

Rice Delphacid

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Common Name:

Rice Delphacid

Scientific Name:

Tagosodes orizicolus (Müir)
(Hemiptera: Delphacidae)

Key Facts About Rice Delphacids:

- ▶ They are piercing and sucking insects that feed on rice plant phloem.
- ▶ They are an invasive pest in the U.S. from Central and South America.
- ▶ They cause leaf damage known as “hopperburn.”
- ▶ Symptoms of damage include yellowing of leaves and ovipositional scars on leaf blades.
- ▶ They excrete excess sugar called “honeydew,” leading to sooty mold.
- ▶ They carry a virus that causes Rice Hoja Blanca disease.
- ▶ Rice delphacids were recorded in Texas in 2015 and have since spread throughout the Texas Rice Belt.

Preferred Hosts

Rice delphacids (RDs) feed on various grasses in the Poaceae plant family, with rice being its primary and most economically significant host. While this insect has been observed on other monocots such as barnyard grass and various non-crop grasses, rice remains its most severely affected host.

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Description

The RD is a planthopper, typically about ¼ inch long (Fig. 1a). It exhibits sexual dimorphism, with females being larger than males. Males are brown with black patches at the tips of their wings, while females are paler in color (Fig. 1a). Both sexes have a yellow to white median dorsal stripe. There is also a short-winged female morph, where the wings are significantly smaller, and the abdomen is more bulbous (Fig. 2a). These short-winged females primarily focus on egg-laying (Fig. 2b) when resources are available, aiding in the rapid establishment and growth of the population.

The RD undergoes five nymphal instars before maturing into adults. Nymphs are lighter in color than adults and have two characteristic brown stripes on each side of the abdomen (Fig. 1b). They are smaller and lack wings. Both adults and nymphs have piercing-sucking mouthparts, which they use to extract sap from rice plants.

As an adult, the RD resembles a leafhopper, but can be distinguished by its large, apical, hind leg spur. Planthoppers, like the RD, have a prominent spur on their hind legs (Fig. 2d), whereas leafhoppers only have one or two rows of smaller spines.

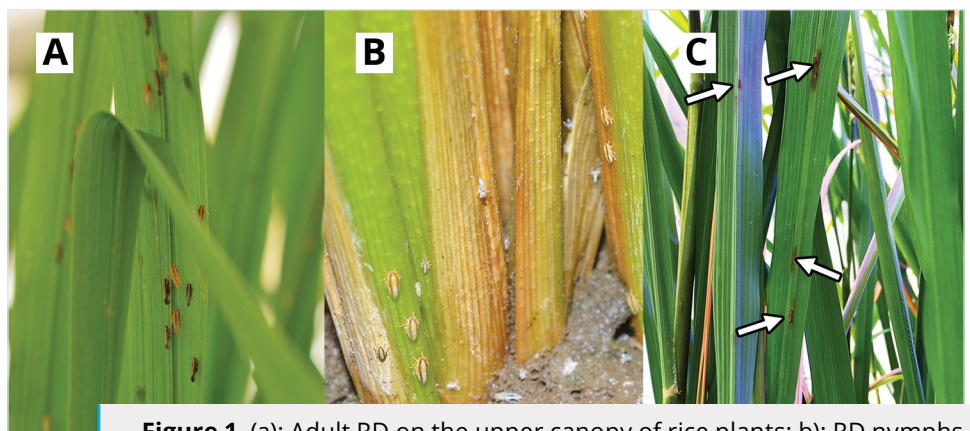


Figure 1. (a): Adult RD on the upper canopy of rice plants; (b): RD nymphs concentrated near the bottom or lower canopy; (c): RD oviposition injuries on midribs of rice leaves. (Photos courtesy of Lina Bernaola)