POPULATION FLUCTUATION OF SLUG CATERPILLAR, *Parasa. lepida* ON DIFFERENT VARIETIES OF MANGO

CHAUDHARY, N. J.; PATEL, B. C. AND PATEL, R. K.

DEPARTMENT OF ENTOMOLOGY
C. P. COLLEGE OF AGRICULTURE
SARDARKRUSHINAGAR DANTIWADA AGRICULTURAL UNIVERSITY
SARDARKRUSHINAGAR – 385 506 (GUJARAT), INDIA

EMAIL: niravchaudhry1007@gmail.com

ABSTRACT

An experiment was carried out to study the population fluctuation of slug caterpillar on different varieties of mango and it aws found that the larval population of P. lepida recorded higher in Rajapuri and Kesar varieties of mango during the month of August and September, respectively. While, moderate larval population was recorded in Dasheri and Langda varieties in the month of October and November, respectively. While, the lowest larval population was recorded in Amrapali and Alphanso varieties during the month of August. Moreover, the Rajapuri variety of mango was more preferred by slug caterpillar than Alphanso variety of mango.

KEY WORDS: slug caterpillar, Mangifera indica, Parasa lepida

INTRODUCTION

Mango (*Mangifera indica* L.) is considered as a national fruit of India and cultivated for about 4,000 years in our country and its production and consumption is gradually increased (Baddi *et al.*, 2015). Among the total world production, India rank first by producing 54 per cent of total world production. It is a commercial fruit crop occupies an area of 25,16,000 ha. with an annual production of 1,84,31,000 million tonnes in India (Anonymous, 2015[a]) while, cultivation is about 1.42 lakh ha. and total production is about 11.25 lakh tonnes in Gujarat (Anonymous, 2015[b]). About, 150 species of insect pests have been reported by Butani, (1974) and David and Ramamurthy, (2012) attacking on mango. Amongst the different insect pests attacking mango, the population of slug caterpillar (*P. lepida*) was found increasing in north Gujarat region day by day. The young larvae feed on the lower epidermis of the leaf and in heavy infestation, the larvae defoliate whole mango plant. The leaves of younger plant damaged up to 52.6 percent in mango as reported by Kapoor *et al.*, (1985). The back of the caterpillars are furnished with stinging hairs, which have an irritant effect on the skin of human being when came into contact (Viqar *et al*., 2008).

MATERIAL AND METHODS

To study the population fluctuation of slug caterpillar, an experiment was carried out during January 2015 to December 2015 at Horticultural Instructional Farm, S.D.A.U., Sardarkrushinagar on different varieties of mango *viz*., Rajapuri**,** Kesar, Langda, Dasheri, Amrapali, Alphanso. Five trees of

each variety of mango were randomly selected and from each tree, ten twigs (50 cm length) from all the directions were selected and total number of larvae/twig were counted at week interval.

RESULTS AND DISCUSSION

The study on population fluctuation of slug caterpillarcarried out on different varieties of mango during January to December, 2015 and the data are presented in Table 1 and depicted in Figure 1. The data showed that the population of slug caterpillar was started from 4th week of May and remained active up to December on all the varieties of mango. The highest (9.02 larvae/twig) larval population of *P. lepida* recorded in the variety Rajapuri during the month of August and the lowest (2.02 larvae/twig) was recorded in the variety Alphanso during the month of September. The varieties Kesar, Langda, Dasheri, ad Amprpali recorded 7.91, 6.21, 4.95 and 3.58 larvae/twig, respectively. The higher infestation of slug caterpillar in Rajapuri variety might be due to shape and colour of leaves of variety.. The leaf shape of Rajapuri is oblong having grooves and ridges surface with dark green colour and lanceolate waxy magins with more chlorophyll. Hence, the ovipositional preference of slug caterpillar of slug caterpillar found more on Rajapuri variety. In Alphanso variety, the shape of leaves is flat ovate and colour and colour of leaves were were light green , which may not preferred by female for oviposition.

REFERENCES

Anonymous, (2015[a]). Area and production of fruit crops. National Horticultural Board, Ministry of Agriculture, Government of India. pp. 2-4. (www. nhb.gov.in)

Anonymous, (2015[b]).Area and production of fruit crops. National Horticultural Board, Ministry of Agriculture, Government of India at a glance. pp. 91-99. (www. nhb.gov.in)

Baddi, J.; Vijayalakshmi, D.; Durgannavar, N. A. and Chandru, A. (2015). Mango peel: A potential source of natural bioactive phyto-nutrients in functional food.*Asian Journal of Dairy Food Research.*34(1): 75-77.

Butani, D.K. (1974). Insect pests of Fruit crops and their control (Mango). *Pesticides*. 8(3): 37-41.

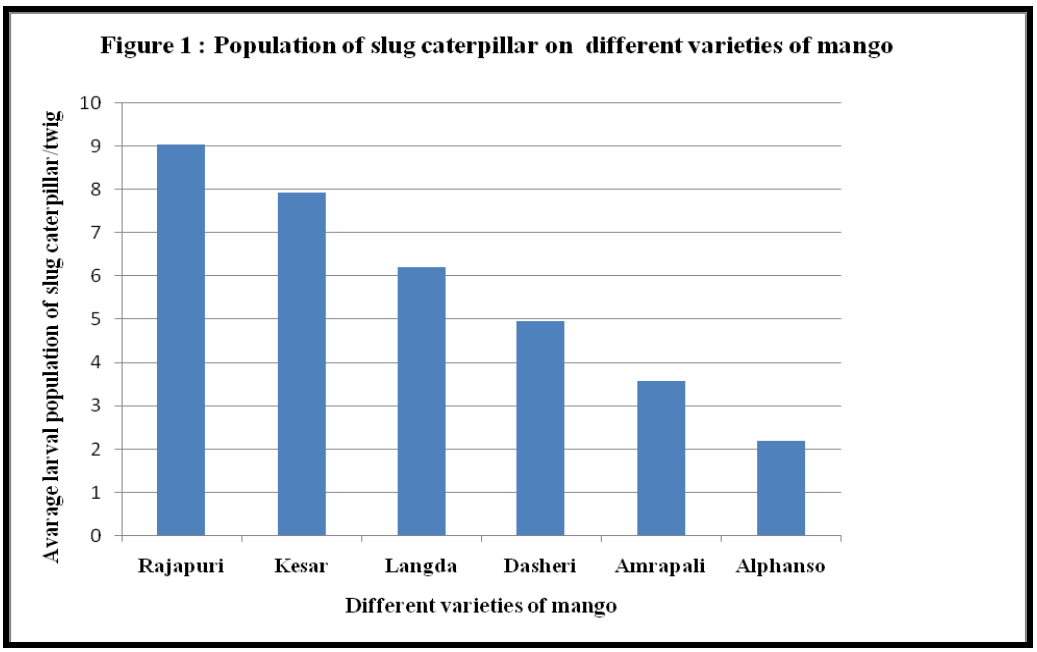
David, B.V. and Ramamurthy, V.V. (2012). Pests of fruit trees. In: Elements of Economic entomology. Seventh Edition. Namrutha Publications. Chennai. pp. 153-154.

Kapoor, K.N.; Deobhakta, S.R. and Dhamdhere, S.V. (1985). Bionomics of the slug caterpillar, *Latoia lepida* (Cramer) (Lepidoptera: Limacodidae) on mango. *Journal of Entomological Research.*9(2): 235-236.

Viqar. S.; Kamaluddin, A.A.; Isma, Y and Waqar-Ul-Haq. (2008). Tea pest *Parasa lepida*(Moore) (Lepidoptera: Limacodidae) from Bangladesh with reference to its description and control strategy. *International Journal of Biology and Biotechnology.*5 (1-2): 41-45.

Table 1. Larval Population of *P. lepida* on mango

Sr No	Name of the variety	Av. larval population/twig
1	**Rajapuri**	9.02
2	**Kesar**	7.91
3	**Langda**	6.21
4	**Dasheri**	4.95
5	**Amrapali**	3.58
6	**Alphanso**	2.20



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