

Determining Soil Texture Based On Feel and Appearance

Sand

Sand is loose and single-grained. The individual grains can be seen or felt readily. Squeezed in the hand when dry, sand falls apart when pressure is released. Squeezed when moist, it forms a cast but crumbles when touched.

Sandy Loam

A sandy loam is soil containing a high percentage of sand but having enough silt and clay to make it somewhat cohesive. The individual sand grains can be readily seen and felt. Squeezed when dry, a sandy loam forms a cast that falls apart readily. If squeezed when moist, a cast can be formed that bears careful handling without breaking.

Loam

A loam is a soil having a relatively even mixture of different grades of sand, silt, and clay. It is mellow with a somewhat gritty feel but is fairly smooth and slightly plastic. Squeezed when dry, it forms a cast that bears careful handling, and the cast formed by squeezing the moist soil can be handled freely with breaking.

Silt Loam

A silt loam is soil having a moderate amount of fine sand and only a small amount of clay; over half of the particles are of the size called silt. When dry, a silt loam appears cloddy but the lumps can be broken readily; when pulverized, it feels soft and floury. When wet, the soil runs together readily and puddles. Either dry or moist, it forms a cast that can be handled freely without breaking; when moistened and squeezed between thumb and finger, it does not ribbon but has a broken appearance.

Clay Loam

A clay loam is fine-textured soil that usually breaks into clods or lumps that are hard when dry. When the moist soil is pinched between the thumb and finger, it forms a thin ribbon that breaks readily, barely sustaining its own weight. The moist soil is plastic and forms a cast that bears much handling. When kneaded in the hand, it does not crumble readily, but works into a heavy compact mass.

Clay

A clay is fine-textured soil that usually forms very hard lumps or clods when dry and is very plastic and usually sticky when wet. When the moist soil is pinched out between the thumb and finger, it forms a long, flexible ribbon. Some clays, very high in colloids, are friable and lack plasticity at all conditions of moisture.