Broad-Headed Sharpshooter (*Oncometopia orbona*)

Pest Fact Sheet

CALIFORNIA DEPARTMENT OF FOOD & AGRICULTURE

Introduction: The Broad-headed Sharpshooter (*Oncometopia orbona* (Fabricius)) (BHSS), is a large, colorful cicadellid leafhopper that feeds on the sap from the xylem of vascular plants.

Distribution: *Oncometopia orbona* is distributed in Mexico, Costa Rica, Venezuela, Paraguay, Brazil, and Argentina. In the United States it can be found in the southeastern states as far west as Texas and northeast as far as Pennsylvania (Takiya & Dmitriev, 2011). It is not presently found in California.

Description: Adults of BHSS (7–12 mm long) differ from the CA invasive Glassy-Winged Sharpshooter (GWSS) (10–14 mm long) in the following: head and thorax yellow, typically bearing dark markings and greenish, bluish or brownish tones (GWSS head and thorax are brown to blackish in ground color); wings dark with greenish/bluish hues and tip transparent (GWSS wings are mostly transparent with reddish markings on the veins); head speckled with whitish to yellow markings (GWSS head speckled with white or yellow). The nymphs of the broad-headed sharpshooter are yellow in ground color, with bluish or greenish hues, brown markings, and red eyes (GWSS nymphs are brown). Nymphs of both species are similar in having red eyes. In the field the egg masses of BHSS and GWSS are often indistinguishable, but differ in brochosome shape under ultra high magnification. Females lay 10–20 eggs (sometimes more) on leaves, often in groups, sometimes at the stem.

Biology: Eggs hatch after 10–14 days, while development from egg to adult takes 30–60 days in warm conditions, allowing for 1–2 generations per year. It is possible to observe a third generation in southern part of its range. Adults live one to 1–2 months. In the northern part of its distribution, adults undergo diapause and overwinter hidden in leaf litter or bark crevices, emerging in early spring. In southern areas, activity is year-round with migration between herbaceous plants in summer and woody hosts in the fall (Turner & Pollard 1959).

Hosts and economic importance: The broad-headed sharpshooter feeds on many vascular plants including conifers, grasses, sedges, and several species of broad-leaved woody and herbaceous plants. They are found in a variety of habitats. Like GWSS, Broad-headed Sharpshooter is a vector of *Xylella fastidiosa*, which causes Pierce's disease in grapevines (Wallingford 2007).



Adults of Broad-Headed Sharpshooter (left); Glassy-winged Sharpshooter (right).





Nymphs of Broad-Headed Sharpshooter (upper); Glassy-winged Sharpshooter (lower).


Egg mass of the GWSS. Scale line = 1.0 mm.

References:

Takiya, D. and Dmitriev, D. A. 2013., 3i Cicadellinae: 3i interactive keys and taxonomic databases, subfamily Cicadellinae - Oct 2011 version.

Turner, W. F., and Pollard, H. N., 1959. Life histories and behavior of five insect vectors of phony peach disease. United States Department of Agriculture Technical Bulletin, 1188: 1 -28.

Wallingford, A.K., 2007. Evaluating the risk of Pierce's disease in Virginia's vineyards. Ecological Society of America Annual Meeting. Accessed September 8, 2022:

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