

CULTIVATION AND YIELD PERFORMANCE OF OYSTER MUSHROOMS ON AGRICULTURAL WASTES

BY

[STUDENT'S FULL NAME]

[MATRIC NUMBER]

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DEGREE IN BIOLOGY

[MONTH, YEAR]

CERTIFICATION

This is to certify that this research project titled "Cultivation and Yield Performance of Oyster Mushrooms on Agricultural Wastes" 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 cultivation and yield performance of oyster mushrooms on agricultural wastes, 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 cultivation; to determine the influence of these attributes on the outcomes under investigation; and to identify the challenges associated with cultivation and yield. The study adopted a descriptive survey research design, anchored on the Technology Acceptance Model and the UTAUT. A sample size of 410 respondents was determined using the Taro Yamane formula and selected through stratified and simple random sampling techniques, out of which 391 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 = 3.19). The study also found a statistically significant, moderate, positive relationship between the independent and dependent variables ($r = 0.45$, $p < 0.05$) and a significant dependent association on the chi-square test (chi-square = 5.38, $p < 0.05$). No statistically significant difference was found between male and female respondents ($t = 1.25$, $p > 0.05$). 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 cultivation.

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CHAPTER ONE: INTRODUCTION

1.1 Background to the Study

The study of cultivation and yield performance of oyster mushrooms on agricultural wastes 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.

Cultivation continues to command considerable attention among researchers, policymakers, and practitioners in biology. Public institutions at the federal, state, and local levels have developed programmes that seek to mainstream cultivation into routine governance. Studies conducted within the West African subregion by Kalu and Bello (2018) reached conclusions broadly consistent with the Nigerian evidence. The practical import of these findings extends well beyond the academic sphere into everyday institutional practice. Evidence assembled by Adekunle and Bamgbose (2015) across twelve states underscored the heterogeneity of outcomes linked to cultivation. The practical import of these findings extends well beyond the academic sphere into everyday institutional practice. Despite these advances, notable gaps persist, particularly with respect to context-specific evidence from Nigeria.

The relationship between cultivation and yield has been the subject of sustained academic interest across several disciplines. Economic pressures and resource scarcity frequently determine the pace at which cultivation advances in practice. Field evidence gathered by Eze and Eze (2016) suggested that stakeholder engagement materially improves the results achieved in matters of cultivation. Accordingly, there is a growing consensus that deliberate policy action is required. Findings reported by Dauda and Nnamdi (2018) observed that respondents with greater exposure to cultivation recorded markedly different results. 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.

A growing corpus of literature draws attention to the pivotal role of cultivation in shaping developmental trajectories. Nigeria's federal structure and its diverse cultural geography ensure that the experience of cultivation varies considerably from one region to another. Evidence assembled by Dauda and Nnamdi (2015) across twelve states underscored the heterogeneity of outcomes linked to cultivation. For practitioners, the practical significance of cultivation cannot be overstated, given its demonstrable link with yield. Comparative work by Ibrahim and Ibrahim (2022) across several states uncovered a consistent pattern linking cultivation with yield. Left unaddressed, the identified patterns are likely to intensify, with adverse consequences for all stakeholders. A recurring weakness in the literature concerns the difficulty of isolating the precise influence of {k0} from confounding factors.

Over the past two decades, cultivation has become increasingly significant within the Nigerian landscape and beyond. Within Lagos State, the country's most populous commercial hub, the dynamics of cultivation are observed in their starkest form. Empirical evidence from Bello and Alade (2021) suggests that positive developments in yield are associated with improvements in cultivation. The cumulative effect of these