

Soil texture

How is soil texture determined?

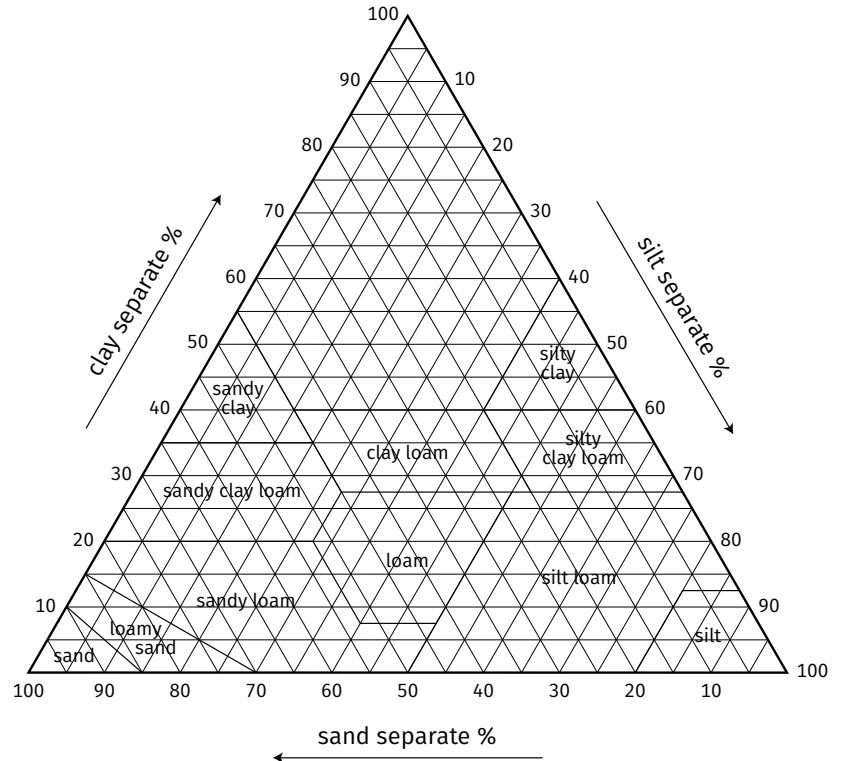
Materials

- 500 ml of soil (a flower bed will work if digging under the mulch layer)
- Mason jar (or cylindrical water glass)
- Borax (or liquid dish soap)
- Parafilm (or plastic wrap)

Instructions

Day 1: Prepare soil columns

1. Add enough soil to fill half of the mason jar (if a 1-pint jar, add 1 cup of soil), add and a pinch of Borax (or a couple of drops of liquid dish soap) to the mason jar.
2. Add same cup of water to the mason jar.
3. Cover the top of the mason jar with parafilm and shake vigorously to mix the water throughout the soil, then let sit overnight.



Day 2

4. Examine the mason jar you prepared day 1.
5. Measure the heights of the layers of soil sediment in the column. (The largest particles are sand and should be on the bottom; the middle sized particles are silt and should be in the middle; the smallest particles are clay and should be on the top.)
6. Add the three measures together, then divide each by the total to find the percentage. (The total may not equal the initial volume of soil, due to settling, floating humus or organic material that will not be included.)

Silt	
Sand	
Clay	

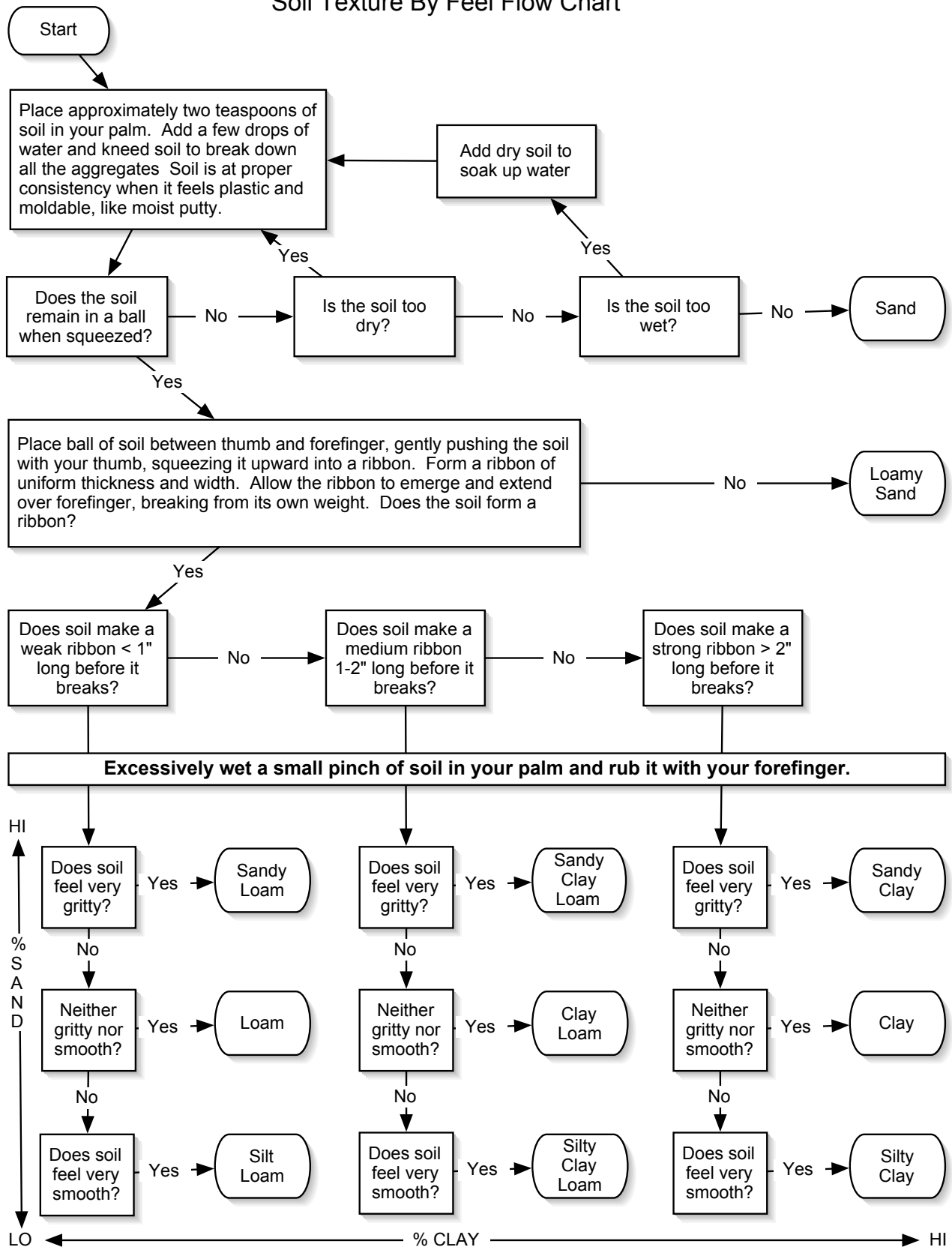
7. Use the percentages to determine soil texture using the USDA soil texture triangle to the right.

Soil type: _____

8. Follow the directions on the soil texture flow chart (on the following page) to determine the soil texture of your sample by feel.

Soil texture: _____

Soil Texture By Feel Flow Chart



Source: Oregon State University Extension Service