



Plant Health Care Strategies: Pest, Plant and Soil Management

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Key Points

- *Aggregation is the key to healthy soil and, therefore, one of the most important goals of soil management.*
- *Healthy soil is created by the power of plants and the living organisms that depend upon organic matter for their habitat and food.*
- *Diversity above ground creates diversity below ground, the plant's first line of defense in combating pathogenic diseases and insect pressure.*

FIELD INDICATORS OF HEALTHY SOIL

Structure and aggregation

Good earth smell

Presence of worms

Presence of organic matter

Resources

Web Soil Survey

<http://websoilsurvey.sc.egov.usda.gov/App/HomePage.htm>

UC Davis Soil Web

<http://casoilresource.lawr.ucdavis.edu/gmap/>

UC Davis Soil Web apps

<https://casoilresource.lawr.ucdavis.edu/soilweb-apps/>

Official Soil Series Descriptions

<https://soilseries.sc.egov.usda.gov/osdname.aspx>

Silvics manual from USFS

http://na.fs.fed.us/pubs/silvics_manual/table_of_contents.shtm

NRCS Soil Health Division

<http://www.nrcs.usda.gov/wps/portal/nrcs/detailfull/soils/health/?cid=stelprdb1237522>

Soil Quality Test Kit Guide

http://www.nrcs.usda.gov/Internet/FSE_DOCUMENTS/nrcs142p2_050956.pdf

Soil Quality Indicator Sheets

<https://www.nrcs.usda.gov/wps/portal/nrcs/detail/soils/health/assessment/?cid=stelprdb1237387>

Water Management for Fruit Trees and Other Plants, Paul Vossen, University of CA

<http://cesonoma.ucanr.edu/files/27167.pdf>

Nutrient Flash Cards (app)

Additional Reading (Interesting stuff)

The Nature and Properties of Soils, Weil and Brady, 15th Edition

A must read for anyone seriously interested in learning more about soils.

Soil Biology Primer, online version

<http://www.nrcs.usda.gov/wps/portal/nrcs/main/soils/health/biology/>

Urban Soil Primer, online version

http://www.nrcs.usda.gov/Internet/FSE_DOCUMENTS/nrcs142p2_052835.pdf

Cornell Soil Health Manual, online version

<http://soilhealth.cals.cornell.edu/training-manual/>

“Below ground carbon trade among tall trees in a temperate forest”

Klein, Tamir 15 April 2016, Vol 352, Issue 6283 Science sciencemag.org

