

EFFECT OF DIFFERENT INSECTICIDES AGAINST SLUG CATERPILLAR (*Parasa lepida* L.) ON MANGO

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ABSTRACT

An experiment was carried out to study the effectiveness of insecticides on slug Caterpillar on mango. A field experiment was carried out at Horticultural Instructional Farm, Sardarkrushinagar and three mango trees per treatment were selected. From the overall results it can be concluded that application of flubendiamide 480 SC @ 0.14 per cent or chlorantraniliprole 18.5 SC @ 0.006 per cent or spinosad 45 SC @ 0.014 per cent at 15 days interval found most effective to control the larval population of slug caterpillar on mango.

KEY WORDS: slug caterpillar, *Mangifera indica*, *Parasa lepida*

INTRODUCTION

Mango (*Mangifera indica* L.) is the national fruit of India. Mango truly a “King” of fruits has been cultivated for about 4,000 years and its production and consumption has gradually increased as its popularity has grown (Baddi *et al.* 2015). It is native to India and this sweet fruit was described in the ancient Sanskrit literature, e.g. *Valmiki Ramayana*. The mango belongs to family Anacardiaceae is an important tropical and sub-tropical fruit crop. Among the fruits of universal importance, mango is one of the top fruit, because of its sweet fragrance, attractive colour, high palatability, taste and quality being rich in sugar, vitamins, and minerals. The larvae of slug caterpillar is the destructive stage of this insect. The young larvae feed on the lower epidermis of the leaf. As they mature, the whole leaf blade is eaten leaving the mid ribs. In heavy infestation, the larvae defoliate whole mango plant. The larvae of *Parasa lepida*

observed on young leaves of mango at Indore (Madhya Pradesh). The leaves of younger plant damaged up to 52.6 per cent in mango (Kapoor *et al.* 1985).

MATERIAL AND METHODS

To evaluate the efficacy of various insecticides against slug caterpillar on mango, a field experiment was carried out at Horticultural Instructional Farm, Sardarkrushinagar and three mango trees per treatment were selected. Five liter spray solution / tree (Table 1) was prepared for each treatment. Insecticides were applied at respective dose with the help of Gator sprayer. The insecticidal application was applied during morning hours.

RESULTS AND DISCUSSION

From the various insecticides tested against slug caterpillar under field conditions at Sardarkrushinagar, it can be seen that flubendiamide 480 SC @ 0.14 per cent proved as the most effective treatment to control the slug caterpillar larvae under

field conditions followed by chlorantraniliprole 18.5 SC @ 0.006 per cent and spinosad 45 SC @ 0.014 per cent. While, next effective treatments were indoxacarb 15.8 EC @ 0.007 per cent, novaluron 10 EC @ 0.015 per cent, chlorpyrifos 50 % + cypermethrin 5 % @ 0.04 per cent, cypermethrin 5 % + quinalphos 20 % @ 0.023 and profenophos 40 % + cypermethrin 4 % @ 0.044 per cent and were rank second. The treatment of chlorpyrifos 20 EC @ 0.04 per cent was least effective against slug caterpillar on mango.

SUMMAR AND CONCLUSION

From the overall results , it can be concluded that flubendiamide 480 SC @ 0.14 per cent proved as the most effective treatment to control the slug caterpillar larvae under field conditions followed by

chlorantraniliprole 18.5 SC @ 0.006 per cent and spinosad 45 SC @ 0.014 per cent at 15 days interval from the initiation of pest population.

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Table 1. Details of insecticides used against *P. lepid*a on mango

Sr. No.	Technical name	Concentration (%)	Dose (ml/10 lit)	Commercial name
1.	Flubendiamide 480 SC	0.14	3	Fame
2.	Chlorantranilipore 20 SC	0.006	3	Coragen
3.	Novaluron 10 EC	0.015	5	Rimon
4.	Indoxacarb 15.8 SC	0.007	5	Avaunt
5.	Chlorpyriphos 50 EC + Cypermethrin 5 EC	0.055	10	Spine 505
6.	Cypermethrin 5 EC + Quinalphos 20 EC	0.023	10	Viraat
7.	Spinosad 45 EC	0.014	3	Tracer
8.	Profenophos 40 EC + Cypermethrin 4 EC	0.044	10	Profensuper
9	Chlorpyriphos 20 EC	0.04	20	Hilban
10.	Control	-	-	-

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