

SUGARCANE APHIDS IN FLORIDA¹

(HOMOPTERA: APHIDIDAE)

H. A. Denmark²

INTRODUCTION: There are 2 species of aphids that infest sugarcane in Florida. The yellow sugarcane aphid, *Sipha flava* (Forbes) and the sugarcane aphid, *Melanaphis sacchari* (Zehntner). Forbes described *Chaitophorus flavus* (1884) from sorghum at Champaign, Illinois. It has been a pest of sugarcane in Florida for many years. Forbes reported it as the yellow sorghum plant louse. Zehntner described *Aphis sacchari* from sugarcane in Java (1897). It was first collected in Florida at Belle Glade in 1977 on sugarcane. Measurements are in mm.

DISTRIBUTION: *Melanaphis sacchari*: Distributed throughout tropical and subtropical regions (Middle East, Africa, India, China, Thailand, Japan, Malaysia, Indonesia, Philippines, Australia, Hawaii, Caribbean, Central and South America). First continental North American report from Belle Glade, Florida, 1977.

Sipha flava: North America, north as far as New York State in the east and Washington in the west; Caribbean, and Central and South America.

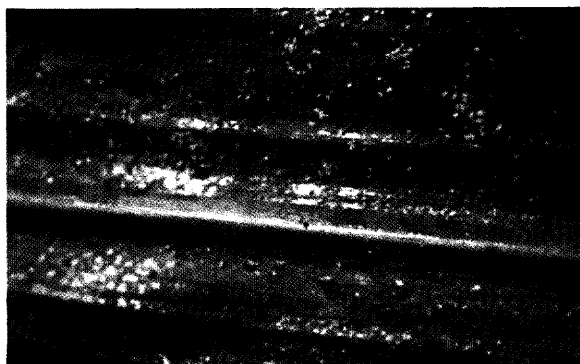


Fig. 1a. *Melanaphis sacchari*.
Photo by Dr. Tom Summers

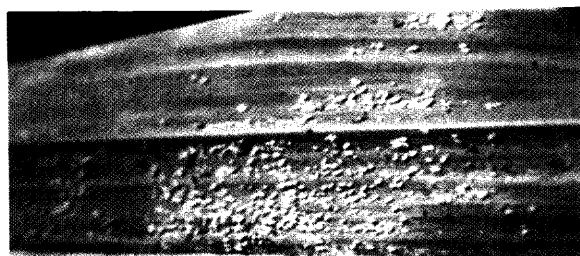


Fig. 1b. *Sipha flava*.
Photo by Dr. Tom Summers

¹/Contribution No. 671, Bureau of Entomology.

²/Chief of Entomology, Division of Plant Industry, P.O. Box 1269, Gainesville, FL 32602.

HOSTS: *Melanaphis sacchari*: Gramineae, especially *Sorghum* and *Saccharum*; also sometimes on *Echinochloa*, *Oryza*, *Panicum*, and *Pennisetum*.

Sipha flava: Gramineae including *Digitaria*, *Hordeum*, *Panicum*, *Paspalum*, *Saccharum*, *Sorghum*, and *Triticum*.

ECONOMIC IMPORTANCE: *Melanaphis sacchari*: A vector of the persistent virus millet red leaf, but apparently unable to transmit sugarcane mosaic.

Sipha flava: A known vector of sugarcane mosaic virus. They occur in large colonies on leaf blades of their hosts.

DESCRIPTION: *Melanaphis sacchari*: This is a small, ant-attended aphid, variable in color according to host plant and environmental conditions. It is yellowish-green under Florida conditions on sugarcane (Fig. 1a). It may be pale yellow, yellow brown, purple, or even pinkish. Apteræ and alatae 1.1-2.0 with variable dorsal markings on the abdomen.

Sipha flava: The apteræ are small, yellow (Fig. 1b) to green in cooler temperatures, with numerous long bristle-like hairs on the body with dusky transverse markings on the dorsum. Alates have a yellow abdomen with various dorsal dark markings. Apteræ and alatae 1.3 to 2.0.

CONTROL: Only a few requests have been received for the control of these 2 species of aphids. There is predation and parasitism of each species. The Department of Entomology and Nematology, University of Florida, recommends Diazinon, Dimethoate, Di-syston, Malathion, Metasystox-R, Phosdrin, and Thimet for the control of aphids. Follow the label instructions.

LITERATURE CITED:

- Blackman, R. L. and V. F. Eastop. 1984. Aphids on World's Crops: an identification guide. British Mus. (Natural History) pp i-vii and 1-466.
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- Zehntner, L. 1897. Die plantenluizen van het suikenet. Arch. Suikerind. Ned. Ind., 5, *Aphis sacchari* p. 551.