

DIVERSITY AND DISTRIBUTION OF MOSQUITO LARVAE IN STAGNANT WATER BODIES

BY

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DEGREE IN BIOLOGY

[MONTH, YEAR]

CERTIFICATION

This is to certify that this research project titled "Diversity and Distribution of Mosquito Larvae in Stagnant Water Bodies" 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 and distribution of mosquito larvae in stagnant water bodies, 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 distribution. 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 358 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 = 3.07). The study also found a statistically significant, moderate, positive relationship between the independent and dependent variables ($r = 0.55$, $p < 0.05$) and a significant dependent association on the chi-square test (chi-square = 5.51, $p < 0.05$). No statistically significant difference was found between male and female respondents ($t = 1.26$, $p > 0.05$). 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 and distribution of mosquito larvae in stagnant water bodies 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.

Contemporary scholarship increasingly frames diversity as inseparable from the broader question of distribution. National policies and programmes have sought, with varying degrees of success, to respond to the realities of diversity and distribution. Findings reported by Nwosu and Musa (2018) observed that respondents with greater exposure to diversity recorded markedly different results. These observations collectively invite a reconsideration of standard assumptions regarding distribution. Evidence assembled by Nwosu and Aderemi (2015) across twelve states underscored the heterogeneity of outcomes linked to diversity. The practical import of these findings extends well beyond the academic sphere into everyday institutional practice. A recurring weakness in the literature concerns the difficulty of isolating the precise influence of {k0} from confounding factors.

A growing corpus of literature draws attention to the pivotal role of diversity in shaping developmental trajectories. Within Lagos State, the country's most populous commercial hub, the dynamics of diversity are observed in their starkest form. Studies conducted within the West African subregion by Okonkwo and Ekwueme (2018) reached conclusions broadly consistent with the Nigerian evidence. The weight of evidence therefore points toward a renewed commitment to evidence-based decision-making. The aggregate picture emerging from Ibrahim and Ibrahim (2023) points to a modest but consistent association between diversity and the outcomes of interest. The practical import of these findings extends well beyond the academic sphere into everyday institutional practice. A recurring weakness in the literature concerns the difficulty of isolating the precise influence of {k0} from confounding factors.

Contemporary scholarship increasingly frames diversity as inseparable from the broader question of distribution. National policies and programmes have sought, with varying degrees of success, to respond to the realities of diversity and distribution. Research by Ibrahim and Ibrahim (2021) using mixed methods provided particularly rich insight into the mechanisms connecting diversity and distribution. Such findings reinforce the argument that diversity deserves a place of priority on the development agenda. Ekwueme and Musa (2020), in a survey of relevant stakeholders, concluded that the benefits of diversity are unevenly distributed across groups. Sustained engagement with the issues raised here is therefore essential if meaningful progress is to be recorded. The reviewed studies, while valuable, are frequently dated, small in scale, or confined to a single locality.

Debates on national transformation repeatedly return to the role of diversity and its attendant dynamics. The socio-cultural diversity of Nigeria implies that responses to diversity must be differentiated rather than uniform. Empirical evidence from Ogbeide and Famuyide (2021) suggests that positive developments in