

**The “Soil Shake” and
“Soil Squeeze” tests**
by Emily Bishton



Take a trip around your garden to take samples and learn about your soil!

The “Soil Shake” test reveals how much sand, silt, and clay is in your soil.

Materials needed: 2-3 clean, quart-size glass or clear plastic jars with lids.

1. Chose several different locations in the garden, as far apart as possible. In each area, dig down below the mulch layer in the soil to reach the native soil, and fill each jar halfway to the top with the native soil.
2. Fill the rest of the jar with plain tap water, screw the lid on tight, and shake it thoroughly until all soil has been liquefied. Then quickly place the jar right side up on a flat surface where it can settle undisturbed for 24 hours.
3. The sand content of the sample will settle to the bottom of the jar within a minute, because it’s the heaviest and largest soil particle.
4. The silt layer will settle on top of the sand more slowly, and you’ll be able to see the difference by observing the color and particle size of each layer.
5. The clay layer may take several hours or days to completely settle as the top layer. It is usually a thinner layer than the sand or silt, with either a bluish or yellowish color. Any compost or other organic matter that is in the soil will continue to float in the water.

The “Soil Squeeze” test reveals whether your soil is dry enough for planting.

Dig down below the mulch layer in the soil, to get a small sample that will fit in the palm of their hand. Give the soil sample a firm squeeze, then open your hand and it a light poke with your finger. One of three things will happen:

1. It will fall apart as soon as you open your hand, because it is very dry. You should wet it a bit, then let it drain again before digging and planting.
2. It will hold its shape when you open your hand, but crumble apart when you poke it. Your soil is dry enough to be planted.
3. It will hold its shape when squeezed, and stay stuck together even when poked. This means your soil is too wet to plant. Wait for a few more dry-weather days to try the test again with a new sample. If it still sticks together, it may be a sign of heavy clay or poor drainage, which will greatly affect your plant choices and/or soil amendment strategies.