

***Sphenoptera (Chrysoblemma) anchorifera* sp. n. from Sahara
(Coleoptera: Buprestidae)**

SVATOPLUK BÍLÝ

Department of Entomology, National Museum, Kunratic 1, 148 00 Praha 4, Czech Republic

Taxonomy, Buprestidae, *Sphenoptera (Chrysoblemma) anchorifera* sp. n., Sahara

Abstract. *Sphenoptera (Chrysoblemma) anchorifera* sp. n. is described from Sahara (Algeria). A differential diagnosis and illustrations of the new species are given. The new species can be distinguished from all known *Sphenoptera* species by the peculiar shape of the aedeagus (parameres bearing long curved lateral processes). The larva develops in roots of *Salsola* sp. (Chenopodiaceae).

INTRODUCTION

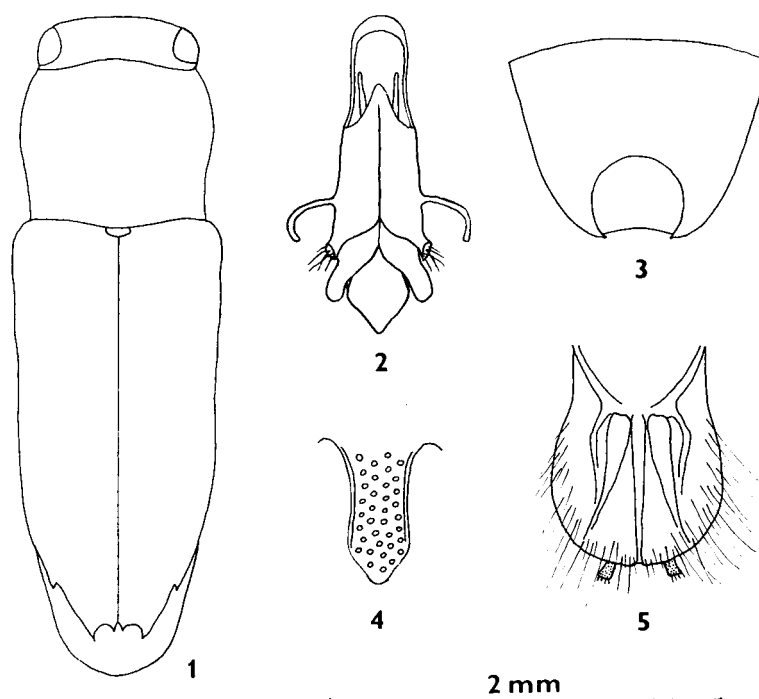
During a collecting trip to Sahara in 1987 a new species of *Sphenoptera* Solier (subgen. *Chrysoblemma* Jakovlev) was found infesting roots of *Salsola* sp. (Chenopodiaceae). This new species possesses a very extraordinary aedeagus which is quite unusual, not only within *Sphenoptera*, but within all Buprestidae. I have not found any notice about *Sphenoptera* species with so extraordinary male genitalia, either in Théry's monograph of North African Buprestidae (Théry, 1928) or in Obenberger's revision of the subgenus *Chrysoblemma* (Obenberger, 1927). I have also failed to find this species in the largest collections of Buprestidae (Prague, London, Paris, Munich, St. Petersburg).

Sphenoptera (Chrysoblemma) anchorifera sp. n.

MALE: Small, subcylindrical and rather vaulted (Fig. 1); whole body dark golden green, frons and pronotum sometimes with slight blue tinge; head with dense, short white pubescence, pronotum and elytra with very short, rather dense white pubescence; entire ventral side with long, dense white pubescence; newly hatched specimens are covered with cream-white powder, especially on underside.

Head large, slightly convex and somewhat wider than anterior pronotal margin; vertex 4.0 times as wide as width of eye, moderately vaulted, eyes small, elliptical, very slightly projecting beyond outline of head; sculpture of head consisting of small, fine, simple punctures, somewhat finer on frons than on vertex; antennae short, robust, hardly reaching basal third of lateral pronotal margins; 3rd antennal segment slightly longer than wide, sharply triangular; segments 4–10 widely rhomboid, wider than long, last antennal segment as wide as long.

Pronotum regularly convex, 1.1 times as wide as long with the maximum width in anterior third (Fig. 1); anterior pronotal margin slightly and widely lobate, posterior margin slightly bisinuate and far narrower than basal part of elytra; lateral pronotal margins arched regularly in anterior two thirds and curved slightly in posterior third; posterior pronotal angles sharp; sublateral pronotal keel very short, reaching only one-tenth of the



Figs 1–5: *Sphenoptera* (*Chrysoblemma*) *anchorifera* sp. n. 1 – holotype, ♂, 8.4 mm; 2 – aedeagus of the holotype; 3 – anal sternite of the holotype; 4 – prosternal process; 5 – ovipositor of the allotype. Scale bar belongs to Figs 2–5.

pronotal length; pronotal sculpture homogenous, consisting of fine, simple, dense punctures. Scutellum very small, trapezoid, twice as wide as long.

Elytra rather convex, slightly acuminate posteriorly, 1.8–2.0 times as long as wide at humeri and apically shortened, not covering apex of abdomen (Fig. 1); humeral swellings large and well-developed, each elytron with three large, sharp apical teeth; medial tooth largest, slightly bent inwards; elytral sculpture consisting of large and dense, shallow punctures forming indistinct rows on apical half of elytra and rough, transverse wrinkles on basal half of elytra.

Ventral side with very dense, fine punctation, abdomen also with fine basal microsculpture. Prosternal process (Fig. 4) slender, enlarged slightly behind metacoxae, pointed obtusely apically, margined finely laterally, and covered completely with large, rough punctures. Anal sternite of male (Fig. 3) excavated conspicuously in apical half with two lateral spines bent inwards; apical margin incurved widely. Legs long, slender, male tibiae unmodified; tarsi very long, distinctly longer than tibiae. Claws dark brown, long, slender, bent slightly only.

Aedeagus (Fig. 2) modified highly: Parameres short with anchor-shaped lateral branches, median lobe with extrusible membraneous wings (all males were dissected).

FEMALE: Differs from the male by the form of the anal sternite which is rounded simply and widely, unexcavated, and by its triangular antennal segments 4–10. Ovipositor (Fig. 5) very short and wide, with long, dense lateral bristles and with short but well-sclerotised styli (four females were dissected).

Length ♂ ♀: 5.8–9.0 mm (holotype 8.4 mm); width 1.9–2.6 mm (holotype 2.3 mm).

TYPE MATERIAL: Holotype (♂): Algeria, 27.iv.1987, Beni Abbes, Oued Saoura, Vít Kubáň leg. Allotype (♀): Algeria occ., 27.–28.iv.1987, Beni Abbes, M. Škorpík leg. Paratypes (12♂, 8♀): The same data as holotype (3♂); the same data as allotype (6♂, 7♀); Algeria, 29.iv.1987, Timimoun, S. Bílý leg. (1♂, 1♀); 27.iv.1987, Beni Abbes, S. Bílý leg. (2♂).

Holotype and allotype deposited in the National Museum, Prague, paratypes in coll. V. Kubáň (Brno), M. Škorpík (Znojmo) and National Museum, Prague.

DERIVATIO NOMINIS: The specific name "*anchorifera*" (bearing an anchor) indicates the unusual shape of aedeagus which looks like an anchor.

Bionomics: All type specimens were cut off or reared from the roots of *Salsola* sp. Larva of the last instar causes small galls on the root in the depth about 5–10 cm.

The new species belongs to the subgenus *Chrysoblemma* as defined by Jakovlev (1903) and Obenberger (1927) on the following characters: Whole body metallic golden green or golden-bronze, often with blue tinge; apex of elytra trispinose obtusely; tarsi slender and very long, usually longer than tibiae; Palaearctic distribution.

S. anchorifera sp. n. resembles somewhat *S. cylindricollis* Marseul from Algeria and *S. viridiaurea* Kraatz from Central Asia (the latter develops also in the roots of *Salsola* sp.) by its shortened elytra, body-shape and size. Both these species differ from *S. anchorifera* sp. n. by the less convex and wider frons with shorter pubescence, less arched lateral pronotal margins (nearly straight in *S. viridiaurea*), shorter and less developed apical elytral teeth and by elytral sculpture; both *S. cylindricollis* and *S. viridiaurea* possess distinct elytral grooves with flat and lustrous interstices. Moreover the alternate interstices of *S. cylindricollis* are distinctly elevate. The anal sternite of both species is rounded simply, unmodified in both sexes, the antennal segments of male are widely triangular and the aedeagus is a simple spindle-shape (a common form in all *Sphenoptera*). Also the frontal and pronotal punctation of *S. cylindricollis* is sparser than that of *S. anchorifera* sp. n. with intervals 2–3 times wider than the diameter of punctures.

REFERENCES

- JAKOVLEV B. 1903: Etude sur les Sphenoptera paléarctiques du sous-genre Chrysoblemma (Coleoptera: Buprestidae). *Horae Soc. Entomol. Ross.* **36**: 248–277.
OBERBERGER J. 1927: De Sphenopterarum subgenere Chrysoblemma B. Jak. (Col., Buprestidae). *Acta Soc. Entomol. Čechoslov.* **24**: 20–28.
THÉRY A. 1928: Etudes sur les Buprestides de l'Afrique du Nord. *Mém. Soc. Sci. Nat. Maroc* **19**: 1–586.

Received December 15, 1993; accepted January 14, 1994