Effect of Animal Manures on Macro and Micro Nutrient Contents of Lubricating Oil Contaminated Soil

Adekunle, I. O.; Busari, M. A.; Sorinola, A. O.

Abstract

A pot experiment was carried out at the University of Agriculture, Abeokuta to evaluate the effect of animal manures on waste engine oil contaminated soil. The treatments were control (C), cattle manure (CM), poultry manure (PM), pig manure (PGM) and pacesetter manure (PSM). The manures were applied at the rate of 8 t ha⁻¹. The manures significantly (P<0.05) increased soil organic C (OC), total N, available P, K, and cation exchange capacity (CEC) which enhanced maize growth parameters such as plant height and leaf area. Manures also increased Fe, but reduced Pb, in soil and plant. Thus manures had remediating effect in terms of possible Pb toxicity.