

Insecticidal activity of leaf powders of *Atemisia annua* and *Occimum gratissimum* on stored Rice weevil (*Sitophilus oryzae*)

Okore O. O and Okonkwo A. E

Biological Sciences Department, Michael Okpara University of Agriculture, Nigeria

The insecticidal properties of the leaf powders of *Artemisia annua* and *Occimum gratissimum* against *Sitophilus oryzae* on rice grains was investigated in the laboratory. Mortality rate of *S. oryzae* was tested using 0.5g of these leaf powders. Ten weevils were introduced from laboratory culture into 15g of rice in appropriate jars containing 1.0g and 2.0g of the plant powders. The experiment was carried out in five replicates. From the experiment, it was observed that both leaf powders had insecticidal property. 100% mortality was observed after six days of subjecting the adult weevils to the plant powders. Treated grains had lower mean rate for adult emergence when compared with the control experiment. The mean values obtained for *A. annua* powder culture were 22.0 ± 1.00 and 22.50 ± 0.50 while for *O. gratissimum* powder cultures, the means were 24.0 ± 0.70 and 21.50 ± 1.00 respectively. The control culture had mean values of 109.20 ± 5.54 and 113.60 ± 5.41 . These show that both plant powders have potential as botanical for this important pest of rice in storage.

eguomovo@yahoo.co.uk