DESCRIPTION OF A NEW SPECIES OF THE GENUS ONCOPSIS
(HEMIPTERA: CICADOMORPHA: CICADELLIDAE) FROM GREECE

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Abstract – Oncopsis krios – a new species of Macropsinae leafhopper from Mt. Killini in Greece is described. The new species belongs to the O. alni-group and differs from O. alni, O. planiscuta, O. appendiculata and O. tristis by the combination of coloration and genital characters. An identification key for all European species of the alni-group is provided. O. krios is reported from Ulmus sp. which is a new host plant for Oncopsis. Hitherto all known European Oncopsis species are associated with Betulaceae.

KEY WORDS: Auchenorrhyncha, Hemiptera, Macropsinae, leafhopper, new species, taxonomy, Greece.

Izvleček – OPIS NOVE VRSTE RODU ONCOPSIS (HEMIPTERA: CICADOMORPHA: CICADELLIDAE) IZ GRČIJE


KLJUČNE BESEDE: Auchenorrhyncha, Hemiptera, Macropsinae, škržatki, nova vrsta, taksonomija, Grčija.

Introduction

In the western Palaearctic region the genus Oncopsis Burmeister, 1838 (Cicadellidae, Macropsinae) is represented by some 12 species. A total of eight
Oncopsis species have been reported from Europe. Species identification is generally difficult because of few reliable morphological characters. Additionally many Oncopsis species are polymorphic concerning the coloration (Claridge & Nixon, 1981, 1986). So far all known European species are associated with Betulaceae (Alnus, Betula, Carpinus, Corylus) and can be separated by the shape of the aedeagus into two species groups (Anufriev, 1967): the flavicollis-group with an S-shaped aedeagus and the alni-group with an evenly curved aedeagus.

Material collected by R. Linnavuori provided an undescribed Oncopsis species from Greece belonging to the alni-group, which is presented here. Notable is the host plant, which is the first record for an Oncopsis species on Ulmaceae.

Material and methods

For the description I follow Ossiannilsson’s and Hamilton’s (1980) terminology. The type material is deposited in the National Museum of Wales, Cardiff collections (NMWC).

Taxonomy

Genus Oncopsis Burmeister, 1838
Type species: Cicada flavicollis Linnaeus, 1761; by subsequent designation by Westwood, 1840.

Oncopsis krios sp. n.

Paratypes: 12♂, 7♀, Peloponnesus, Mt. Killini, M. S. Trikalon, Greece, 11-13.VI.1990, R. Linnavuori leg. (NMWC). 1♂, 1♀ of paratypes deposited in the Natural History Museum, London (BMNH) and 1♂, 1♀ of paratypes deposited in the Zoological Institute, Russian Academy of Sciences, St. Petersburg (ZIN).

Additional material: 1 intersex (Figs 5-6), same locality and date as holotype and paratypes (NMWC). Intersex individuals within Oncopsis are discussed and their terminalia figured by Hamilton (1980).

Note. The host plant is indicated as Ulmus montana. This species was often regarded as a subspecies of Ulmus glabra Hudson, 1762. As U. glabra ssp. montana is not listed in Flora Hellenica (Strid & Tan, 1997) the host plant is best treated as Ulmus sp.

Description: The general appearance is similar to Oncopsis species from the flavicollis-group namely O. flavicollis Linnaeus, 1761 and O. carpini J. Sahlberg, 1871. In lateral aspect the face of both sexes is strongly convex (Figs 1,3). The new described species belongs to the alni-group due to its evenly curved outer margin of the aedeagus (Fig. 5).
Figs 1-6: *Oncopsis krios* sp. n., total view. 1 – male in lateral view (paratype); 2 – male in frontal view (paratype); 3 – female in lateral view (paratype); 4 – female in frontal view (paratype); 5 – intersex in lateral view; 6 – intersex in frontal view. Scale bar for figs 1, 3, 5 = 1.0 mm; for figs 2, 4, 6 = 0.5mm.
Figs 7-17: *Oncopsis krios* sp. n., male and female genitalia. 7 – aedeagus from the left; 8 – male left genital style from the left; 9-10 – anal collar appendage of two different males; 11 – female ovipositor in ventral view; 12 – male second tergal apodemes in broadest view; 13 – male second tergal apodemes in ventral view; 14-15 – male first tergal apodemes in different views; 16 – male ventral apodemes in broadest view; 17 – male first dorsal apodemes of another specimen in broadest view. Scale bar for figs 7-10, 12-17 = 0.25 mm; for fig. 11 = 0.5 mm.
Species diagnosis: The here described species differs from *O. appendiculata* Wagner, 1944 and *O. tristis* Zetterstedt, 1838 by the larger body size and the shape of the branches of the anal collar appendages. *O. krios* sp. n. differs from *O. alni* Schrank, 1801 and *O. planiscuta* Thomson, 1870 by the coloration and the shape of the 7th female sternite.

Coloration (Figs 1-4): Male: Body yellow-brownish, abdomen dark brown dorsally, yellow ventrally; wings hyaline with brown veins, commisural border yellow and brown, apical cells infumated; legs yellow-brownish, tibia externally with a brown band; face yellow with two large black discoidal spots, discoidal cross-band always missing, median band short, interocular band not reaching the eyes (Fig. 2).

– Female: Body yellow, abdomen yellow-brownish dorsally, yellow ventrally; wings hyaline with yellow-brownish veins; legs yellow without any markings; face yellow with two large black discoidal spots, discoidal cross-band, median band and interocular band missing (Fig. 4).

Male genitalia (Figs 5-8, 9-13): Ventral outline of aedeagus convex and evenly curved (Fig. 5); branches of anal collar appendages of approximately equal length (Figs 7-8); genital style as in Fig. 6. 1st dorsal apodemes quite variable (Figs 12-13, 15); 2nd dorsal apodemes almost as broad as long (Figs 10-11) and only slightly convex, separated by a small gap; 1st ventral apodemes short and angular, clearly separated from each other (Fig. 14).

Female genitalia (Fig. 9): Caudal margin of 7th abdominal sternum convex and with a deep incision between angular corners (Fig. 9); ventral margin of ovipositor in later aspect straight and extending caudally beyond apex of pygofer.

Body length: Males – 4.35-4.65 mm. Females – 4.60-4.80 mm.

Etymology: The species is named after the markings on the male's vertex (Fig. 2). Derived from ancient Greek "κρις; krios" – ram". In addition the river Krios has its source in Mt. Killini.

Identification key to European *Oncopsis* species (*alni*-group)

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<th>Males</th>
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<th>Genital style narrow, smaller species. On <em>Betula</em></th>
<th>Genital style broad, larger species. On <em>Alnus</em> or <em>Ulmus</em></th>
<th>Longer branch of anal collar appendage strongly retorse</th>
<th>Longer branch of anal collar appendage moderately curved</th>
<th>Branches of anal collar appendage of different length</th>
<th>Branches of anal collar appendage of equal or almost equal length</th>
<th>Face with broad discoidal cross-band. On <em>Alnus incana</em></th>
<th>Face without discoidal cross-band. On <em>Ulmus</em></th>
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6(1) Caudal margin of 7th abdominal sternum almost straight or concave. On Alnus .................................................. 7
Caudal margin of 7th abdominal sternum convex. On Betula or Ulmus ....... 8
7(6) 7th abdominal sternum straight, medially with a slight incision . . . planiscuta
7th abdominal sternum concave, medially without incision ............. alni
8(6) 7th abdominal sternum with a deep incision betweenangular corners. On Ulmus . ........................................ krios n. sp.
7th abdominal sternum with a shallow incision. On Betula ............... 9
9(8) Ovipositor extending caudally considerably beyond apex
of pygofer............................................................ appendiculata
Ovipositor extending caudally only little beyond apex of pygofer ...... tristis

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References


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