



Sponges

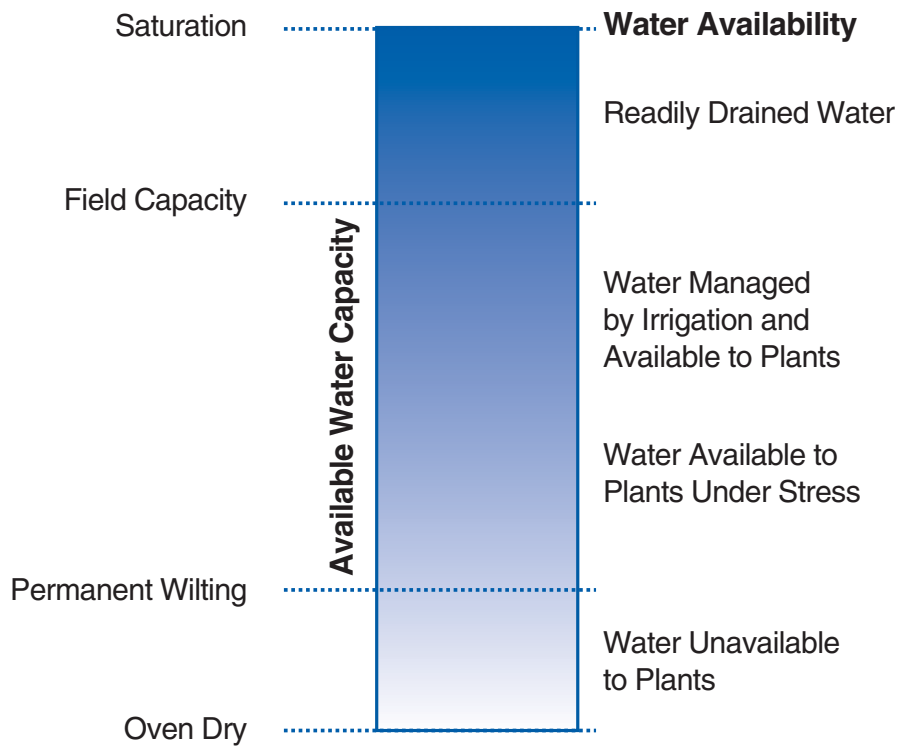


Essential Question: Explain the difference between fields at the following levels of soil water: oven dry, permanent wilting point, field capacity, and saturation.

Overview

Soil is important because it anchors plants and provides them with nutrients and water. In this activity, you will learn how soil texture affects how much water is available for a farmer’s crops.

Soil, as in a farmer’s field, has four different stages: oven dry (a condition unlikely to occur in nature), permanent wilting point, field capacity, and saturation. In this activity, you will learn the differences between these stages. You will also calculate the available water for three different sponges, each representing a soil type.



Materials

- 3 sponges (1 heavy duty, 1 commercial, 1 multi-purpose)
- 250-mL graduated cylinder
- pie plate
- 500-mL beaker