

**AMBLYCERUS SCHWARZI (COLEOPTERA:
BRUCHIDAE) ATTACKING THE SEEDS OF THE
TROPICAL-ALMOND TERMINALIA
(COMBRETACEAE) IN CUBA**

Julio Genaro¹, John M. Kingsolver²

ABSTRACT: A bruchid beetle, *Amblycerus schwarzi*, described in 1970 from the West Indies, is recorded for the first time in *Terminalia catappa*, a new host and host family for the species.

The tropical-almond terminalia, *Terminalia catappa* L. (almendro de la India) (Combretaceae), is indigenous to the Old World tropics and is cultivated as an ornamental in Cuba (Sauget and Liogier, 1953). The fruit is edible and the seed contains a valuable oil, not unlike that of the true almond, *Prunus dulcis* (Miller) Webb. The bruchid, *Amblycerus schwarzi* Kingsolver, has a wide distribution in the West Indies (Kingsolver, 1970). Bruner *et al.* (1975) listed insects that affect the plant in Cuba but do not mention any that feed upon the fruits. Martorell (1964) listed only a scolytid beetle infesting seeds of tropical-almond in Puerto Rico. Kingsolver (1970) listed for *A. schwarzi* three host plants. These belong to two plant families: *Hippomane mancinella* L. and *Ricinis communis* L. (Euphorbiaceae) and *Tectona grandis* L. (Verbenaceae).

The purpose of this paper is to cite a new host plant record for *A. schwarzi* and to illustrate the damage to fruits of *T. catappa* caused by the larvae of the beetle.

Observations were made in June of 1994, June and December of 1995, and January of 1996 on 37 trees of tropical-almond terminalia at Brisas del Mar and La Veneciana, Guanabo, at the north coast of Havana City, Cuba. Dry fruits were gathered from beneath the trees and placed in bags for transport and later study. Diameters of beetle emergence holes were measured, and dry fruits without signs of infestation were kept to await adult emergence. Beetles were identified by the junior author (JMK).

Beetles affected the dry fruits. The larvae feed in the seed without completely consuming it, then cut a hole in the seed wall. Larvae pupate inside the seed and adults emerge through the hole. Emergence holes of beetles in dry fruits (Fig. 1) that remained on the ground provided entry of other invertebrate species (i.e. Dermaptera, Coleoptera, Araneae) that used the cavities as refugia or as feeding places. From 1 to 5 beetles ($x = 1.8$, $SD = 1.0$, $N = 70$) emerged

¹ Museo Nacional de Historia Natural, Obispo #61, esquina oficinas, Plaza de Armas, Habana Vieja 10100, Cuba.

² Florida State Collection of Arthropods, P.O. Box 147100, Gainesville, FL 32614-7100 USA.

from each fruit. Average diameter of emergence holes was 2.6 mm (SD-0.4, range: 2.0-3.5 mm, N = 44).

A microlepidopteran *Blastobasis* (probably a new species) (Blastobasidae), identified by David Adamski (Smithsonian Institution, Washington, D.C.), also emerged from the fruits after the larva had partly consumed the seed. Its cocoon was spun inside the cavity. Martorell (1964) cited moths of the families Olethreutidae and Pyralidae feeding in the fruits of *T. catappa* in Puerto Rico.

Voucher specimens are deposited in the Museo Nacional de Historia Natural de Cuba, Florida State Collection of Arthropods, Gainesville (beetles), and the Smithsonian Institution (moths).

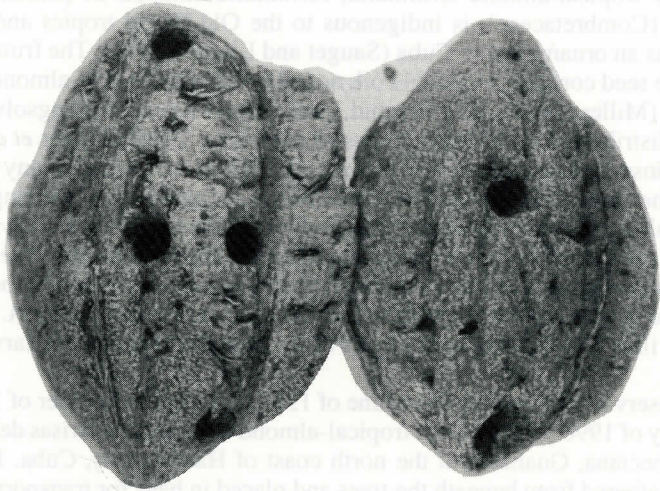


Fig. 1. Dry fruits of tropical-almond terminalia showing the emergence holes of *Amblycerus schwarzi*.

ACKNOWLEDGMENTS

The first author thanks the RARE Center for Tropical Conservation, Philadelphia, Pennsylvania for generously providing financial support during a visit to several museums in the United States.

LITERATURE CITED

- Bruner, S.C., L.C. Scaramuzza, and A.R. Otero. 1975. Catálogo de los insectos que atacan a las plantas económica de Cuba. Segunda edición. Academia de Ciencias de Cuba, 399 p.
- Kingsolver, J.M. 1970. A synopsis of the subfamily Amblycerinae Bridwell in the West Indies, with descriptions of new species. Trans. Amer. Entomol. Soc. 96:469-497.
- Martorell, L.F. 1964. Annotated food plant catalog of the insects of Puerto Rico. Agric. Exper. Sta., Univ. Puerto Rico, 303 p.
- Sauget, J.S. and E.E. Llogier. 1953. Flora de Cuba. Vol. III. Contrib. Ocas. Mus. Hist. Nat., Colegio La Salle 13:1-502.