

## Effects of different processing methods in reducing insecticidal residues on Bushitao (*Vigna unguiculata* Walp (L)) pods

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A study was carried out to assess the residual effects of three recommended insecticides and their removal by different processing procedures.

A bioassay was used to assess insecticidal toxicity. Aphids were used as indicator organisms to assess residues in the bioassay method. Three insecticides (Acephate, Dimethoate and Imidachlopid) recommended by Department of Agriculture were used to control aphids. Processing methods included washing of Bushitao pods with tap water, 2 % salt-water and 10 % (w/v) buttermilk. The experiment was done in a Completely Randomized Design (CRD) with five replication. The residual toxicity was determined by means of aphid mortality.

In Bushitao pods that were not subjected to any processing treatments (control) the residual toxicity, based on Aphid mortality, was found to last for 14 days, 12 days and 10 days for Dimethoate, Acephate and Admire respectively. All the processing methods used in this study significantly ( $P < 0.01$ ) reduced the insecticidal residues on Bushitao pods compared to the control. Washing the pods with 2% salt-water showed the highest level of reduction in residual toxicity.

From the results of the experiment, it is apparent that washing Bushitao pods with 2% salt-water reduce the toxic effect of insecticides remarkably.