An Unusual Treehopper (Homoptera, Membracidae)

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In a previous paper (Dennis, 1960) I discussed two pseudohermaphrodites of the buffalo treehopper, *Stictocephala bubalus* (Fabricius). The insect described here is a specimen of *Stictocephala palmeri* (Van Duzee) and is much like these two. It was collected in Wisconsin during the summer of 1950, but no other locality information is available. It is in my collection. Except for the genitalia it appears to be a normal, though somewhat weakly sclerotized, female. (Figs. 1-4). The female parts enclose the male parts.

Tergite IX and the anal tube are normal.

Female parts—Sternite VII of this species has been described (Dennis, 1952) as having the "posterior margin a wide, acute-bottomed notch with non-sinuate sides reaching almost ½ the depth of segment." The figure accompanying the description shows the sternite as being truncate at the base with nearly parallel sides. In the present specimen, sternite VII is roundly narrowed basally, has broadly sinuate sides and has the posterior margin a subacute-bottomed notch with broadly sinuate sides reaching half the depth of the sternite.

Valvulae 1 are represented completely on the left side only. The distal ¾ of the right valvula appears to have been broken off. The left valvula 1 is elongate, spoon-shaped. Valvulae 2 are missing. Remnants of valvulae 3 are closely associated with the male parts and are described below.

The first valvifers are completely fused with the bases of valvulae 1; but, though contiguous, are not fused in the ventral midline. The second valvifers are represented by tiny remnants dorsal to the first valvifers.

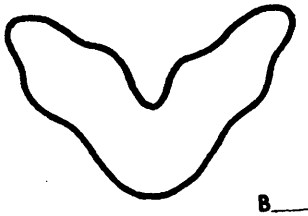

Fig. 1

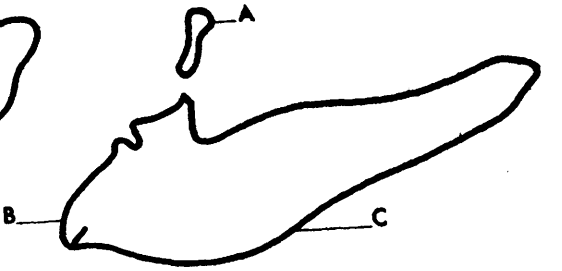

Fig. 2

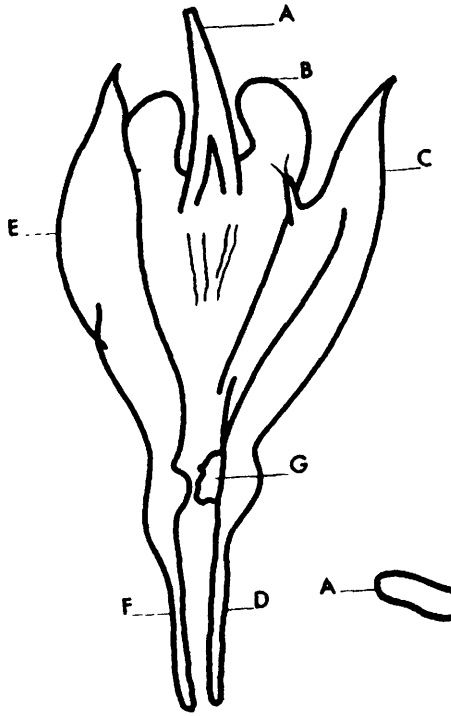

Fig. 3

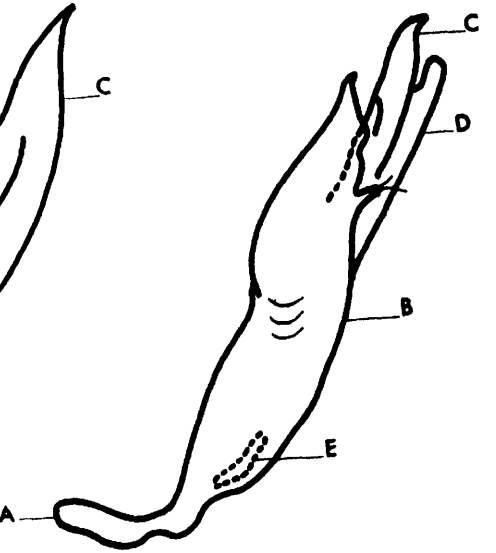

Fig. 4

Fig. 1. Sternite VII, posterior edge up.

Fig. 2. Female parts, left lateral aspect. A. remnant of valvifer 2, B. valvifer 1, C. valvula 1.

Fig. 3. Male and female parts, antero-dorsal aspect. A. aedeagus, B. remnant of valvula 3, C. posterior arm of left style, D. anterior arm of left style, E. posterior arm of right style, F. anterior arm of right style, G. connective.

Fig. 4. Male and female parts, left lateral aspect. A. anterior arm of left style, B. posterior arm of left style, C. aedeagus, D. remnant of valvula 3, E. connective.

Male parts—The lateral valves and the subgenital plate are missing.

The connective, aedeagus and remnants of valvulae 3 of the female are supported in a sheet-like membrane which originates from the styles.

The anterior arm of the aedeagus is missing. The posterior arm consists of about the dorsal third of a normal posterior arm. The base of this posterior arm is in the supporting membrane about ⅔ of the way up the styles.

The connective is irregular in shape and is situated in the supporting membrane well below the remnant of the aedeagus. It is at the usual position between the styles at the juncture of the anterior and posterior arms of the styles.

The anterior arms of the styles are rather irregular, compressed, thin, parallel and slightly upturned. The posterior arms are irregular, broad, flattened, slightly twisted and spoon-shaped and pointed at the apices. The left posterior arm is the more heavily sclerotized in the distal third and has a prominent posterior spur at a point about ¾ its length. This spur has two apical hairs.

The supporting membrane on each side between the aedeagus and the posterior arm of the style extends as a slightly sclerotized, rounded edge which appears to be a remnant of the distal end of valvula 3 of the female.

LITERATURE CITED

Dennis, Clifford J. 1952. Genitalia of the Membracidae of Wisconsin. Can. Ent. 84 (6): 157-173.

..... 1960. The genitalia of the buffalo treehopper, *Stictocephala bubalus* (Fabricius). Amer. Midl. Nat. 64 (2): 459-473.