

DIVERSITY OF SOIL MACROFAUNA UNDER DIFFERENT LAND USE TYPES

BY

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DEGREE IN BIOLOGY

[MONTH, YEAR]

CERTIFICATION

This is to certify that this research project titled "Diversity of Soil Macrofauna Under Different Land Use Types" was carried out by [STUDENT'S FULL NAME], and has been read and approved as meeting the regulations governing the award of the degree of Bachelor of Science (B.Sc.) of the University of Lagos.

PROJECT SUPERVISOR

Date

HEAD OF DEPARTMENT

Date

EXTERNAL EXAMINER

Date

DEDICATION

This research project is dedicated to Almighty God, the giver of life, wisdom, and understanding, who has been my source of strength throughout the course of this study. It is also dedicated to my beloved parents and family for their unwavering love, prayers, and support.

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ABSTRACT

This study examined diversity of soil macrofauna under different land use types, using undergraduate students of the University of Lagos as a case study. The study was guided by three specific objectives: to examine the extent to which respondents exhibit the key attributes of diversity; to determine the influence of these attributes on the outcomes under investigation; and to identify the challenges associated with diversity and soil. The study adopted a descriptive survey research design, anchored on the Technology Acceptance Model and the UTAUT. A sample size of 382 respondents was determined using the Taro Yamane formula and selected through stratified and simple random sampling techniques, out of which 345 questionnaires were found valid for analysis. Data were analysed using descriptive statistics, including frequency counts, percentages, and weighted mean scores, and inferential statistics, including the Pearson Product Moment Correlation Coefficient, the Independent Samples t-test, and the chi-square test, at a 0.05 level of significance. The findings revealed that respondents exhibit the identified attributes to a considerable extent (grand mean = 3.08). The study also found a statistically significant, moderate, positive relationship between the independent and dependent variables ($r = 0.574$, $p < 0.05$) and a significant dependent association on the chi-square test (chi-square = 7.82, $p < 0.05$). No statistically significant difference was found between male and female respondents ($t = 1.24$, $p > 0.05$). The major challenges identified include inadequate awareness, weak institutional support, infrastructural constraints, and limited access to information. The study recommends targeted interventions, improved access to resources, and intensified public education on diversity.

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CHAPTER ONE: INTRODUCTION

1.1 Background to the Study

The study of diversity of soil macrofauna under different land use types is situated within a body of scholarship that has grown rapidly in the past two decades. This section of the chapter traces the background to the study by examining the historical, theoretical, and practical dimensions of the subject.

Scholars have long recognised diversity as a critical determinant of outcomes in biology. Federal and state governments have initiated several reforms, yet implementation gaps continue to constrain progress in matters of diversity. Evidence assembled by Ibrahim and Osinachi (2015) across twelve states underscored the heterogeneity of outcomes linked to diversity. Such findings reinforce the argument that diversity deserves a place of priority on the development agenda. Longitudinal research by Oyelaran and Bamgbose (2016) revealed that sustained attention to diversity yields appreciable dividends over time. The practical import of these findings extends well beyond the academic sphere into everyday institutional practice. The reviewed studies, while valuable, are frequently dated, small in scale, or confined to a single locality.

diversity occupies a prominent position in contemporary debates about soil and national development. Auxiliary variables, including education, income, and location, further condition how diversity is experienced across communities. An examination by Bello and Alade (2019) attributed much of the observed variation in outcomes to institutional capacity and policy continuity. For practitioners, the practical significance of diversity cannot be overstated, given its demonstrable link with soil. A notable study by Nnamdi and Dauda (2017) argued that the impact of diversity is substantially mediated by the quality of institutions. The weight of evidence therefore points toward a renewed commitment to evidence-based decision-making. It is therefore imperative that further empirical work be undertaken to clarify the causal relationships at stake.

diversity, when examined in relation to soil, reveals complex and often paradoxical dynamics. Public institutions at the federal, state, and local levels have developed programmes that seek to mainstream diversity into routine governance. Nnamdi and Dauda (2020), in a survey of relevant stakeholders, concluded that the benefits of diversity are unevenly distributed across groups. For practitioners, the practical significance of diversity cannot be overstated, given its demonstrable link with soil. The work of Dauda and Ogunlana (2023) extended earlier analyses by demonstrating that soil reinforces the effects of diversity. Left unaddressed, the identified patterns are likely to intensify, with adverse consequences for all stakeholders. Nevertheless, the existing literature is not without its limitations, and several questions remain unresolved.

Over the past two decades, diversity has become increasingly significant within the Nigerian landscape and beyond. Federal and state governments have initiated several reforms, yet implementation gaps continue to constrain progress in matters of diversity. Findings reported by Ogunlana and Famuyide (2018) observed that respondents with greater exposure to diversity recorded markedly different results. The implications of these dynamics are far-reaching, touching questions of equity, efficiency, and accountability. Evidence assembled by Nnamdi and Aderemi (2015) across twelve states underscored the heterogeneity of outcomes linked to