

***Subgulina kerzhneri*, a new genus and species of antlion
from Central Asia
(Insecta: Neuroptera: Myrmeleontidae)**

by

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ABSTRACT

Subgulina gen. nov. includes *S. kerzhneri* sp. nov., from Mongolia and China, and two species formerly in the genus *Maracanda* McLachlan: *M. iranica* Hölzel, 1968, and *M. talitzkii* Luppova, 1979. The new taxa are described and illustrated.

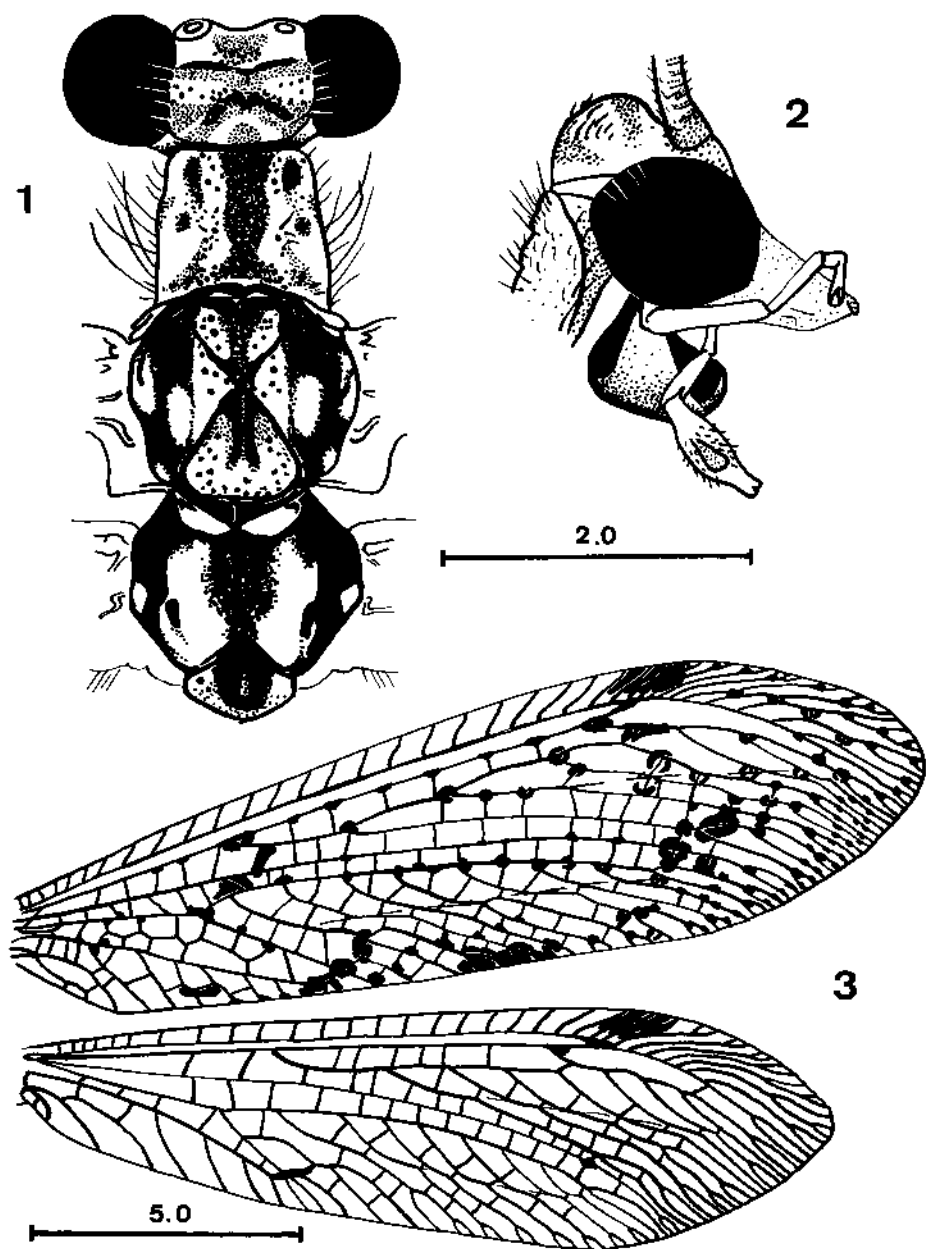
Key words: systematics, Myrmeleontidae, *Subgulina* gen. nov., *S. kerzhneri* sp. nov.

INTRODUCTION

HÖLZEL (1968) described a new species of the Palaearctic antlion genus *Maracanda* McLachlan, namely *M. iranica*, and mentioned a peculiar structure in the male, which was interpreted as part of the gula. STANGE (1970) found a similar feature in the Nearctic *Brachynemurus pusillus* Currie, 1899 — now placed in the genus *Chaetoleon* Banks— which he termed “pouch”. *Maracanda talitzkii* Luppova, 1979 [= *M. exigua* Luppova, 1987, after ZAKHARENKO & KRIVOKHATSKY (1994)] was described with the same structure in the male named by LUPPOVA (1987) “a suspended bowl (cup)” in Russian.

I recently found six specimens of an undescribed species with the same manifestation in the male, in the collection of the Zoological Institute, St Petersburg. This peculiar structure, named here a “goitre”, requires further morphological and functional investigation.

It has, however, decided to describe this new species in a new genus, together with the two other similar Palaearctic species, based on the presence of the goitre, and supported by other characteristics.



Figs 1-3. *Subgulina kerzhneri* sp. nov. 1: Head and thorax (holotype); 2: Head with goitre, side view (paratype); 3: Wings (holotype). Scales in mm.

DESCRIPTIONS

Subgulina gen. nov.

Type species: *Subgulina kerzhneri* sp. nov.

Diagnosis: smallest of all Isoleontini, separated from other genera by unique presence of a goitre, of unknown function, suspended below the gula of the male. Presectoral field of forewings with 2 to 6 (usually 5), of hindwings with 2 to 4 (usually 2) transverse veins. Spurs present. Male ectoproct small, without processes. Female with eighth sternite bifurcate.

Etymology: named for the peculiar structure resembling a goitre under the gula (postmentum) of the labium.

Composition: *Maracanda iranica* and *M. talitzkii* are also included in this new genus. Only *M. amoena* McLachlan, 1875, now remains in the genus *Maracanda*. The position of *M. lineata* Navás, 1913 (not seen) has yet to be investigated. Besides the goitre, *Subgulina* is distinguished from *Maracanda* by the presence of spurs. *Mongoleon* Hölzel, 1970, and other genera of Isoleontini resemble *Subgulina* in appearance.

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Subgulina kerzhneri sp. nov. (Figs 1-8)

Holotype: male, Mongolia, South-Gobi aymak, 60 km east of spring Talyin-Bilgakh-Bulak, $42^{\circ}55'N-100^{\circ}00'E$, 17-19.viii.1969, I. KERZHNER leg.

Paratypes : 3 males, 2 females, [China: Inner Mongolia] Mongolia, Central-Gobi, Khara-khoto, $41^{\circ}45'N-101^{\circ}05'E$, 1.vi-15.vii.1926, P. KOZLOV leg.

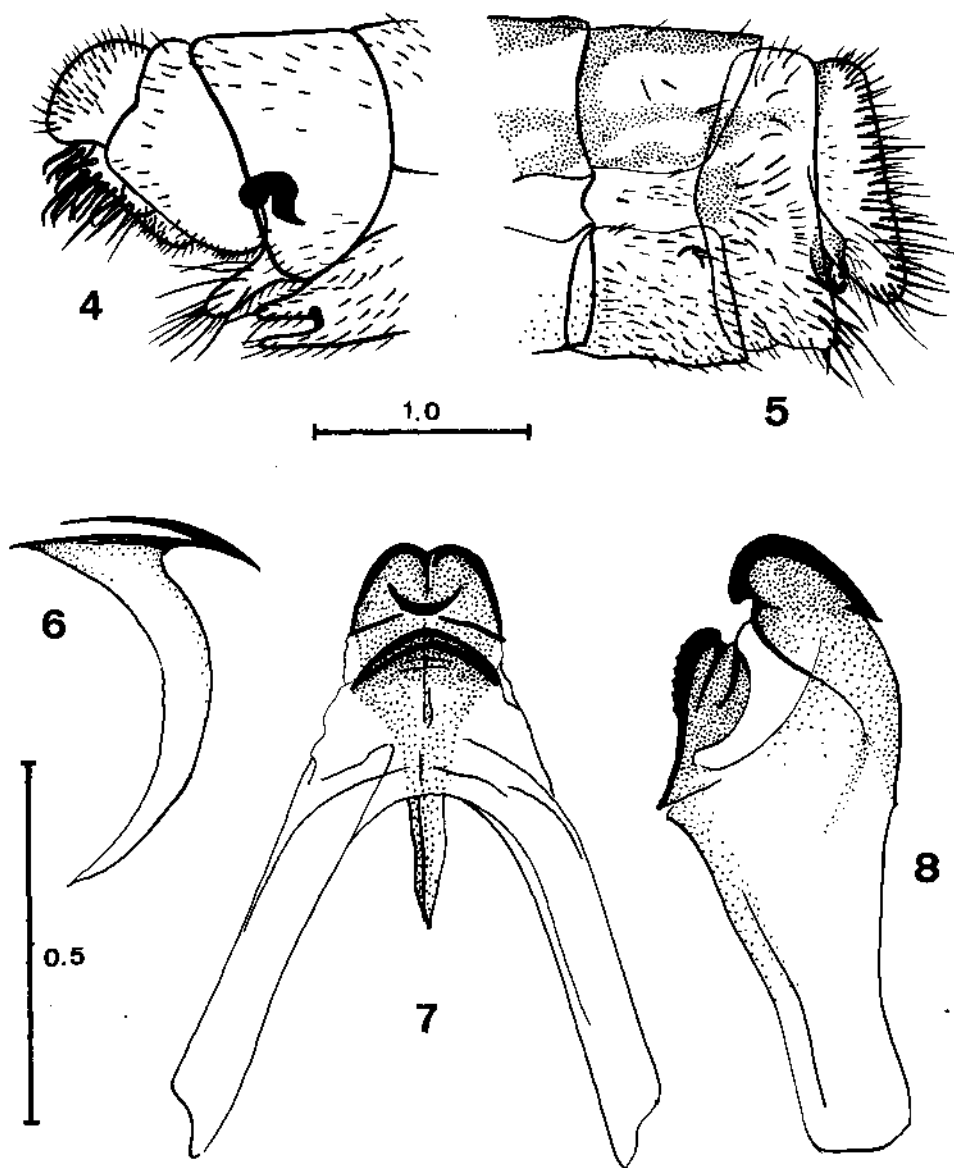
Etymology: dedicated to Dr I. KERZHNER who collected this new species.

Diagnosis: a small pale-olive antlion. Forewing length: holotype 18 mm (paratypes 17-19 mm), hindwing: 16 (15-17) mm, abdomen: 10 (9-10) mm.

Head (Fig. 1). Fulvous-yellow with dark-brown crescent over antennae. Face with longitudinal brown line. Frons and vertex with two transverse dark-brown bands with indistinct edges. Frons convex with short black and white hairs, black hairs inserted into small black sockets. Eyes convex. Long white hairs extend from edges of frons and vertex to approximately one third of the eye width. Antennae clavate, light-brown with dark rings on each segment. Palpi (Fig. 2) pale, apical segment of labial palpi fusiform with darker spot around sensory pit. A dark-fulvous bowl-shaped "goitre" is present under the head (Fig. 2).

Thorax (Fig. 1). Pronotum longer than wide, light-fulvous, with three longitudinal dark-fulvous stripes, the medial complete and the two lateral interrupted with indistinct edges. Lateral margins of pronotum with long white decumbent hairs. Dark-brown areas predominate on the meso- and postnotum.

Legs. Light-fulvous with white and black hairs and setae. Forecoxae and forefemora with a wide comb of long white hairs. Base of fore- and midfemora with one long black sensory hair each. The fifth segment of all tarsi slightly longer than basitarsus, as long as the second, third and fourth together. Spurs brick-red, slightly curved, shorter than basitarsus.



Figs 4-8. *Subgulina kerzhneri* sp. nov. (paratypes). 4: Apex of female abdomen; 5: Apex of male abdomen; 6: Hypandrium, male; 7 & 8: Gonarcus-paramere complex, dorsal (7) and lateral (8) views, male. Scales in mm.

Wings (Fig. 3). Wide, lanceolate. All longitudinal veins light with dark-brown punctuation. Membrane of forewing darkened with brown roundish points. Pterostigma brown, all Banksian lines distinct. Forewing with five, hindwing with two presectoral crossveins; inner cubital field and exterior CuA field of forewing with a few supplementary veins.

Abdomen (Fig. 5). Shorter than wings, dark-brown with two longitudinal lateral lines, with short pale and dark hairs. Ectoproct short, gonarcus extended, parameres paired, but fused together (Figs 6-8).

Paratypes all similar to holotype; females without goitre, with eighth sternite bifurcate (Fig. 4).

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The new species is close to the two other species of *Subgulina* and *M. amoena* in size, appearance and coloration, but the male genitalia resemble those of *Mongoleon*, *Isoleon* Esben-Petersen, and some *Myrmecaelurini*.

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REFERENCES

- CURRIE, R.P. 1899. New species of North American Myrmeleonidae. V. *The Canadian Entomologist* 31: 361-365.
- HÖLZEL, H. 1968. Zur Kenntnis der Myrmeleoniden des Iran (Planipennia: Myrmeleonidae). *Stuttgarter Beiträge zur Naturkunde* 181: 1-32.
- HÖLZEL, H. 1970. Beiträge zur Kenntnis der Myrmeleoniden der Mongolei (Neuroptera: Planipennia). *Acta Zoologica Academiae Scientiarum Hungaricae* 16 (1-2): 115-136.
- LUPPOVA, E.P. 1979. [A new species of antlion of the genus *Maracanda* McL. (Neuroptera: Myrmeleontidae) from the U.S.S.R. fauna.] *Trudy Vsesoyuznogo Entomologicheskogo Obshchestva* 61: 90-92 (in Russian).
- LUPPOVA, E.P. 1987. [Superfamily Myrmeleontoidea.] In: Medvedev, G.S. (Ed.) *Opredelitel' Nasekomikh Evropeiskoi Chasti S.S.S.R. Tom IV. 6 Chast': Bol'shekrylye, Verblyudski, Setchatokrylye, Skorpionovye Mukhi, Ruchneiniki*. [Identification keys to the insects of the European part of the U.S.S.R. Vol. IV. Part 6: Fish-flies, snake-flies, lacewings, scorpion-flies, caddis-flies.] 79-96. Izdatel'stvo "Nauka", Leningrad, U.S.S.R. (in Russian).
- McLACHLAN, R. 1875. Neuroptera s. str. Planipennia. In: *Fedtschenko's Travels in Turkestan* 8 (2): 1-24. St Petersburg, Russia.

- NAVÁS, L. 1913. Expedition to the central western Sahara. X. Quelques Névroptères du Sahara français. *Novitates Zoologicae* 20: 444-458.
- STANGE, L.A. 1970. Revision of the antlion tribe Brachynemurini of North America. *University of California Publications in Entomology* 55: 1-192.
- ZAKHARENKO, A.V. & KRIVOKHATSKY, V.A. 1994. [Neuroptera from the European part of the former U.S.S.R.] *Izvestiya Kharkovskogo Entomologicheskogo Obshchestva* 1 (2): 34-83 (in Russian).

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