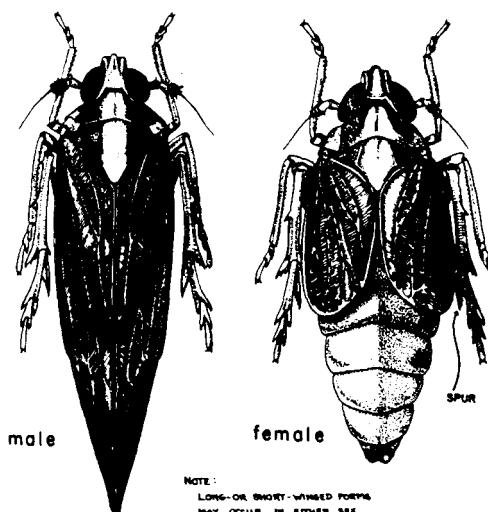


The Rice Delphacid, Sogata orizicola Muir, and Two Closely Related Species
(Homoptera: Fulgoroidea: Delphacidae)

The rice delphacid, Sogata orizicola Muir, is, as far as known, the sole vector of a virus disease of rice which has been called "hoja blanca". This disease was first observed in the Western Hemisphere about 1954, and in the United States in September, 1957, at Belle Glade, Florida. An additional infection was found in September, 1958, at Bay Saint Louis, Mississippi. The disease is not prevalent in the major rice-producing areas of the Orient, although an apparently similar infection of rice is known in Japan. Symptoms of the disease include yellowish-white discoloration or streaking of the leaves and affected plants often fail to head. Yields of rice in infected fields are often reduced 25 to 50 percent and the disease is capable of completely ruining the crop, particularly late plantings. The estimated loss to the rice crop in Cuba in 1956 was 25 percent. The insect has been recorded in Argentina, Colombia, Venezuela, Costa Rica, British Guiana and Cuba, in addition to the United States. First records in this country are September 14, 1957, at Belle Glade, Florida, and September 3, 1958, at Bay Saint Louis, Mississippi.

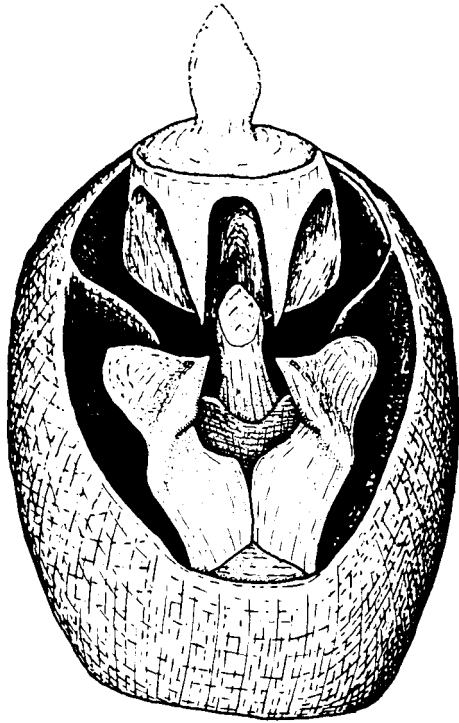
The preferred survey procedure for S. orizicola consists of sweeping of cultivated and volunteer rice, not overlooking small patches that may be present at the margin of fields. General sweepings of other grasses do not appear to be very satisfactory for collecting S. orizicola; however, S. fucifera (Horvath) may be abundant.



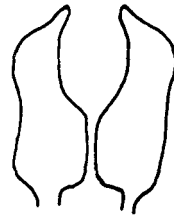
SOGATA ORIZICOLA

The non-specialist can recognize the family and more important members of the genus by the characters illustrated in the accompanying habitus drawings. The following points should be noted:

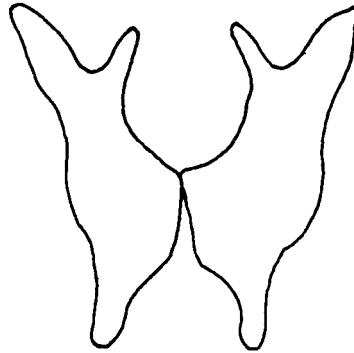
1. The family Delphacidae is easily distinguished from all other Homoptera by the movable spur at the apex of the hind tibia.
2. The genus Sogata is made up of small and slender species which have/are:
 - (1) 3.5-4 mm. in length in the long-winged form; slightly over 3 mm. in the short-winged form. Note - most specimens of both sexes will have long wings.
 - (2) a pale-yellow stripe running down the center of the dorsum of the head and thorax.
 - (3) males dark-brown with smoky-colored wings that are darker at the apex.
 - (4) females usually with a uniform yellowish to tan color.



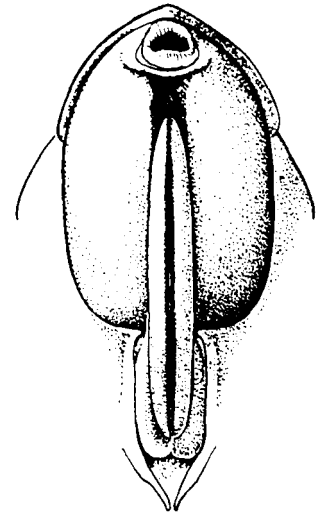
ORIZICOLA
male genitalia



CUBANA
styles only



FURCIFERA
styles only



female genitalia

Identification to species in the genus *Sogata* is based on characters found in the structures of the male genitalia and particularly in the styles which have characteristic outlines for each species. The styles are observed best when the genital capsule is studied in a direct posterior view. The styles will be seen as paired structures and are the most obvious components of the genitalia. Accompanied by the drawings, the following notes should allow recognition of the species treated here:

- (1) *Sogata orizicola* Muir. Apex of style broad with inner margins rather pointed and with a marked carina. See drawing. This rice pest is known in the United States only from Florida and Mississippi.
- (2) *Sogata furcifera* (Horvath). Apex of style with deep cleft giving a "mitten-like" outline. See drawing. A very common species found throughout southern United States.
- (3) *Sogata cubana* (Crawford). Apex of style small, comparatively slender and gently curved inward. See drawing. Known in United States only in Florida.