Physiochemical Properties of Soil in Selected Sites of the Lake Chilwa Basin after 5 years of Conservation Agriculture Practice

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Conservation Agriculture (CA) has been implemented in the Lake Chilwa basin for over 5 years in response to the rising interest in exploring the potential of CA as one of the sustainable agricultural production technologies in Malawi. **S**oil physiochemical characterization was carried out in some selected Extension Planning Areas (EPAs) before CA implementation. The aim was to lay basis for future monitoring of the physiochemical soil changes that the CA intervention might bring. Collected **s**oil samples were analyzed in a laboratory using standard analysis procedures. Soils were found to be generally nitrogen deficient during baseline study**.** The results were attributed to unsustainable land use practices that required interventions such as CA practice**.** The physiochemical status of the soil was once again reviewed after 5years of CA practice and current results show some improvements in some soil properties and a decline in others. Recorded changes continue to show significant differences ($P \leq 0.05$) across the EPAs under study but no significant variation ($P \geq 0.05$) along the soil depth (0 – 30cm). The negative decline in soil status is attributed to nutrient loss through heavy leaching under waterlogged conditions experienced in the basin prior to the second soil review.