A new species of the genus *Elodes* Latreille from Pakistan (Coleoptera: Scirtidae)[1]

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Abstract

A new species of the genus *Elodes* Latreille, 1796 from Pakistan is described. *Elodes tegminis* **n. sp.** is compared with other species of *Elodes* which have the hind margin of tergite 8 not indented (*Elodes sericea* group and a few other species). The new species has an isolated position within the genus because of the structure of the tegmen.

Keywords: Coleoptera, Scirtidae, *Elodes sericea* group, *Elodes*, new species, Pakistan.

Zusammenfassung

Es wird eine neue Art der Gattung *Elodes* Latreille, 1796 aus Pakistan beschrieben. *Elodes tegminis* **n. sp.** wird mit anderen Arten von *Elodes* verglichen, deren achtes Tergit einen nicht eingebuchteten Hinterrand hat (*Elodes sericea*-Gruppe und wenige andere Arten). Durch den Bau des Tegmen nimmt die neue Art eine isolierte Stellung ein.

Contents

1 Introduction

Only a single species of the family Scirtidae, *Hydrocyphon interrogationis* Klausnitzer, 1980, was known before from Pakistan (see Klausnitzer 1980). The herein described new species of the genus *Elodes* thus constitutes the second record of this family from this large country. The new species shows peculiar morphological characters. Concerning the entire margin of tergite 8 it is similar to the *Elodes sericea* group and some other species of the genus *Elodes*.

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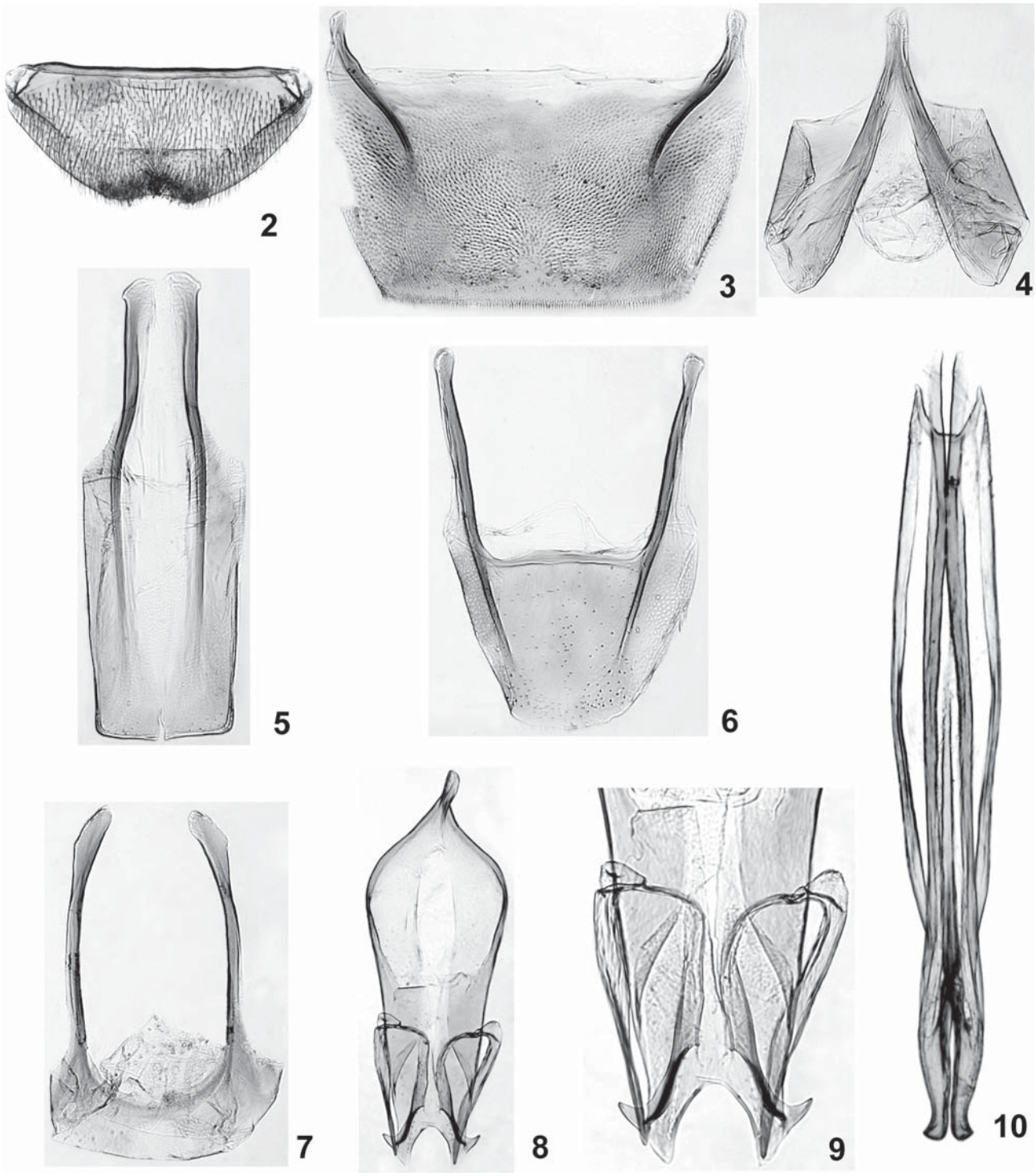
2 Description of *Elodes tegminis* n. sp.

Holotype: ♂, Pakistan (Chītral), Madaglasht [35° 47′ N 72° 00′ E], 2500–3700 m, 5.–7.VII.1982, Erber & Heinz leg. – In coll. Staatliches Museum für Naturkunde, Stuttgart.

[1] 158th contribution to the knowledge of Scirtidae.

Fig. 1. *Elodes tegminis* n. sp., holotype, habitus dorsal. – Scale: 1 mm.



Figs. 2–8. *Elodes tegminis* n. sp., holotype. – **2**. Sternite 7. **3**. Tergite 7. **4**. Sternite 8. **5**. Sternite 9. **6**. Tergite 8. **7**. Tergite 9. **8**. Tegmen. **9**. Tegmen, Parameres. **10**. Penis.

Derivatio nominis: The species name 'tegminis' is derived from 'tegmen' (Latin, neuter) and refers to the morphological term 'tegmen'. The tegmen of *E. tegminis* n. sp. has a particular structure.

Body length (= length of pronotum in the middle + length of elytra between shoulder and apex along longitudinal axis of body) 3.94 mm. Body extended, approxi-

Tab. 1. Localities of species of the *Elodes sericea* group.

Species	Localities
eberti Klausnitzer, 1970	Ukraine (Carpathians), Caucasus Region, Iran
gerdmuelleri Klausnitzer, 2009	Kazakhstan
jelineki Klausnitzer, 2009	Uzbekistan
orientalis Iablokoff-Khnzorian, 1973	Tadzhikistan
persicus Klausnitzer, 1975	Iran: Prov. Golestan (Southeast coast of Caspian Sea)
sericea Kiesenwetter, 1859	Greece (Hellenistic West Balkan and Western Greek Islands)

mately parallel sided (Fig. 1). Index body length/width of elytra = 1.9.

Head brown, more light brown in front, vertex darker; densely punctured with light coloured hairs, hairs directed forwards. Maxillar palps and labial palps yellowish brown.

Antennal segments 1–3 yellowish brown, other antennal segments dark brown. Length of 1st antennal segment 0.21 mm, 2nd segment 0.10 mm, 3rd segment 0.05 mm, and 4th segment 0.42 mm.

Pronotum yellowish brown, slightly darker in the middle (Fig. 1); strongly punctured; light hairy, hairs directed backwards; hind edges clearly separated, front margin weakly rounded, almost straight; length along median line 0.82 mm; maximum width 1.24 mm. Scutellum yellowish brown.

Elytra dark brown with a yellowish brown longitudinal stigma beginning at the shoulders and running diagonally inwards; posterior half along the lateral margin with a narrow light longitudinal band (Fig. 1); densely light hairy; densely punctured; width of one elytron in the middle 1.05 mm; length of one elytron between shoulder and apex along longitudinal axis of the body 3.12 mm.

Legs light brown. Sternites 3–5 brown, dark brown in the middle; sternite 6 dark brown only at the anterior margin lateral to the middle, otherwise yellowish brown.

Sternite 7 weakly indented posteriorly (Fig. 2), depth of indentation 0.06 mm; length along the middle 0.52 mm; maximum width 1.20 mm.

Tergite 7 forming a trapezoid-like plate with slightly bent bacilla lateralia (Fig. 3); hind margin with a dense seam of pointed setae; length of plate in the middle 0.43 mm, maximum width 0.85 mm; bacilla lateralia (without taking into account the curvature) 0.37 mm long.

Sternite 8 (Fig. 4) with large pterygia posteriorly rounded; stem short, divided already at the beginning, projecting like a fork into the basis of the pterygia; total length 0.55 mm; maximum width 0.57 mm.

Sternite 9 forming a sclerotized plate, straight-cut posteriorly and small rounded (Fig. 5), with single short setae; bacilla lateralia strongly sclerotized; total length 0.88 mm; maximum width of plate 0.32 mm; posterior width of plate 0.24 mm; length of bacilla lateralia 0.65 mm.

Tergite 8 with entirely margined plate, posteriorly bent and almost straight bacilla lateralia linked together at the base of the plate (Fig. 6); plate covered with single pointed setae, hind margin with short pointed hairs; total length 0.75 mm; width of plate 0.48 mm; length of plate in the middle 0.34 mm; length of bacilla lateralia 0.65 mm.

Tergite 9 with sclerotized bacilla lateralia, weakly linked together at the base of the plate; plate small, barely sclerotized (Fig. 7); total length 0.67 mm; width of plate 0.44 mm; length of bacilla lateralia (without taking into account the curvature) 0.50 mm.

Tegmen (Fig. 8) with a broad rounded base. Parameres little sclerotized, ending in hooked, outwardly directed pointed apices, covered with single short setae. Linked with the parameres is an eyelet-like structure on every side, ending posteriorly in two pointed apices (Fig. 9). Total length of tegmen 1.13 mm; maximum width 0.40 mm.

Penis slim, parameroids posteriorly with hardly separated lateral tooth, covered with sensorial pores and short setae (Fig. 10). Total length of penis 1.40 mm; maximum width 0.18 mm.

3 Discussion

Elodes tegminis n. sp. is clearly distinguished from all other known species of the genus by the structure of the tegmen, so it cannot be mistaken for any other species of *Elodes*. *E. tegminis* n. sp. can be compared with the *E. sericea* group and some other species which have tergite 8 similar because of the evenly curved hind margin of the plate of this sclerite. However, the probably apomorphic structure of the parameres makes a true relationship to the *E. sericea* group questionable. Also the structure of sternite 8 differs from the type of the species group.

Six species are currently known of the *Elodes sericea* group, which was introduced in detail by KLAUSNITZER (2009a) (Tab. 1). Characters of the males of this group are: Parameres single-pointed posteriorly; tergite 8 with entire margin posteriorly or at most very weakly indented; stem of sternite 8 forked, ± sclerotized in between the base of the indentation. A character of the females is the bursal sclerite which is ± compact, formed by two longitudinal parts (sclerites). The monophyly of the *Elodes sericea* group is still a matter of discussion because some of the mentioned characters are plesiomorphic. For that reason this group should be understood as a 'working tool' only.

Elodes improvisa Klausnitzer, 1990 has posteriorly pointed parameres and an entire margin of the male tergite 8, like the species of the *Elodes sericea* group, but it is characterized by a derived structure of sternite 8 and the parameroids (KLAUSNITZER 2009b) and is thus different. The plates of tergite 8 of *Elodes lohsei* Klausnitzer, 2000, *E. spinidens* Klausnitzer, 2001 and *E. venustula* Klausnitzer, 2002 are likewise entirely margined, but they were not assigned to the *Elodes sericea* group since the pointed apices of the parameres are modified and further differences of the tegmen exist (KLAUSNITZER 2009b).

The plate of tergite 8 is ± deeply indented in all other species of the genus *Elodes* of the Palaearctic and the Oriental Region.

4 References

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