

Notes on *Mycterodus drosopouloسی* Dlabola, 1982
(Hemiptera, Fulgoroidea, Issidae)

Заметки о *Mycterodus drosopouloسی* Dlabola, 1982
(Hemiptera, Fulgoroidea, Issidae)

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Ключевые слова: Issini, *Mycterodus balikesiricus*, *M. drosopouloسی*, *M. hamatus*, *Zopherisca penelopae*, *Quercus coccifera*, морфология, маквис, кормовое растение, Восточное Средиземноморье.

Abstract. Male genitalia of the Mediterranean issid plant-hopper, *Mycterodus drosopouloسی* Dlabola, 1982, are illustrated for the first time. The species is recorded for the first time from Mount Parnitha near to Athens, Greece. The host plant of *M. drosopouloسی* and its biotopical preferences are described.

Резюме. Приведены достоверные рисунки гениталий самцов средиземноморской иссиды *Mycterodus drosopouloسی* Dlabola, 1982. Впервые этот вид указан с горы Парнис в окрестностях Афин с данными о местобитании и кормовом растении.

In early May 2015 thanks to invitation of the Agricultural University of Athens (Greece) and particularly to the hospitality of Dr. Antonios Tsagkarakis I had an opportunity to spend one day in a field collecting planthoppers in macchia communities of Parnitha Mt. (or Parnis Mt.) near to Athens. During this trip *Mycterodus drosopouloسی* Dlabola, 1982 described by J. Dlabola after several specimens from Greece and Turkey [Dlabola, 1982] was collected in numbers on *Quercus coccifera* (L.). This issid species is endemic to Aegean Subprovince of the Eastern Mediterranean Province.

The genus *Mycterodus* Spinola, 1839 is one of the largest issid taxon comprising 6 subgenera with 79 species distributed in Central and Southeastern Europe, Eastern Mediterranean Basin, Anatolia, Caucasus, Middle Asia, Iran, and Iraq [Gnezdilov et al., 2014]. *Mycterodus drosopouloسی* belongs to the subgenus *Mycterodus sensu stricto*. This species was just once mentioned in the literature after the original description where it was recorded nearby Athens [Gnezdilov, 2008]. In the same paper I already mentioned that Dlabola's drawings of *M. drosopouloسی* male genitalia are incorrect and pointed out that this species is closely related to *Mycterodus hamatus* Dlabola, 1971, described after a

single male from Izmir in Turkey [Dlabola, 1971], according to peculiar long and spiny two subapical processes of the phallobase (Figs. 1, 2). My recent study of type specimens of *Mycterodus balikesiricus* Dlabola, 1979, known from Sindirgi in Turkey [Dlabola, 1979], also showed its close relation to these two species and again incorrectness of Dlabola's drawings [Dlabola, 1979, figs 42, 43]. In fact *M. balikesiricus* also has pair of long spiny subapical processes of the phallobase. Species identification in the family Issidae is mainly basing on the characters of male genitalia, thus correct and detailed illustrations of genitalic structures are very important for identification and comparative morphological studies.

The type series of *M. drosopouloسی* include the holotype which is from Evia Island (Vathi-Avlis) of Greece and 8 males and females from Sultanyayla in Turkey [Dlabola, 1982]. The paratypes from Turkey were collected on *Quercus* sp. Thus including my record of this species in 2008 it was known just after four specimens from Greece. However my experience of day collecting on Parnitha Mt. shows that *M. drosopouloسی* together with another Greek endemic issid, *Zopherisca penelopae* Dlabola, 1974, are common species occurring on *Quercus coccifera* (L.) in macchia communities. This confirmed information on host plant specialization of the species is very important as very few ecological data on Mediterranean Issidae are available in the literature.

Material and methods

Biogeographical terminology follows Emeljanov [1974]. Morphological terminology after Gnezdilov et al. [2014].

Material studied is deposited in the collection of the Zoological Institute RAS, Saint Petersburg, Russia.

Morphological notes

Mycterodus (Mycterodus) drosopoulosi Dlabola, 1982

Figs 1–6.

Material. Greece: 3♂♂, 12♀♀, 25 km NW of Athens, Parnitha Mt., 250–500 m, 5.V.2015, V.M. Gnezdilov.

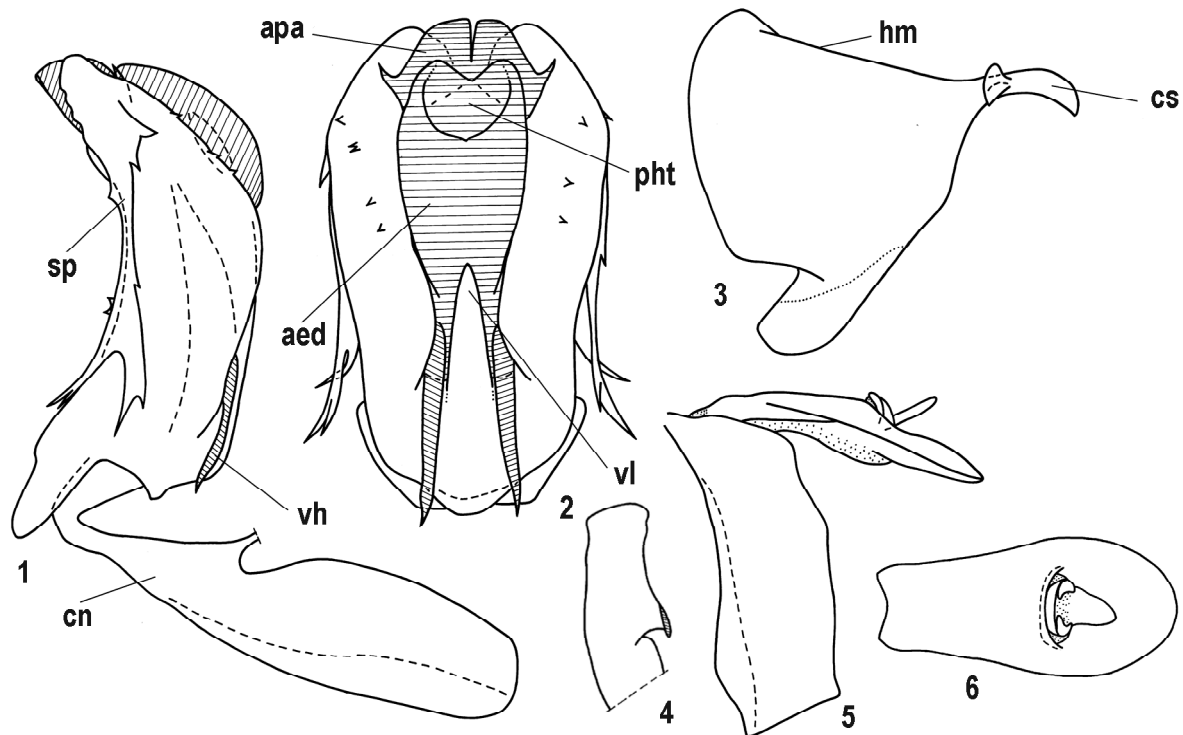
Male genitalia. Anal tube long, enlarged apically, widely rounded (in dorsal view), apical angles rounded, not protruding downwards (in lateral view) (Figs 5, 6). Pygofer with slightly convex hind margin. Phallobase massive, with pair of long spiny subapical processes which almost reaching its basement (Fig. 1). Each process bifurcate apically with several teeth. Ventral margins of dorso-lateral phallobase lobes each with 3–4 dents in a vertical row (Fig. 2). Ventral phallobase lobe long and narrow. Aedeagus massive, with well developed apical part bearing large phallotrema which is well visible above the upper margin of the phallobase. Apical aedeagal processes wide, each with a spine. Aedeagus with pair of short and narrow ventral hooks, pointed apically and directed down. The hooks arising in lower third of the aedeagus

and reaching its basement. Connective is very long and massive. Style with straight hind margin (in lateral view) (Fig. 3). Capitulum almost rectangular, truncate apically (in dorsal view), with wide lateral tooth (Fig. 4).

Comparison. The species well differs from closely related *M. hamatus* and *M. balikesiricus* by the shape and spination of subapical phallobase processes which are clearly bifurcate apically and by general spination of the phallobase apex (Figs 1, 2).

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Figs 1–6. *Mycterodus drosopoulosi* Dlabola, male genitalia. 1 — penis and connective, lateral view; 2 — penis, ventral view; 3 — style, lateral view; 4 — capitulum of style, dorsal view; 5 — pygofer and anal tube, lateral view; 6 — anal tube, dorsal view. aed — aedeagus; apa — apical aedeagal process; cn — connective; cs — capitulum of style; hm — hind margin of style; pht — phallotrema; sp — subapical phallobase process; vh — ventral aedeagal hooks; vl — ventral phallobase lobe.

Рис. 1–6. *Mycterodus drosopoulosi* Dlabola, гениталии самцов. 1 — пенис и коннектив, сбоку; 2 — пенис, снизу; 3 — стилус, сбоку; 4 — головка стилуса, сверху; 5 — пигофор и анальная трубка, сбоку; 6 — анальная трубка, сверху; aed — эдеагус; ара — апикальные отростки эдеагуса; сп — коннектив; cs — головка стилуса; hm — задний край стилуса; pht — фаллотрема; sp — субапикальный отросток фаллобазы; vh — вентральные крючки эдеагуса; vl — вентральная лопасть фаллобазы.

References

- Dlabola J. 1971. Taxonomische und chorologische Ergänzungen zur türkischen und iranischen Zikadenfauna (Homopt. Auchenorrhyncha) (Sammelausbeute von Dr. Wittmer, mit einem Nachtrag über andere Gebiete der Paläarktis) // Acta Faunistica Entomologica Musei Nationalis Pragae. Vol.14. P.115–138.
- Dlabola J. 1979. Neue Zikaden aus Anatolien, Iran und aus Südeuropäischen Ländern (Homoptera: Auchenorrhyncha) // Acta Zoologica Academiae Scientiarum Hungaricae. Vol.25. No.3–4. P.235–257.
- Dlabola J. 1982. Fortsetzung der Ergänzungen zur Issiden-Taxonomie von Anatolien, Iran und Griechenland (Homoptera, Auchenorrhyncha) // Acta Musei Nationalis Pragae. Vol.38B. No.3. P.113–169.
- Emeljanov A.F. 1974. Proposals on the classification and nomenclature of areals // Entomologicheskoe Obozrenie. Vol.53. No.3. P.497–522 .
- Gnezdilov V.M. 2008. New and little known species of the genus *Mycterodus* Spinola (Homoptera, Issidae) from the Eastern Mediterranean // Entomologicheskoe Obozrenie. Vol.87. No.3. P.575–580.
- Gnezdilov V.M., Holzinger W.E., Wilson M.R. 2014. The Western Palearctic Issidae (Hemiptera, Fulgoroidea): an illustrated checklist and key to genera and subgenera // Proceedings of the Zoological Institute RAS. Vol.318. Suppl.1. 124 p.

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