

RICE DELPHACID

TECHNICAL DATA SHEET



Photo by L. Bernaola, Texas A&M

PEST

Overview

The Rice Delphacid (RD), *Tagosodes orizicolus*, is an invasive planthopper that feeds on rice and other grasses. It was first recorded in Texas in 2015 and has since become a recurring rice pest in Texas rice belt. In Louisiana, RD was detected in July 2025 (first record in >70 years), with initial finds in Tensas Parish and later detections on ratoon rice across the state.

Native from Central and South America, this pest thrives in warm and humid conditions, developing from egg to adult in

about 4–6 weeks, depending on temperature. Females insert eggs into the leaf sheath or leaf midrib, often leaving visible scars (Fig 1). Eggs hatch in 5–10 days, nymphs pass through five instars in 15–25 days, and adults live 15–36 days. Both nymphs and adults have piercing-sucking mouthparts and feed on the phloem.

In Texas, this pest often reaches damaging levels, and producers face widespread outbreaks. Heavy infestations can cause “hopperburn”, which begins as leaf yellowing and progresses to

browning, drying, and plant dieback in patches (Fig 2). Rice Delphacids excrete honeydew, which promotes sooty mold growth and reduces photosynthesis. Also, RD is a vector of the *rice hoja blanca virus* (RHBV), which causes white-chlorotic leaf streaking, stunting, poor root growth, and panicle sterility or poor grain fill, depending on crop stage at infection (Fig 3). Reported yield losses commonly range from 25–75% and complete crop loss has been documented under severe infestation.

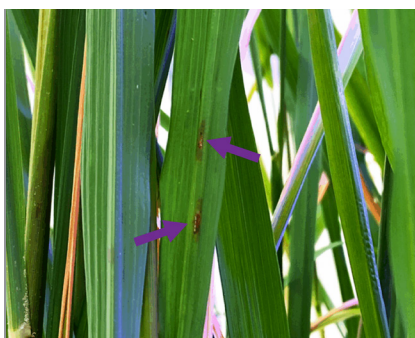


Fig 1. RD oviposition scars on rice leaf. Photo adapted from L. Bernaola, Texas A&M.



Fig 2. Hopperburn symptom in rice field. Photo by M.O. Way, Texas A&M.



Fig 3. Sterile panicle caused by RHBV. Photo by F. Dalla Lana and M. Flasco, LSU AgCenter.

KEEP AN EYE OUT FOR:

Field Identification

Adults

Males are darker with black patches near the wingtips, and females are paler. Both sexes typically have a **yellow to white median dorsal stripe**. Adults are highly mobile and commonly found higher in the canopy.



Fig 4. RD Adult. Photo by J. Villegas, LSU AgCenter.

Nymphs

Smaller, wingless, and lighter colored than adults. They commonly show **two dark brown longitudinal stripes on each side of the abdomen**. They are often concentrated lower in the plant canopy.



Fig 5. RD Nymph. Photo by J. Villegas, LSU AgCenter.

MANAGEMENT STRATEGIES

Scouting

Risk is greatest during vegetative stages so monitor fields constantly for early signs of Delphacid presence and activity, such as chlorotic leaves, stunting, honeydew-associated sooty mold, and first signs of hopperburn.

✓ When?

Begin at early tillering and continue regularly checking until about 50% heading. Increase scouting frequency in late-planted, ratoon (second-crop), and rice-crawfish rotation fields.

✓ How?

Use sweep net and sample both the upper and lower canopies (Fig 6). Additionally, pulling back the canopy for further inspection of nymphs in crowns/stem bases is recommended.

Note: There is no established economic threshold for RD in the U.S. yet. Management decisions rely on scouting, early detection, and symptom progression.



Fig 6. Sweep net sampling. Photo by T. Musgrove, LSU AgCenter.

RHBV

Rice Hoja Blanca Virus



Fig 7. RHBV symptoms in the field. Photo by Gary Bradshaw, Texas A&M.

The RHBV is transmitted by the rice delphacid in a persistent, circulative and propagative manner, which means that, once acquired, the virus replicates within the insect, which remains infective for life. Infected females also transmit the pathogen via ovary to the offspring (Fig. 7, 8). RD may acquire the virus 1–12 hours after feeding on an infected plant and it may take 15–25 days for the virus to reach the salivary glands before efficient transmission. Inoculation to a healthy plant may occur after 3–7 hours feeding.

Hopperburn presents as general yellowing/bronzing and scorch tied to delphacid feeding, often with honeydew and sooty mold, whereas RHBV produces distinct chlorotic/white striping and reproductive sterility even at lower vector densities. Remember that mature plants can carry RHBV without obvious foliar symptoms, so sterility/poor fill and local delphacid presence become key clues.

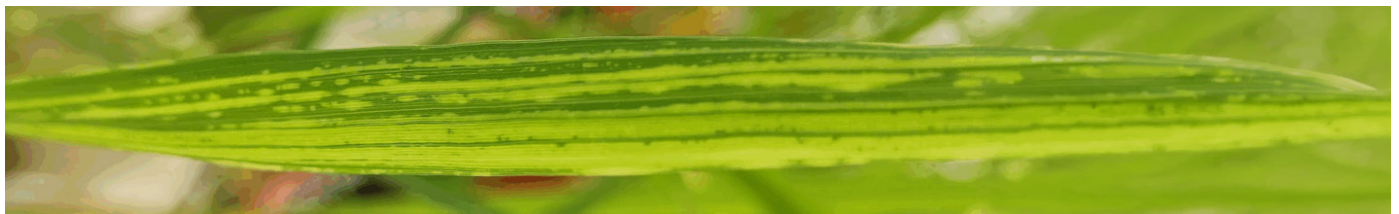


Fig 8. RHBV streaked leaf. Photo adapted from Maribel Cruz, CIAT-FLAR.

BE AWARE:

*“The U.S. EPA has granted a **Section 18 Quarantine Exemption** allowing the use of Courier insecticide (buprofezin) from April 15, 2026 through March 19, 2029 to control rice delphacid. Courier is registered at 9.0–13.6 fl oz/acre with up to two applications allowed per year. Several studies have demonstrated effective control of **delphacid nymphs** with **Courier applied at 13.6 fl oz/acre**. An additional active ingredient may be needed if high numbers of adult delphacids are also present. Do not apply COURIER SC if the rice fields are used for aquaculture, including crawfish production. The toxicity of Courier to crawfish has not yet been investigated.” Source: Musgrove, Villegas, Kerns and Wilson.*

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