## Research Note

## LISSORHOPTRUS ISTHMICUS KUSCHEL (COLEOPTERA:CURCULIONIDAE): A NEW RICE PEST FOR PUERTO RICO

Rice seedlings affected by a leaf-feeding curculionid were detected in commercial rice fields at Vega Baja, Puerto Rico, 22 April 1986. Collected adults were identified by C. O'Brien (Florida Agricultural and Mechanical University, Tallahassee. Florida) as Lissorhoptrus isthmicus Kuschel. Voucher specimens were deposited at Agricultural Experiment Museum, Río Piedras, Puerto Rico. The weevil was also recovered from rice fields in Arecibo and Manatí, but not from Lajas or Gurabo, where experimental rice plots were also available. The limited distribution of L. isthmicus in the rice-growing areas of the island suggests a recent introduction. The first two recorded specimens were collected by R. Toledo (Agricultural Extension Service) May 11, 1984, at Finca Ceiba, Vega Baja, Puerto Rico. These specimens were collected by Toledo were not identified until 1986.

Little is known about the life history and pest status of L, isthmicus in rice. The insect is also present in the Dominican Repub-

lic, Haiti, Panama, and South America<sup>2</sup>. In the United States another species of this genus, *L. oryzophilus* Kuschel, is considered one of the most important insect pests of rice<sup>3,4,5,6</sup>. Menesses and Gómez<sup>7</sup> listed *L. brevirostris* (Suffrian) as one of the two most important pests limiting rice production in Cuba.

The damage produced by *L. isthmicus* is similar to that described for *L. oryzophilus* and *L. brevirostis*. The larvae feed on the roots whereas the adults remove the epidermal tissue of leaves. This removal produces straight longitudinal scars. The scars produced by the adults are distinctive and can be used as an index of an infestation. Larval feeding on the roots has been related with stunted seedlings, lodging, and yield losses<sup>4,7</sup>. Larval damage is considered economically significant whereas adult feeding is considered of little importance. The pupae can be found attached to the roots in a soil capsule (fig. 1).

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<sup>1</sup>Manuscript submitted to Editorial Board 26 August 1987. The authors acknowledge comments by O. Cotte, C. Cruz, F. Gallardo and A. Segarra on an early draft of the manuscript.

<sup>2</sup>O'Brien, C. W. and G. W. Wimber, 1982. Annotated cheklist of the wevils (Curculionidae sensu lato) of North America, Central America, and the West Indies (Coleoptera:Curculionidae). *Mem. Am. Entomol. Inst.* 34: 1-382.

 $^{3}$ Bowling, C. C., 1961 Chemical control of the rice water weevil. *J. Econ. Entomol.* 54: 710-12.

<sup>4</sup>Newson, L. D., and M. C. Swanson, 1962. Treat seed to stop rice water weevil damage. L. Agric. 5: 4-5.

<sup>5</sup>Riley, C. V., 1881. Insect enemies of rice. Am. Nat. 15: 148-49.

<sup>6</sup>Webb, J. L. 1914. Notes on the rice water weevil, *Lissorhoptus simplex* (Say), *J. Econ. Entomol.* 7: 432-38.

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