

A NEW SPECIES OF *CIXIUS* FROM THE UNITED STATES
(HOMOPTERA: FULGOROIDEA: CIXIIDAE)

SHUN-CHERN TSAUR

Institute of Zoology, Academia Sinica,
Nankang, Taipei, Taiwan 115, Republic of China

Abstract.—Twenty-seven species of *Cixius* are recognized as occurring in the United States; of these, eight have been known from California. A ninth cixiid species for California, *Cixius yufengi* NEW SPECIES, is described and illustrated here.

Key Words.—Insecta, Cixiidae, *Cixius yufengi* NEW SPECIES

Thirteen genera and 174 species of Cixiidae have been reported from North America, all of which occur in the United States. Recently, an undescribed species of *Cixius* from California, collected by Yu-Feng Hsu, was found and is described in this paper. This brings the total of United States species of *Cixius* to 27, nine of which occur in California. All the scale units used here are in mm.

GENUS *CIXIUS* LATREILLE, 1804

Type Species.—*Cicada nervosa* L. (Subsequent designation by Curtis).

Cixius yufengi Tsaaur, NEW SPECIES

(Fig. 1)

Type.—Holotype: male; data: USA. CALIFORNIA. MONTEREY Co.: 13 Apr 1990, Y. F. Hsu; deposited: Institute of Zoology, Academia Sinica, Taipei, Taiwan, Republic of China.

Male.—Body length: 7.0 mm; length of tegmen: 5.9 mm. General coloration black. Body covered with powdery wax. Lateral carinae of vertex each with round yellow macula on basal one-third. Median carina of face dull brown. Lateral carinae of face and transverse carina between face and vertex brown. Ocelli tawny. Legs black-yellow on coxae, trochanters and femora, yellow on tibiae and tarsi. Tegmina translucent, with prominent black pustules, 1 faint oblique grey stripe originating from fork of Sc+R to ramification of A. Vertex 1.3× as wide (at level of basal emargination) as length along middle line. Rostrum attaining hind coxae. Tegmen with 11–12 apical cells, finely curving outward on costal margin. Chaetotaxy of hind tarsi 7/6–7. Second tarsomere with double row of spines with second row membranous. Genitalia: in ventral view, pygofer roundly U-shaped; in lateral view dorsolateral angle with small production curving mesad, in ventral view medioventral process large, triangular, in lateral view blade-like. Anal segment slightly widening toward anal opening, in lateral view apical projection gently curving ventrad, apical margin concave medially, anal style slender. In lateral view genital styles symmetrical, in ventral view slightly curving dorsad toward apex, distal lobe flap-like, and parallel-sided on basal two-thirds. Aedeagus slender, basoventral surface not indented, with total of 3 spinose processes, 2 visible in left-side orientation, 1 in right side aspect: shortest implanted on lateroapical angle near base of flagellum, acuminate, gently curving outward, directed dorsad at tip; intermediate originating from ventral surface near apex, stout for most portion, curving laterad and tapering to apex at apical one-fourth; longest located opposite shortest, awl-shaped, smoothly curving dorsad, directed cephalad at tip.

Female.—Unknown.

Diagnosis.—*Cixius yufengi* NEW SPECIES is similar to *C. prominens* Tsaaur, and these two species can be easily distinguished from other species in the genus

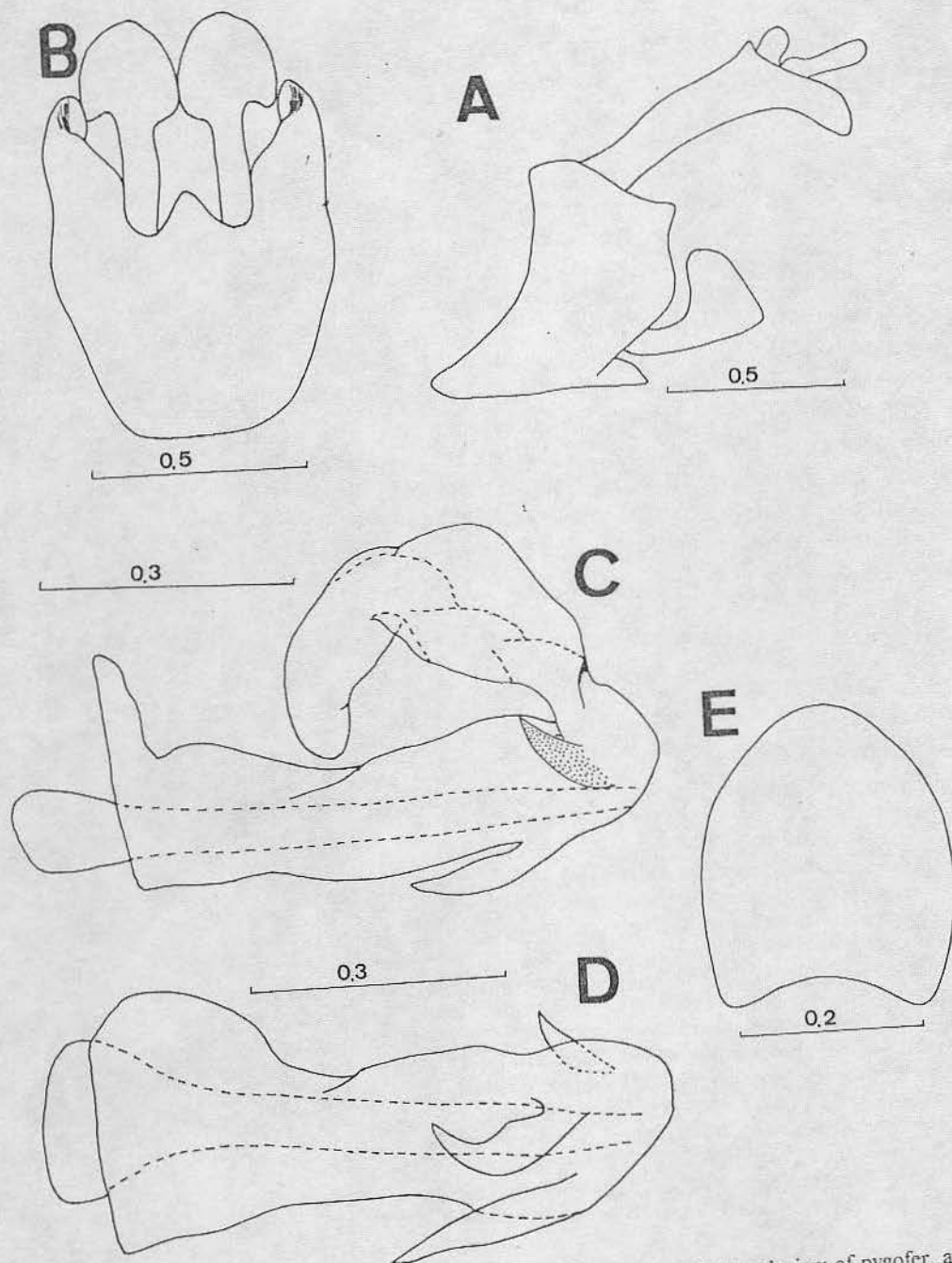


Figure 1. Male genitalia of *Cixius yufengi* NEW SPECIES. A, Left lateral view of pygofer, anal segment and anal style; B, ventral view of pygofer and genital styles; C-D, aedeagus; C, left lateral view; D, ventral view; E, anal segment, caudal view.

in that each bears a prominent production in lateral view. These 2 species may be separated by aedeagal pattern, which, for *C. yufengi*, is shown in Fig. 1: C, D.

Distribution.—United States (California).

Etymology.—This new species is named after the collector of the holotype, Yu-Feng Hsu.

Material Examined.—See type.

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LITERATURE CITED

- Kramer, J. P. 1981. Taxonomic study of the planthopper genus *Cixius* in the United States and Mexico (Homoptera: Fulgoroidea: Cixiidae). *Trans. Am. Entomol. Soc.*, 107: 1-68.
- Kramer, J. P. 1983. Taxonomic study of the planthopper family Cixiidae in the United States (Homoptera: Fulgoroidea). *Trans. Am. Entomol. Soc.*, 109: 1-58.
- Tsaur, S. C. 1990. Two new species of *Cixius* from California (Homoptera: Fulgoroidea: Cixiidae), with a revised key to the species of the genus. *Bull. Inst. Zool., Academia Sinica*, 29(1): 49-55.

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