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First Records for the Rice Plant Hopper, *Sogata orizicola* Muir, in Puerto Rico (Homoptera: Fulgoridea: Delphacidae)

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INTRODUCTION

"Hoja blanca", is a very serious disease of rice, recently found for the first time in the southern part of the United States, but known since 1954 in Cuba, Venezuela, Panamá, Costa Rica, the Dominican Republic, Dutch Guiana, El Salvador, Guatemala, and Colombia. According to Atkins and Adair (1)², in Cuba and Venezuela the estimated yield reduction in affected fields has been as much as 75 percent.

In order to establish the presence of the vector of this disease in Puerto Rico the senior author visited the Island during September of 1959. The vector, *Sogata orizicola* Muir was found breeding in certain rice areas of Puerto Rico.

DISCUSSION

The fulgorid fauna of Puerto Rico is exceptionally well known from the comprehensive report of Caldwell and Martorell (2). The present note adds an economic species new to the Island fauna.

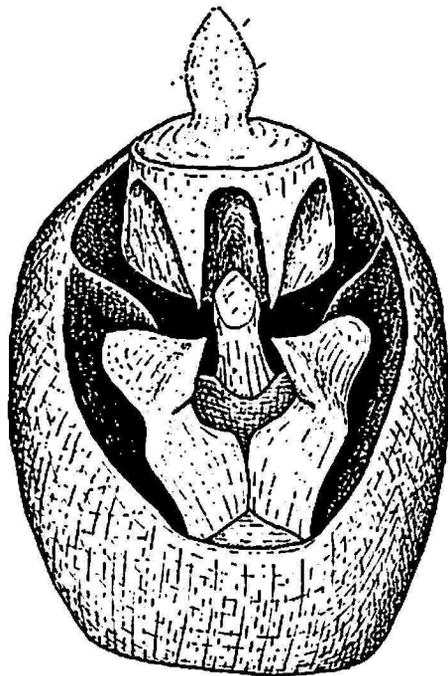
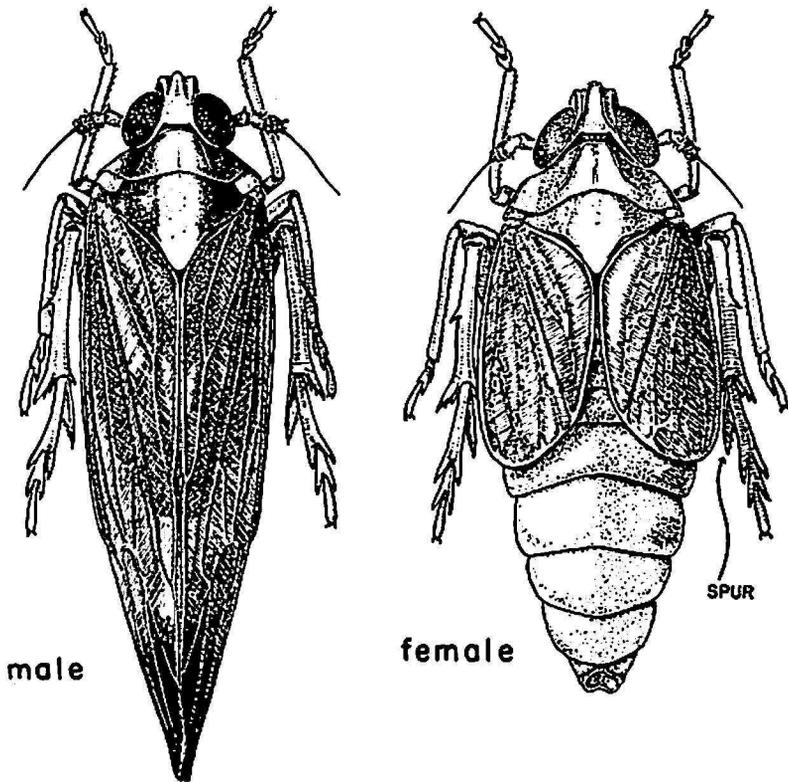
Sogata orizicola MUIR

1926 *Sogata orizicola* Muir. Bul. Hawaiian Sugar Pl. Assoc. 18: 27;
pl. 4, figs. 78-80

Length 3-4 mm. Macropterous or brachypterous (see fig. 1). General coloration as in *Sogata cubana* (Crawford) and *S. furcifera* (Horvath), but male lacks very dark spot at apex of clavus almost always found in males of the other two species. Females of the three species cannot be separated at present.

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² Italic numbers in parentheses refer to Literature Cited, p. 165.



male genitalia

FIG. 1.—*Sogata orizicola*, male and female, and the male genitalia. Note that long- or short-winged forms may occur in either sex.

The critical diagnostic characters are found in the male genitalia, particularly the styles. Apex of style broad with inner apical margin rather pointed and with a marked oblique carina (fig. 1).

S. orizicola, the rice plant hopper, is apparently restricted to rice as a host plant and is the only known vector of "hoja blanca", a virus disease of field rice. During the survey of the Cicadellidae and Fulgoridae conducted by Caldwell and Martorell in the latter part of 1947 they could not collect this particular insect species. This might have been because they did not collect insect material from rice fields. Undoubtedly the species has been in the Island for a long time. It is to be noted that the insect is recorded from the eastern regions of the Island although rice fields were studied in the western areas.

PUERTO RICAN RECORDS.—Cayey, Cidra, Naguabo, San Lorenzo, and Yabucoa. All specimens taken on field rice from September 21–24, 1959 by Kramer and Martorell. Specimens will be deposited in the U. S. National Museum, Washington, D. C., and the Agricultural Experiment Station, Río Piedras, P. R.

SUMMARY

The important disease of rice, "hoja blanca" is transmitted by the fulgorid, *Sogata orizicola* Muir. The vector was found breeding in rice fields at the eastern region of the Island of Puerto Rico. A brief description of the insect, as well as a plate illustrating the same are given in the article.

RESUMEN

La muy importante enfermedad del arroz, Hoja Blanca, es transmitida por el fulgórico *Sogata orizicola* Muir. El vector se encontró en campos arroceros de la parte este de la isla de Puerto Rico. En este artículo se describe brevemente el insecto y se ilustra el mismo.

LITERATURE CITED

1. Atkins, John G., and Adair, Roy C., Recent discovery of Hoja Blanca, a new rice disease in Florida, and varietal resistance disease tests in Cuba and Venezuela, *Plant Dis. Rptr.*, **41** (2) 911–5, 1957.
2. Caldwell, J. S., and Martorell, Luis F., Review of the Auchenorrhynchous Homoptera of Puerto Rico, Part 2, The Fulgoroidea except Kinnaridae, *J. Agr. Univ. P. R.*, **34** (2) 133–269, 1950.