CONDITION OF THE SOIL

Saline Clay

COMMON CROP TYPES

Grasses such as meadow brome and strawberry clover.

Intermediate wheatgrass and yellow sweet clover.

Definition:

Saline clay is a chemical condition of the soil rather than a physical condition, like texture classes. High salinity (the amount of salt in the soil) is due to inputs such as fertilizers or pesticides application. Saline soil presents higher electric conductivity (EC), which impacts data readings. Soil salinity can affect plant growth both physically (osmotic effect) and chemically (nutrition and/or toxicity effect). As the salt content of the soil increases, it becomes more difficult for plants to take up water.

Composition:

Clay (55%), silt (35%), and sand (10%), with salinity levels of ~5 mS/cm corresponding to highly saline irrigation or intense use of fertilizers.

Characteristics:

Clay soils are characterized by grain sizes of <0.002 mm, high water holding capacity, with higher hummus content and higher fertility, and lower drainage rates.