

Home soil texture analysis

These are the steps you need to take:

1. Scrape away any mulch or organic matter from the surface of the soil and then dig up a sample of soil. You only need enough to fit easily in the palm of your hand. If there are any stones or large particles of organic matter remove those.
2. If the soil sample contains individual aggregates, or crumbs of soil, you need to break those up. You may need to do this with a hammer or a kitchen pestle and mortar. But take care not to grind the soil particles, just break up the crumbs.
3. Next, with a soil sample in your hand gradually add water and mix the soil and water together in a kneading motion. The idea is to make the whole sample moist and free from lumps. It shouldn't be so wet that it falls apart because of the moisture content. It should end up a consistency that can potentially be rolled into a ball.
4. And rolling the sample into a ball is the next step of the process. Roll it between the palms of your hands and note whether the ball holds together, as this is one of the indicators of soil texture type.
5. The next step is perhaps the trickiest, both to do and to describe. What you have to do is place the ball of soil between your thumb and forefinger and by sliding your thumb and forefinger in opposite directions try to create a ribbon of soil. The length of the ribbon that you create is another indicator of soil texture.
6. Finally, consult the table below, and try to identify the description which most closely matches the behaviour of your soil sample. You can then read across to find your soil texture class.

Soil Texture Identification

Characteristics of Sample	Soil Texture Class
Cannot be moulded, will not stick together, no ribbon created, grains of sand stick to fingers.	Sand
Creates a fragile ball that just about holds together, leaves fingers discoloured, produces a short (5 mm, 0.2 inches) ribbon that easily breaks.	Loamy Sand
A fragile ball, sticky and with many grains of sand sticking to the fingers, leaves fingers stained with clay, ribbon of 5 to 15 mm (0.2 to 0.6 inches).	Clayey Sand
Forms a ball that just bears handling, grains of sand can be seen and felt, produces a ribbon 15 to 25 mm long (0.6 to 1 inch).	Sandy loam
As for Sandy Loam, but individual grains of sand cannot be seen only felt. Ribbon of 15 to 25 mm (0.6 to 1 inch).	Fine Sandy Loam
Creates a coherent ball with a spongy feel but no sandiness or silkiness. Forms a ribbon about 25 mm long (1 inch).	Loam
Forms a coherent ball although somewhat crumbly, smooth and silky to the touch. Forms a ribbon about 25 mm long (1 inch).	Silty Loam
Creates a very coherent ball with sand grains that can be felt. Forms a ribbon of 25 to 40 mm (1 to 1.5 inches).	Sandy Clay Loam
Forms a coherent spongy ball with a plastic, smooth feel. Will form a ribbon 40 to 50 mm long (1 to 1.5 inches).	Clay Loam
Creates a plastic feeling ball, but sand grains can be felt, seen and heard. Forms a ribbon 50 to 75 mm long (2 to 3 inches).	Sandy Clay
Creates a smooth ball with a plastic feel, some resistance to manipulation between thumb and forefinger. Forms a ribbon 50 to 75 mm long (2 to 3 inches).	Light Clay
Create a smooth plastic ball which feels like plasticine, can easily be moulded, resistance to manipulation between thumb and forefinger. Forms a ribbon and 75 mm or more long (3 inches, plus).	Medium Clay
Smooth plastic ball like stiff plasticine. Can easily be moulded. Strong resistance to ribboning. Forms a ribbon at least 75 mm long (2 inches).	Heavy Clay