In addition to the physical damage, RD excrete honeydew, a sugary substance that promotes the growth of sooty mold on leaves (Fig. 5). The sooty mold forms a black coating over the leaf surface, reducing a plant's ability to photosynthesize effectively. This further weakens the plant, compounding the stress caused by direct sap loss.

Indirect Damage

The RD is the primary vector of the Rice Hoja Blanca Virus (RHBV), a serious pathogen causing Rice Hoja Blanca or "white leaves" Disease (Figs. 6 and 7). Infected plants can experience reduced tillering, stunted growth, and severe yield losses.

Monitoring

Effective monitoring of RD is essential for managing infestations and minimizing crop damage. To ensure early detection, regular field inspections are needed, paying particular attention to early signs of RD activity such as yellowing of leaves, sooty mold, and hopperburn symptoms. Use sweep nets to assess both nymph and adult populations, with a focus at the bottom canopy of rice plants where RD nymphs are most commonly found.

Since RD pose the greatest threat during the vegetative stage, monitoring should begin at the early tillering stage of rice. Ratoon rice seems to be more susceptible to RD in Texas. Therefore, it is important to monitor ratoon fields closely to prevent significant yield loss.

Figure 5. Sooty mold growing on RD-infested rice plants. *(Photos courtesy of Nupur Sarkar and Mirna Zacarias, Agricola Miramontes)*

Figure 6. (a): A picture of Rice Hoja Blanca Disease in a Colombia CIAT-FLAR facility; (b): A closer look of RHBD symptoms on infected rice leaves. *(Photos courtesy of Maribel Cruz, CIAT-FLAR)*

Management

There is no established economic threshold for RD. Currently, two insecticides, Endigo ZCX and Tenchu 20SG, are labeled under emergency exemptions for RD control in Texas, with registrations valid until 2025. When using these pesticides, follow label instructions in conjunction with the emergency exemptions. Remember, the label is the law!

In native countries of the RD, the main strategy for managing them involves using resistant or tolerant rice varieties. In the U.S., research is underway aiming to better understand the susceptibility of various rice cultivars to RD. Integrating varietal resistance with other IPM strategies, like cultural practices and chemical controls, can create a sustainable and effective approach to controlling RD.

Trade name	Active ingredient	Rate/acre	Timing of application
Endigo ZCX	Lambda-chyalothrin and Thiamethoxam	4.5–6.0 fl. oz.	Apply based upon scouting and before hopperburn occurs. A maximum of 2 applications per season.
Tenchu 20SG	Dinotefuran	7.5–10.5 wt. oz.	

Figure 7. Symptoms of Rice Hoja Blanca Disease in a commercial rice field in Wharton County, TX, 2024. *(Photo courtesy of Gary Bradshaw)*