

HELIOTHIS ARMIGERA, A NEW PEST OF BITTERGOURD

Bittergourd, *Momordica charantia* L. is one of the most important vegetable crops grown in India. The productivity of the crop is greatly reduced by pests and diseases. The major pests occurring on the crop are fruit fly, *Bactrocera cucurbitae*; leaf beetles, *Henosepilachna vigintioctopunctata* and *Aulacophora* spp.; and the leafhoppers, *Amrasca biguttula biguttula* and *Empoasca* (s.str.) *motti* (Nair, 1989; Mathew, 1995). The pumpkin caterpillar, *Diaphania indica* has been reported on bittergourd damaging the ovaries of flowers and boring into the young developing fruits making them unfit for human consumption (Butani and Jotwani, 1984).

A mixed infestation of gram pod borer, *Heliothis armigera* and *Diaphania indica* was observed in Perumbadavam, Ernakulam district, Kerala during April, 1995. The yellowish-green caterpillars of *H. armigera* and the green caterpillars of *D. indica* damaged developing fruits. The caterpillars bored the fruits and fed on the internal contents. The excreta of the larvae could be seen at the entrance of the bore hole. Caterpillars of *D. indica* made silken webs on the infested fruits. All the larval stages of *D. indica* and the early stages of *H. armigera* entered into the fruits and fed

on them. In the case of grown up caterpillars of *H. armigera*, only the anterior part of the larvae entered the fruits for feeding while the hind part of the larvae remained outside. On slight disturbance, the caterpillars fell on the ground and escaped. As a result of entry of secondary microorganisms, yellowing and rotting started from the infested area. Appearance of bore holes reduced the market price of bittergourd fruits even when the yellowing was absent. Approximately ten per cent of the fruits were infested by the caterpillars. On rearing, majority of the caterpillars of *H. armigera* died of polyhedrosis indicating that high percentage of viral infection exists in nature. A similar infestation of *H. armigera* and *D. indica* was observed during May 1995 in the bittergourd gardens at the Kerala Agricultural University, Vellanikkara, Trichur also. Here the infestation observed was about 18.7 per cent. Search for literature revealed that this is the first report of *H. armigera* on bittergourd.

In India, this pest has been reported from several vegetable crops, viz., cowpea, **dolichos lab-lab**, red gram, tomato, lady's finger, **crucifers**, drumstick (Nair, 1986), beans and onions (Butani and Jotwani, 1984).

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