



BERNADETTE'S UNDER THE SUN

Science from the ground up

GET YOUR HANDS DIRTY!

Can You Identify Your Soil by Feel?

SOIL HAS A TEXTURE

Soil scientists can learn a lot simply by picking up a soil sample and feeling it. The size and proportion of its mineral particles determine its texture.

Touch it. Mold it. Notice what it does.



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SAND

Largest particles.

Feels gritty. Individual grains are easy to notice. Wet sandy soil usually makes a weak ball and little or no ribbon.

SILT

Medium-sized particles.

Feels smooth or floury when dry and silky or slippery when wet. It is less sticky than clay.

CLAY

Smallest particles.

Feels sticky and plastic when wet. Clay molds easily and can form a longer ribbon.

Most soils are mixtures of sand, silt, and clay.

Their proportions determine soil texture - and affect water movement, nutrient holding, and root growth.



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SOIL TEXTURE CHALLENGE

Try a simplified version of the field texture-by-feel method used by soil scientists.

YOU WILL NEED A soil sample • a little water • your hands • this worksheet

1. LOOK & FEEL IT DRY

Remove rocks, roots, and large plant pieces. Rub a pinch of dry soil between your fingers. Is it gritty, smooth, powdery, hard, or crumbly?

2. ADD WATER SLOWLY

Moisten a small handful a few drops at a time. You want it moist enough to mold, but not dripping wet.

3. MAKE A BALL

Squeeze the soil in your hand. Does it stay together? Soil that will not hold together may contain a lot of sand.

4. TRY A RIBBON

Press moist soil between your thumb and forefinger, pushing it upward and outward. Does it break immediately, form a short ribbon, or keep extending?

5. FEEL IT AGAIN

Rub a little moist soil between your fingers. Gritty suggests more sand; very smooth suggests more silt; sticky or plastic suggests more clay.

YOUR OBSERVATIONS	
Dry feel	_____
Ball test	_____
Ribbon test	_____
Wet feel	_____
My texture prediction	_____

Think like a soil scientist: Where did your sample come from? How might its texture affect water movement or plant growth there?

SCIENCE NOTE

Texture-by-feel is a useful field estimate. Soil scientists use standardized methods and additional observations to classify soils more precisely.