EVALUATION OF THREE SYSTEMIC INSECTICIDES AND THREE METHODS OF APPLICATION FOR THE CONTROL OF RED PALM WEEVIL, (RHYNCHOPHORUS FERRUGINEUS OLIV, COLEOPTERA CURCULLIONIDAE)

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The systemic insecticides, monocrotophos methomidophos and oxydemeton-methyl were evaluated against red weevil larvae. Fifty young palms were artificially infested by introducing twenty larvae per palm, into holes of 2.5 cm diameter, 15 cm deep on the trunk. Fourteen days after introduction, palms were treated with three insecticides using three different methods of application viz trunk injection, drenching into the crown and feeding through the exposed roots. Ten days after treatment palms were uprooted, split and larval mortality was recorded. Each treatment was replicated five times.

Both monocrotophos 60% and methamidophos 60% caused significantly high mean percentage mortality than oxydemetonmethyl.

Comparative application methods indicated a significantly high mean percentage mortality ($P=0.001$), when the crown was drenched and when injected into the trunk, over the root feeding technique.

There was no interaction, between the insecticides and the methods of application.

Length of the larval feeding tunnels in the controls were significantly longer than in the treated palms ($p=0.01$). Also the mean length of the feeding tunnels was significantly shorter in the drenched palms ($p=0.05$). Results indicated that monocrotophos 60% and methamidophos 60% are equally efficient in controlling red weevil infestation when used at the rate of 6 g ai per palm. Drenching into the crown or trunk injection proves to be equally efficient methods for application.