Mexican Rice Borer Extends Reach Into Louisiana

BATON ROUGE, LA.

he Mexican rice borer, a threat to sugarcane and rice, has moved eastward from Texas extending farther into Louisiana.

The insect was first found in Louisiana in December 2008 north of Vinton.

On Nov. 22, 2010, four male adults were found in a pheromone trap about six miles southwest of Sulphur, according to Gene Reagan, LSU AgCenter entomologist. Chris Carlton, director of the Louisiana State Arthropod Museum, confirmed that these trap catches were Mexican rice borers.

"This trap location is adjacent to a grassy area where no crops are grown, and it is within 15 to 18 miles of commercial sugarcane fields south of Lake Charles," Reagan said.

Reagan's graduate student, Julien Beuzelin, said the traps are set out by the Louisiana Department of Agriculture and Forestry. "Without their work, it would have not been possible to detect this insect's movement," Beuzelin said.

He said the LDAF had planned to end the monitoring program in early December, but after the Nov. 22 samples were found, the department has decided to continue the program into the spring.

Beuzelin said the discovery is a reliable indicator that the pest is continuing to move eastward in Louisiana.

"Since first being found in south Texas in 1980, they have consistently expanded their Louisiana-Texas line north of Vinton.

A 2007 study by LSU and Texas A&M projected an annual \$45 million loss of revenue for Louisiana rice farmers once the entire state is infested.

The estimated damage for sugarcane is projected at up to \$220 million in the next few years. Mexican rice borers are not obvious pests in rice until the crop is in the boot stage. But by the time it is found within rice plants, Reagan said, studies with Texas colleagues show that the population jumps rapidly. Reagan said that prompted the question to arise regarding the pest's overwintering habitat.

Between growing seasons, the insect is found in high numbers in grasses such as Johnsongrass and vaseygrass.

Once the insect bores into sugarcane, insecticides don't work well because the cavity created by the borer is filled with chewed plant material, frass, blocking a chemical's entry, he said.



The Mexican rice borer moth rests on Johnsongrass foliage. Photo by Anna Mészáros

range along the Gulf Coast," Beuzelin said.

In 2006, the Mexican rice borer was found in east Texas just one county away from Louisiana, and it was anticipated that it would be found in Louisiana in 2008. Only two weeks before the end of 2008, borers showed up in two pheromone traps five miles apart on the Insecticides work better on the pest in rice, Reagan said. However, three applications may be required in some east Texas areas.

A new seed treatment, Dermacor, appears to help control the pest in rice. Originally, Dermacor was developed as a seed treatment for drill-seeded rice against the rice water weevil. Δ