

Insecticidal Control of Fruit-Borer, *Leucinodes orbonalis* G. on Brinjal, *Solanum melongena*.

The egg-plant, *Solanum melongena* L., is ravaged by the fruit-borer, *Leucinodes orbonalis* G. Use of systemic granular insecticides had no effect on the fruit borer (Uthamasamy *et al.*, (1973). Pranab Roy *et al.* (1973) concluded that parathion 0.04 per cent sprayed six times at 15 days interval commencing from a week after transplanting was effective in reducing the infestation level of this fruit borer and also in increasing the yield. Present

studies were made with eight formulations of insecticides to find out their efficacy in controlling the brinjal fruit borer.

Two field experiments were conducted at the Agricultural College and Research Institute, Coimbatore and the variety SM 68 (*Vari*) was used in both the experiments. The experiments were of a randomised replicated blocks design with nine treatments (Table 1). The foliar appli-

TABLE 1. Efficacy of insecticides against fruit borer of brinjal
(Mean of two experiments)

S. No.	Treatments	Fruit borer (%) incidence		Yield of healthy fruit (kg per plot)
		By number	By weight	
1.	Chlorfenvinphos (Birlane) 0.1 %	18.6(25.5)	22.3(28.1)	32.78
2.	Sevimol 0.1 %	19.4(26.1)	24.8(29.8)	36.15
3.	Carbaryl 0.1 %	24.0(29.2)	26.9(31.1)	26.45
4.	Endosulphan (Thiodan) 0.07%	21.7(27.8)	26.4(30.8)	28.60
5.	Pyromal 10 ml in 3 liters of water	25.7(30.5)	30.1(33.2)	25.08
6.	Dicrotophos (Bidrin) 0.5 kg a. i./ha	23.8(29.2)	29.3(32.7)	29.42
7.	Carbophenothion (Trithion) 0.06 %	23.3(28.8)	29.9(33.1)	25.60
8.	Dursban 0.1 %	28.8(32.3)	32.0(34.4)	20.98
9.	Control	35.7(36.6)	45.9(42.6)	18.83
	S. E.	2.05	2.98	N. S.
	C. D.	4.35	6.32	

N. S. = Not Significant
(Figures in parentheses are transformed values)

cation of insecticides commenced from 40 days after the soil application of solvirex. Three rounds of spraying were given at an interval of 20 days. At each harvest, the total number of fruits per plot, number and weight of affected and unaffected fruits were recorded and the percentage of incidence was worked out. The data are presented in Table 1.

All the treatments are on par in reducing the incidence of fruit borer and further it is to be noted that chlorfenvinphos has registered the lowest incidence of fruit borer as revealed by weight and by number. The carbaryl based sevimol and carbaryl have recorded a similar trend in both the cases. As regards the yield of fruits, it is seen that though the differences among the treatments were

not statistically significant, the insecticides had an influence on the yield of healthy fruits. The treatments Sevimol and chlorfenvinphos have registered the maximum yield per plot.

S. UTHAMASAMY
M. GOPALAN
D. VENKATANARAYANAN

Department of Entomology,
Tamil Nadu Agricultural University,
Coimbatore-641003.

REFERENCES

- PRANAB ROY MANIC GOPAL SHOME and ASOKE DASGUPTA. 1973. Studies on the control of brinjal shoot and fruit borer, *Leucinodes orbonalis* G. (Pyralidae: Lepidoptera). *Sci., and Cult.*, 39 (6): 270-71.
- UTHAMASAMY, S., M. GOPALAN and D. VENKATANARAYANAN. 1973. Control of major pests of egg-plant (*Solanum melongena*) with systemic granular insecticides. *Pesticides*, 7 (2): 14-21.