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PESTS OF CUCURBITS - 2. BLACK LEAF-FOOTED BUG

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INTRODUCTION

The black leaf - footed bug, *Leptoglossus* australis, is a sucking insect found on all cucurbits and some other crops such as pawpaw and citrus. Cucurbits are vegetables which belong to the family Cucurbitaceae, such as cucumbers, pumpkins, watermelons and gourds.

DESCRIPTION AND BIOLOGY

The adult bug is purple-black with small orange spots on the underside. The hind legs have leaf-like extensions. The antennae (feelers) are nearly as long as the body.

Females lay strings of 5 to 16 round, flattened white eggs on the underside of leaves. The eggs hatch in about 9 days. The nymphs (early stages) look like orange and black ants when they first hatch, but as they grow , they become more like the adults. Nymphs moult (lose their skins and grow) 5 times before they become adult. Under good conditions the nymphs become adult in 3 to 4 weeks.

ECONOMIC IMPORTANCE

Nymphs usually feed in groups, often at the base of flowers. They do not often feed on leaves. Adults also feed on flowers but the main damage they do is to fruits. The small holes made by the feeding of the bugs allow entry of plant diseases. These are called secondary rots and can destroy or seriously damage fruits. Large numbers of black leaf-footed bugs feeding on developing fruit can cause them to become twisted and

The adult black leaf-footed bug

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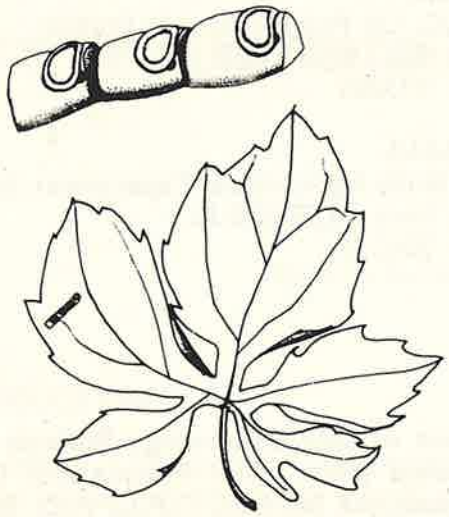
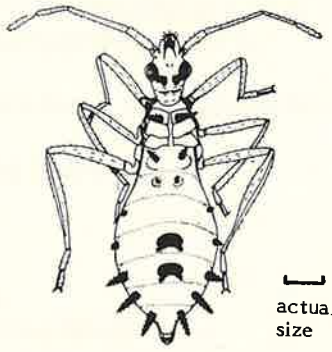
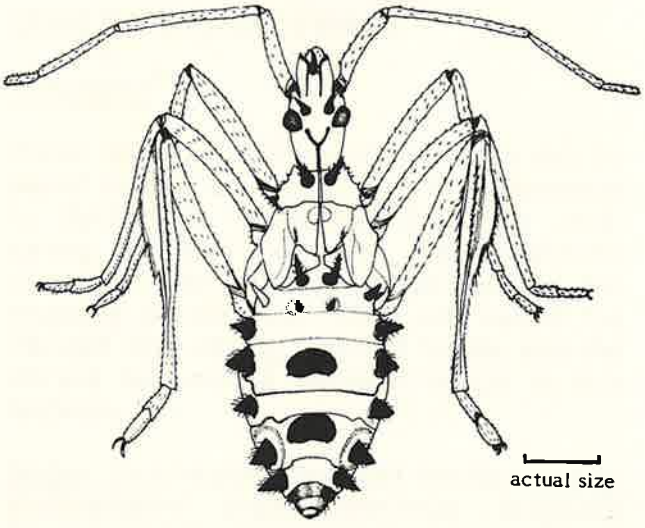


Eggs of the black leaf-footed bug on a pumpkin leaf, with enlarged details of the eggs shown above.





Nymphs of the black leaf-footed bug. Early stage (top), late stage (lower).

distorted. Cucumbers are most seriously affected because of their thin skins.

CHEMICAL CONTROL

If pests numbers are high or if damage is seen the bug can be controlled by using carbaryl at 0.2%. This is prepared by mixing:

EITHER

40 ml Sevin 75%
15 litres water

or

40 ml Septene 75%
15 litres water

or

40 ml Sevimol 75%
15 litres water

OR

60 ml Sevin 50%
15 litres water

or

60 ml Septene 50%
15 litres water

or

60 ml Sevimol 50%
15 litres water

Do not harvest the fruit less than 3 days after spraying. This 3 days is known as the waiting period.

FURTHER READING

Hill, D. (1975). *Agricultural Insect Pests of the Tropics and Their Control.* Cambridge University Press. 516 pp.

Kranz, J., Schumtterer, H. and Koch, W. (1977). *Diseases, Pests and Weeds in Tropical Crops.* Verlag Paul Parey: Berlin and Hamberg. 665 pp.

Purseglove, J.W. (1978). *Tropical Crops; Dicotyledons.* Longmans, Longon, 719 pp.

Sutherland, J.A. (1983). *Safe and Efficient Use of Pesticides.* Rural Development Handbook No. 18. D.P.I., Konedobu.

FURTHER INFORMATION

Further information on the black leaf-footed bug and other insect pests of cucurbits can be obtained by contacting your nearest D.P.I. entomologist. Entomologists are based at:

PORT MORESBY
D.P.I., P.O. Box 417, KONEDOBU
Tel: 214699 Ext 255

LAE
Bubia Agriculture Research Centre
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Tel: 551377

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(Illustrations: Michelle Kelly)