

TAXONOMIC STUDY ON THE LITTLE KNOWN GENUS *MEGISSUS* LINNAVUORI, 1965 FROM TURKEY (HEMIPTERA: FULGOROMORPHA: ISSIDAE)¹

Veysel Kartal²

ABSTRACT: The genus *Megissus* and type species *Megissus acutus*, described by Linnavuori in 1965 from one locality in Turkey, are redescribed based on the examination of material from a new locality in Turkey.

KEY WORDS: Issidae, *Megissus*, *Megissus acutus*, new locality, redescription, Turkey

The genus *Megissus* Linnavuori (1965) is monotypic and the type species, *Megissus acutus* Linnavuori (1965), are known only from Turkey. Dlabola (1979) transferred this species to the genus *Tshurtshurnella* Kusnezov, 1927 and later (Dlabola, 1987), back to *Megissus*. External characters and the structure of the male genitalia confirms its placement in the genus *Megissus*.

SYSTEMATIC ENTOMOLOGY

Genus *Megissus* Linnavuori, 1965

Type Species: *Megissus acutus* Linnavuori, 1965:68, figs. 22:e-g, 23:a. By original designation Linnavuori, 1965.

Material Examined: 2♂♂, 6♀♀, Yenicekale (K.Maraş), Turkey, 04.07.2004, leg. Okutaner, A.Y. New locality for this species in Turkey. The specimens are deposited in the collections: Ondokuz Mayıs University, Faculty of Science and Arts, Department of Biology, 55139-Samsun, Turkey.

Redescription: Body large, elongate, strongly tapering, caudad, in female slightly longer than in male. Head (across eyes) somewhat broader than pronotum. Frons convexly prominent in upper part, flattish in lower, convexly sided laterally, upper margin straight, only traces of the sublateral keels present, median keel absent. Vertex transverse, anterior margin rounded, keel not present. Pronotum and scutellum without keels. Forewings much longer than abdomen and strongly acuminate, longitudinal veins strong, cross veins rather obsolete. Hindwings absent. Hind tibiae with 2 spines. In male and female anal tube narrow and elongate, aedeagus with a transverse dentate keel and lateral spines at the base of phallosome.

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² Ondokuz Mayıs University, Faculty of Science and Arts, Department of Biology, 55139-Samsun, Turkey. E-mail: veyselk@omu.edu.tr

Key to the genera *Megissus* and *Tshurtshurnella*

- 1 (2). Vertex, pronotum and scutellum without keels, only traces of the sublateral keels present on the frons. Aedeagus with transverse dentate keel and lateral spines at the base of phallosome, ventral lobe of phallosome long, reaching the apex of phallosome. Stylus strongly tapering caudad. Anal tubes in male and female strongly elongate, more than 2.5 times as long as maximum width*Megissus*
- 2 (1). Vertex, pronotum and scutellum with keels. Aedeagus without transverse dentate keel and without spines laterally on phallosome, ventral lobe of phallosome short, not reaching or at maximum reaching the anterior margin of phallosome. Stylus widely rounding dorso-caudad. Anal tubes in male and female at maximum twice as long as maximum width*Tshurtshurnella*

Remarks: *Megissus* can be distinguished externally by its large size, fairly elongate appearance, acuminate forewings and strongly caudad tapering body. In the general structure of male genitalia, it resembles the genus *Tshurtshurnella*, but it can be distinguished from the latter by the presence of transverse dentate keels and spines laterally at the base of phallosome and shape of the anal tube.

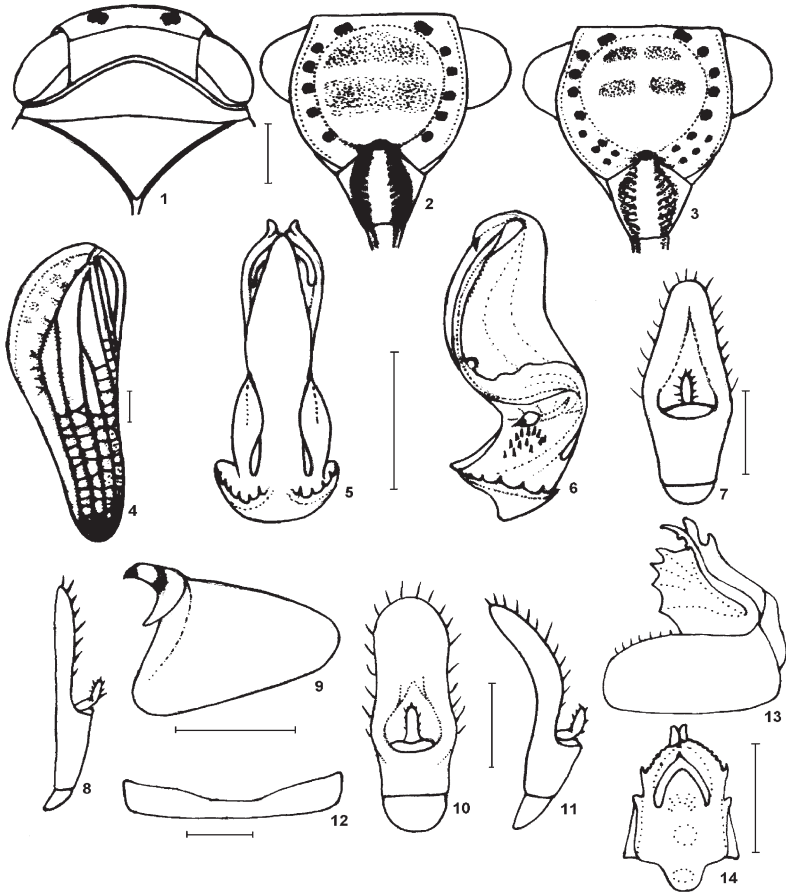
***Megissus acutus* Linnavuori, 1965**

Tshurtshurnella acuta (Linnavuori, 1965): Dlabola, 1979:269.

Measurements: Total length ♂♂: 6.20mm, ♀♀: 6.71 (6.60-7.00)mm; head width (Across eyes) ♂♂: 1.85 (1.80-1.90)mm, ♀♀: 1.98 (1.90-2.00)mm; length of vertex ♂♂: 0.33mm, ♀♀: 0.34 (0.33-0.37)mm; anterior margin width of vertex ♂♂: 1.03mm, ♀♀: 1.05 (1.00-1.10)mm; length of pronotum ♂♂: 0.53 (0.50-0.57)mm, ♀♀: 0.57 (0.53-0.60)mm; length of forewings ♂♂: 5.33mm, ♀♀: 5.66 (5.50-6.00)mm.

Redescription: Vertex 3.1-3.3 times as broad as long, anterior margin rounded or somewhat convex, lateral margins almost parallel (Fig. 1). Pronotum 1.6-1.8 times as long as vertex, anterior margin considerably rounded, posterior margin slightly concave. Frons 1.1-1.2 times as broad as long (Figs. 2, 3). Forewings relatively long and acuminate, 2.7-3.0 times as long as maximum width (Fig. 4). General coloration yellow to yellowish brown, vertex, pronotum and scutellum only faintly marked dorsally with brownish spots. Frons with marginal row of round or quadrate black spots laterally, the number and size of these spots are variable among specimens and laterally at the base of this row of spots a short marginal row of black spots can also be present. Median area of frons in upper and middle part with 1 or 2 transverse brown bands (Figs. 2, 3). Longitudinal veins of forewings bordered with brown, apex with three black stripes (Fig. 4).

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Figs. 1-11. *Megissus acutus* Linnavuori, 1965: 1- Fore body, dorsal view. 2,3- Head, ventral view. 4- Forewing. 5- Aedeagus, ventral view. 6- Aedeagus, lateral view. 7- Anal tube, dorsal view. 8- Anal tube, lateral view. 9- Stylus, lateral view. 10,11- Anal tube of female. 10- Dorsal view. 11- Lateral view. 12- Female sternum VII, ventral view. 13- Gonapophyse VIII, ventral view. 14- Gonapophyse IX, dorsal view. Scales: 0.5mm.

Male Genitalia: Aedeagus short and robust. In ventral view (Fig. 5), phallosome enlarged laterally in basal part ventral lobe of phallosome long and band-like, reaching the apex of phallosome. Aedeagus subapically enlarged and each apical lobe with a small apical process. In lateral view (Fig. 6), slightly 'S' shaped, rounded apically, in upper part latero-dorsally strongly flattened; dorsal margin subapically with a small lateral tooth. Dorso-lateral lobe of phallosome long, very narrow apically, in shape of falcate appendage, directed over ventro-lateral apicad, its middle laterally with a small and dentate lobe; dorso-lateral lobe broad basally, with spines. Base of phallosome with a transverse dentate keel and lateral spines.

Anal tube in dorsal view (Fig. 7) elongate, 2.5 times as long as maximum breadth, lateral margins in the middle convex, subapically strongly narrowed, with rounded apex. Ventral side of anal tube concave, without protruding, in lateral view (Fig. 8) ventral margin straight. Stylus in lateral view (Fig. 9) tapering caudad, with strong apical and subapical tooth, subapical tooth flattened laterally, half-moon-shaped.

Female Genitalia: Anal tube elongate, in dorsal view (Fig. 10) enlarged subapically and rounded apically, 2.5 times as long as maximum width. In lateral view (Fig. 11) strongly curved to ventral surface, ventral margin and ventral surface concave. Posterior margin of sternum VII is straight medially (Fig. 12). Posterior margin of gonocoxa VIII lobe-shaped. Endogonocoxal process with apical and subapical lobe. Apical group of anterior connective lamina of gonapophyse VIII includes 3 teeth, lateral group includes 4 keeled teeth, comb broad (Fig. 13). Distal parts of posterior connective laminae of gonapophyse IX arched, each distal part with long tooth and longitudinal row of tubercles laterally. Median field with single broad lobe. Lateral fields with short processes. Proximal part convex, with notch (Fig. 14).

Distribution: Turkey: Yayladağı (Hatay), Yenicakale (K.Maraş). This species was described in Turkey from Yayladağı (Linnavuori, 1965:1♂ type, 1♂ and 1♂ paratypes, 5.VIII.1963, leg. Linnavuori and until now was known only from the type locality.

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