



Contribution of Clay, Silt, Organic Matter, Free Iron Oxides and Active Calcium Carbonate in Cation Exchange Capacity in Wasit and Maysan Soils

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Abstract: This study was conducted to estimate the contribution of clay, silt, organic matter, iron oxides and active CaCO_3 in CEC of Wasit and Maysan soils with equation of Asadu and Chibuike (2015). There was highly significant positive correlation between the clay content and the CEC values ($r^2=0.74$). There was no significant correlation between the CEC and each of the silt content organic matter, iron oxides and active calcium carbonate. The relationship between CEC with the soil components (clay, free iron oxides, active calcium carbonate, silt, organic matter) were all positive and highly significant and with a higher correlation coefficient ($r^2=0.87$). The percentage of the contribution soil components for clay and free iron oxides was 69.04 and 18.29, respectively, while for active calcium carbonate, silt and organic matter was 6.671, 3.609 and 1.219% respectively.

Keywords: Clay, Silt, Organic matter, Free iron oxides, Active calcium carbonate
