A New Species of Dikraneura from Witch-Hazel (Homoptera--Cicadellidae)

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A NEW SPECIES OF DIKRANEURA FROM WITCH-HAZEL
(HOMOPTERA—CICADELLIDAE)

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While collecting in a wooded area in the Great Smoky Mountains National Park in Tennessee, an interesting new species of Dikraneura was collected from witchhazel, Hamamelis virginiana. To our knowledge, this is the first time that a cicadelline leafhopper has been reported from this host, which thus adds a new plant genus and family to the biological orbit of the Cicadellinae.

This new species has posed a taxonomic problem in that it agrees very well with venational and other general characteristics of the genus Dikraneura, but the male genitalia are extremely different from any described North American species, and from any European species illustrated by Ribault. Especially peculiar are the forked and clasplike pygofer hook and the very peculiar aedeagus, Fig. 1. At first we considered erecting a new subgenus to receive this species, but believe that for the present it would be more satisfactory to simply indicate this as a distinctive species group.

Fig. 1. Dikraneura hamar, male genitalia. A, lateral aspect of external parts; B, ventrolateral aspect of pygofer hook; C, aedeagus, lateral aspect; D, aedeagus, posterio-ventral aspect; E, style, ventral aspect.
Dikraneura hamar n. sp.

A pale, yellowish, blunt-headed species resembling Forcipata in general appearance. Length 3.5 mm.

The vertex is produced, tapered, and blunt at apex. In general appearance the insect is narrow with the wings decidedly longer than the abdomen. The vertex, pronotum and scutellum are white tinted with yellow. The elytra are lemon-yellow subhyaline. The wings are white subhyaline.

The female seventh sternite is roundedly produced.

The male plates are long and narrow. The style in ventral view is concavely narrowed on the outer margin at the apex so as to form a narrow, sharp-pointed spine which curves outward at the apex. The aedeagus in posterior-ventral view appears enlarged at base and narrowed, tapering to a slender apex. In lateral view it appears broad with a basal pubescent ventral portion and a broadened, blade-like apical portion serrate on the anterio-dorsal margin. The pygofer bears a dorso-caudal hook on each side which is divided into two long terminal spines which are widely separated at base and usually converge and overlap at apex.

Holotype, male.—Chimneys Campground, Great Smoky Mountains National Park, Tennessee, September 1, 1948, from Hamamelis virginiana, Ross and Stannard. Allotype, female, and 32 paratypes—Same data. Holotype, allotype, and male and female paratypes in the collection of the Illinois Natural History Survey; male and female paratypes in the DeLong Collection at The Ohio State University.

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