

ON THE CONTROL OF *EROSOMYIA INDICA* GROVER A NEW PEST OF MANGO IN KERALA

Erosomyia indica Grover (Cecidomyiidae; Diptera) was first recorded as a pest of mango in India by Grover and Prasad (1966) and its distribution and biology studied by Prasad *et al* (1966) and Prasad and Grover (1966). The adult is a small yellowish midge, the maggots of which are seen tunnelling within the pre-flowering tender shoots, leaf petioles, flower buds and within just set fruits. The attack on the vegetative parts, especially on the tender shoots, results in the formation of small swellings (galls) all over. The full grown maggots, which are yellowish in colour bore their way out and drop down to pupate in soil. The attacked regions of the shoot gradually die and dry up. The attacked flower buds and fruits show exit holes on them and they drop subsequently. The damage to the tender shoots have been found to be of the magnitude of 50 to 90 percent during the months of December to March. Young plants when attacked often are prevented from growing at all due to the killing of all the fresh shoots growing from time to time. The grafted varieties of mangoes appear to be more susceptible than the local varieties.

On account of the severity of the damage caused by this pest and since nothing is known on the control of its attack, a field experiment was conducted at the Agricultural College Farm, Vellayani, during 1970 with a view to compare the efficacy of the different insecticides in controlling the midge. The details of the insecticides used and results are given in Table I. The insecticides were sprayed on the tender shoots as they were just growing out of the stem. The occurrence of the symptoms of the midge attack was observed a week after application of the insecticides, by which time the shoots were full grown.

Table I

Insecticides and doses	Percent shoots damaged	
	First trial	Second trial
D. D. T. 0'2%	50	—
Sevin (S) 0'2%	20	—
Endrin 0'04%	30	11.3
Formothion (Anthio) 0.05%	40	—
Dimethoate (Rogor) 0.075%	10	Nil
Phosphamidon (Dimecron) 0.05%	Nil	3
Parathion 0.04%	10	Nil
Endosulfan (Thiodan) 0.05%	10	—
Control : unsprayed	82.5	77

S. Suspension; all others are emulsions. Brackets are for proprietary names.

It may be seen from Table I that parathion, dimethoate, phosphamidon and endosulfan were highly effective in reducing the infestation on the mango shoots by the gall midge.

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References

- Grover, P. and Prasad, S. N. 1966. Studies on Indian gall midges XVI. Four species of gall midges. (Cecidomyiidae: Diptera) affecting inflorescence of mango. *Cecidologia indica 1*: 1-19
- Prasad, S. N. and others. 1966. Survey of gall midges infection in mango inflorescence. *Cecidologia indica 1*: 1-19
- Prasad, S. N. and Grover, P. 1966. Gall midges of economic importance IV. Biology of gall midges (Gecidomyidaej Diptera) affecting mango inflorescence. *Cecidologia indica 1*: 51-66

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