

EVALUATION OF SYSTEMIC INSECTICIDES FOR THE
CONTROL OF FOLIAR PESTS OF COCONUT

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In the past, studies on the use of systemic insecticides have shown that application to the palm by trunk injection was effective in killing the leaf eating caterpillar *Opisina arenosella* (= *Nephantis serinopa*).

However with a view to avoid permanent damage caused to the palm trunk, by trunk injection, other methods of application were evaluated.

In experiments carried out in several estates with palms of varying heights application by feeding through exposed roots and trunk injection were both very effective in killing, the foliar pests, *O.arenosella*, *Promecotheca cumingi* and *Aspidiotus destructor*, when monocrotophos and methamidophos were applied at the rate of 6 g a.i. per palm.

In sandy soils, root feeding is practicable but in gravely and clayey soils, it is difficult to expose healthy roots, when large numbers of palms have to be treated.

Trunk injection using electric drill is quicker and is more convenient than root feeding, to arrest a fast spreading pest infestation.

About 2000 mature palms treated in July 1985, at Dummalasuriya and 1700 young

palms treated in October 1985 at Madurankuliya by trunk injection with monocrotophos using electric drill were healthy in June 1986. The wounds caused by injection healed, though a permanent hole was left on the trunk.

Pesticide residue analysis carried out at CISIR from nut water collected from treated palms by Thin Layer Chromatography revealed that within two month after treatment the residue levels fell below detectable limit.