

Soil texture

How is soil texture determined?

Materials

- 500 ml of soil (a flower bed will work if digging under the mulch layer)
- 100 ml graduated cylinder
- Borax
- Parafilm (or plastic wrap)

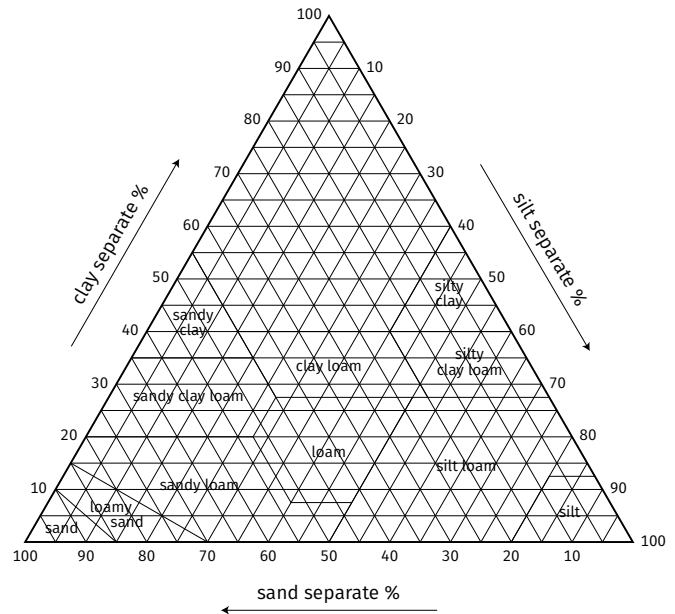
Directions

Day 1: Prepare soil columns

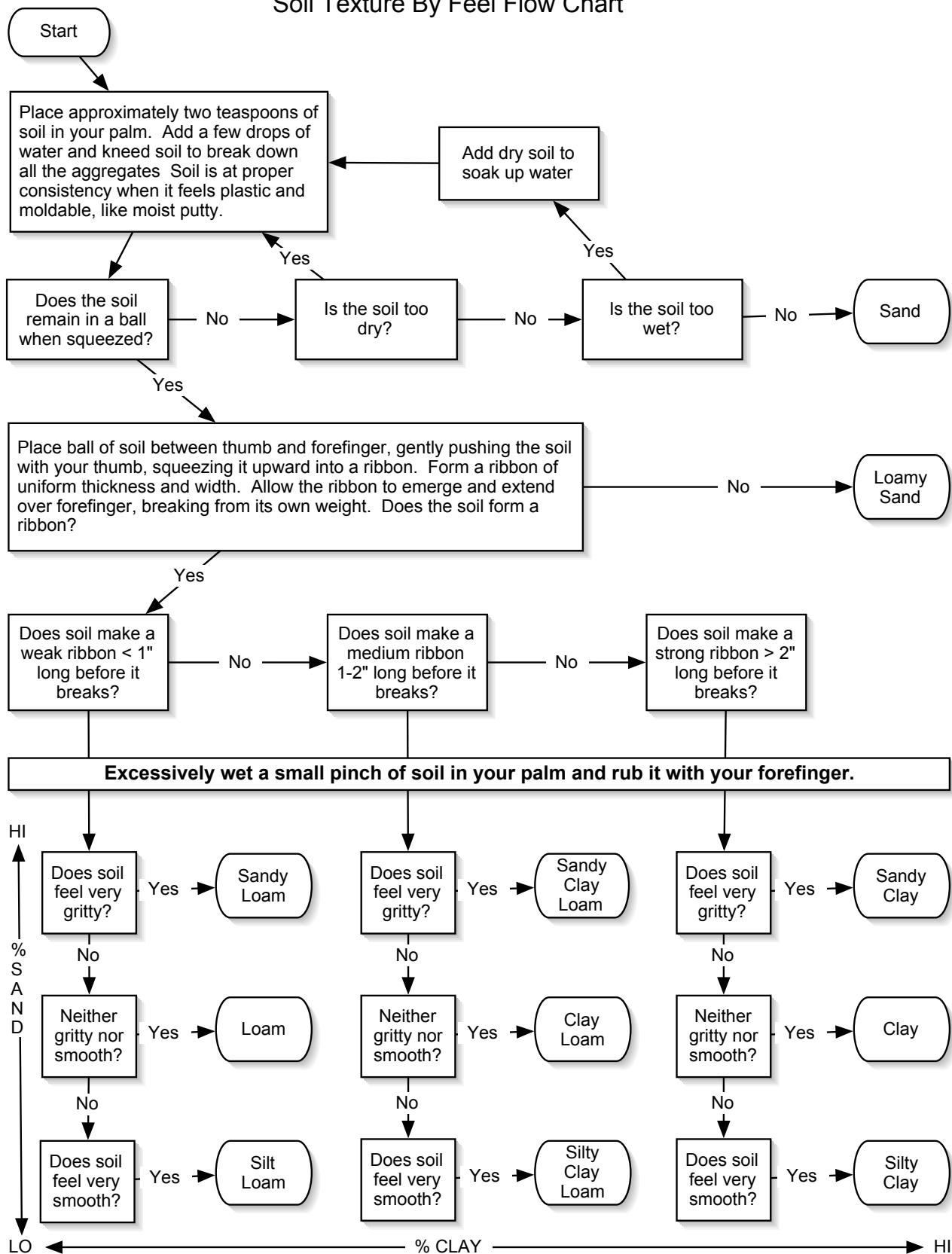
1. Add 50 ml of soil and a pinch of Borax to a 100 ml graduated cylinder.
2. Add water up to 100 ml in the cylinder.
3. Cover the top of the cylinder with parafilm and shake vigorously to mix the water throughout the soil, then let sit overnight.

Day 2

4. Examine the graduated cylinder 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 50, due to settling, floating humus or organic material that will not be included.)
7. Use the percentages to determine soil texture using the USDA soil texture triangle to the right.
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 By Feel Flow Chart



Source: Oregon State University Extension Service