Chart, scatter chart

Description automatically generated

SPE = Soil paste Extract

SWR = soil water ratio (= Dilutions 1 :5)

**Reference protocol for mesure of the soil conductivity**

To estimate the soil salinity, we choose to use the relationship that relies on the electrical conductivity of saturated paste extracts and electrical conductivity on soil to water ratios (Sonmez et al, 2008). (1:5) soil to water ratios suspensions were prepared by adding 80 ml of deionized water to 20 g of dried and sieved (<2mm) soil samples and shaken by hand four time in 30 minutes following Rhoades et al, 1982 protocol. Conductivity with temperature correction was then measured in the soil solution using a Consort K912 probe (Consort bvba, Belgium) (verifier). Ionic composition was measured thanks to the Horiba probe (Ca, k, Na).

A subset of the samples was also used to establish a relationship between saturated paste extract and 1:5 soil to water ratios

References

Sonmez, S., Buyuktas, D., Okturen, F., Citak, S., 2008. Assessment of different soil to water ratios (1:1, 1:2.5, 1:5) in soil salinity studies. Geoderma 144, 361–369.<https://doi.org/10.1016/j.geoderma.2007.12.005>

Rhoades, J.D., n.d. Salinity: Electrical Conductivity and Total Dissolved Solids 19.