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COMPARATIVE ANALYSIS OF FAUNA POPULATIONS IN THE SOIL OF UNIVERSITY OF AGRICULTURE, ABEOKUTA, NIGERIA.

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ABSTRACT

A survey of the micro and macro fauna and their relative abundance in 12 different locations on the campus of the University of Agriculture, Abeokuta were investigated. Two groups of soil were identified on the basis of organic matter content. The first group consisted of soil samples from fallow land, cultivated land, arboretum, refuse dump, students' hostel and students center with high organic matter ranging from 2.28% to 4.86%. The second group comprising petrol station, works and services station, riverbank, poultry pen and clinic with low organic matter content ranging from 0.41% to 1.38%. Higher numbers of earthworms and protozoans were found in soil sample examined compared with the numbers of nematodes recorded. Numbers ranged from 2-7, 4-15 and 11-42 for nematodes, earthworms and protozoans respectively. Positive correlations existed among the numbers of fauna collected and soil organic matter contents. The earthworms encountered belonged to four previously identified species: *Keffia proxipora, Millsonia nigra, Hippopera nigeriae* and *Libyodrillus violaceous* while only two kinds of nematodes: *Rhabditis* and *Spirotera* species were found. Five species of protozoans were encountered namely: *Loxodes nostrus, Anoplophyra lumbrici, Spirotomum ambiguum, Lcthyophithius muitifilis* and *Maupasella nova.*

Keywords: Soil, organic matter, earthworm, protozoa, nematode