

Analytical approaches to the investigation of heavy and trace elements in soils on oil palm plantations in South-western Nigeria

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The pollution of agricultural farmlands such as oil palm plantations by trace and heavy metals has presumed significant concerns because of their persistent and toxic nature to the environment, man and plants. Environmental changes caused by anthropogenic factors can greatly influence the translocation and uptake of essential and toxic elements and hence altering the forms in which they occur, which subsequently affects plant uptake. A quantification of total metal concentrations of heavy and trace metals is not adequate to explain the processes of essential and toxic element uptake by plants on agricultural soils. In this study, quantification and speciation of trace and heavy metals in soils on fifteen sampling points in the southern area of Nigeria was investigated. The heavy/trace elements were extracted as residual, reducible, acid soluble and oxidizable. The risk assessment and physicochemical parameters of the soils were also investigated.

Biography

O. B. Olafisoye Bola is on her Ph.D. programme at the Cape Peninsula University of Technology, Cape Town, South Africa. She is a lecturer at the Bowen University, Iwo, Nigeria. She has published papers in several journals of repute.

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