

**STATISTICAL ANALYSIS ON EFFECT OF  
NITROGEN FERTILIZERS ON DIFFERENT  
VARIETIES OF RICE**

**BY**

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**MATRIC NO: 2008/1650**

**DEPARTMENT OF STATISTICS, FEDERAL UNIVERSITY OF  
AGRICULTURE, ABEOKUTA.**

**JULY, 2012.**

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**A PROJECT SUBMITTED IN PARTIAL FULFILMENT OF THE  
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## ABSTRACT

In this project work, the appropriate fertilizer requirement for yield of rice was determined using factorial design, ANOVA, Multiple Comparison of Mean and Test Between - Subjects Effect.

Graphical plot that shows the Main Effect between the treatment and varieties which shows that the variety effects are large compared to the effects of the treatment.

The Interaction Effect plot shows the yield output versus the treatment for the five varieties of rice, which tells us that the effect of treatment upon the yield output depends upon the varieties.

The interval plot of yield to the mean makes us know that at 95% confidence interval, variety four has the highest mean value (3486.08) followed by variety three with mean value (3264), followed by variety one with mean value (2798.5), next by variety two with mean value (2552.92) and the last is variety five with mean value (2152.92). The intervals all overlap, therefore, we can not conclude that any of the means are different.

This study also examines how the low quality of our local rice that have emanated from the poor farming / poor design of experience could be checked through good design of experiment using appropriate fertilizer requirement on local rice variety

Statistical packages such as SPSS and MINITAB were used in the analysis of data in this research work.

The study concludes by recommending that Farmers in the country should be encouraged to cultivate variety 4 i.e (NERICA L---42) more than the other variety, extension officers should intensify their roles to farmers to use the right fertilizer level and variety in obtaining high yield, and government should provide modern farm implements, credit facilities and all what it takes to make agriculture rewarding to farmers in the country.