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Host Preference of Epilachna Beetle, *Henosepilachna vigintioctopunctata* (Fabr.)*

K. N. Patel and M. S. Purohit **

Department of Entomology, N. M. College of Agriculture, Navsari - 396 450

The general survey made for the determining the host range of epilachna beetle during 1996-97 at College Farm, Navsari indicated that the pest damaged mainly brinjal (*Solanum melongena* L.) and tomato (*Lycopersicum esculentum* L.). However, information about the preference among these two hosts viz., brinjal and tomato by this pest is lacking. In order to compare these two hosts for the preference of the epilachna beetle the study was undertaken in the laboratory of Department of Entomology, N. M. College of Agriculture, Navsari during 1996-97. The neonate larvae, collected from Laboratory reared culture, were reared singly on the fresh leaves of respective food materials (for each host 40 larvae) until pupation. The emerged adults were also fed on their respective food leaves. The effect of host plants were compared on the basis of larval period, pupal period, weight of full grown larva and pupa and adult longevity. The result revealed that larval and pupal period was not significantly influenced by the food plants (Table-1). However, the average number of days required to complete entire larval stage was slightly longer (15.95 ± 0.86 days) on tomato leaves as compared to brinjal leaves (15.60 ± 0.73). The adult longevity, significantly influenced by food plants, was higher on tomato as compared to brinjal. The larva grow faster and obtained heavier weight when fed with brinjal leaves (27.55 ± 0.51 mg.) than on tomato leaves (23.40 ± 0.65 mg.) The corresponding data for pupal weight was

TABLE 1

Effect of food plant on different growth parameter of *H. Vigintioctopunctata.*

Host. plant	Duration (days)		Longivity (days)		Mean weight (mg.)		
	Larval	Pupal	Male	Female	Larva	Pupa	Adult
Brinjal	15.60±0.73	4.10±0.30	34.00±1.51	46.15±0.46	27.55±0.511	28.65±0.52	27.72±0.52
Tomato	15.95±0.86	4.30±0.46	37.00±1.15	48.00±0.65	23.40±0.65	25.19±0.66	26.31±0.74
't' value	1.35	1.54	2.20	2.06*	23.00*	18.21*	16.24*
	N.S.	N.S.	Sig.	Sig.	Sig.	Sig.	Sig.

*'t' value significant at 5% level significance.
N.S. = Non significant.

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** Present address : Training Associate (P.P.), GAU, Navsari.

28.65 ± 0.52 mg. and 25.19 ± 0.66 mg. Brinjal leaves also enhanced the development and body weight of adults. These results clearly indicated that the brinjal leaves was preferred by larva and adult which in turn supported the development in shorter period and also helped in gaining heavier weight of both damaging stages. Such preference of brinjal over tomato by H. *vigintioctiopunctata* was reported by Rao and Azam (1973).

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