

Some new Orthoptera from Turkey

By

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Tettigoniidae

Isophya bicarinata sp. n.

(Figs. 1—8)

Özet: Bu taravayda Türkiyeden toplanan Tettigoniidae familyasından 2 yeni türün ve Acrididae familyasından 2 yeni alt türün tavsifleri verilmiştir.

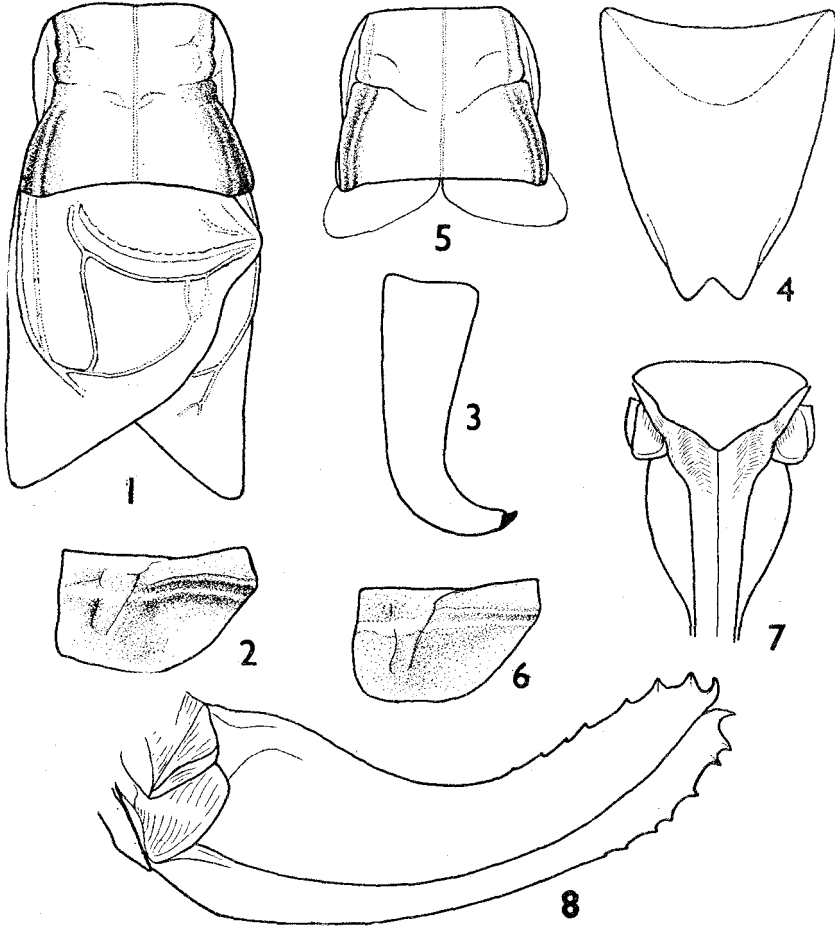
♂ (type).—A small but stoutly built species. Fastigium of vertex narrower than first antennal segment, viewed from above projecting beyond the edges of antennal sockets, with a very distinct furrow. Pronotum (figs. 1,2) short, in profile almost straight above; its posterior margin very weakly incurved; lateral carinae very distinct, parallel in prozona, divergent in metazona where each carina is double; lateral lobes much longer than deep. Elytra much longer than pronotum, extending to the end of 4th tergite. Cercus (fig. 3) incurved near the apex, which bears a small black tooth. Subgenital plate (fig. 4) long, narrowed at the apex, with a subacute excision.

General colouration green, face lighter, antennae uniformly reddish brown; pronotum with a light medium line; lateral carinae white, supplementary lateral carinae of metazona reddish brown; elytra lighter; abdomen darker, with two parallel reddish-brown stripes.

♀. Fastigium of vertex as in ♂. Occiput more spherical than in ♂. Pronotum (figs. 5,6) as in ♂, its lateral carinae gradually divergent in prozona. Elytra very short, extending to the end of metanotum. Subgenital plate (fig. 7) triangular, first valvifer with a low convexity. Ovipositor (fig. 8) relatively short and wide, gradually upcurved behind the middle, with few teeth.

Colour as in ♂.

Length of body, ♂ 15.7-16.8 (type), ♀ 15.3-16; pronotum, ♂ 3.3-3.5 (type), ♀ 3.4-3.8; elytra, ♂ 5-6 (type); hind femur, ♂ 12.9-14 (type), ♀ 12.2-13.8; ovipositor, ♀ 6.1-7 mm.



Figs. 1-8.- *Isophya bicarianata* sp. n. ♂, 1, pronotum and elytron from above; 2, pronotum in profile; 3, left cercus; 4, subgenital plate; ♀, 5, pronotum and elytron from above; 6, pronotum in profile; 7, subgenital plate and basis of ovipositor; 8, ovipositor.

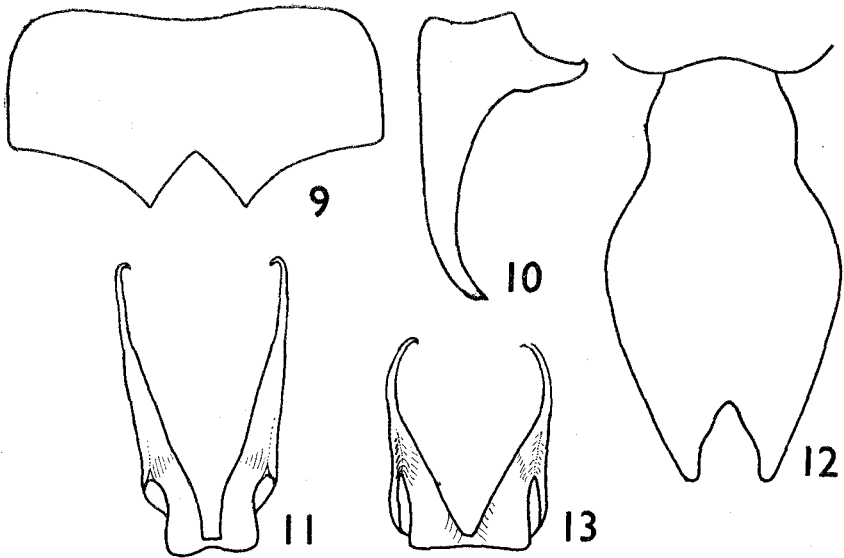
Bingöl province: Bingöl dağları, Zarovan yaylası, ca. 2800 m, 2.VIII.1954, 8 ♂♂ (including type), 4 ♀♀ (T. Karabağ), Hülül deresi, 3.VIII.1954, 2 ♂♂, Batırma yaylası, 2.VIII.1954, 6 ♂♂, 2 ♀♀ (N. Şişli).

This new species is similar to the Cyprian *I. mavromoustakisi* Uv. in having carinate pronotum, but differs from it in less stout body, more distinct lateral pronotal carinae and particularly by the carinae being double in metazona, as well as by longer elytra of male.

Rhacocleis acutangula sp.n.

(Figs. 9-13)

♂ (type).—Fastigium of vertex narrowly truncate below. Pronotum cylindrical, its anterior margin slightly incurved, posterior margin round. Elytra short, extending a little beyond the end of first tergite. Last tergite (fig. 9) with an acutangular



Figs. 9-13. *Rhacocleis acutangula* sp.n., ♂ ,9, last tergite; 10, left cercus; 11, titillator; ♀ ,12, subgenital plate; 13, *R. tarcius* Uv., ♂ , titillator.

excision and acute lobes. Cercus (fig. 10) conical, incurved, with a strong tooth near base. Titillator (fig. 11) long, slender, its apex incurved and slightly decurved, with a very fine tooth at the apex. Subgenital plate longer than wide, with an acute excision in the middle of apex.

General colouration dirty-brown, with blackish markings, a

black spot on the middle of posterior edge of pronotum and black spots on tergites.

♀. Elytra very small, lateral scale-like. Subgenital plate (fig.12) much longer than wide with a deep and narrow excision. Ovipositor relatively long, but shorter than last femur, almost straight in profile.

Colour lighter than in ♂, reddish brown, a small black spot on the middle of posterior margin of pronotum and tergites.

Length of body, ♂ 16.8 (type), ♀ 17; pronotum, ♂ 5.4 (type), ♀ 5.8; elytra, ♂ 3 (type); hind femur, ♂ 17 (type), ♀ 18.3; ovipositor, ♀ 15.3 mm.

Balıkesir province: Savaştepe, 27.XI.1954, 1 ♂ (type), 3 ♀ ♀ (Ö. K. Gülen).

This new species differs from *R. turcicus* Uv. by measurements and by the last tergite, which has acutangular excision, by cercus with a stronger tooth, by the structure of titillator (compare fig. 11 with 13, which is drawn from a paratype of *R. turcicus* Uv, in the British Museum), by the structure of subgenital plate of male and subgenital plate of female.

Acrididae

Gomphocerus sibiricus acutus subsp.n.

(Figs. 14 — 17)

♂ (type).— Antenna longer than head and pronotum together, with long and broad clavus. Frontal ridge in profile strongly prominent above the antennae (fig 14). Fastigium of vertex strongly projecting forward, triangular, its apex very acute (fig. 15). Temporal foveolae very long, regularly curved. Pronotum narrow, strongly convex at the prozona in profile (fig. 16); median carina well developed; lateral carinae distinct only in the first third of prozona.

Elytra (fig. 17) extending almost to the hind knee, cubital veins well separated.

Anterior femur shorter than pronotum, slender, regularly curved; pear-shaped inflation of the anterior tibia approximately as long as the anterior femur.

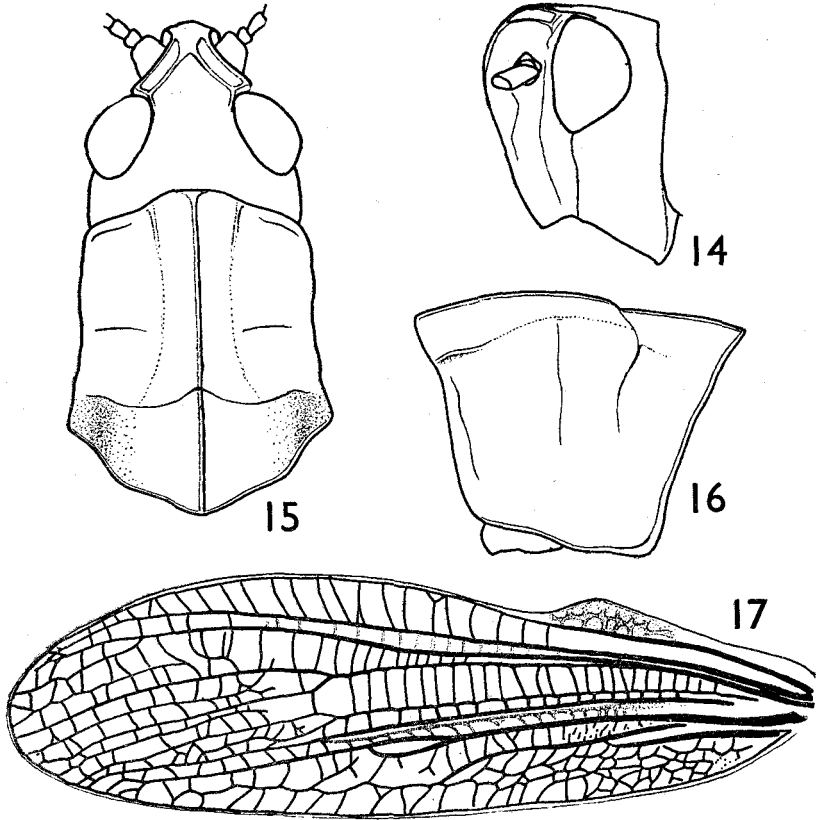
General colouration dark brown; face lighter; elytra light

reddish brown; first and second legs greyish brown; the underside of hind femur and hind tibia red.

Length of body, ♂, 17.1 (type)—17.8; antenna, 6.6 (type); pronotum, 4.9 (type); elytra, 11.6 (type) — 11.7; anterior femur, 4 (type); hind femur, 11 (type) mm.

Rize province: İkizdere, Çağırkankaya, 22.VIII.1954, 2 ♂♂ (including type) (M. Başoğlu).

This interesting new subspecies differs from all known subspecies of *G. sibiricus* L. by longer temporal foveolae, acute fastigium of vertex and narrow pronotum with obliterated lateral carinae. It has red hind legs as in *G. sibiricus caucasicus* Motsch. but the above morphological characters are certainly more important, and, possibly even specific.



Figs. 14-17. - *Gomphocerus sibiricus acutus* ubsp. n., ♂, 14, head in profile; 15, head and pronotum from above; 16, pronotum in profile; 17, left elytra.

Pseudoceles obscurus lateritius subsp.n.

♀ (type).—Fastigium of vertex hexagonal, slightly concave. Pronotum in profile convex in prozona, almost straight in metazona. Median carina well developed; lateral carinae well developed on metazona. Elytra and wings well developed. Hind femur relatively short; hind knee weakly elongate.

Colouration dark brown; elytron without fasciae; basal disc of wings intense brick-red, with well defined black fascia and basal ray; hind femur inside with three black fasciae, that nearest the knee being darker, between them light blue, above with two distinct blackish fasciae; hind tibia bluish, with a light fascia near base.

♂. As the female, but smaller. Pronotum less convex in the prozona than in female.

Colour as in ♀.

Length of body, ♂, 14.6-17, ♀, 20.4-23.4 (type); pronotum, ♂, 3.8, ♀, 4.9-5.1 (type); elytra, ♂, 15.9, ♀, 20 (type); hind femur, ♂, 9.1-9.9, ♀, 11.2-12 (type) mm.

Bingöl dağ range: Hilhil deresi, 3.VIII.1954, 2♂♂, 1♀ (type), Zoravan yaylası, 2.VIII.1954, 1♂, Şevti yaylası, 1.VIII.1954, 1♂ (T. Karabağ).

This new subspecies is similar to *P. obscurus* Uv. from Daghistan, but differs from it by larger size, structure of fastigium of vertex and brick-red wing colour in both sexes.

The types of all new species are deposited in British Museum (Natural History), paratypes are in the Zoological Institute, University of Ankara.

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