

# Irrigation

Garden Tip – 11-3-2025

# What type of soil do you have?

## Find out with the “jar test”

### Supplies:

- Straight-edged, clear jar
- Permanent Marker
- Ruler
- Watch/stopwatch
- 1 tablespoon powdered dishwash detergent
- Old colander (2mm seive)



# The “Jar Test”



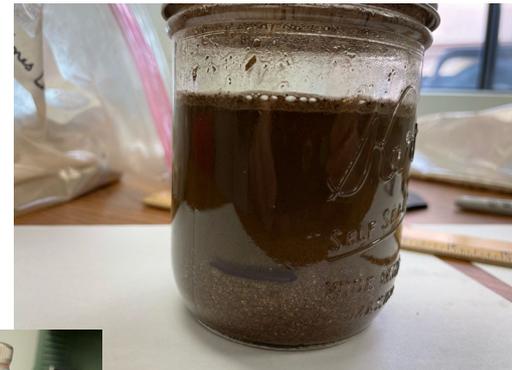
## Steps:

1. Sieve (2mm) the soil-remove rocks, debris, organic matter
2. Fill jar 1/3 full of soil
3. Fill remainder of jar with water, leaving some room at the top



# The “Jar Test”

4. Add 1T of detergent
5. Shake vigorously and let sit for 1 minute
6. Draw a line on jar where sand layer has formed at bottom
7. Let sit for 2 hours
8. Draw a line on jar where silt layer has formed



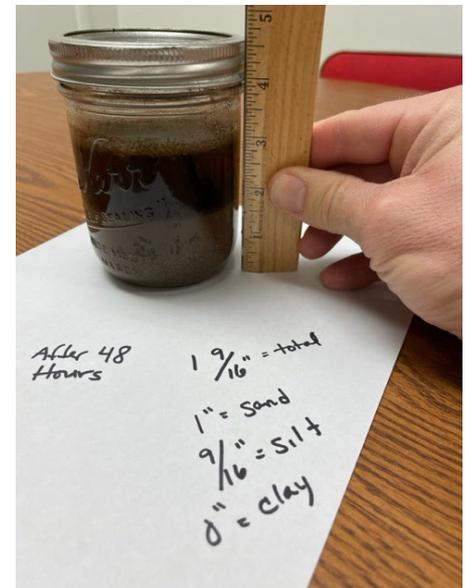
# The “Jar Test”

9. Leave jar for 48 hours
10. Mark the third settled layer-this is the clay layer
11. Measure each layer and the total of all layers
12. Calculate the percentage:

Example:

If 3 total inches of water and 1.5 inches of sand

$$1.5 / 3 = 50\% \text{ sand}$$



# Watering for Soil Type

- Sandy soil needs to be irrigated more frequently than clay soil.
- Clay soils absorb more water but at a slower rate.

## Where does water go????

- Plant uses some
- Evaporation (sun, wind)

# 1-2-3 Rule –

<b>Plant Size</b>	<b>Irrigate to depth of</b>	<b>Irrigate again when soil dries to a depth of:</b>
Up to knee high (annual, perennial)	1 foot	1 inch
From knee high to little above head (shrub)	2 feet	2 inches
Trees	3 feet (most tree roots are within top 3ft of soil; watering deeper will not cause roots to grow deeper)	3 inches

To test how deeply you have watered, insert a pointed metal probe into the ground; it will easily slide through wet soil and become difficult to push when it hits dry soil.

