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Evaluation of Erodibility Status of Soils in Some Areas of Imo and Abia States of Nigeria

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Abstract : In this study, the erodibility indices and some soil properties of some cassava farms in selected areas of Abia and Imo States were investigated. This study involves taking measurements of some soil parameters such as permeability, soil texture and particle size analysis from which the erodibility indices were compared. Results showed that soils of the areas are very sandy. The results showed that Isiukwuato with index of 72 has the highest erodibility index. The results also showed that Arondizuogu with index of 34 has the least erodibility index. The results revealed that soil erodibility (k) values varied from 34 to 72. Nkporo has the highest sand content; Inyishie has the least silt content. The result indicates that there were respectively strong inverse relationship between clay and silt contents and erodibility index. On the other hand, sand, organic matter and moisture contents as well as soil permeability has significantly high positive correlation with soil erodibility and it can be concluded that particle size distribution is a major finger print on the erodibility index of soil in the study area. It is recommended that safe cultural practices like crop rotation, matching and adoption of organic farming techniques be incorporated into farming communities of Abia and Imo States in order to stem the advances of erosion in the study area.

Keywords : erodibility, indices, soil, sand
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