

Zeitschrift: Mitteilungen der Schweizerischen Entomologischen Gesellschaft =
Bulletin de la Société Entomologique Suisse = Journal of the Swiss
Entomological Society

Herausgeber: Schweizerische Entomologische Gesellschaft

Band: 58 (1985)

Heft: 1-4: Fascicule-jubilé pour le 80e anniversaire du Prof. Dr. Paul Bovey =
Festschrift zum 80. Geburtstag von Prof. Dr. Paul Bovey

Artikel: Rhitrogena anatolica sp. n. (Ephemeroptera : Heptageniidae) from
Turkey

Autor: Kazanci, Nilgün

DOI: <https://doi.org/10.5169/seals-402168>

Nutzungsbedingungen

Die ETH-Bibliothek ist die Anbieterin der digitalisierten Zeitschriften auf E-Periodica. Sie besitzt keine Urheberrechte an den Zeitschriften und ist nicht verantwortlich für deren Inhalte. Die Rechte liegen in der Regel bei den Herausgebern beziehungsweise den externen Rechteinhabern. Das Veröffentlichen von Bildern in Print- und Online-Publikationen sowie auf Social Media-Kanälen oder Webseiten ist nur mit vorheriger Genehmigung der Rechteinhaber erlaubt. [Mehr erfahren](#)

Conditions d'utilisation

L'ETH Library est le fournisseur des revues numérisées. Elle ne détient aucun droit d'auteur sur les revues et n'est pas responsable de leur contenu. En règle générale, les droits sont détenus par les éditeurs ou les détenteurs de droits externes. La reproduction d'images dans des publications imprimées ou en ligne ainsi que sur des canaux de médias sociaux ou des sites web n'est autorisée qu'avec l'accord préalable des détenteurs des droits. [En savoir plus](#)

Terms of use

The ETH Library is the provider of the digitised journals. It does not own any copyrights to the journals and is not responsible for their content. The rights usually lie with the publishers or the external rights holders. Publishing images in print and online publications, as well as on social media channels or websites, is only permitted with the prior consent of the rights holders. [Find out more](#)

Download PDF: 03.04.2026

ETH-Bibliothek Zürich, E-Periodica, <https://www.e-periodica.ch>

Rhithrogena anatolica sp.n. (Ephemeroptera: Heptageniidae) from Turkey

NILGÜN KAZANCI

Hacettepe Üniversitesi, Fen Fakültesi Biyoloji Bölümü, Beytepe-Ankara, Türkiye.

In this paper the male imago of a new titillatorless *Rhithrogena*, *R. anatolica* sp.n., from Middle, Eastern, and Southeastern Turkey is described and figured.

Rhithrogena anatolica sp.n. (figs. 1–7)

Male imago: Length of body: 6–6,5 mm, Length of fore wing 6–6,5 mm, length of cerci 15–16 mm. Compound eyes olive green in living specimens but turning to light grey in alcohol. Prothorax light brown, mesothorax and metathorax black-brown, laterally white, mesoscutum light brown. Coxae light brown. Femora, tibiae and tarsi yellow without dark spots, tarsal claws light brown. Wings transparent with white venation. C, Sc, R light brown, cross-veins very light, hardly visible. Pterostigma opaque with 9 straight cross-veins. First segment of abdomen brown, segments 1–7 yellowish-brown and transparent, segments 8–10 light brown and opaque. Sternites and tergites without markings. Styli yellow, transparent, laterally light brown. Small, rounded lobes separated by a broad emargination with a small, median protuberance (fig. 1). Style yellow, obliquely truncated and divergent penis lobes do not have apical denticles and titillators. Their apical parts slightly and lateral parts, strongly sclerotized in abdominal view (fig. 2). In dorsal view almost the whole surface of penis lobes sclerotized and swollen beneath the genital orifices (fig. 3). Large genital orifices angular in caudal view (fig. 7). Cerci yellow without annulations.

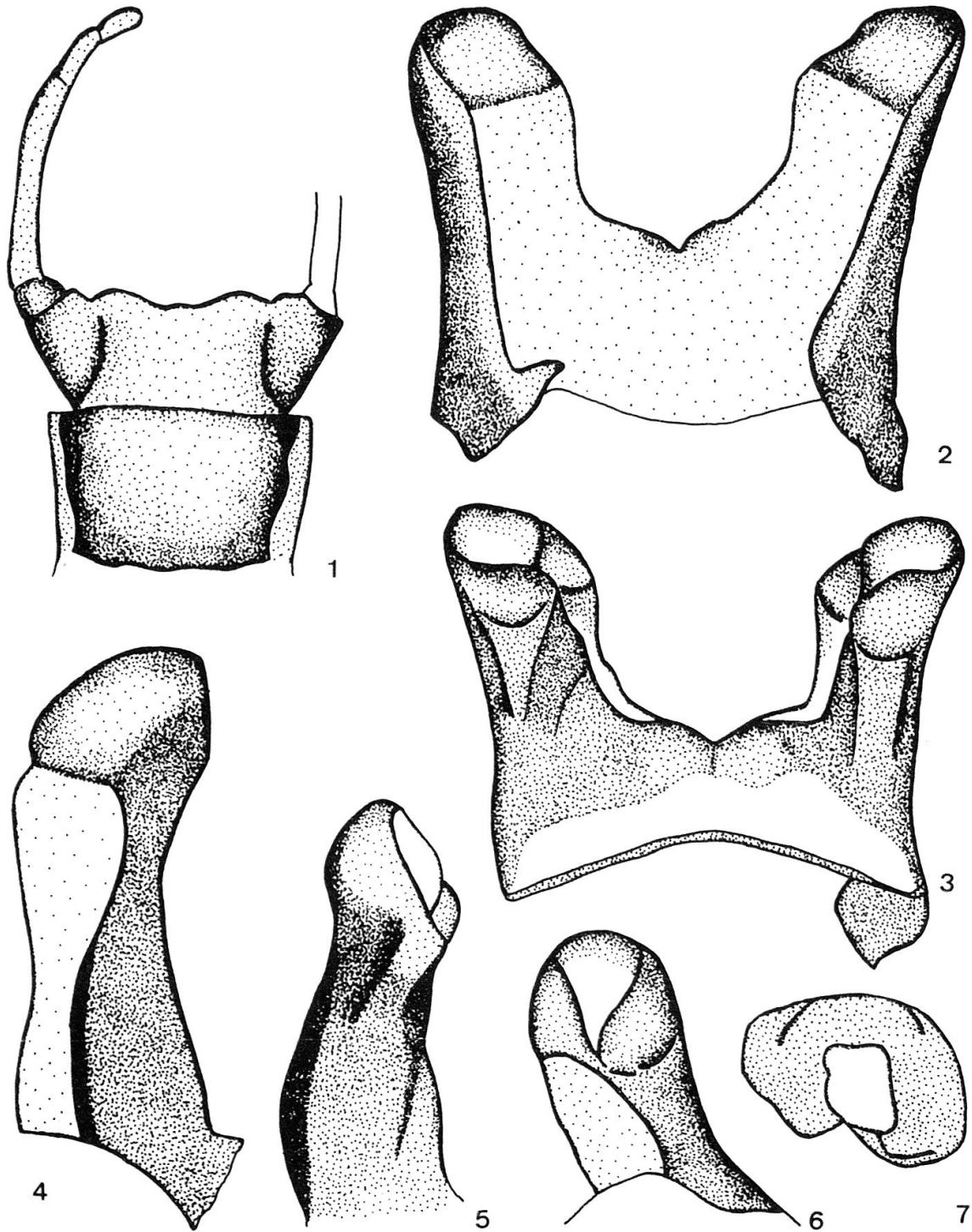
Ecology: Imagos of *Rhithrogena anatolica* sp.n. were collected surroundings of large rivers and streams having sandy beds and rocky banks. The flight period of this species probably lasts from the end of spring to early fall.

Material: Holotype ♂, Ankara: Kırıkkale, Kızılırmak River 750 m, 19.5.1983; Erzurum: Ilica 2000 m, 27.7.1981, 1 ♂ imago; Sivas: Zara: Suca Village, 1320 m, 25.7.1982, 4 ♂ imagos; Erzurum: Kandilli, 2000 m, 17.7.1984, 2 ♂ imagos; Siirt-Eruh Road: Zarova River, 400 m 22.7.1984, 25 ♂ imagos, leg. and coll. N. KAZANCI.

RELATIONSHIPS

Genitalia of *Rhithrogena anatolica* sp.n. titillatorless and spineless like those of *R. tibiale* (ULMER, 1920) and *R. znojkoii* (TSHERNOVA, 1938). *Ecdyonurus znojkoii* TSHERNOVA, 1938 is included in genus *Rhithrogena* by THOMAS & DIA (1982) because of its nymphal structure. *Cinygma tibiale* ULMER, 1920 is included in genus *Epeorus* by TSHERNOVA & B (1982). KAZANCI & BRAASCH have recently removed *Cinygma tibiale* ULMER, 1920 from us to genus *Rhithrogena* (Some New Heptageniidae (Ephemeroptera) from Anatolia, received for publication in Aquatic Insects). By considering all of the above results, *Rhithrogena anatolica* sp.n. is included in titillatorless

form of the genus *Rhithrogena*. *Rhithrogena anatolica* sp.n. differs from *R. tibiale* (ULMER, 1920) and *. znojko*i (TSHERNOVA, 1938) in the shape of the penis lobes and in body coloration.



Figs. 1-7. *Rhithrogena anatolica* sp. n., male imago. 1: Styliger plate, ventral view. 2-7: Penis (2 ventral, 3 dorsal, 4 lateral, 5 latero-dorsal, 6 inner side, and 7 caudal view).

RESUME

Le mâle de la nouvelle espèce *Rhithrogena anatolica* sp.n. est décrit ici. Les caractéristiques qui différencient cette espèce des autres sont l'absence des titillateurs et des épines peniales sur le penis. *Rh. anatolica* est apparentée à *Rh. tibiale* ULMER, 1920 et *Rh. znojkoii* TSCHERNOVA, 1938 et se distingue de ces espèces par la forme des lobes peniaux et la couleur du corps.

ACKNOWLEDGEMENTS

This study was supported by the Scientific and Technical Research Council of Turkey, Project number TBAG-574. I thank MOLLIE EMRE for correcting the English text.

REFERENCES

- KAZANCI, N. & BRAASCH, D. *Some new Heptagenidae (Ephemeroptera) from Anatolia* (received for publication in Aquatic Insects).
- THOMAS, A.G.B. & DIA, A. 1982: *Ecdyonurus (?) znojkoii* TSCHERNOVA, 1938: *Redescription et appartenance générique réelle (Ephemeroptera, Heptageniidae)*. Bull.Soc.Hist.Nat. Toulouse 118: 297-303.
- TSCHERNOVA, O.A. (1938) *K poznaniju podenok (Ephemeroptera) vostotshnogo Zakavkaza*. Tr. Azerb. Fil. AN SSSR 7: 55-64.
- TSCHERNOVA, O.A. & BELOV, V.V. 1982 1. *Systematic position and Synonymy of Cinygma tibiale* ULMER, 1920 (*Ephemeroptera, Heptageniidae*). Ent. Mitt. Zool. Mus. Hamburg 7: 193-194.
- ULMER, G. 1920. *Neue Ephemeropteren*. Arch. Naturgesch. 80: 78-80.

(received February 25, 1985)

