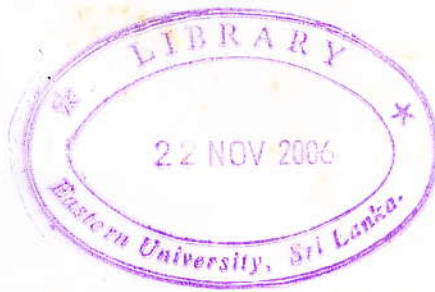


**STUDIES ON THE EFFECT OF DIFFERENT METHODS
TO PROTECT STORAGE PEST OF COWPEA**

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ABSTRACT

A laboratory study was conducted to find out a suitable storage method for cowpea against the storage insect *Callosobruchus maculatus* by comparing the effect of four treatments such as neem leaf powder (5g/100g of cowpea seeds), citrus leaf powder (5g/100g of cowpea seeds), rice husk ash (5g/100g of cowpea seeds) and exposure to sunlight and the number of cowpea seeds with eyehole, number of adult emergence, and weight loss were assessed for two month. These parameters were compared with untreated control.

The number of cowpea seeds with eyehole in all treatment (neem, ash, citrus and sundry) other than the control was significantly ($p < 0.05$) reduced. Number of adult emergence was significantly reduced when neem, ash and citrus were used. However, it was found out that the neem and ash had higher efficiency in reducing the number of seeds infested with *Callosobruchus maculatus* and the emergence of adults. All the treatments other than control have significantly reduced the percentage of weight loss of cowpea seeds. Even though, it was observed that the neem and ash had higher efficacy in reducing the percentage of weight loss of cowpea seeds than the citrus and seed exposed to sunlight.

Therefore, based on these results neem leaf and ash could be effectively used against *Callosobruchus maculatus* in cowpea than citrus and the seed exposed to sun light.

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