

CONTROL OF MUSTARD SAW FLY, *ATHALIA PROXIMA* KLUG ON *RAPHANUS SATIVUS* L.

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The results of the field experiment indicated that spraying of 0.01% Cypermethrin (Ripcord), Permethrin (Permasect), Permethrin (Ambush), MIPC, Bassa, 0.05% Orthene, Mecarbam, 0.02% Aldrin, 0.03% Methyl parathion, Endosulfan and Methyl demeton were quite effective for control of mustard saw fly, *Athalia proxima* Klug, on radish.

Vegetable farms of radish around Pune (Maharashtra) are regularly infested by mustard saw fly. Caterpillars of the same feed on young and mature leaves by making several holes in the leaf lamina. Due to the voracious feeding by the larvae only midribs of the leaves are left, resulting in the loss of yield. Kadam & Patel (1956) used Pyrethrum spray diluting with water in the proportion of 1:800 against the pest. Dorge & Mogal (1967) recommended the use of 0.05% Pyrocolloid and 0.05% Malathion to check the infestation of mustard saw fly. Butani *et al.* (1977) suggested spraying with 0.05% DDVP or 0.1% Malathion or dusting with 4% Carbaryl or 5% Malathion for the control of the pest on radish and other crops. Recently, Jagtap & Kadam (1981) observed effective control of the pest on radish by 0.02% Parathion, 0.05% Malathion, 0.02% Diazinon and 0.2% Carbaryl spray.

A field experiment was conducted during Kharif 1979 on the white long variety of radish at Agricultural College Farm, Pune to study the effect of newer insecticides on mustard saw fly. Fourteen treatments including control were replicated thrice in randomised block design having a plot size of 6 X 3 m (Table I). For recording the observations, ten plants were selected randomly from each plot and tagged. Total number of larvae were counted prior to and 48 hrs after insecticidal spray on tagged plants. The percentage decline of larval population was worked out and transformed into angular values for statistical analysis.

Statistical analysis of the data indicated that all the treatments were significantly superior to control, for reducing the infestation of mustard saw fly

(Table I). The treatment with Cypermethrin (Ripcord), Permethrin (Permasect), Permethrin (Ambush), MIPC, Bassa, Orthene, Mecarbam, Aldrin, Methyl parathion, Endosulfan and Methyl demeton were at par and significantly superior to rest of the treatments, showing maximum decline in larval population of mustard saw fly.

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Table—I. Control of *Athalia proxima* Klug. on radish with newer insecticides.

Treatment	Concen- tration %	% larval mortality (48 hrs after spraying)	Source of insecticide
Cypermethrin (Ripecord)	0.01	100.00 (90.00)	M/S NOCIL, Bombay
Fenvalerate (Sumicidin)	0.01	90.36 (75.63)	" Rallis India Ltd., Bangalore
Permethrin (Permasect)	0.01	100.00 (90.00)	" B.P.M., Bombay
Permethrin (Ambush)	0.01	98.80 (86.35)	" ICI, Bombay
Orthene	0.05	97.61 (84.81)	" B.P.M., Bombay
MIPC	0.10	97.52 (84.73)	" "
Bassa	0.10	100.00 (90.00)	" "
Mecarbam	0.05	99.9 (89.81)	" "
Aldrin	0.02	100.00 (90.00)	" Kulkarni, Sangli
Methyl parathion	0.03	100.00 (90.00)	" "
Endosulfan	0.03	96.29 (83.51)	" "
Methyl demeton	0.03	100.00 (90.00)	" "
Monocrotophos	0.03	88.37 (73.54)	" CIBA-GEIGY, Bombay
Untreated (Control)	—	1.38 (3.94)	

Arcsin values in parentheses.