



A Rough Sweetpotato Weevil

Bloisyrus asellus (Olivier)

(Coleoptera: Curculionidae)

Ronald A. Heu, Dick M. Tsuda*,
Steven K. Fukuda*, Cheryl L. Young and
Monica I. Lee

Figure 1. Enlarged photo of an adult *Bloisyrus asellus* (Olivier). Length of the weevil is ¼" (6 mm).

Introduction. Immature specimens of a rough sweetpotato weevil, *Bloisyrus asellus* (Olivier) were first collected in Hawaii at a commercial Okinawan sweet potato farm in Waipio, Oahu, on November 14, 2008. Identification was made by A. Samuelson of the Bishop Museum on January 23, 2009. This species occurs in Southeast and Eastern Asia, Philippines, Japan, Taiwan and China. It is not known to occur on the mainland U.S.

Description. Adult *Bloisyrus* (Fig. 1) are ¼" (6 mm) long, brown, with their forewings (elytra) ridged and rough. There are several color forms of the adult weevil – brown and dark brown. Adults are foliage-feeding and create notches along the edges of the sweet potato leaves (Fig. 3). However, like other *Bloisyrus*, the white C-shaped grubs (Fig. 2) are more damaging as they live beneath the soil surface and gouge grooves or channels along the surface of the storage root as they feed (Smit, year unknown). Damage by the grubs reduces marketability.



Figure 2. Grooves cut into the exterior of Okinawan sweet potato (upper photo) by *B. asellus* grubs (lower photo)

* College of Tropical Agriculture and Human Resources, University of Hawaii.



Figure 3. Adult *Bloosyrus* (upper photo) creating a feeding notch at the edge of an Okinawan sweet potato leaf. Resulting notch on leaf indicates that *Bloosyrus* is in the area. (lower photo).

Hosts. In Hawaii, the weevil has been found associated with the purple flesh “Okinawan” sweet potato (*Ipomoea batatas*). No weevils have been found associated with the related morning glory plants.

Distribution. In addition to the first known infestation at Waipio in central Oahu, several other infestations on the island have been uncovered in late February 2009. One infestation was found on several wayside sweet potato plants several miles away in

Mililani, and the other infestation was found at a commercial farm at Waihole in Windward Oahu. Recent infestations were also found at Poamoho and Pearl City in central Oahu. Surveys to locate the beetle elsewhere in the State are in progress.

Detection. Adult weevils are nocturnal and are difficult to detect in the field during the day. They hide among the foliage. When disturbed, they drop to the ground and remain motionless. With their brown color, they blend in well with the soil. Weevil grubs are in the soil associated with the storage root. Grooves created by the grubs are not apparent until the root is extracted. Feeding notches created by the adult (Fig. 3) are indications that *Bloosyrus* is in the area.

Acknowledgements. We gratefully acknowledge Y. Ishibashi, J. Garcia, P. Conant, C. Hirayama for their assistance with conducting *Bloosyrus* surveys. Taxonomic help was provided by B. Kumashiro. This material was made possible, in part, by a Cooperative Agreement from the United States Department of Agriculture's Animal and Plant Health Inspection Service (APHIS). It may not necessarily express APHIS' views.

Reference

Smit, N.E.M.J. (unknown year). Rough sweetpotato weevil.
<http://www.lucidcentral.org/keys/sweetpotato>