STATISTICAL ANALYSIS OF YIELD OF SOME SELECTED COWPEA VARIETIES AT THE INTERNATIONAL INSTITUTE OF TROPICAL AGRICULTURE (IITA) IBADAN

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ABSTRACT

The aim of this project is to explain the principles of statistics governing the analysis and interpretation of the statistical data i.e. investigating the application of a statistical procedure namely experimental design to the yield of Cowpea varieties as carried out by I.I.T.A was obtained and analyzed. There are eight varieties of cowpea on four sites located at Kano, Shika, Mokwa and Kaduna. There are over four sites, for the purpose of this project we will be making use of the results available from these sites. The purpose of studying the performance of the varieties of cowpea is to know if there are differences in their performances. If there are any differences at all, also to find out if the differences are due to replication or both. This project is divided into five chapters.

Chapter One deals with the general introduction to cowpea crop, how it grown, constraints to cowpea production and it's uses, objectives of research work, source of data obtained, scope of study and coverage of the project and concepts and definition.

Chapter Two is on literature review, which entails the review of experimental design: its main uses and the types of experimental design available.

Chapter three deals with the project methodology and Brief description of the package used, which is Statistical Packages for Social Sciences and can be used in the statistical analysis of research data.

Chapter four deals with the analysis of the data obtained, Test of hypothesis, Blocking efficiency, co-efficient of the interpretation of the results, conclusion and recommendation draw from the analysis in which it was concluded that except for experiment I and II (Kano and Chika Stations) there are no significant differences in the yields of cowpea varieties at Mokwa and

Kaduna research stations at 5% level of significance i.e. irrespective of trial location there is an equal chance that each variety performed exactly in the same way with respect to yield.