



Soil Electrical Conductivity (1:1)

EQUIPMENT

1. Balance
2. Orion Star A212 Conductivity Meter
3. Shaker

REAGENT

1. Deionized water

PROCEDURE

1. Soils are dried (40°C) overnight, ground in a flail mill, and sieved through a 2-mm screen.
2. 20 g of soil is weighed into a 50-mL test tube and 20 mL deionized water is added.
3. Samples are capped and placed on shaker for 30 minutes (~180 oscillations per minute).
4. Samples are filtered using high quality filter paper and the filtrate is collected.
5. Using a calibrated conductivity meter, the probe is submerged into the solution and the conductivity reading is taken once it stabilizes.
6. Units are reported in mmhos/cm

REFERENCE

Rhoades, J.D. 1996. Salinity: Electrical Conductivity and Total Dissolved Solids. Chapter 14 in *Methods of Soil Analysis. Part 3. Chemical Methods*. Soil Science Society of America Book Series No. 5.