whether there is a need for different use and/or management.

Ground Penetrating Radar Scan

A general soil characterization can provide an overall evaluation of your soil conditions and identify potential problems. A ground penetrating radar scan can determine depth to bedrock or the presence of any large buried artifacts.



Other Soil Health Tests

Several other soil health tests can assess if your garden soil is performing optimally from the physical, chemical and biological perspectives, ensuring the quality and quantity of your produce as well as the health of the local environment.

For more information contact Edwin Muniz at edwin.muniz@usda.gov or 732-537-6062.

A soil assessment will help you discover...

Trace Metal Content

General Site & Soil Characterization

- Slope, aspect, surface stoniness
- Physical & chemical properties such as: texture, structure, consistency, depth to restrictive layer, depth to seasonal high water table, & soil pH

Soil Health Indices

Physical

- Penetration Resistance (compaction)
- Infiltration (water movement into soil)
- Saturated Hydraulic Conductivity (water movement through soil)

Chemical

- pH and salinity
- Cation Exchange Capacity
- Base Saturation
- Nitrate-Nitrogen, Potassium & Phosphorus

Biological

- CO₂ Respiration

New Jersey

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