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EFFECT OF TWO SYNTHETIC PYRETHRO1D INSECTICIDES ON THE CONTROL OF CARDAMOM THRIPS *(SCIOTHRIPS CARDAMOMI* RAMK.) INFESTING CARDAMOM *(ELETTARIA CARDAMOMUM)*

Cardamom thrips *Sciothrips cardamomi* (Ramk) is the most serious pest of cardamom in south India. If feeds on the succulent shoots, flower buds and capsules causing severe injury. For controlling the pest, repeated applications of insecticides in a scheduled manner are essential.

Nair (1967) recommended the use of nicotine sulphate and dieldrin for the control of cardamom thrips. Nambiar *et al.* (1975) recommended quinalphos, PAP and dimethoate as 0.1% sprays against this pest. Wilson *et al.* (1977) found that leptophos, monocrotophos, phosalone, formothion, phenthoate and dimethoate as 0.03% sprays are effective against the thrips.

The phosphatic synthetic pyrethroids, permethrin and cypermethrin were evaluated against the thrips during 1980–81 at the Cardamom Research Station, Pampadumpara. The trial was carried out on Mysore variety. The insecticides permethrin 1 CO ppm and cypermethrin at 60 ppm were applied at monthly intervals from April to November skipping application during June. High volume spraying was done at 0.5 l/plant. Monocrotophos and quinalphos were used at 3CO ppm and 500 ppm respectively as checks.

The effect of the treatments was estimated by comparing the intensity of infestation on the capsules formed after the commencement of application of the treatments. Capsules collected at each harvest were sorted out separately for each treatment and the percentage of infestation worked out.

The data obtained were pooled, tabulated and statistically analysed. The results of analysis are presented in Table 1.

Table 1

Intensity of infestation by thrips on cardamom capsules under treatments with synthetic pyrethroids

Treatment No.	Treatments	Percentage of infestation	Percentages transformed into angles
T_1	Permethrin, 100 ppm	2.302	7.42
T_2	Cypermethrin, 60 ppm	3.607	9.54
T_3	Monocrotophos, 300 ppm	3.105	8.52
T_4	Quinalphos, 500 ppm	6.202	11.82
T_0	Control	19.760	23.52
	CD (0.05)		435

Permethrin at 100 ppm gave better protection than quinalphos at 500 ppm. However, permethrin at 100 ppm was on par with cypermethrin 60 ppm and monocrotophos 300 ppm.

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സംഗ്രഹം

ഏലപ്പേൻ നിയന്ത്രണത്തിന് കൃത്രിമ പൈറിത്രോയ്ഡ് വിഭാഗത്തിൽപ്പെട്ട കീടനാശിനികൾ ഉപയോഗിച്ച് പാമ്പാടുംപാറ ഏല ഗവേഷണകേന്ദ്രത്തിൽ പരീക്ഷണങ്ങൾ നടത്തിയതിൽ 0.006% വീര്യത്തിൽ സൈപെർമിത്രിൻ, 0.01% വീര്യത്തിൽ പെർമിത്രിൻ ഇവ ഫലപ്രദമാണെന്നു കണ്ടു.

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