

Chemical Composition of Soils of Krishna delta Region in Andhra Pradesh

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ABSTRACT

Horizon-wise soil samples from fourteen pedons representing Krishna delta region of Andhra Pradesh were analyzed for elemental composition. The study revealed that silica and sesquioxides were the dominant fractions contributing to more than 75 per cent followed by calcium and magnesium oxides. The coarse textured pedons registered higher $\text{SiO}_2 / \text{R}_2\text{O}_3$, $\text{SiO}_2 / \text{Al}_2\text{O}_3$ and $\text{SiO}_2 / \text{Fe}_2\text{O}_3$ ratios due to higher silica and lower sesquioxide content than fine textured soils. In much of the study area silica/ alumina and silica/iron oxide ratios increased with depth. The order of other elements was found to be $\text{Na} > \text{K} > \text{Mn} > \text{P}_2\text{O}_5 > \text{CuO} > \text{ZnO}$ in soils represented by majority of the pedons.

Key words: *Molar concentration, Molar ratios, P_2O_5 , K_2O , Na_2O , CaO , MgO , ZnO and CuO*