

***Leiodes kociani* sp. nov. (Coleoptera, Leiodidae, Leiodinae) from Caucasus**

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Taxonomy, description, Leiodidae, Leiodinae, *Leiodes*, Caucasus, Georgia

Abstract. *Leiodes kociani* sp. nov. from Caucasian region of Georgia (Svaneti) is described and distinguished from the similar species. Key to the identification of the *Leiodes* species known from Georgia up to the present time is provided.

INTRODUCTION

The Georgian fauna of the genus *Leiodes* Latreille, 1796 does not seem to be sufficiently known at present. Only nine species of the genus have been described or recorded from Georgia up to now (Perreau 2015). The new species is added in this paper to the fauna of Georgia. Taking into account the great diversity of the Georgian environment, further new species can be expected to be discovered in the region.

MATERIAL AND METHODS

Among the material collected in Georgia recently, one interesting and distinctive species of the genus *Leiodes*, new to science, has been discovered.

Abbreviations:

ZSPC	private collection of Zdeněk Švec, Praha, Czech Republic
AI-AXI	antennomeres I-XI
L	length
W	width
W/L	ratio of the relevant measurements
Carina or mesoventral carina	mesoventral longitudinal carina

The examined material has been compared with the types and other material deposited in the ZSPC. The material mentioned in this paper is preserved in ZSPC.

Measurements of the body length and the individual body parts were measured to the first decimal place of millimetre.

The dissected male genitalia were mounted in polyvinylpyrrolidone (Lompe 1986) on a transparent sheet added to the same pin as the type specimen.

The type specimens are indicated by a red label added to the same pin bearing the status of the specimen (holotypus or paratypus respectively), the species name, name of the author and year of the designation.

Data quoted from labels accompanying the specimens are reproduced verbatim; an oblique line (/) indicates a line break on the label.

The terminology, especially the classification of types of the mesoventral longitudinal carina follows that in Švec (2008).

KEY AND DESCRIPTION

Key to the identification of the *Leiodes* species known from Georgia.

- 1 Mesoventral carina low, gradually falling anteriorly. 2
- Mesoventral carina highly angular, steeply falling anteriorly. 7
- 2 (1) Last antennomere as wide as or almost as wide as previous AX. 4
- Last antennomere distinctly narrower than AX. 3
- 3 (2) Parameres distinctly shorter than median lobe of aedeagus. Body brown-black. Elytral intervals with very dense punctures. Lateral sides of pronotum angulate in lateral view; pronotum widest in mid-length with slightly blunt posterior angles dorsally viewed. 2.5-4.0 mm. Europe, Caucasus, Asia, Nearctic Region. *L. rhaetica* (Erichson, 1845)
- Parameres almost as long as median lobe of aedeagus. Body red-brown to black or bicoloured with dark head and pronotum. Elytral intervals finely sparsely punctured. Lateral sides of pronotum rounded in lateral view; pronotum widest at base with rectangular posterior angles in dorsal view. Base emarginate before hind angles. 3.7-4.4 mm. Caucasus, Asia. *L. stocki* Švec, 1996
- 4 (2) Pronotum widest far before base, narrowed to base in dorsal view. 5
- Pronotum widest at base or at basal half, not narrowed to base. 6
- 5 (4) Parameres a little shorter than median lobe of aedeagus. Last tarsomere longer than previous. 3.0-4.0 mm. Europe, Caucasus, Asia. *L. dubia* (Fabricius, 1792)
- Parameres a little longer than median lobe of aedeagus. Last tarsomere shorter than previous. 3.0-3.3 mm. Caucasus. *L. tarsatula* Daffner, 1983
- 6 (4) Body smaller, 2.1-2.5 mm. Antennae unicoloured yellow-brown. Individual tarsomeres of posterior tarsi almost parallel sided, not widened apically. Parameres without appendix. Caucasus. *L. caucasica* Daffner, 1983
- Larger, 3.0-4.0 mm. Antennal club usually darker. Tarsomeres of posterior tarsi conically widened apically. Parameres with appendix apically. Europe, Caucasus, Asia. *L. ferruginea* (Fabricius, 1787)
- 7 (1) Base of pronotum emarginate before posterior angles. Membranous wings missing. Body oblong oval, larger, 2.8-4.3 mm. 8
- Base of pronotum straight. Membranous wings developed. Body short oval, smaller, 1.5-2.5 mm. 9
- 8 (7) Body smaller, 2.8-3.4 mm. Elytral striae with strong densely arranged punctures; elytral intervals with fine but dense puncturation. Median lobe of aedeagus rounded at apex. Caucasus. *L. immeritina* (Reitter, 1890)
- Body larger, 4.0-4.3 mm. Elytral striae with fine sparse punctures; elytral intervals very fine, hardly detectable punctured. Median lobe of aedeagus roundly truncate at apex. Caucasus. *L. ampla* (Reitter, 1887)
- 9 (7) Elytra without transverse strigosity. Median lobe of aedeagus conically narrowed to shortly rounded apex. 1.5-2.5 mm. North Africa, Europe, Caucasus, Asia. *L. badia* (Sturm, 1807)
- Elytra partly transversely strigose. Median lobe of aedeagus broadly rounded at apex. 2.0 mm. Caucasus (Georgia, Svaneti). *L. kociani* sp. nov.

***Leiodes kociani* sp. nov.**

(Figs. 1, 2)

Type material. Holotype (♂): "Georgia, Svaneti, 1631m/ Mazeri env., river Dolra valley/ sifting under *Alnus*/ 43.087000 N 42.597794 E/ 6.vii. 2015, Švec lgt.", (ZSPC); paratype (♂): "Georgia, Svaneti, 1640m/ Mazeri env., N slope, forest/ sifting under *Fagus*/ 43.089162N, 42.594790E/ 6.VII.2015 M. Kocian lgt.", (ZSPC).

Description. Length of body 2.0 mm. Length of body parts in holotype: head 0.2 mm, pronotum

0.5 mm, elytra 1.3 mm, antenna 0.7 mm, aedeagus 0.5 mm. Maximum width of head 0.6 mm, pronotum 1.1 mm at base, elytra 1.3 mm at basal fourth.

Shape of body as in Fig. 1. Dorsum, unicolorous antennae and legs yellow-red. Dorsum without microreticulation. Elytra partly transversely strigose. Underside yellow-red with darker mesoventral carina and margins of meso- and metacoxae.

Head. Distinctly punctured, punctures of one size irregularly distributed, separated predominantly by about 2-3 times their own diameter; vertex with four large punctures. Ratios of lengths of antennomeres II-XI (2nd antennomere equal to 1.0) = 1.0 – 1.3 – 0.8 – 0.7 – 0.8 – 1.0 – 0.4 – 1.1 – 1.1 – 2.0. Ratios of width of All-AXI (2nd antennomere equal to 1.0): 1.0 – 0.8 – 0.8 – 1.0 – 1.2 – 2.0 – 1.5 – 2.5 – 2.7 – 2.7. Antennomere XI a little longer than wide, as wide as penultimate. Ratios of width:length of the All-AXI: 0.7 – 0.4 – 0.7 – 1.0 – 1.0 – 1.3 – 2.3 – 1.5 – 1.6 – 0.9.



Figs. 1-2. *Leiodes kociani* sp. nov.; Fig. 1 - dorsal aspect of the holotype, Fig. 2 - dorsal view on aedeagus (holotype).

Pronotum. Punctuation a little sparser and finer than that on head; simple. Punctures separated by about 3-4 times their own diameter. Lateral margins convergent straight in basal half, then very flatly rounded anteriorly in dorsal and lateral view. Base straight. Posterior angles closely rounded, acute in dorsal view; obtuse and closely rounded in lateral view.

Scutellum. With several punctures similar to those on head.

Elytra. Elytra sparsely transversely strigose. Strigosity confining entire elytral surface except of triangular area adjacent to scutellum reaching from shoulders laterally to basal third apically. Beside strigosity elytral surface with regular punctured longitudinal striae. The punctures of striae fine, small, separated by about 3-4 times their own diameter. Stria 9 well distant from lateral margin, first parallel then approximately at basal third confluent with lateral channel of elytra. Elytral intervals with punctures of the similar size and density as on pronotum tending to seriate in some places.

Legs. Anterior tibiae approximately 2.0 times as wide at apex as at base. Anterior and mid tarsomeres 2-4 feebly dilated. Posterior tibiae slightly simply curved; posterior femora terminate by angled lobe ventrally.

Mesoventral carina, type δ .

Male genitalia. Aedeagus as in Fig. 2. Parameres bisetose with one terminal and one preapical seta.

Variation: No substantive variation has been detected in the paratype.

Etymology. The new species is dedicated to the specialist in the family Staphylinidae, one of the collectors of the new species Matúš Kocian.

Diagnosis. *Leiodes kociani* sp. nov. is most similar to *Leiodes strigipenne* Daffner, 1983 (Europe) and *L. gyllenhalii* Stephens, 1829 (North Africa, Europe) in the size, shape of body, presence of elytral strigosity and by mesoventral carina of type ♂. It differs from both species by elytra lacking strigosity at adjacent part of scutellum and also by the shape of the median lobe of the aedeagus having broadly rounded apex and also by the shape of the internal sac.



Fig. 3. Type locality (43.089162N, 42.594790E), photo by M. Kocian.

ACKNOWLEDGEMENTS. I am pleased to express my sincere thanks to my entomological friend Matúš Kocian (Praha, Czech Republic) for providing me with the leiodid material.

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Published: 31.1.2016