

A new species and a new subspecies of *Sphenoptera* (subgenus *Chrysoblemma*) from Central Asia and Pakistan with taxonomic notes on *S. (C.) scovitzii* Faldermann and *S. (C.) tamarisci* Gory & Laporte and synonymy of two other species of *Sphenoptera* (Coleoptera: Buprestidae)

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Sphenoptera (*Chrysoblemma*) *kerzhneri* sp. n. from Kazakhstan and Uzbekistan and *S. (C.) eddin pakistana* ssp. n. from Pakistan are described and compared with closely related species. *S. (C.) scovitzii* Faldermann, 1835 is regarded to comprise four subspecies: *S. s. scovitzii* Fald. (= *angelica* Obenberger, 1915, *combinatrix* Obenberger, 1920, *vachshenica* Stepanov, 1959, **synn. n.**, *scowitzii* var. *coelestis* Obenberger, 1927, *scowitzii* var. *tedshenigena* Obenberger, 1937), *S. s. alfieri* Obenberger, 1923, *S. s. noeli* Obenberger, 1924, **stat. n.**, and *S. s. splendens* Gory & Laporte, 1839, **stat. n.** *S. (C.) tamarisci* Gory & Laporte, 1839 is comprised of two subspecies: *S. t. tamarisci* Gory & Lap. (= *smaragdina* Jakovlev, 1901, *sterbai* Obenberger, 1927, **synn. n.**, *sterbai* var. *lura* Obenberger, 1937) and *S. t. beckeri* Dohrn, 1866, **stat. n.** (= *tamaricis* ssp. *scutellata*, var. *bifossa*, **abb. cyanipennis**, *viridirubra* Obenberger, 1920, **synn. n.**, *beckeri* var. *chrysorrhoea* Obenberger, 1927, and **ab. elisabethae** Obenberger, 1937). Lectotypes are designated for *S. eddin* Jakovlev, 1903, *S. scovitzii* Fald., *S. latescutata* Fairmaire, 1892, *S. angelica* Obenb., *S. combinatrix* Obenb., *S. noeli* Obenb., *S. tamarisci* Gory & Lap., *S. sterbai* Obenb., *S. tekkensis* Obenb., 1948, and *S. potopolskii* Stepanov, 1959. The following synonymy is established: *S. (s. str.) glabrata* Ménétériés, 1832 (= *maura* Jakovlev, 1901, **syn. n.**), *S. (Deudora) rauca* (Fabricius, 1787) (= *rauca* var. *africana* Jakovlev, 1900); both Jakovlev's names were based on mislabelled specimens.

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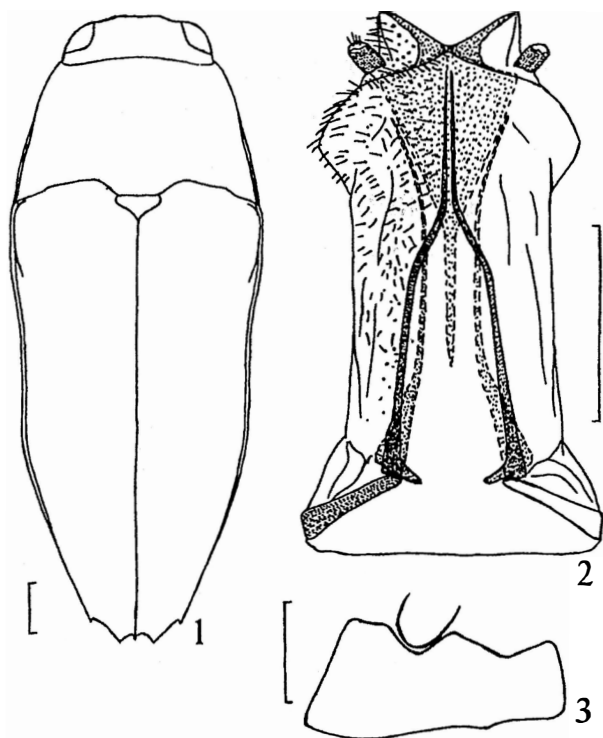
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Introduction

Examination of extensive material of *Sphenoptera* subgen. *Chrysoblemma* in the collection of Zoological Institute, Russian Academy of Sciences, St. Petersburg and collection of Dr. Sv. Bílý (National Museum, Prague, Czech Republic) has revealed two specimens of a new species from Central Asia and two specimens of *S. eddin* Jak. from Pakistan, which can be attributed to a new subspecies; descriptions of these new taxa are presented below. Examination of type specimens of species and infraspecific

taxa described by F. Faldermann, F.L. de Laporte and H.L. Gory, L. Fairmaire, B. Jakovlev, A. Semenov-Tian-Shanskii, J. Obenberger, and V. Stepanov enabled the authors to clarify the taxonomic structure, to establish new synonymy, and to designate the lectotypes for some forms belonging to widely distributed and extremely polytypic *S. (C.) scovitzii* Fald. and *S. (C.) tamarisci* Gory & Laporte.

The following acronyms are used throughout the text: MNHN = Museum National d'Histoire Naturelle (Paris, France); NMP = Narodni Muzeum v Praze (Prague, Czech Republic);



Figs 1-3. *Sphenoptera* (*Chrysoblemma*) *kerzhneri* sp. n.: 1, habitus; 2, ovipositor; 3, hind coxa (left). Scale bars: 1 mm.

TAU = Zoological Museum of Tel Aviv University (Tel Aviv, Israel); ZIN = Zoological Institute, Russian Academy of Sciences (St. Petersburg, Russia). In citations of labels, the following abbreviations are used: h = handwritten, p = printed, rus = in Russian.

Lectotypes are designated to provide stability of the nomenclature.

***Sphenoptera* (*Chrysoblemma*) *kerzhneri* sp. n.**

(Figs 1-3)

Holotype. ♀, **Kazakhstan**, Syr-Dar'ya province, Perovsk (currently Kzyl-Orda, Kzyl-Orda province), 23.V.1905, Sumakov (ZIN).

Paratype. ♀, **Uzbekistan**, Kuldzhuktau, Ayakguzhumdy, 22.V.1965, I. Kerzhner (ZIN).

Description. Body (Fig. 1) moderately elongated, 2.55-2.65 times as long as wide, moderately transversely and longitudinally convex; golden-green, with front, basal margin of elytra, ventral surface, antennae, and legs having distinct coppery reflection; covered with white or yellowish wax-like coating, which ac-

cumulates in depressed areas dorsally and nearly completely conceals the surface ventrally. Length 11.1-12.7 mm, width at the base of elytra 4.2-5.0 mm.

Head rather broad, slightly narrower than pronotum anteriorly; frons with feebly convex sides weakly diverging posteriorly, almost flat being elevated above semilunar clypeus, with poorly defined carinae posteriorly and inward of antennal fossae, which do not extend to the inner margins of eyes; with poorly defined depression above the clypeus, which narrows toward upper 2/5 and then extends as a distinct groove toward anterior pronotal margin. Width of vertex 1.97-2.06 times the transverse diameter of eye. Eyes large, convex, slightly projecting outward the head. Frons and vertex with coarse punctato-rugose sculpture which is denser and shallower anteriorly becoming sparser and bigger at the middle; micropunctures sparse, inconspicuous; frons with short, white setae, which are longer and denser anteriorly. Antennae serrated from slightly elongated 4th antennomere; 5-9th antennomeres transversely triangular; apical antennomeres lost.

Pronotum 1.67-1.68 times as wide as long, widest at base; sides slightly convex in anterior 1/4, then nearly straight or hardly concave towards basal 1/4, arcuately diverging to acutely angled, blunted apically basal corners. Lateral carinae feebly curved downward at the ends, extending to approximately anterior 1/4 of pronotal length, being visible from above up to middle. Anterior margin weakly bisinuate, bordered with narrow, entire sulcus; basal margin bisinuate, median projection rather broad with nearly straight truncated apex. Pronotal disc moderately convex, moderately flattened along the middle; covered with coarse, dense macropunctures, which are denser laterally, sometimes confluent in curved irregular lines divided by irregular rugae; micropunctures superficial but distinct, rather dense. Pronotal surface with dense but very short, inconspicuous, white, erect setae. Prosternal process slightly convex, bordered with distinct, deep sulcus, covered with sparse, coarse punctures. Scutellum transversely triangular, with rounded lateral corners, densely punctato-rugose.

Elytra 1.84-1.88 times as long as wide at base, widest at humeri, sides nearly parallel in basal 1/4, then slightly, emarginately converging to apical 2/5 and abruptly converging to apex; elytral apices tridentate, with lateral and sutural teeth acute, narrow, short, and middle one broad, blunted apically. Elytra with distinct, entire striae bearing hyphen-like structure on the bottom. Intervals bearing indistinct, sparse, short, white setae, weakly convex (stronger convex laterally and distally), with dense small macropunctures, inconspicuous micropunctures, and irregular curved rugosities, which are smooth on the elytral disc and coarser anteriorly and laterally.

Body ventrally covered with dense, sometimes confluent punctures, which are larger and coarser on prosternum, becoming smoother and smaller on abdomen, and dense, semirecumbent, white setae equal in length to those on the frons. Metacoxae with hind margin strongly curved and bearing a distinct tooth separated by deep emarginations laterally and medially (Fig. 3). Fore and middle tibiae almost straight with weakly curved inner margin. Anal sternite (female) slightly irregularly arcuated distally.

Female. Ovipositor as in Fig. 2.

Male unknown.

Comparison. *S. kerzhneri* sp. n. belongs to the group of species characterized by the rather regular punctuation of abdominal sternites which have no smooth shiny plates laterally, and by the pronotum moderately, regularly, arcuately enlarged towards sharp basal corners. This group is represented in Central Asia and Transcaucasia by the following species: *S. striatipennis* Jakovlev, *S. tamarisci beckeri* Dohrn, *S. ovata* Alexeev, *S. hammadae* Kalashian & Volkovitch, *S. khnזורiani* Kalashian, and *S. hauseri* Reitter. *S. kerzhneri* sp. n. differs from all these species in the structure of hind coxae (Fig. 3) (in *S. hauseri*, posterior margin only with a deep and wide lateral incision, without median one; in other species it is slightly bisinuate, without large tooth, sometimes with flat projection). It differs also from most of the abovementioned species in the structure of ovipositor (Fig. 2) (females of *S. hammadae* and *S. khnזורiani* are unknown). The listed species, except *S. striatipennis*, differ also in the presence of a fine sulcus, frequently interrupted medially, along the anterior margin of pronotum. Additionally, *S. tamarisci beckeri*, which is probably the most closely related to the new species, differs in the distinctly finer and sparser macropunctures of dorsal surface, thin elytral striae and flatter intervals. *S. striatipennis* differs in the larger

body size (15-24 mm), elongated distal antennomeres, irregular macropunctuation of pronotum, which is much coarser and larger laterally being sparser and smaller medially, and also in the thin elytral striae and flatter intervals. *S. khnזורiani* differs from the new species in the larger size (16.8 mm), strongly convex body, well developed supraantennal carinae on frons strongly overhanging the semicircular clypeus, sparser and finer macropunctuation and dense, distinct micropunctuation of dorsal surface. *S. ovata*, *S. hammadae*, and *S. hauseri* differ in the very strong supraantennal carinae, much finer and sparser macropunctuation of the pronotum, and, especially in *S. hauseri*, alternately elevated elytral intervals, of which even intervals are flattened while odd ones are convex.

Host-plants unknown.

Etymology. Named in honour of I.M. Kerzhner who collected one of the two specimens of the new species.

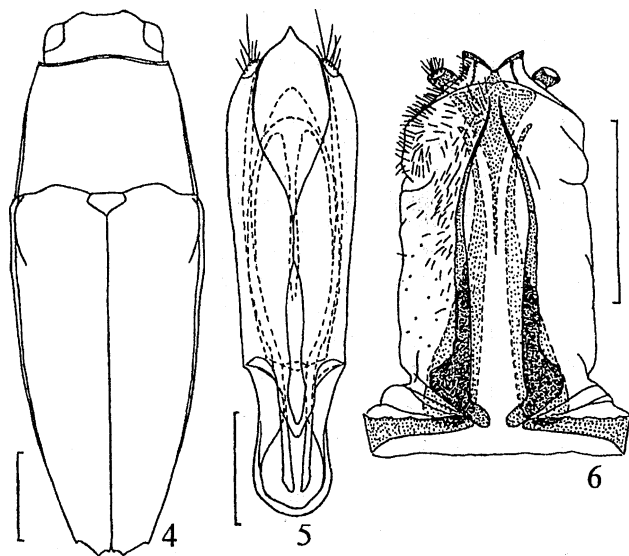
***Sphenoptera (Chrysoblemma) eddin* Jakovlev, 1903**

eddin Jakovlev, 1903: 252 (cat.), 257 (key), 266 (descr.).

Lectotype (designated here, ZIN): ♂, Kouh-i-Touftan, 13-14.VI.01, Zarudny (h, rus)/ *eddin* Jak. (h)/ Type (p)/ *Sph. eddin* B. Jak., type (h) B. Jakowlew det. (p)/ koll. B. Yakovleva (p, rus).

Additional material. 1 specimen, C. Iran, Fahraj, 2.VI.1977 (NMP).

Remarks. Jakovlev (1903) noted that type of *S. eddin* was a female though the single specimen deposited in his collection is a male. *S. eddin* belongs to the species-group characterized by the presence of spots of small, very dense punctures on the sides of hypomera, metasternum, hind coxae and abdominal sternites limiting more or less convex shiny plates ("mirrors"), which bear only a few large punctures. From other examined species of this group (*S. scovitzi* Fald., *S. asiatica* Gory, *S. ignita* Reitt., and *S. antoniae* Reitt.), it differs in the strongly and nearly linearly converging anteriorly sides of pronotum (Fig. 4) (in mentioned species, pronotal sides are more or less arcuate, more slightly converging anteriorly), very deep median pronotal groove bearing dense small punctures on its bottom, and slightly bisinuate hind margin of the hind coxae (it is almost straight in *S. scovitzi* and strongly bisinuate, with large and deep medial incision in other species). In addition, *S. scovitzi* differs in its strongly transverse scutellum and the other species differ in the distinct median longitudinal groove on the



Figs 4-6. *Sphenoptera (Chrysoblemma) eddin pakistana* ssp. n.: 4, habitus; 5, aedeagus; 6, ovipositor. Scale bars: Fig. 4 – 2 mm, Fig. 5 – 0.5 mm, Fig. 6 – 1 mm.

abdominal sternites 1-2 (in *S. eddin*, the base of abdomen is flattened or very slightly depressed longitudinally).

***Sphenoptera (Chrysoblemma) eddin pakistana* ssp. n.**
(Figs 4-6)

Holotype. ♂, Pakistan, Nari Bank, env. Sibi, 6.V.1979, Kwieton leg. Deposited in the collection of S. Bily (NMP).

Paratype. ♀, as holotype.

Description. *S. e. pakistana* differs from *S. e. eddin* (E Iran) in the smaller size (11.0-12.2 mm vs. 14.5 mm), narrower body which is less strongly narrowed anteriorly and posteriorly from the humeral level (body 2.82-2.83 times as long as wide, pronotum 1.30-1.35 times as wide as long, elytra 2.03-2.15 times as long as wide at humeri whereas in *S. e. eddin* these indices are 2.65, 1.40, and 1.88 respectively). Additionally, *S. e. pakistana* differs in the larger and coarser pronotal macropunctuation, shallower and denser punctuation of the pronotal groove, slightly coarser and sparser macropunctures of elytral intervals, coarser punctures in the striae, and more distinct and dense micropunctuation of the dorsal surface, which is smooth and nearly inconspicuous in *S. e. eddin*.

Aedeagus as in Fig. 5. Ovipositor as in Fig. 6.

***Sphenoptera (Chrysoblemma) scovitzii* Faldermann, 1835**

scovitzii Faldermann, 1835: 155, Tab. 5, Fig. 6 (as *scovitzii* in text and *scovitzii* under figure).

Type material examined. *S. scovitzii* Fald., lectotype (designated here, ZIN): [silver square]/ Conf. Pers.(p)/ *Scovitzii* Fald., Persia (h). – *S. latescutata* Fairm., lectotype (designated here, MNHN): Turkestan (h)/ *Sphenoptera latescutata* Fair. 1892, Turkestan (h). – *S. rhododactyla* Sem., holotype (ZIN): ♀, Dort-Kuyu, 4.VI.89, A. Semenov (h, rus) / *Sph. rhododactyla* m., Typ. un., VIII.96 (h)/ A. Semenov det. (p)/ Type (p). – *S. angelica* Obenb., lectotype (designated here, NMP): ♂, Araxes, Dr. Vesely (p)/ Typus (red, p)/ *angelica* m., Type (h), Det. Dr. Obenberger (p)/ *Sphenoptera (Chrys.) scovitzii* Fald. (h) Alexeev det. (p)/ Mus. Nat. Pragae inv. (p) 26 162 (h). – *S. combinatrix* Obenb., lectotype (designated here, NMP): ♂, Tr.Casp., Penschdeh (p)/ Typus (red, p)/ *combinatrix* m., Type (h), Det. Dr. Obenberger (p)/ *Sphenoptera scovitzii* Fald., cum typo compar. (h), Alexeev det. (p)/ Mus. Nat.

Pragae inv. (p) 26 275; paralectotype? (NMP): ♂, Imam-baba, Transcasp. (p)/ Typus (red, p)/ *angelica* m., Type (h), Det. Dr. Obenberger (p). – *S. scovitzii* var. *coelestis* Obenb., holotype (NMP): Caucasus (h) / Typus (red, p) / *scovitzii* var. *coelestis* m., Type (h), Det. Dr. Obenberger (p). – *S. scovitzii* var. *tedshenigena* Obenb., holotype (NMP): Tedshen, Transcasp. (p)/ Typus (red, p)/ *Sph. (Chrysoblemma) scovitzii* var. *tedshenigena* m., Type (h), Det. Dr. Obenberger (p). – *S. vachshenica* Step., holotype (ZIN): ♂, Tadzhijskaya SSR, dol. r. Vakhsh, na solodke [Vakhsh valley, on *Glycyrrhiza*], 27.07.1950, V.D. Potopolskii (h, rus)/ Typus (red, p)/ *Sphenoptera (Chrysoblemma) vachshenica* m. n. sp., 52 (h), V. Stepanov det. (p). – *S. noeli* Obenb., lectotype (designated here, NMP): ♂, Lac Tsad, N'Guigmi (h)/ Typus (red, p)/ *Noeli* m., Type (h), Det. Dr. Obenberger (p); paralectotypes (NMP): 4 ♂, 3 ♀, Museum Paris, Tchad, N'Guigmi, D'Noel, 1919 (p)/ Aout (p)/ Juliet (p)/ Typus (red, p)/ *Noeli* m., Type (h), Det. Dr. Obenberger (p); 1 ♂, 2 ♀, same labels, but Septembre; 3 ♀, same labels, but Octobre; 1 ♀, n'Guigmi, Tschad (h) (other labels as in lectotype). One syntype labelled "Gabon" belongs to *S. s. splendens* Gory & Laporte.

Remarks. The comparison of the type specimens (including the genital structures) of *S. scovitzii* and *S. noeli*, the specimen of *S. scovitzii alfieri* (TAU) determined by A. Descarpentries and completely matching the original description, and the specimens of *S. splendens* determined by Jakovlev and Kerremans (ZIN) has shown that those belong to the same species. *S. s. alfieri* differs from *S. s. scovitzii* only in the body coloration which varies from coppery to

dark-bronzy, though there is one specimen from Israel (Zomet Deza'el, 18.VI.1982, Q. Argaman; TAU) having green body and greenish-copper elytra like *S. s. scovitzii*. Six specimens of the undescribed *S. (Hoplística) bytinskii* Obenb. in coll. (Palestine, Bir Rechme, 1,6.VI, 5.VII, on *Acacia*, *Tamarix*; NMP) supplied with original type labels belong to *S. s. alfieri*. There is yet one specimen of *S. parumpunctata* (Klug) in TAU collection bearing the following labels: Beersheba, on *Gypsophila*, 23.VI., Bytinski-Salz; *Sphenoptera Bytinskii* m., Type, Det. Dr. Obenberger. Much probably Obenberger by a mistake intended to give the name *bytinskii* to two different species. *S. s. noeli* and *S. s. splendens* differ from the other two subspecies in the more elongated body (see Table), finer elytral sculpture with more distinct and entire fine striae though having hyphen inner structure (in *S. s. scovitzii* the striae are usually divided into separate hyphens and *S. s. alfieri* demonstrate an intermediate state; the interval punctures are slightly coarser and sparser in both subspecies and also more distinct irregular flat rugosities are present). Specimens with deep median pronotal groove are quite frequent in *S. s. noeli* and *S. s. splendens*, but very rare in two other subspecies. In addition, the punctures on the sides of pronotum are partly confluent in *S. s. noeli* forming irregular rugosities (in *S. s. scovitzii*, *S. s. alfieri*, and *S. s. splendens*, the punctures on the pronotal sides are mainly isolated though sometimes also forming rugulose sculpture). The plates of the ventral lamella of penis in *S. s. noeli* are slightly wider distally and the ovipositor scarcely shorter and wider; in *S. s. splendens* these structures are similar to those of *S. s. scovitzii* and *S. s. alfieri*.

***Sphenoptera (Chrysoblemma) scovitzii scovitzii* Faldermann, 1835**

sulcifera Kerremans in litt. (see Obenberger, 1930: 257).
latesculata Fairmaire, 1892: CVIII; Jakovlev, 1903: 255 (pro var.); Obenberger, 1930: 257 (pro var.).

latesculata: Jakovlev, 1893: 447 (misspelling of *latesculata* Fairmaire, 1892; not *latesculata* Jakovlev, 1886: 99).
transcaspica Jakovlev, 1893: 448 (unnecessary new name for *latesculata*: Jakovlev, 1893; pro var.) (see also Reitter, 1895).
rhododactyla Semenov, 1896: 251; Jakovlev, 1903: 255 (pro var.); Obenberger, 1930: 258 (pro var.).
angelica Obenberger, 1915: 55, syn. n.
combinatrix Obenberger, 1920: 124, syn. n.
scovitzii [sic] var. *coelestis* Obenberger, 1927: 21 (Transcaucasia, Araxes sup.).
scovitzii [sic] var. *tedshenigena* Obenberger, 1937: 110.
vachshenica Stepanov, 1959: 59, syn. n.

Distribution. SE European Russia (Richter & Alexeev, 1965), Armenia, Azerbaijan, Kazakhstan, Turkmenistan, Uzbekistan, Tajikistan, Turkey, Iran, Afghanistan, Iraq, Syria, Israel.

Note. We accepted the subsequent spelling *scovitzii*, which is in general current usage, rather than the original spellings *scovitzii* or *szovitzii*.

***Sphenoptera (Chrysoblemma) scovitzii alfieri* Obenberger, 1923, stat. n.**

alfieri Obenberger, 1923: 81 (subg. *Hoplística*; pro sp.) (Aegyptus: Meadi, 8.6.12); Théry, 1928: 222 (pro var.), 239 (*scovitzii* Fald., part.), 552.
bytinskii Obenberger in coll. (subg. *Hoplística*; ?part.).

Distribution. Saudi Arabia, Israel, Egypt.

***Sphenoptera (Chrysoblemma) scovitzii noeli* Obenberger, 1924, stat. n.**

noeli Obenberger, 1924: 118 (subg. *Hoplística*; pro sp.).

Distribution. Chad.

***Sphenoptera (Chrysoblemma) scovitzii splendens* Gory & Laporte, 1839, stat. n.**

splendens Gory & Laporte, 1839: 29, t. VII, fig. 43 (pro sp.); Kerremans, 1913: 480; Jakovlev, 1901: 12 (cat.), 36 (key); Obenberger, 1930: 286 (subg. *Hoplística*).

Table. Length/width ratios in *Sphenoptera (Chrysoblemma)* spp.

Subspecies	Body	Pronotum	Elytra
<i>S. tamarisci beckeri</i>	2.55-2.80	1.45-1.60	1.83-2.00
<i>S. tamarisci tamarisci</i>	2.50-2.55	1.50-1.65	1.77-1.82
<i>S. scovitzii scovitzii</i>	2.55-2.70	1.50-1.69	1.81-1.93
<i>S. scovitzii alfieri</i>	2.55-2.66	1.57-1.65	1.82-1.87
<i>S. scovitzii noeli</i>	2.71-2.79	1.48-1.54	1.91-1.94
<i>S. scovitzii splendens</i>	2.60-2.75	1.47-1.56	1.85-1.98

Material examined (6 specimens, ZIN): 1 ♂, Senegal (h)/ Staud. 32 (h)/ *splendens* Lap.-G. (h, blue)/ *splendens* C. G. (h)/ *Sph. splendens* Kerr. [sic!] (h) B. Jakovlev det. (p)/ koll. B. Yakovleva (p, rus); 1 ♂, Senegal, Fairm (h)/ *splendens* Cast. Gory (h)/ Kerremans (h)/ det. Kerremans (p); 1 ♀, c. Gebler (p)/ *Sphenoptera* Dej. *splendens*, Seneg. (h); 1 ♂, [red square]/ [yellow square]/ Seneg. (h)/ *splendens* (h); 1 ♂, Gabon, 30, Boucard (h)/ det. Kerremans (p); 1 ♀, 459 (p)/ Senegal (h)/ *splendens* (h) / det. Kerremans (p).

Distribution. Senegal, Gabon.

Sphenoptera (Chrysoblemma) tamarisci Gory & Laporte, 1839

tamarisci Gory & Laporte, 1839: 35, pl. IX., fig. 53; Kerremans, 1913: 336 (as *tamaricis*, pro *tamaricis* Klug, 1829, part.); Théry, 1928: 240 (as *tamaricis*, pro *tamaricis* Klug, 1829, part.); Obenberger, 1930: 252 (*beckeri* Dohrn, 1866, part.).

Type material examined. *S. tamarisci* Gory & Lap., lectotype (designated here; MNHN: coll. Oberthür): ♂, *Tamarisci* Gory, Type, Arabie (h; place label); paralectotype: ♀, as lectotype. – *S. smaragdina* Jak., holotype (ZIN): ♀, Sierra-Leone (h, white label with red margins; locality erroneous?, see Note)/ 238 (p)/ *Sphenoptera tamaricis* (h)/ *smaragdina* Jak. (h)/ Type (p)/ *Sphenoptera smaragdina* Jak., Type (h), B. Jakovlev det. (p)/ koll. B. Yakovleva (p, rus). – *S. sterbai* Obenb., lectotype (designated here, NMP): ♂, Sultanabad, Luristan (h)/ Typus (red, p)/ *sterbai* m., Type (h), Det. Dr. Obenberger (p); paralectotypes (NMP): 1 ♂, as lectotype; 1 ♀, Persien, Luristan (h), other labels as in lectotype (NMP); 78 specimens, Persien, Luristan (p) [without type labels]. – *S. sterbai* var. *lura* Obenb., holotype (NMP): ♂, v. Bodemeyer, Persien, Luristan (p)/ *Sphenoptera tamaricis* Klug (h, ?Kerremans)/ *Sph. (Chrysobl.) sterbai* var. *lura* m., Type (h), Det. Dr. Obenberger (p). – *S. tamaricis* ssp. *scutellata* Obenb., holotype (NMP): Transcaspia, Merw (h)/ Typus (red, p)/ *Beckeri* v. *scutellata* m., Type (h), Det. Dr. Obenberger (p). – *S. tamaricis* var. *bifossa* Obenb., holotype (NMP): Kuldja (h)/ Typus (red, p)/ *Beckeri* v. *bifossa* m., Type (h), Det. Dr. Obenberger (p). – *S. tamaricis* ab. *viridirubra* Obenb., holotype (NMP): Tr. Casp., Gr. Balchan (p)/ Typus (red, p)/ *Beckeri* v. *viridirubra* m., Type (h), Det. Dr. Obenberger (p). – *S. tamaricis* ab. *cyanipennis* Obenb., holotype (NMP): Semirjetschie, Tschu-Tal (h)/ Typus (red, p)/ *Beckeri* var. *cyanipennis* m., Type (h), Det. Dr. Obenberger (p). – *S. beckeri* var. *chrysorrhoea* Obenb., holotype (NMP): Kazalinsk, Syr Darja (h)/ Typus (red, p)/ *Beckeri* var. *chrysorrhoea* m., Type (h), Det. Dr. Obenberger (p). – *S. beckeri* ab. *elisabethae* Obenb., holotype (NMP): Caucasus, Elisabetpol, Babadjanides (p)/ Typus (red, p)/ *Sph. (Chrysobl.) Beckeri* var. *Elisabethae* m., Type (h), Det. Dr. Obenberger (p). – *S. tekkensis* Obenb., lectotype (designated here, NMP): ♂, Tekke-Turkm., Utsh-Adji (h)/ Typus (red, p)/ *Sphenoptera (Chrysoblemma) tekkensis* m., Type (h), Det. Dr. Obenberger (p)/ *Sphenoptera beckeri* Dohrn (h) Alexeev det. (p)/ Mus. Nat. Pragae inv. (p) 26 271 (h); paralectotype (NMP): ♀, Tekke, Turkmenia (Utsh-Adji) (h) (other labels as in lectotype, inv. 26 272). – *S. po-*

topolskii Step., lectotype (designated here, ZIN): ♂, Tadzhijskaya SSR, dol. r. Vakhsh (Tadzhikistan, Vakhsh valley), 27.VII.1950, V. Potopolskii (h)/ Typus (red, p)/ *Sphenoptera (Chrysoblemma) potopolskyi* m. n. sp., 52 (h), V. Stepanov det. (p); paralectotypes (ZIN): 4 ♂, 6 ♀, same data.

Remarks. The comparison of the type specimens of *S. tamarisci* Gory & Lap. (MNHN), *S. smaragdina* Jak. (ZIN), and *S. sterbai* Obenb. (NMP) has shown that those undoubtedly belong to the same species and subspecies. This form differs from *S. t. beckeri* Dohrn in the shorter and wider body, pronotum, and elytra (see Table), as well as denser micropunctures, especially on the elytra, which make them dull, while the body of *S. t. beckeri* has strong metallic reflection. However, in spite of these differences, the great similarity in other characters supports the assumption that *S. beckeri* is at most a subspecies of *S. tamarisci*. The examination of the type specimens of infraspecific taxa attributed by Obenberger to *S. sterbai*, *S. tamaricis*, or *S. beckeri* confirmed their affiliation to either *S. t. tamarisci* or *S. t. beckeri*. *S. t. beckeri* occupies the northern part of the species range whereas *S. t. tamarisci* occurs southward. Specimens from Kopetdagh Mts. (Southern Turkmenistan) are similar to *S. t. tamarisci* in the body shape and to *S. t. beckeri* in the sculpture.

Note. There is a good reason to believe that the geographic label of the holotype of *S. smaragdina* as well as those of two further *Sphenoptera* described by Jakovlev, *S. (s. str.) maura* Jakovlev, 1901 (Senegal) and *S. (Deudora) rauca* var. *africana* Jakovlev, 1900 (Sierra-Leone), are erroneous. These specimens originate from Staudinger and bear geographic labels of similar design. It is widely known that erroneous labels sometimes occur in Staudinger's material and it seems so regarding the three specimens mentioned above. *S. maura* refers to *S. glabrata* (Mén.) and *S. rauca* var. *africana* to *S. rauca* (F.). Their synonymy is discussed below.

Sphenoptera (Chrysoblemma) tamarisci *tamarisci* Gory & Laporte, 1839

tamaricis: Marseul, 1865: 399 (non Klug, 1829; see Obenberger, 1930: 252).
smaragdina Jakovlev, 1901: 290 (cat.), 316 (key), 352 (descr.), **syn. n.**
sterbai Obenberger, 1927: 22, **syn. n.**
sterbai var. *lura* Obenberger, 1937: 110.

Distribution. Iran, Saudi Arabia, Egypt (Sinai).

Sphenoptera (Chrysoblemma) tamarisci beckeri Dohrn, 1866, stat. n.

beckeri Dohrn, 1866: 249 (pro sp.); Jakovlev, 1903: 251 (cat.), 258 (key), 276-277 (discuss.); Kerremans, 1913: 336 (pro *tamaricis* Klug, 1829, part.); Théry, 1928: 240 (pro *tamaricis* Klug, 1829, part.); Obenberger, 1930: 252 (pro sp.).

prasina Olivier in litt. (see Obenberger, 1930: 252).

thalassina Dejean, 1821: 92 (nom. nud.); Jakovlev, 1903: 276-277 (nom. nud.); Obenberger, 1930: 252 (*beckeri* Dohrn, part.).

tamaricis ssp. *scutellata* Obenberger, 1920: 122, syn. n.

tamaricis var. *bifossa* Obenberger, 1920: 122, syn. n.

tamaricis ab. *viridirubra* Obenberger, 1920: 122, syn. n.

tamaricis ab. *cyanipennis* Obenberger, 1920: 123, syn. n.

beckeri var. *chrysorrhoea* Obenberger, 1927: 21.

beckeri ab. *elisabethae* Obenberger, 1937: 110.

tekkensis Obenberger, 1952: 4 (syn.: Alexeev & Volkovitsh, 1989).

potopolskii Stepanov, 1959: 59 (syn.: Alexeev & Volkovitsh, 1989).

Distribution. S Ukraine (Crimea), SE European Russia (Volgograd, Astrakhan Prov., Daghestan), Kazakhstan, Armenia, Azerbaijan, Turkmenistan, Uzbekistan, Tajikistan, Turkey, Afghanistan, NW China, Mongolia.

Sphenoptera (s. str.) glabrata (Ménétriés, 1832)

maura Jakovlev, 1901: 284 (cat.), 317 (descr.), syn. n.

We examined the holotype of *S. maura* (ZIN): ♀, Senegal (h, red)/ *S. proxima* (h)/ Staud. 32 (h)/ *maura* Jak. (h)/ Type (p)/ B. Jakovlev det. (p)/ koll. B. Yakovleva (p, rus). The label "Senegal" is apparently erroneous (see the Note under *S. tamarisci*).

Sphenoptera (Deudora) rauca (Fabricius, 1787)

rauca var. *africana* Jakovlev, 1900: 402.

We examined the holotype of *S. rauca* var. *africana* (ZIN): ♀, Sierra-Leone (h, red)/ Staud. 32 (h)/ *rauca* v. *africana* (h)/ *rauca* v. *africana* Jak. (h)/ Type (p)/ B. Jakovlev det. (p)/ koll. B. Yakovleva (p, rus). The label "Sierra Leone" is apparently erroneous (see the Note under *S. tamarisci*).

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