

AFLATOXIN CONTAMINATION IN GROUNDNUTS IN STORAGE

BY

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[MONTH, YEAR]

CERTIFICATION

This is to certify that this research project titled "Aflatoxin Contamination in Groundnuts in Storage" 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 aflatoxin contamination in groundnuts in storage, 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 aflatoxin; to determine the influence of these attributes on the outcomes under investigation; and to identify the challenges associated with aflatoxin and contamination. The study adopted a descriptive survey research design, anchored on the Technology Acceptance Model and the UTAUT. A sample size of 403 respondents was determined using the Taro Yamane formula and selected through stratified and simple random sampling techniques, out of which 369 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 = 3.05). The study also found a statistically significant, moderate, positive relationship between the independent and dependent variables ($r = 0.508$, $p < 0.05$) and a significant dependent association on the chi-square test (chi-square = 9.08, $p < 0.05$). No statistically significant difference was found between male and female respondents ($t = 1.15$, $p > 0.05$). 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 aflatoxin.

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CHAPTER ONE: INTRODUCTION

1.1 Background to the Study

The study of aflatoxin contamination in groundnuts in storage 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 aflatoxin as inseparable from the broader question of contamination. The colonial and post-colonial legacies of the Nigerian state continue to influence contemporary patterns of aflatoxin. Comparative work by Ekwueme and Nwosu (2022) across several states uncovered a consistent pattern linking aflatoxin with contamination. The weight of evidence therefore points toward a renewed commitment to evidence-based decision-making. Evidence assembled by Adigun and Adekunle (2015) across twelve states underscored the heterogeneity of outcomes linked to aflatoxin. These developments carry important implications for policy and practice in food science and technology. Nevertheless, the existing literature is not without its limitations, and several questions remain unresolved.

In both global and African literatures, aflatoxin is now regarded as a key index of institutional performance. Economic pressures and resource scarcity frequently determine the pace at which aflatoxin advances in practice. Studies by Eze and Chukwu (2019) largely support the view that aflatoxin exerts a measurable influence on outcomes of interest. The practical import of these findings extends well beyond the academic sphere into everyday institutional practice. Ibrahim and Ogunlana (2020), in a survey of relevant stakeholders, concluded that the benefits of aflatoxin are unevenly distributed across groups. For practitioners, the practical significance of aflatoxin cannot be overstated, given its demonstrable link with contamination. Despite these advances, notable gaps persist, particularly with respect to context-specific evidence from Nigeria.

A growing corpus of literature draws attention to the pivotal role of aflatoxin in shaping developmental trajectories. The Nigerian context presents peculiar challenges, ranging from infrastructural deficits to institutional weaknesses, which shape the manner in which aflatoxin unfolds. An examination by Ibrahim and Ogunlana (2019) attributed much of the observed variation in outcomes to institutional capacity and policy continuity. The implications of these dynamics are far-reaching, touching questions of equity, efficiency, and accountability. A notable study by Eze and Bakare (2017) argued that the impact of aflatoxin is substantially mediated by the quality of institutions. Accordingly, there is a growing consensus that deliberate policy action is required. Nevertheless, the existing literature is not without its limitations, and several questions remain unresolved.

aflatoxin, when examined in relation to contamination, reveals complex and often paradoxical dynamics. National policies and programmes have sought, with varying degrees of success, to respond to the realities of aflatoxin and contamination. Research by Adekunle and Umeh (2021) using mixed methods provided particularly rich insight into the mechanisms connecting aflatoxin and contamination. These observations collectively invite a reconsideration of standard assumptions regarding contamination. Research by Ogunlana