

## **INSECTICIDE USE EFFICIENCY IN COWPEA PRODUCTION IN NIGERIA**

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### **ABSTRACT**

Cowpea is a pulse crop widely consumed in Nigeria to bridge the daily per caput requirements of protein needed by Nigerians; especially the low income earners. Productivity enhancement in cowpea production is achieved with the application of insecticide; which is needed to control insect pests that negatively impact on the yield of cowpea. This study assessed insecticide use efficiency in cowpea production in Kano and Ogun states (representing areas of high and low cowpea production in Nigeria respectively) from where a total of two hundred respondents were selected for the study using simple random sampling procedure. Descriptive statistics was used to explain the insecticide use pattern of cowpea farmers while the OLS regression and linear programming were used to determine insecticide use efficiency and optimal insecticide application respectively in the two locations. The significant production resources affecting cowpea production in both locations were land area cultivated to cowpea production, hired and family labour utilised in cowpea production. Insecticide was found to be a significant factor affecting cowpea productivity only in Kano State where it was found to be used above the optimal requirement, given its marginal value product of N141.27 and marginal factor cost of N 655.65. The study recommended among others that developments that would bring about sustainability in the use of insecticide should therefore, take into consideration the environmental implication occasioned by its use, the established standards and what actually operates at the field level in line with the socio-cultural cropping arrangement of cowpea producers in the country.

### **Keywords**