

IDAHO FALLS COMMUNITY GARDEN CLASS: *HEALTHY SOIL I*

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I. Introduction – (15min)

- Instructor introduction
- Class Overview

II. What is “Organic?” – (15min)

- What exactly does “organic” mean?
- The benefits of gardening organically

III. The Basics of Soil – (15min)

- What is it? – *rock, water, air, and the soil food web of organisms*
- Soil characteristics – *sand, silt, and clay*
- How to keep it healthy – *avoiding chemicals, adding organic matter, etc.*

IV. Soil Testing – (15min)

- Simple ball test – *the easiest way*
- Jar test – *a DIY way to learn your soil type*
- Lab testing – *to test fertility or for lead, arsenic, pesticides, etc.*

V. Composting – (25min)

- Why compost? – *recycling nutrients and “closing the loop”*
- Composting basics – *greens and browns, regular turning, what not to use*
- Types of composting systems – *yard systems, worm bins and food digesters*

VI. Mulch – (20min)

- The benefits of mulch – *water retention, weed suppression, nutrients, etc.*
- Mulch materials – *organic matter mulches and plastic mulch*
- Techniques – *sheet mulching, mixed mulching, etc.*

VII. Conclusion and Q&A – (15min)

ADDITIONAL RESOURCES:

Books:

- “*The New Organic Grower*” by Eliot Coleman
- “*Gaia's Garden: A Guide to Home-Scale Permaculture*” by Toby Hemenway
- “*How to Grow More Vegetables...*” by John Jeavons
- “*Let It Rot: the Gardeners Guide To Compost*” by Stu Campbell
- “*Gardening When It Counts*” by Steve Solomon

Websites:

- Organic Consumers Association – www.organicconsumers.org
- Oregon Tilth - www.tilth.org

A SIMPLE TEST FOR SOIL TEXTURE

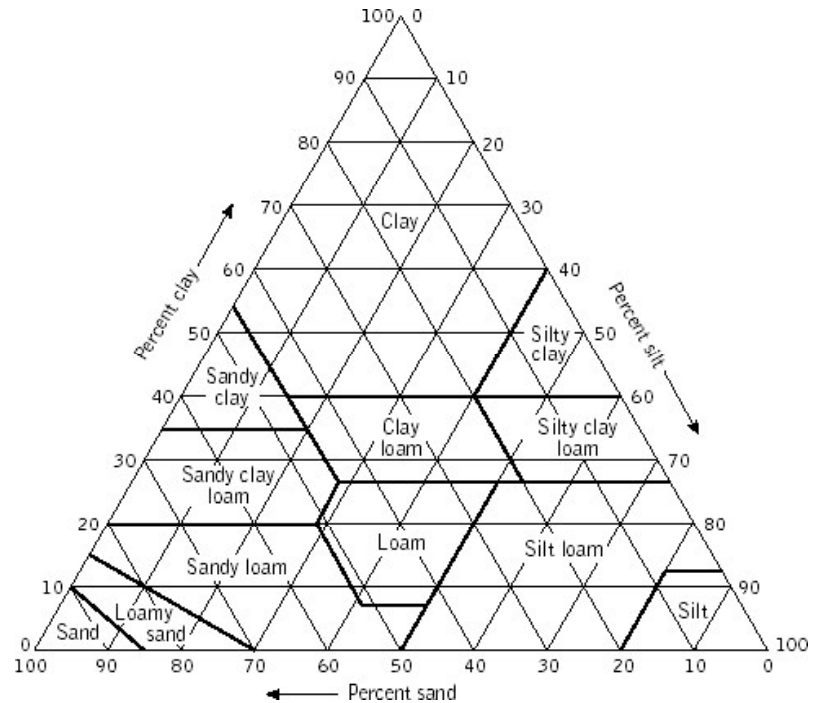
This is an easy DIY way to examine your garden's soil texture – whether it is sandy, clayey, or somewhere in between. Knowing the texture of your soil will help you manage fertility and irrigate your landscape more effectively.

What You Need:

- A one-quart jar with a screw-on lid
- 1 1/2 cups of garden soil (follow the directions below for gathering the sample)
- 2 cups of water
- One teaspoon of non-sudsing detergent
- A ruler
- A grease pen or piece of masking tape

Gathering a Sample:

1. Dig a 6-inch deep hole in 6 to 10 places around your garden
2. Use a shovel or trowel to slice a 1-inch thick wedge out of the side of each hole
3. Collect samples in a bucket or bowl and mix them together, breaking up clods
4. Remove any twigs, sod or debris



The Test:

1. Pour 2 cups of water into the jar
2. Add 1 1/2 cups of the composite soil sample
3. Add detergent
4. Screw the lid on tight and shake vigorously for at least 2 minutes
5. After one minute, mark the level of settled sediment with a grease pen. This layer is sand
6. After 2 hours, mark the next layer. This layer is silt
7. After 24 hours, mark the next layer. This is the clay layer
8. Organic matter will float to the top

Measuring the Results:

1. Measure each layer with the ruler in inches and tenths of inches
2. Record the depth of each layer and the total depth of the 3 layers
3. Multiply the depth of each layer by 100, and then divide the each result by the total depth also multiplied by 100.

Example:

Sand: 1.5 inches x 100 = 150 150 ÷ 300 = 50%

Silt: 0.6 inches x 100 = 60 60 ÷ 300 = 20%

Clay: 1.0 inches x 100 = 100 100 ÷ 300 = 30%

Total: 3.0 inches x 100 = 300