# *Sharpia stanovskyi* sp.n. from southern Oman (Coleoptera: Curculionidae: Smicronychini)

237-243

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#### Abstract

A new species of *Sharpia* TOURNIER, 1873 (Coleoptera: Curculionidae: Curculioninae: Smicronychini), *S. stanovskyi* is described from southern Oman (Dhofar Province) and compared with *S. sabulicola* COLONNELLI, 2009, and other similar species.

Key words: Coleoptera, Curculionidae, Curculioninae, Smicronychini, Sharpia, taxonomy, new species, Oman.

#### Introduction

The genus *Sharpia* was described by TOURNIER (1873) based on *Erirhinus rubidus* ROSENHAUER, 1856. In the original description, the genus was characterized by markedly elongate antennal segments 1–2 and ventrally contiguous eyes. The latter character is typical also for the type genus of the tribe Smicronychini, *Smicronyx* SCHOENHERR, 1843. ZUMPT (1936) published so far the only revision of the genus *Sharpia*, at that time comprising six species. Eventually, VOSS (1960) and COLONNELLI (2009) described two additional species of *Sharpia* from Southwest Asia. The genus *Sharpia* currently comprises eight Palaearctic species (ALONSO-ZARAZAGA et al. 2017), and a few other species occur in the Afrotropical Region, exclusively on the African mainland (ALONSO-ZARAZAGA & LYAL 1999), supposedly in arid areas. In the southern Palaearctic, especially in sub-Saharan and Southwest Asian eremial zones, further new species are to be expected. Various species of Convolvulaceae have been reported as host plants of *Sharpia* (FRIEDMAN 2017, HALPERIN & FREMUTH 2003). COLONNELLI (2009) collected two species of this genus in the United Arab Emirates on *Convolvulus prostratus*.

In 2019, two Czech entomologists, J. Stanovský and K. Orszulik, undertook a collecting trip to Oman, where they obtained numerous weevils, among which I found a species of *Sharpia* new to science.

#### Material and methods

All measurements, their interpretation, treatment and mounting of male genitalia, devices used, photography, picture processing, and the terminology follow KošťáL (2018). Female genitalia (spermatheca and spiculum ventrale) were imbedded in Solakryl on a plastic board and photographed using same devices as described in KošťáL (2018).

Abbreviations:

El, Ew Pl, Pw Rl, Rw	maximum elytral length, maximum elytral width pronotal length, pronotal width rostrum length in dorsal view, rostrum width (at base)
KO	Collection Michael Košťál, Šoporňa, Slovakia
NMP	National Museum, Museum of Natural History, Prague, Czechia
NMW	Naturhistorisches Museum Wien, Vienna, Austria
OR	Collection Kamil Orszulik, Frýdek-Místek, Czechia
SY	Collection Jiří Stanovský, Ostrava, Czechia

# Sharpia stanovskyi sp.n.

**Holotype**  $\sigma$  (NMP): "OMAN mer. 9.iii.2019 Al-Mughsayl N 16° 53' 00" E 53° 47' 42" leg. J. Stanovský". **Paratypes:**  $3 \sigma \sigma$ ,  $2 \varphi \varphi$  (KO),  $1 \sigma$ ,  $1 \varphi$  (NMW),  $12 \sigma \sigma$ ,  $10 \varphi \varphi$  (SY): same data;  $2 \sigma \sigma$ ,  $4 \varphi \varphi$  (OR) "OMAN mer. 10.iii.2019 Al-Mughsayl N 16° 52' 47" E 53° 43' 29" leg. Orszulik";  $1 \sigma$  (KO): same data.

DIAGNOSIS: This species is recognizable by relatively small, oval (El/Ew > 1.50), dark to reddish brown body, long (Rl/Pl ~ 1.4 in  $\sigma \sigma$ , ~ 1.6 in  $\varphi \varphi$ ), regularly curved rostrum, pronotum slightly broader than wide, almost equally bright scales on the disk and sides of elytra, ill-defined whitish macula on elytral interstriae 3–5 shortly behind elytral midlength formed by large pale scales, strikingly thin protarsal onychium as long as tarsomeres 1–3 combined, and by the long and thin (length/width > 5) body of the penis.

DESCRIPTION: Holotype: Completely preserved, 2.78 mm long male. Integument blackish to dark brown, antennal scape in proximal 4/5 reddish brown, completely covered with large adpressed, imbricate subcircular to irregularly angular light brown to greyish scales and additional, sparse elongate suberect arch-like whitish scales regularly distributed on rostrum, sides of pronotum, elytra and legs being more sparsely distributed on pronotal disc (Fig. 1a–b).

Head: Rostrum thin, long (Rl/Rw = 6.9, Rl/Pl = 1.4); in dorsal view (Fig. 1a) widest at base, very slightly narrowed anteriad; basal part densely covered with elliptical adpressed greyish scales and elongate subrecumbent arch-like whitish scales oriented posteriad, apical part with sparse adpressed elliptical and intermixed whitish hair-like scales oriented anteriad; in lateral view (Fig. 1b) regularly moderately curved, in basal part of same width, in apical part slightly narrowed anteriad; antennal scrobes directed ventrad reaching anterior margin of eyes. Head capsule globose, space between eyes as wide as rostrum at base, laterally with tufts formed by suberect broadly oval whitish scales. Eyes very large, taking up 9/10 visible surface of head capsule, not protruding from head outline, almost contiguous ventrally. Antennae except club covered on scape with sparsely, on funicle with densely arranged elongate arch-like whitish scales, inserted at 0.6 of rostrum length, insertions in dorsal view not visible, scape 1.1 × as long as funicle, moderately widened in apical 1/5, segment 1 widened apicad, twice as long as wide, segment 2 thinner, as long as 0.8 × segment 1, segments 3–7 isodiametric, club spindle-shaped, 2.3 × as long as wide, brown and grey tomentous with several erect pale sensilla.

Pronotum (Fig. 1a–b): Shorter than wide (PI/Pw 0.88), widest at about its midlength, sides in dorsal view in basal half moderately, in apical half markedly rounded, with shallow constriction before anterior margin, posterior margin with shallow lateral emarginations, anterior margin shallowly concavely emarginated; in lateral view flat on disc, in anterior part moderately sloping; in median part covered with brown, in paralateral part with whitish, on sides with whitish and light brown subcircular to irregularly angular adpressed scales, whitish scales form in paralateral parts longitudinal ill-defined pale bands, on sides and behind anterior margin additional elongate, subrecumbent to suberect arch-like whitish scales.

Scutellum (Fig. 1a): Indiscernible.

Elytra (Fig. 1a–b): Longer than wide (El/Ew = 1.64), in anterior 3/5 subparallel to very slightly rounded, in posterior part first almost rectilinearly narrowed, then evenly rounded, humeri slightly prominent; widest at humeri; interstriae flat,  $5-7 \times as$  wide as striae, of approximately same width, integument, when cleared of scales, finely shagreened without punctures, covered with large subcircular, apparently imbricate, slightly shiny light brown, creamy and whitish scales completely concealing integument, interstriae 3–5 shortly behind midlength with clustered whitish scales forming ill-defined macula, paler (creamy and whitish) scales more prevalent on sides and in somewhat less extent at base, additionally with elongate (length/width = 5–8), subrecumbent to suberect arch-like whitish, rarely brown scales regularly distributed on all interstriae; striae fine, shallow, hardly visible between rows of imbricate scales on interstriae.



Fig. 1: *Sharpia stanovskyi*, a) habitus (paratype), dorsal view, b) same, lateral view, c) penis, ventral view, d) same, lateral view, e) apex of penis, dorsal view, f) spiculum gastrale, g) tegmen, h) spiculum ventrale. Scale bar 0.5 mm. Figs. 1a–b, e not to scale.



Figs. 2–6: *Sharpia stanovskyi*: 2–3) sutures and outlines of ventrites 1–5 of 2) male, showing texture of ventrite 1, and 3) female. Scale bar = 0.5 mm.

Figs. 4–6: Penis in ventral view (4–5) and spermatheca (6) of 4) *Sharpia stanovskyi*, 5) *S. sabulicola*, 6) *S. stanovskyi*.

Venter: Completely covered with same type of imbricate scales as on elytra but of paler colour; anterior margin of prosternum emarginated; mesoventral process small, moderately protruding, completely covered with scales, anteriorly separating mesocoxae; metaventrite and ventrites 1-2 flat to very slightly convex, ventrite 1  $1.4 \times$  as long as ventrite 2, the latter  $1.4 \times$  as long as ventrites 3-4 combined, ventrite 5 of same length as ventrites 3-4 combined, ventrite 1 moderately densely, almost regularly punctate, punctures shallow, slightly elongate (Fig. 2).

Legs (Fig. 1a): Femora unarmed, with shallow preapical emargination, profemora considerably, meso- and metafemora moderately robust; tibiae mucronate, protibial inner margin moderately sinuate, meso- and metatibial inner margin straight, apical edge of protibiae with short, of meso- and metatibiae with moderately long spines; onychium of protibiae thin, considerably long, as long as tarsomeres 1–3 combined, tarsomere 1 somewhat longer than wide, tarsomere 2 almost isodiametric, tarsomere 3 as long as wide, not bilobed, claws simple, thin, connate at the very base; femora and tibiae densely covered with subcircular to shortly elliptical, adpressed unicolorous greyish scales and whitish arch-like scales of same type as on elytra, tarsi except onychia covered with subcrect pale hair-like scales, onychia with very thin long hairs.

Male terminalia (Figs. 1c–e, 4): Penis long (length/width = 5.8), body of penis with moderately concave sides, bluntly tapered at apex; in lateral view (Fig. 1d) slightly unevenly bent, straight at apex; tegmen (Fig. 1g) with well-developed parameroid lobes connate in their basal 2/3, manubrium tegmeni more than twice as long as tegmen diameter; spiculum gastrale (Fig. 1f) straight, thin, at proximal end somewhat enlarged, at distal end with strongly sclerotized subtriangular sternites VIII.

Female: Rostrum longer (Rl/Pl ~ 1.6) than in male, antennal insertion in 0.5 of rostrum length; profemora less robust; metaventrite and ventrites 1–2 very slightly more convex; ventrite 1  $1.2 \times$  as long as ventrite 2, the latter  $1.7 \times$  as long as ventrites 3–4 combined, ventrite 5 shorter than ventrites 3–4 combined (Fig. 3). Spiculum ventrale (Fig. 1h) in distal part moderately enlarged, without setae. Spermatheca (Fig. 6) with developed ramus, small corpus and long massive cornu.

COMPARATIVE NOTES: *Sharpia stanovskyi* is closely related to *S. sabulicola* COLONNELLI, 2009 described from the United Arab Emirates. I dissected a male paratype (KO) and ascertained striking differences in the penis. *Sharpia stanovskyi* differs from *S. sabulicola* in the larger body size (2.25–2.94 mm vs. 2.15 mm), pronotum wider than long (Pl/Pw 0.88 vs. 1.03), dark brown to blackish rostrum (vs. reddish), onychia of protibiae as long as tarsomeres 1–3 combined (vs. onychium as long as  $0.8 \times$  tarsomeres 1–3 combined), male profemora robust (vs. profemora moderately thick), rostrum longer (Pl/Pw > 1.4 vs. Pl/Pw < 1.4), and especially in the long and thin body of the penis (l/w 5.8 vs. l/w 2.8) (Fig. 4 vs. Fig. 5). Some similarities could be also found with *S. soluta* FAUST, 1885 from Romania, Cyprus, Transcaucasia and Central Asia, and *S. uniseriata* VOSS, 1960 from Afghanistan. *Sharpia stanovskyi* differs from the former species, among other characters, in the strikingly smaller body size and much longer, elongate subrecumbent arch-like scales on the elytra; and it differs from the latter species in the absence of the longitudinal carina on the apical part of the rostrum and in the elongate elytra.

VARIABILITY: Body length: 2.25–2.94 mm. The type series does not show any remarkable variability except small differences in the pattern of the vestiture.

DISTRIBUTION: Oman (Dhofar).

BIONOMICS: The type series was collected by individual searching in the sand and litter under sparse shore vegetation at the beach (Fig. 7).

ETYMOLOGY: I dedicate the species to one of its collectors, Jiří Stanovský, a specialist in Carabidae, my colleague and a diligent collector.



Fig. 7: Habitat of Sharpia stanovskyi, southern Oman, Mughsayl Beach (photograph K. Orszulik).

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# References

- ALONSO-ZARAZAGA, M.A. & LYAL, C.H.C. 1999: A world catalogue of families and genera of Curculionoidea (Insecta: Coleoptera) (Excepting Scolytidae and Platypodidae). – Barcelona: Entomopraxis, S.C.P., 315 pp.
- ALONSO-ZARAZAGA, M.A., BARRIOS, H., BOROVEC, R., BOUCHARD, P., CALDARA, R., COLONNELLI, E., GÜLTEKIN, L., HLAVÁČ, P., KOROTYAEV, B., LYAL, C.H.C., MACHADO, A., MEREGALLI, M., PIEROTTI, H., REN, L., SÁNCHEZ-RUIZ, M., SFORZI, A., SILFVERBERG, H., SKUHROVEC, J., TRÝZNA, M., VELÁZQUEZ DE CASTRO, A.J. & YUNAKOV, N.N. 2017: Cooperative Catalogue of Palaearctic Coleoptera Curculionoidea. – Monografías electrónicas SEA 8, Sociedad Entomológica Aragonesa S.E.A., 729 pp.
- COLONNELLI, E. 2009: Sharpia sabulicola Colonnelli nov. spec., pp. 231–232, fig. 28. In Magnano, L., Colonnelli, E. & Caldara, R.: Order Coleoptera, superfamily Curculionoidea. Families Anthribidae, Brentidae, Apionidae, Nanophyidae, Curculionidae and Dryophthoridae, pp. 216–266. – In Harten, A. van (ed.): Arthropod Fauna of the UAE. Vol. 2. – Abu Dhabi: Multiply Marketing Consultancy Services.
- FRIEDMAN, A.-L.-L. 2017: The genus Sharpia Tournier in Israel (Coleoptera: Curculionidae, Curculioninae). Israel Journal of Entomology 47: 159–172.

- HALPERIN, J. & FREMUTH, J. 2003: Contribution to the knowledge of Curculionoidea (Coleoptera) and their host plants in Israel. – Zoology in the Middle East 29: 93–100.
- KOŠŤÁL, M. 2018: Two new species of the genus *Bradybatus* Germar, 1823 (subgenus *Nothops* Marseul, 1868) from Lebanon (Coleoptera: Curculionidae: Anthonomini). – Koleopterologische Rundschau 88: 259–267.
- TOURNIER, H. 1873: Matériaux pour servir à la monographie de la tribe des erirrhinides de la famille des curculionides (Coléoptères). – Comptes-rendus des Séances de la Société Entomologique de Belgique 1873: exxxvii.
- VOSS, E. 1960: Afghanistans Curculionidenfauna, nach den jüngsten Forschungsergebnissen zusammengestellt. (155. Beitrag zur Kenntnis der Curculioniden). – Entomologische Blätter 55 [1959]: 113– 162.
- ZUMPT, F. 1936: Curculioniden-Studien XIV. Revision der palaearktischen Arten der Gattung Sharpia Tourn. – Memorie della Società entomologica italiana 15: 25–34.

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