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MSc in Soil Science

(MSc)



Title of thesis: Soil survey, genesis and classification along a transect underlain by quaternary sediments in Kilifi County, Kenya

Summary of work done

• Problem investigated and why

Potential utilization of soil resources in Kilifi area has not been achieved due to insufficient soil information that is required for sustainable production to enhance food security and environmental conservation. The purpose of the study was to generate soil data and maps that will inform decisions on environmentally friendly and sustainable use of soil resources.

• Key findings - Sould be seen to be linked to and or ansering the problem investigate

Soil data of Kilifi County was generated from the five pedons lying on different parent materials and landscape positions. Soils of these pedons showed a great variation in both the morphological, physical, chemical and mineralogical properties being influenced by their

inherent parent materials. These soils were mapped and classified according to the WRB, 2014 based on their characteristics.

Take home message

Soils vary widely with their characteristics changing across landscape and so are their utilization. Therefore, adequate soil information is a prerequisite before decisions are made on land uses. Without this soil resources are prone to deterioration over time that to some extend no management approaches can reverse situation. Therefore, soil information paramount in all efforts geared towards achieving food security and environmental conservation.

Selected pictures of interest from the study





Most interesting part about your MSc/PhD study program that you would like the world to know and/or will mke others to be interesrested/motivated to pursue a similar program/research

Classification of soils using the Revised World Reference Base, 2014 has made it possible to come up with soil classes that are well understood since it captures most of the soil characteristics. All soil including those which were previously classified need to be classified using this system so that more information can be captured and consequently enhance sustainable utilization.