

Review of the subgenus *Semiroodus* Dlabola of the genus *Mycterodus* Spinola (Homoptera: Issidae)

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Abstract – The subgenus *Semiroodus* Dlabola, 1987 of the genus *Mycterodus* Spinola, 1839 with all known species are redescribed. Four new species of the subgenus from Greece and West Turkey are described. A key to the species of the subgenus is proposed.

Résumé – Revue du sous-genre *Semiroodus* Dlabola du genre *Mycterodus* Spinola (Homoptera : Issidae). – Le sous-genre *Semiroodus* Dlabola, 1987 du genre *Mycterodus* Spinola, 1839 avec toutes les espèces connues jusqu'à présent sont redécris. Quatre espèces nouvelles sont décrites pour la Grèce et la Turquie occidentale. Une clé des espèces du sous-genre est proposée.

The subgenus *Semiroodus* was erected by Dlabola (1987) as a new genus for *Mycterodus pallens* Stål 1861. In this paper, Dlabola described additional species – *S. colossicus* from Rhodes and noted that the latter species is closely related to *S. pallens*. Later on he transferred to this genus *M. idomeneus* Dlabola 1985, described from Crete (Dlabola 1997). Recently, Gnezdilov (2003) proposed to treat *Semiroodus* Dlabola as a subgenus of the genus *Mycterodus* Spinola.

The subgenus *Semiroodus* comprises seven species including four new species described below. The species of the subgenus are distributed only in the East Mediterranean Region. They are mainly distinguished by the structure of the male genitalia. The type species of the subgenus – *M. (S.) pallens* was described by Stål (1861) from Greece from one female. Later, *M. (S.) pallens* was recorded also from Croatia (Melichar 1906, Gnezdilov *et al.* 2004). Actually this species is distributed only in Greece. The material recorded from Croatia belongs to undescribed species of the subgenus (in preparation). *M. (S.) hioles* sp. n. is recorded from Lesbos and Hios Islands. *M. (S.) ionus* n. sp. is distributed in Samos

Island and Southwestern Turkey. *M. (S.) ikarus* n. sp. is an endemic species of Ikaria Island. *M. (S.) johannesi* sp. n. is recorded from Skiathos and Poros Islands. *M. (S.) idomeneus* Dlabola is an endemic species of Crete Island. *M. (S.) colossicus* Dlabola is distributed in Aegean Islands and Eastern mainland Greece.

Material and methods

The terminology of the head follows to Anufriev and Emeljanov (1988) and Emeljanov (1995). Emeljanov suggested to distinguish two types of boundary along which runs the division into the vertical and facial sides of the head. In the first type, which is characteristic for more advanced families of Fulgoroidea including Issidae, the division runs between the coryphe and metope. In the second type the boundary divides the metope into the acrometope and eumetope. The acrometope, uniting with the coryphe, forms the macrocoryphe, which is found only in the Delphacidae and Cixiidae. Metope at larval stage bearing two rows of sensory pits along the lateral and the sublateral keels. Coryphe always without sensory pits. In the Issidae «metope» is used to indicate the frons and «coryphe» the vertex. The terminology of the male genitalia follows to Gnezdilov (2003) and the female genitalia to Bourgoin (1993) and

Gnezdilov (2002). The material examined is deposited in the following collections:

SMNH	Swedish Museum of Natural History, Stockholm, Sweden
CD	Collection of S. Drosopoulos, Athens, Greece
NMGW	National Museums & Galleries of Wales, Cardiff, United Kingdom
ZMAN	Universiteit van Amsterdam, Zoölogisch Museum, Amsterdam, The Netherlands
WU	Wageningen University, Wageningen, The Netherlands
MMBC	Moravian Museum, Collection of L. Melichar, Brno, Czech Republic
ZIN	Zoological Institute, Russian Academy of Sciences, St. Petersburg, Russia

Taxonomy

Genus *Mycterodus* Spinola 1839

Subgenus *Semiroodus* Dlabola 1987

Description – Body elongate (dorsal view). Metope relatively long, scarcely narrowing to clypeus. Metope with median keel reaching to postclypeus and sublateral keels distinct only in its apical parts. Coryphe with convex or angulate anterior margin and obtusely angulate or concave posterior margin. Pronotum with strongly convex anterior margin and straight posterior margin. Scutellum with median groove or keel and two lateral keels. Fore wing narrows apically, with hypocostal plate. Radius (R) bi- or trifurcate; Mediana (M) bifurcate; Cubitus anterior (CuA) simple. Hind wing reaching apex of abdomen. Hind tibia with 2 lateral teeth. Metatarsomere I usually with 4 (3+1) intermediate socle setae.

Coloration. General coloration light yellowish brown with brown or dark brown spots. Sublateral keels of metope bordered apically by black stripes. Each fore wing usually with three dark brown dots: one dot between M and CuA basally and two dots between second branches of R and M (one dot near Median bifurcation and another dot distally). Apical cells of fore wing with dark brown spots. Hind wing brown. Traces of the sensory pits of metope, apex of rostrum, claws, apices of third metarsomeres, teeth and socle setae of legs brown or black. Females with apices of gonoplacs and anal tube dark brown.

Male genitalia. Anal tube more or less elongate, narrows apically (dorsal view), not convex (lateral view). Anal column short. Pygofer with weakly convex hind margins (lateral view). Ventral lobe of phallobase relatively short and wide, scarcely narrowing apically, at rounded apex. Aedeagus with a pair of ventral hooks. Each apical process of aedeagus with an apical lobe. Plate of stylus elongate, almost rectangular. Capitulum of stylus not narrowing apically (dorsal view), with distinct apical tooth and relatively broad lateral tooth.

Female genitalia. Sternum VI massive and long, almost triangular. Sternum VII with weakly and widely concave hind margin. Structure of ovipositor characteristic of the genus *Mycterodus*, as described by Gnezdilov (2002). Each distal part of posterior connective lamina of gonapophyse IX with a short tooth in bend place. Apical group of anterior connective lamina of gonapophyse VIII with 3 equal teeth, lateral group with 4 keeled teeth. Endogonocoxal process gradually narrows to weakly bifurcated apex.

Key to species (males)

- 1. Ventral margin of each dorso-lateral lobe of phallobase without processes and teeth (fig. 1) *M. (S.) idomeneus* Dlabola
- Ventral margin of each dorso-lateral lobe of phallobase with processes or teeth (figs 7, 10, 14, 16, 19, 22, 25) 2
- 2. Dorso-lateral lobes of phallobase sharply widening apically, each with large semicircular toothed process on ventral margin (figs 7, 10) 3
- Dorso-lateral lobes of phallobase gradually widening or narrowing apically, each with one triangular or two semi-circular or square processes on ventral margin (figs. 14, 16, 19, 22, 25) 4
- 3. Apical processes of aedeagus simple, with excavated margin of phallotrema (lateral view) (fig. 7) *M. (S.) pallens* Stål
- Apical processes of aedeagus bilobed (lateral view) (fig. 10) *M. (S.) johannesi* sp. n.
- 4. Each dorso-lateral lobe of phallobase with square toothed process on middle of ventral margin (figs 14, 16) 6
- Each dorso-lateral lobe of phallobase with triangular toothed process on middle of ventral margin (figs 19, 22, 25) 5
- 5. Dorso-lateral lobes of phallobase narrowing apically (lateral view) (figs 22, 25) *M. (S.) colossicus* Dlabola
- Dorso-lateral lobes of phallobase not narrowing, but widely rounded apically (lateral view) (fig. 19) *M. (S.) bholes* sp. n.
- 6. Ventral margin of each dorso-lateral lobe of phallobase with triangular toothed apical process (lateral view) (fig. 16). Square process on middle of ventral margin of the lobe far not reaching margin of phallotrema. Apical processes of aedeagus relatively short, each with a short apical lobe *M. (S.) ikarus* sp. n.
- Ventral margin of each dorso-lateral lobe with semicircular toothed apical process (lateral view) (fig. 14). Square process on middle of ventral margin of the lobe reaching margin of phallotrema. Apical processes of aedeagus long, each with a broad and long apical lobe *M. (S.) ionus* sp. n.

Mycterodus (Semiroodus) idomeneus Dlabola 1985 (figs 1-6)

Mycterodus idomeneus Dlabola 1985: 220, figs 12-17.

Semiroodus idomeneus: Dlabola 1997: 305.

Mycterodus (Semiroodus) idomeneus: Gnezdilov 2003: 52.

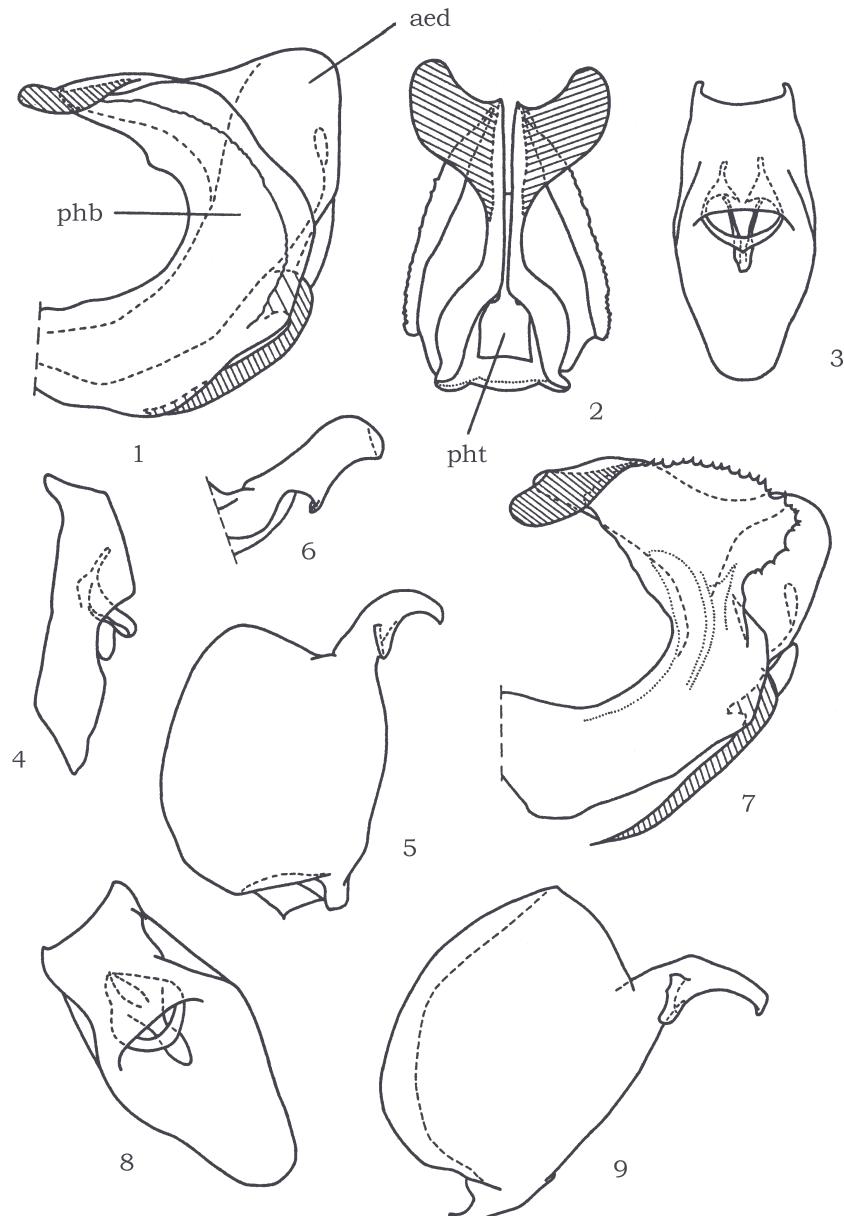
Redescription – Coryphe relatively short (the width is 1.6 times the length), with convex anterior margin. Metatarsomere I with 4 (3+1) intermediate socle setae.

Metope with a pair of oval brown spots next to median keel. Femora with brown spots dorsally.

Male genitalia. Anal tube relatively short and wide, weakly narrows basally and apically, at rounded apex (dorsal view) (figs 3, 4). Anal column narrow, 0.25 times as long as is the anal tube. Each dorso-lateral lobe of phallobase with ventral margin scarcely

excavated medially, without processes, sometimes with an additional narrow toothed lateral lobe (fig. 1). Apical processes of aedeagus narrowing apically, each with a long and broad apical lobe (fig. 2); margin of phallotrema straight (lateral view). Aedeagus with a pair of relatively long ventral hooks (about half as long as aedeagus measured from base to apical margin of phallotrema). Stylus with hind margin straight; caudo-dorsal angle widely rounded (figs 5, 6).

Body length. Male: 5.5–5.6 mm. Female: 6.0 mm.



Figures 1–9

Mycterus idomeneus Dlabola, holotype male. – 1, penis, lateral view. – 2, same, caudo-dorsal view. – 3, anal tube, dorsal view. – 4, same, lateral view. – 5, stylus, lateral view. – 6, capitulum of stylus, dorsal view. – phb, phallobase. – aed, aedeagus. – pht, phallotrema. *Mycterus pallens* Stål, male. – 7, penis, lateral view. – 8, anal tube, dorsal view. – 9, stylus, lateral view.

Material examined – Greece, Crete Is.: 1 ♂ (dissected), holotype, 1 ♀ (not dissected), paratype, Chora Sfakion, 2.V.1982, H. Teunissen leg. (ZMAN); 1 ♂, Omg. Heraclion, 25-27.IV.1975, R.H. Cobben & P. de Vrijer leg. (WU).

***Mycterodus (Semiroodus) pallens* Stål 1861**
(figs 7-9)

Mycterodus pallens Stål 1861: 210.

Mycterodus pallens: Dlalola 1985: 221, figs 18-22.

Semiroodus pallens: Dlalola 1997: 305.

Mycterodus (Semiroodus) pallens: Gnezdilov 2003: 52.

Redescription – Coryphe with obtusely angulate anterior margin, the width is 1.1-1.3 times the length. Metatarsomere I with 4 (3 + 1) intermediate socle setae.

Metope and median keel pale between sublateral keels and base of clypeus. Well pigmented specimens with median lines of clypeus and coryphe, and keels of scutellum pale; metope between median and sublateral keels with longitudinal narrow dark brown stripes joining at median keel apically below sublateral keels. Costal margin of fore wing pale. Males with genital segments yellowish.

Male genitalia. Anal tube relatively short and wide, weakly narrows basally and more strongly so apically (fig. 8). Anal column narrow, 0.20-0.25 times as long as is the anal tube. Dorso-lateral lobes of phallobase sharply widening apically; ventral margin of each lobe with large semicircular toothed process, the margin under the process with concavity (lateral view) (fig. 7). Apical processes of aedeagus long and narrow apically, each with a long and broad apical lobe and excavated margin of phallotrema (lateral view). Aedeagal hooks gradually or sharply narrow to apex, relatively long (0.4-0.6 times as long as aedeagus). Stylus with hind margin scarcely convex or straight; caudo-dorsal angle right (fig. 9).

Female genitalia. Anterior connective lamina of gonapophyse VIII with weakly developed fourth tooth in lateral group.

Body length. Male: 5.9-6.8 mm. Female: 6.8-7.3 mm.

Material examined – Greece: 1 ♂, type, «Graecia» (SMNH); Central Greece: 1 ♂, Sounion-Attiki, 21.VI.1995; 1 ♂, 2 ♀, Marathon-Attiki, 11.VII.1984; 1 ♂, 1 ♂, Parnis Mt.-Attiki, 13.VII.1984; 1 ♂, 4 ♀, Steni-Evia, 27.VII.1988; 1 ♂, Agios Georgios-N. Evia, 21-22.VI.1980; 2 ♂, 2 ♀, Tsoukalades-Boeotia, 12.VII.1999; 1 ♀, Eratini-Doris, 24.V.1980; 3 ♂, 4 ♀, Skaloula-Doris, 11-18.VII.1978; 4 ♀, same locality, 9.VI.1979; 3 ♂, 1 ♀, same locality, 1980; 1 ♂, 3 ♀, Krokylion-Doris, 19.VI.1978; 1 ♂, 2 ♀, Oiti Mt., above Pira, 11.VII.1987; 7 ♂, 5 ♀, Giona Mt., 1500 m, 21.VII.2003, 1 ♂, 1 ♀, Evinos River, 22.VI.1986, S. Drosopoulos all leg. (CD); 1 ♂, Lefkadi, 9.VIII.1986, R.H. Cobben & P. de Vrijer leg. (WU); 3 ♂, 2 ♀, 6 km E Monastery of Varnakova, above Evgalion, 20.VII.2003, V.M. Gnezdilov leg. (ZIN); Peloponnesus: 1 ♂, Artemisia-Messinia, Taygetos Mt., 1000-1300 m, 11.VI.1985; 1 ♂, Kazarma-Messinia, 4.VI.1984; 1 ♂, 1 ♀, Kastanitsa-Arkadia, Parnon Mt., 14.VII.1982; 1 ♂, same locality, 15.IX.1983; 1 ♂, Charadros-Arkadia, 17.VI.1986; 1 ♂, Bubukas-Achaia, 21.VI.1986; Aegean Islands: 1 ♂, Poros [Is.] (MMBC); Ionian

Islands: 1 ♂, 1 ♀, Assos-Kephalinia, 25.VI.1988; 5 ♂, 6 ♀, Agia Efthimia-Kephalinia, 24.VI.1988; 1 ♀, Agios Leon-Zakynthos, 28.VI.1988, S. Drosopoulos all leg. (CD).

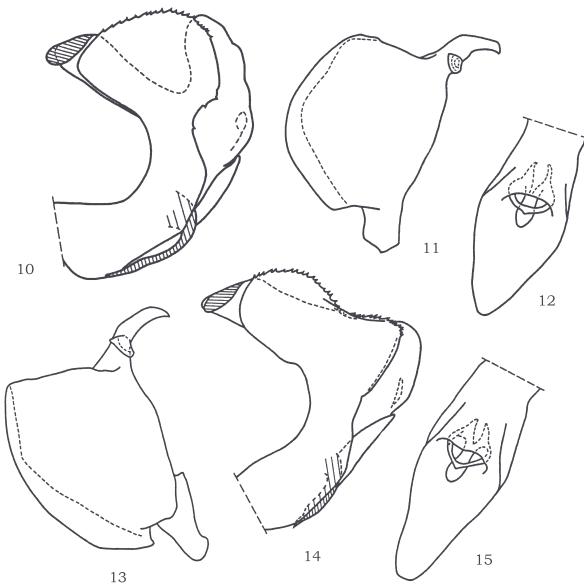
***Mycterodus (Semiroodus) johannesi* n. sp.**
(figs 10-12)

Description – Coryphe scarcely narrows from base to apical part, with anterior margin rectangular or obtusangular, the width is 1.4-1.6 times the length. Metatarsomere I with 4-5 (3-4 + 1) intermediate socle setae.

Preocular fields of head each with dark brown stripe at apical margin. Metope light yellow under sublateral keels and near median keel.

Male genitalia. Anal tube weakly narrows basally and strongly so apically (fig. 12). Anal column relatively wide, about 0.2 times as long as anal tube. Dorso-lateral lobes of phallobase sharply widening apically (fig. 10); ventral margin of each lobe with large semicircular toothed process, the margin convex or straight under the process. Apical processes of aedeagus bilobed (lateral view), each with a wide and long apical lobe. Aedeagal hooks relatively long (half to one-third as long as aedeagus), gradually or sharply narrow to apex. Stylus with hind margin straight; caudo-dorsal angle right or widely rounded (fig. 11).

Body length. Male: 5.5-5.6 mm. Female: 5.6 mm.



Figures 10-15

Mycterodus johannesi sp. n., holotype male. – 10, penis, lateral view. – 11, stylus, lateral view. – 12, anal tube, dorsal view. *Mycterodus ionus* sp. n., holotype male. – 13, stylus, lateral view. – 14, penis, lateral view. – 15, anal tube, dorsal view.

Type material – Holotype ♂, Greece, Skiathos Is., Koukounaries, 12.IX.1998, J.P. Duffels leg. (ZMAN). – **Paratypes**: 1 ♂, 1 ♀, Greece, Skiathos Is., Koukounaries, 12.IX.1998, J.P. Duffels leg. (ZMAN, ZIN); 1 ♂, Poros (Is.) (MMBC).

Etymology – The species name is derived from the first name of Dr. Johannes P. Duffels.

Comparison – The species is similar to *M. pallens* in the ventral margin of each dorso-lateral lobe of phallobase bearing a large semicircular toothed process, but clearly differs in bilobed apical processes of aedeagus (fig. 10).

***Mycterodus (Semiroodus) ionus* n. sp.**
(figs 13-15)

Description – Coryphe scarcely narrows from base to apical part, with anterior margin rectangular or acutangular, the width is 1.2-1.4 times the length. Metatarsomere I with 4-5 (3-4 +1) intermediate socle setae.

Well pigmented specimens with head, upper side of the body, and legs brown; median keel of metope, median line of coryphe and pronotum, groove and lateral keels of scutellum yellowish. Female with brown corners of abdominal sternites.

Male genitalia. Anal tube relatively long and narrow, weakly narrows basally and more strongly so apically (fig. 15). Anal column narrow, about 0.2 times as long as anal tube. Dorso-lateral lobes of phallobase widening apically, each with widely rounded apex (lateral view) (fig. 14); ventral margin of each lobe with a pair of toothed processes reaching margin of phallotrema: semicircular apical process and square middle one (lateral view). Apical processes of aedeagus long, relatively narrow (lateral view), each with a broad and long apical lobe; margin of phallotrema straight. Aedeagal hooks relatively short (about 0.25 times as long as aedeagus). Stylus with straight hind margin, caudo-dorsal angle right (fig. 13).

Body length. Male: 6.2-7.2 mm. Female: 6.9-7.4 mm.

Type material – Holotype ♂, Greece, Samos Is., Hora, 9.VI.1998, S. Drosopoulos leg. (CD). – **Paratypes**: Greece, Samos Is.: 2 ♂, 2 ♀, Hora, 9.VI.1998 (CD, ZIN); 1 ♂, 2 ♀, NE Pithagorio, 23.VI.1987 (CD); 1 ♂, 3 ♀, Pithagorio, 12-15.VII.1997 (CD, ZIN); 1 ♂, 1 ♀, Neohorio, 24.VI.1987 (CD); 3 ♂, 1 ♀, Pyrgos, 24.VI.1987 (CD, ZIN); 2 ♂, 4 ♀, same locality, 13.VII.1996 (CD); 1 ♂, Agios Konstantinos, 27.VI.1987 (CD); 2 ♀, Psili Ammos, 22.VI.1987 (CD), S. Drosopoulos all leg. Turkey, Izmir: 1 ♂, 1 ♀, Selçuk, Sirince, 10.VII.1997 (ZIN); 1 ♂, 1 ♀, Kemalpasa, mixed forest, 10.VII.1997 (NMGW), J.C. Deeming all leg.

Etymology – The species name is derived from the Greek name of a province in Asia Minor – Ionia.

Comparison – The species is related to *M. pallens*, but clearly differs in the ventral margin of each dorso-lateral lobe of phallobase with a pair of processes and shorter aedeagal hooks (fig. 14).

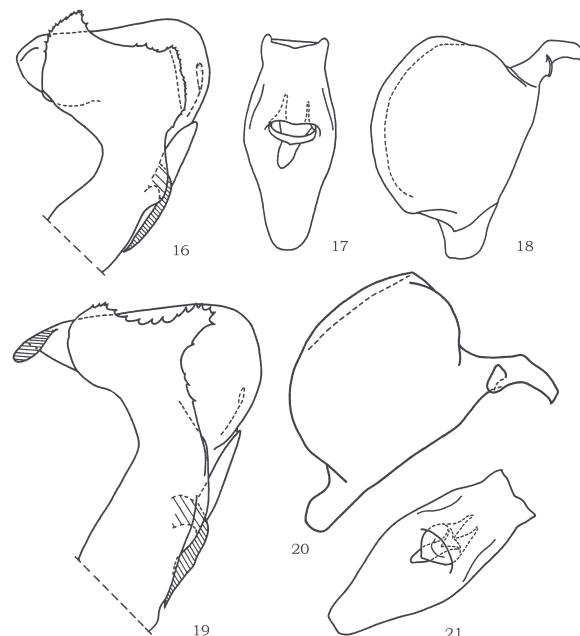
***Mycterodus (Semiroodus) ikarus* n. sp.**
(figs 16-18)

Description – Coryphe scarcely narrows from base to apical part, with obtusely angulate anterior margin, 1.3 times as broad as long. Pronotum sometimes with weak median keel. Metatarsomere I with 4 (3 +1) intermediate socle setae.

Fore wings sometimes with large dark brown spots. Females with corners of sternum VII and proximal parts of gonocoxa VIII dark brown. Males with brownish yellow genital segments.

Male genitalia. Anal tube weakly narrows basally and more strongly so apically (fig. 17). Anal column wide, 0.25 times as long as anal tube. Dorso-lateral lobes of phallobase widening apically, truncated (fig. 16); ventral margin of each lobe with a pair of toothed processes: triangular apical process and square middle process, the last one slightly turned outside. Square middle processes of the lobes far not reaching the margins of phallotrema (lateral view). Apical processes of aedeagus relatively short, each with a short apical lobe (lateral view). Aedeagal hooks relatively short (about 0.3 times as long as is the aedeagus). Stylus with hind margin weakly convex; caudo-dorsal angle widely rounded (fig. 18).

Body length. Male: 5.3-6.3 mm. Female: 5.7-6.8 mm.



Figures 16-21

Mycterodus ikarus sp. n., paratype male. – 16, penis, lateral view. – 17, anal tube, dorsal view. – 18, stylus, lateral view. *Mycterodus hioles* sp. n., holotype male. – 19, penis, lateral view. – 20, stylus, lateral view. – 21, anal tube, dorsal view.

Type material – Holotype ♂, Greece, Ikaria Is., Raches, 14.VII.1981, S. Drosopoulos leg. (CD). – **Paratypes**: Greece, Ikaria Is.: 1 ♂, 1 ♀, Raches, 14.VII.1981 (CD, ZIN); 1 ♀, Karidies, 15.VII.1993 (CD); 1 ♀, Gialiskari, 15.VII.1981 (CD), S. Drosopoulos all leg.; 2 ♂, Gialiskari, 1.VI.1997 (ZMAN, ZIN); 4 ♂, 6 ♀, Armenistis-Nas, 200-300 m, 2.VI.1997 (ZMAN, ZIN); 1 ♂, W of Armenistis, 7.VI.1997 (ZMAN); 1 ♂, 1 ♀, 3 km S of Armenistis, 300 m, 31.V.1997, J.P. Duffels all leg. (ZMAN).

Etymology – The species name is derived from the name of a personage of Greek mythology – Ikarus.

Comparison – The species is related to *M. ionus* sp. n. in the ventral margin of each dorso-lateral lobe of phallobase with square middle process, but differs in the triangular apical process of the lobe and short apical processes of aedeagus, each with short lobe (fig. 16).

Mycterodus (Semiroodus) biales n. sp. (figs 19-21)

Description – Coryphe 1.2-1.3 times as broad as long, anterior margin obtusely angulate or convex. Metatarsomere I with 4-5 (3-4 + 1) intermediate socle setae.

Abdominal sternites sometimes with dark corners. Males with genital segments yellowish light brown.

Male genitalia. Anal tube narrows basally and apically, at truncated apex (fig. 21). Dorso-lateral lobes of phallobase not narrowing, but widely rounded apically (fig. 19); ventral margin of each lobe with a pair of toothed processes: semicircular process apically and long triangular process medially. Apical processes of aedeagus narrow apically (lateral view), each with a relatively short apical lobe. Aedeagal hooks relatively short (about 0.3 times as long as aedeagus). Stylus with hind margin convex, caudo-dorsal angle approximately right (fig. 20).

Body length. Male: 5.8-6.5 mm. Female: 5.9-6.8 mm.

Type material – Holotype ♂, Greece, Lesbos Is., Mandamados, 16.VI.1987, S. Drosopoulos leg. (CD). – **Paratypes**: 3 ♂, 1 ♀, Lesbos Is., Mandamados, 16.VI.1987 (CD); 6 ♂, 4 ♀, Hios Is., Lithi, 21.VI.1987 (ZIN, CD); 4 ♂, 3 ♀, Hios Is., Armolia, 20.VI.1987 (CD, ZIN), S. Drosopoulos all leg.

Etymology – The species name is derived from the combination of first syllables of Hios and Lesbos.

Comparison – The species is closely related to *M. colossicus*, but differs in the widely rounded apically dorso-lateral lobes of phallobase (fig. 19).

Mycterodus (Semiroodus) colossicus Dlabola, 1987 (figs 22-25)

Semiroodus colossicus Dlabola, 1987: 69, figs 31-36.

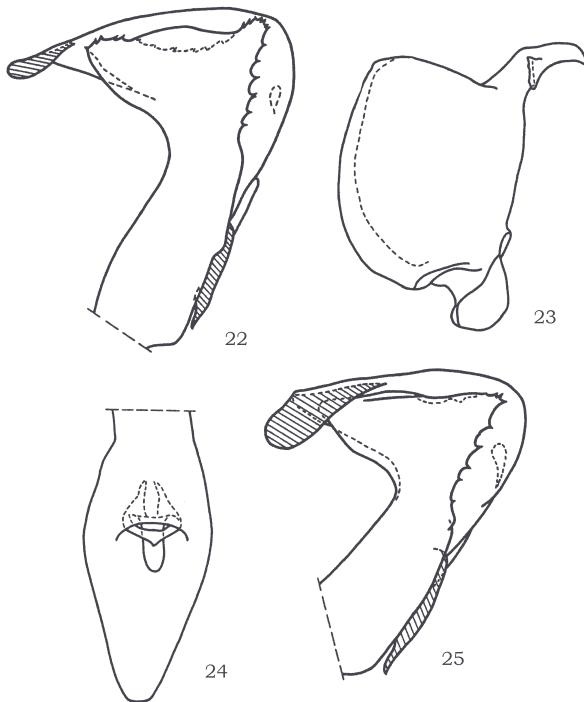
Semiroodus colossicus: Dlabola, 1997: 305.

Mycterodus (Semiroodus) colossicus: Gnezdilov, 2003: 52.

Redescription – Coryphe 1.2-1.7 (usually 1.4) times as broad as long, sometimes with very weak median keel; anterior margin rectangular or obtusangular. Metatarsomere I with 4-6 (3-4 + 1-2) intermediate socle setae.

Well pigmented specimens with head and upper side of the body brown, median keel of metope, median line of pronotum, groove and lateral keels of scutellum yellowish; abdominal sternites with brown or black corners. Males with genital segments yellowish brown. Females with yellow or dark brown gonoplacs and anal tube completely yellow or with brown apex, corners of sternum VII and gonocoxa VIII dark brown.

Male genitalia. Anal tube relatively long, weakly narrows basally and more strongly so apically (fig. 24). Anal column relatively wide, about 0.2 times as long as anal tube. Dorso-lateral lobes of phallobase narrowing apically, each with large triangular process medially (lateral view) (figs 22, 25); ventral margin of the lobe with small and close teeth; in distal part of the lobe, the teeth sometimes situated on the inner side (fig. 22). Apical



Figures 22-25

Mycterodus colossicus Dlabola, male. – 22, penis, lateral view (Rhodes Is.). – 23, stylus, lateral view. – 24, anal tube, dorsal view. – 25, penis, lateral view (Naxos Is.).

processes of aedeagus long, and narrowing apically (lateral view), each with a long apical lobe. Aedeagal hooks relatively long (half to one-third as long as aedeagus). Stylus with hind margin straight, caudo-dorsal angle right (fig. 23).

Body length. Male: 5.0-6.3 mm. Female: 5.3-6.4 mm.

Material examined – Greece: Rhodes Is.: 7 ♂, 5 ♀, Mesanagros, 29.VI.1987 (CD, ZIN); 2 ♂, 5 ♀, Apolakia, 30.VI.1987 (CD, ZIN); 2 ♂, 3 ♀, Salakos, 30.V.1990 (CD); 1 ♂ Dimilia, 31.VI.1987 (CD); 1 ♀, surroundings Petaloudes, 29.V.1990 (CD); 2 ♀, Afandou, 28.VI.1987 (CD), *S. Drosopoulos* all leg.; 1 ♂, Afandou, 1.VI.1990, *R. Linnavuori* leg. (NMGW); Karpathos Is.: 2 ♂, 1 ♀, Messohori, 4.VI.1990, *S. Drosopoulos* & *R. Linnavuori* leg. (CD, NMGW); 1 ♂, 1 ♀, Lefkos, 5.VI.1990, *S. Drosopoulos* & *R. Linnavuori* leg. (CD, NMGW); Naxos Is.: 2 ♂, Apirathos, 21.V.2000 (CD, ZIN). 4 ♂, 1 ♀, 3 larvae, Agia, 20.IV.2001 (CD, ZIN); 10 ♂, 5 ♀, 6 larvae, Chora, 20.IV.2001, *J. Karkaletsis* all leg. (CD, ZIN); Paros Is.: 1 ♂, 1 ♀, Monastirion, 17.VI.1981, *S. Drosopoulos* leg. (CD); mainland Greece: 1 ♂, 1 ♀, Fokis Prov., Giona Mt., 30.VI.1987, *S. Drosopoulos* leg. (CD). 1 ♂, 1 ♀, Thessaloniki Prov., Plagiarion, 23.V.1981, *S. Drosopoulos* leg. (CD); 1 ♂, 2 ♀, Athos [Mt.] (MMBC); 1 ♂, Serres Prov., near Amfipolis, 16.VIII.1963, *R. Linnavuori* leg. (NMGW); 3 ♂, Marathon Lake-Attiki, 23.III.1989, *R. Linnavuori* leg. (NMGW, ZIN).

Note – The species is polymorphic and presented at least by two morphotypes, which are characterized by

presence or absence of teeth on the inner side of ventral margin of each dorso-lateral lobe of phallobase in distal part. Specimens of the first type (fig. 22) occur in Rhodes Island, Karpathos Island, and Giona Mt. in Fokis Province. Specimens of the second type (fig. 25) are distributed in Naxos Island, Paros Island, Plagiarion and in Athos Mt. in Thessaloniki Province, nearby Marathon Lake in Attiki Province, and Amfipolis in Serres Province. The holotype of *M. colossicus* was not examined, and figures by Dlabola (1987) do not allow clear identification, but probably it belongs to the first type as the other examined specimens from Rhodes.

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