

## **EFFECT OF GARLIC, POTASH AND LEMON RIND ON THE CONTROL OF STORAGE INSECT PESTS OF COWPEA (*VIGNA UNGUICULATA* L. WALP) IN NIGER STATE, NIGERIA**

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### **ABSTRACT**

The trial was conducted at Pest Management Technology Laboratory of Niger State College of Agriculture, Mokwa, located on 09<sup>0</sup> 18<sup>1</sup>N, 05<sup>0</sup> 04<sup>1</sup>E of the equator in Southern Guinea Savanna agro-ecological region of Nigeria in 2011 and 2012 cropping seasons. The experiment was aimed at determining the effect of garlic powder, potash, lemon rind and Actellic dust in the storage of cowpea (*Vigna unguiculata* L. walp), with Kano white variety of cowpea. The experiments were arranged in a complete randomized design (CRD) consisted of eight treatments, 4g and 8g of each of garlic powder, potash and lemon rind, actellic dust as well as no application (control) all replicated three(3) times. The parameters measured include number of live insects found, number of dead insects found, insects' damage score and weight loss of the grain. The result showed that the number of live, dead weevils, the cowpea damage score and weight loss during the storage at 30<sup>th</sup> days, 60<sup>th</sup> days, and 90<sup>th</sup> days were significantly similar with all treatments of garlic powder, potash and lemon rind when compared to the control. They are therefore recommended for usage during storage of cowpea for safer management method and cheaper for resource poor farmers; however at 4g and 8g dosage potash is more effective for management of *Callosobruchus maculatus* in the cowpea store.

**KEYWORDS:** *Callosobruchus maculatus*, Cowpea Garlic, Insect Pests, Lemon Rind and Potash