Mexican Rice Borer *Eoreuma loftini* (Dyar)

The Mexican rice borer is a devastating pest of sugarcane and a serious pest of rice. It was first collected in Louisiana in two pheromone traps on Dec. 15, 2008, near two rice fields northwest of Vinton, La.

1. Identification — Mexican rice borer adults are light tan moths with delta-shaped wings (Fig. 1A). By comparison, sugarcane borer adults are larger, straw-colored moths about 3/4-inch long with a series of black dots arranged in an inverted V-shape pattern on the front wings (Fig. 1B). Mexican rice borer adults produce spherical, globular, cream-colored eggs hidden between the folds of dried leaves. After hatching, young larvae feed inside fresh leaf sheaths and then bore into the stem or stalk. This feeding causes an orange discoloration of the leaf sheath.

Fig. 1A) Mexican rice borer adult; Fig. 1B) Sugarcane borer adult. (F. Reay-Jones and T. Riley)

Mexican rice borer larvae are whitish with a light-colored head capsule and two pair of dark purple stripes running the length of the body (Fig. 2A). By comparison, sugarcane borer larvae are yellowish or white with a series of brown spots on the back (Fig 2B). As they bore into the stem or stalk, Mexican rice borer larvae pack tunnels with frass, which prevents the entry of predators or parasites (Fig. 3). Pupation takes place inside the stem or stalk after mature larvae have made moth emergence holes that are smaller than those made by the sugarcane borers in sugarcane.

Fig. 2A) Mexican rice borer larva; Fig. 2B) Sugarcane borer larva. (A. Meszaros and J. Saichuk)

2. Injury to rice & sugarcane — ***Rice injury*** begins with feeding in leaf sheaths. Borers then tunnel inside the stem. Signs of early injury in rice are withering and death of the youngest leaf, resulting in a condition called deadheart (Fig. 4A). Most infestations are not obvious until after the boot stage. Stem feeding during panicle development causes partial or complete sterility and the white-head condition (Fig. 4B). The white, empty panicles are lightweight and stand upright. Feeding inside the stem can also cause plants to lodge before harvest.

Sugarcane injury results in a decrease in sugar production, and under heavy pressure can cause stunting and/or lodging of the stalks. Infestations in sugarcane can be so severe that harvesting fields becomes unfeasible.

3. Scouting rice & sugarcane — ***In rice***, scouting should begin at green ring and intensify when plants reach the early boot stage. Look at the leaf sheath for orange lesions caused by larval feeding. Avoid confusing these lesions with sheath blight injury. To confirm Mexican rice borer injury, peel off the leaf sheath to expose the feeding larva or to detect frass (Fig. 5).

Figure 3) Mexican rice borer larvae pack sugarcane tunnels with frass. (F. Reay-Jones)

In sugarcane, scouting should begin when visible internodes are seen in most plants and continue on a regular basis. Pheromone traps can assist in monitoring for Mexican rice borer adults in rice and sugarcane. If pheromone traps are used, scouting should begin when 20 moths are collected in a trap during a one-week period.

4. Management — Consult your county agent for the latest recommendations to control the Mexican rice borer.

Report the Mexican Rice Borer

If you suspect you have found a Mexican rice borer infestation, report it to your local county agent or contact the Louisiana Department of Agriculture and Forestry at (225) 952-8100.

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Fig. 4A) Dead heart; Fig. 4B) White-head condition. (J. Saichuk)

Figure 5) Feeding lesion - an orange discoloration of the leaf sheath. (J. Saichuk)

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