PHYTOCHEMICAL ANALYSIS OF NEEM BARK FOR ANTIMICROBIAL COMPOUNDS

BY

[STUDENT'S FULL NAME]

[MATRIC NUMBER]

BEING A RESEARCH PROJECT SUBMITTED TO THE DEPARTMENT OF PHARMACY, FACULTY OF PHARMACEUTICAL SCIENCES, UNIVERSITY OF LAGOS, AKOKA, LAGOS STATE

IN PARTIAL FULFILMENT OF THE REQUIREMENTS FOR THE AWARD OF BACHELOR OF SCIENCE (B.Sc.) DEGREE IN PHARMACY

[MONTH, YEAR]

CERTIFICATION

This is to certify that this research project titled "Phytochemical Analysis of Neem Bark for Antimicrobial Compounds" 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.

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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.

ACKNOWLEDGEMENT

My profound gratitude goes to Almighty God for His grace, protection, and guidance throughout the duration of my study and the successful completion of this research project. I am deeply grateful to my supervisor, [SUPERVISOR'S NAME], for the patience, guidance, constructive criticism, and invaluable direction provided throughout the course of this research. I also wish to appreciate the Head of Department, the lecturers of the Department of Pharmacy, and my course mates for their support and friendship. My appreciation also goes to my parents and siblings for their unwavering support, both financial and emotional, throughout my academic journey.

ABSTRACT

This study examined phytochemical analysis of neem bark for antimicrobial compounds, 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 phytochemical; to determine the influence of these attributes on the outcomes under investigation; and to identify the challenges associated with phytochemical and analysis. The study adopted a descriptive survey research design, anchored on the Technology Acceptance Model and the UTAUT. A sample size of 420 respondents was determined using the Taro Yamane formula and selected through stratified and simple random sampling techniques, out of which 394 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 = 3.11). The study also found a statistically significant, moderate, positive relationship between the independent and dependent variables ($r = 0.599$, $p < 0.05$) and a significant dependent association on the chi-square test (chi-square = 5.86, $p < 0.05$). No statistically significant difference was found between male and female respondents ($t = 1.11$, $p > 0.05$). 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 phytochemical.

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CHAPTER ONE: INTRODUCTION

1.1 Background to the Study

The study of phytochemical analysis of neem bark for antimicrobial compounds 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.

A growing corpus of literature draws attention to the pivotal role of phytochemical in shaping developmental trajectories. The Nigerian context presents peculiar challenges, ranging from infrastructural deficits to institutional weaknesses, which shape the manner in which phytochemical unfolds. Osinachi and Dauda (2020), in a survey of relevant stakeholders, concluded that the benefits of phytochemical are unevenly distributed across groups. The implications of these dynamics are far-reaching, touching questions of equity, efficiency, and accountability. Comparative work by Adeniyi and Famuyide (2022) across several states uncovered a consistent pattern linking phytochemical with analysis. The cumulative effect of these dynamics is a situation that demands urgent and coordinated intervention. The reviewed studies, while valuable, are frequently dated, small in scale, or confined to a single locality.

phytochemical occupies a prominent position in contemporary debates about analysis and national development. Federal and state governments have initiated several reforms, yet implementation gaps continue to constrain progress in matters of phytochemical. Field evidence gathered by Nnamdi and Aderemi (2016) suggested that stakeholder engagement materially improves the results achieved in matters of phytochemical. Such findings reinforce the argument that phytochemical deserves a place of priority on the development agenda. Longitudinal research by Bamgbose and Bello (2016) revealed that sustained attention to phytochemical yields appreciable dividends over time. Such findings reinforce the argument that phytochemical deserves a place of priority on the development agenda. 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 phytochemical and its attendant dynamics. The Nigerian context presents peculiar challenges, ranging from infrastructural deficits to institutional weaknesses, which shape the manner in which phytochemical unfolds. Comparative work by Bamgbose and Bello (2022) across several states uncovered a consistent pattern linking phytochemical with analysis. For practitioners, the practical significance of phytochemical cannot be overstated, given its demonstrable link with analysis. Studies conducted within the West African subregion by Nnamdi and Adigun (2018) reached conclusions broadly consistent with the Nigerian evidence. 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.

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