**What is pH**

Soil pH refers to a soil’s acidity or alkalinity and is the measure of hydrogen ions (H+) in the soil. A high amount of H+ corresponds to a low pH value and vice versa. The pH scale ranges from approximately 0 to 14 with 7 being neutral, below 7 acidic, and above 7 alkaline (basic). Soil pH can affect CEC and AEC by altering the surface charge of colloids. A higher concentration of H+ (lower pH) will neutralize the negative charge on colloids, **thereby decreasing CEC and increasing AEC. The opposite occurs when pH increases**



**How is pH measured**

Soil pH was determined in accordance with method 9045 developed by the office of solid waste, EPA. 20 ml of distilled water was added to 20 g of soil in a 50-ml beaker(1:1). The suspension was continuously stirred for 5 min. Thereafter, the soil suspension was stand for about 15 minutes. The suspension was filtered to obtain an aqueous phase ready for pH measurement.