

A NEW *MACROCHEILUS* HOPE, 1838 FROM YEMEN (COLEOPTERA, CARABIDAE)

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Abstract: A new species of *Macrocheilus* Hope, 1838 is described from Yemen. Two male specimens were collected, one at Al Kowd and one at Seyun, during June and August 2002. Up till now the genus *Macrocheilus* had not been reported from the Arabian Peninsula, but only from Africa and other parts of Asia. A sole species is known from the Middle East: *Macrocheilus saulcyi* Chevrolat, 1854. Differences between the new species and *Macrocheilus saulcyi*, *M. dorsiger* Chaudoir, 1876 and *M. capularis* Reiche, 1843 are outlined.

Key words: Coleoptera, Carabidae, *Macrocheilus vanharteni*, n. sp., *Macrocheilus saulcyi*, light traps, Yemen.

Un nuevo *Macrocheilus* Hope, 1838 del Yemen (Coleóptera, Carabidae)

Resumen : Se describe una nueva especie de *Macrocheilus* Hope, 1838, del Yemen. Se colectaron dos ejemplares macho, uno en Al Kowd y otro en Seyun, durante Junio y Agosto de 2002. Hasta ahora el género *Macrocheilus* no se había citado de la Península Arábiga, y solamente de África y otras partes de Asia. Se conoce una única especie de Oriente Medio, *Macrocheilus saulcyi* Chevrolat, 1854. Se detallan las diferencias entre la nueva especie y *Macrocheilus saulcyi*, *M. dorsiger* Chaudoir, 1876 y *M. capularis* Reiche, 1843.

Palabras clave: Coleóptera, Carabidae, *Macrocheilus vanharteni*, n. sp., *Macrocheilus saulcyi*, trampas de luz, Yemen.

Taxonomy/Taxonomía: *Macrocheilus vanharteni* sp.n.

Introduction

Macrocheilus Hope, 1838 (including *Acanthogenius* Reiche, 1843) belongs to the subtribe *Omphrina* Jedlicka, 1941 of the tribe *Helluoini* Hope, 1838, together with some neotropical genera and six genera from the ancient world: *Omphra* Dejean, 1825, *Meladroma* Motschulsky, 1855, *Triaenogenius* Chaudoir, 1877, *Erephognatus* Alluaud, 1932, *Colfax* Andrewes, 1920 and *Creagris* Nietner, 1857 (Lorenz, 2005).

Macrocheilus can be distinguished from these genera by its typical labrum, pronotum at base narrower than mesothorax, simple 4th tarsomere and its first antennomere, which is not longer than 2nd and 3rd together (Reiche, 1843; Schaum, 1863; Andrewes, 1920; Jeannel, 1946; Jedlicka, 1963).

Within the genus *Macrocheilus*, 48 species and 3 subspecies have been described so far, spread over Africa (35 species) and Asia (13 species), one species is known from Turkey, Syria (Saïda, type-locality (Chevrolat 1854)), Israel and Lebanon: *M. saulcyi* Chevrolat 1854. Until this moment this genus has not been reported from the Arabian Peninsula.

Working with insect traps to carry out an inventory of entomophagous insects, Tony van Harten, then of General Department of Plant Protection, Sana'a, collected two specimens of the genus *Macrocheilus* at two different places. Both specimens were collected with light traps, one in Al Kowd, near Zinjibar (13°05'N 45°22'E, alt. 20 m), the other one in Seyun, in the Wadi Hadramauth (15°57'N 48°46'E, alt. 630 m).

At Al Kowd, the light trap was placed on the balcony of the first floor of the regional agricultural office, in the middle of an agricultural area, where mainly fruit crops and vegetables are grown. The place is just a few kilometres from the Indian Ocean.

In Seyun the trap was placed near a farm just outside the town. In the Wadi Hadramauth intensive agriculture takes place with the cultivation of mainly lucerne and date-palms. The area is hot and very dry.

Macrocheilus vanharteni sp. n.

Seyun, male, 12-14.VIII.2002, light trap, leg. A.v. Harten & A. Al Zubayri, holotype, Zoölogisch Museum Amsterdam, The Netherlands.

Al Kowd, male, VI.2002, light trap, leg. A.v.Harten & S. Al Haruri, paratype, collection R. Felix

Abbreviations: TL: total length, mandibles included; MW: body maximum width; LP/WP: length of pronotum/width of pronotum; LE/WE: length of elytra/width of elytra. (LE: linear distance from basal ridge to apex of one elytron, along the suture).

DESCRIPTION (Fig. 1-7):

TL: 12.4 mm; MW: 10.6 mm; LP/WP: 0.73; LE/WE: 1.04.

Head: light orange brown, short, eyes protruding, temples short, almost straight towards the neck. Temples with rows of large setae along hind margin of the eyes. Head coarse and rather dense and deeply punctured (less dense in middle of the front) with long yellow setae, weakly shining, without microsculpture (120 x). Clypeus less dense punctured in the posterior 1/3, the anterior half only with a row of 9 large setiferous punctures at 2/5 from the anterior margin, consisting of 4 large ones and the 5 little ones distributed as follows: OooOoOooO (fig. 4). No fringe of little setae on the anterior margin of the clypeus. Labrum smooth, wider than long, posterior half subparallel, slightly diverging, and anterior half strongly converging, the top broadly rounded. At the converging point with a large seta at each side exact on the rim; posterior half up to the converging point lateral underneath with a fringe of short setae. At the apex of the labrum 4 setae, two exactly on the margin from the top, and two beneath the margin just on the top. Two supraorbital setae present on each side; frontal impressions short and shallow. Mandible smooth on outer furrow, with setae along the upper rim and one seta on the lower rim near the base of the mandible.

The first four antennomeres less densely pubescent with rather long setae, from the fifth segment densely pubescent with much shorter setae. Last segment of maxillary palps straight, rather strongly diverging and pubescent; first and second segment smooth, with some long and some short setae. First labial palp with two setae next to each other in the middle on a hardly visible protuberance.

Mentum with a central tooth, which is sharp and straight (not bent upwards at the end), not as long as the side ones, but as long as the distance between the deepest points at its base, with one large seta on both sides at the base and several larger and smaller bristles near the base of the mentum; on the tooth itself two smaller bristles (fig 2).

Pronotum: light orange brown, transverse, its maximum width at the anterior fifth; lateral sides narrowly beaded, lateral margin between brim and disk widening towards the posterior angles. Pronotum laterally rather strongly sinuated in the apical fifth, forming a short tooth just before the hind angles, which is acute and somewhat protruding. Base straight in the middle, strongly oblique sinuate towards the hind angles (fig. 3). Strongly setiferous punctuate. Setae long and yellow. The anterior angles of the pronotum with some larger bristles. Large seta in the posterior angle and a lateral one at $\frac{1}{4}$ from the front. Median furrow fine, in a flat and more or less depressed area. Basal impressions slightly rounded, deep. Prosternum coarsely punctuated, weakly shining, without microsculpture (120 x).

Elytrae: subparallel, widening towards the end, not covering the last two tergites. Lateral margin just rounding the shoulders before it ends in an almost smooth deep bended furrow towards the scutellum. Only 7 striae visible, rather deep, finely punctured, not reaching the base and the apex, but disappearing in a region of disordered punctures. Scutellar striae hardly visible through the deep punctures. Intervals subconvex, coarse setiferous punctuation in two rows. Basal pore present. Umbilicate series with about 32 pores, not interrupted in the middle although they are more separated from each other. Just behind the shoulders 3 extra pores on the very margin and at the apex again 4 extra pores, each in the lengthening of the imaginary 8th stria and of striae 6, 5 and 3. Pubescent setae about as long as the second maxillary palp.

The pale orange subhumeral spots reach the lateral margin, which is pale orange over its total length, so the median dark transverse marking stops at about the width of one interval from the margin. The dark basal marking only reaches the basal margin at the foremost part of the shoulders and extends, diamond-shaped, backwards. The hind border of the transverse dark marking is slightly milled, substraight, not following the suture.

Hind-episterna very long; whole underside, including abdominal sternites coarsely punctuated and pubescent, except for gula and ventral and lateral sides of neck; in the middle of abdominal sternites less dense punctuated. Winged.

Legs: light brown. All tibia sharply double keeled on the outside. All tarsomeres strongly pubescent. Mesotibia apically with two short flat truncated spines on the outside

(fig 5). First three fore tarsomeres not dilated, with ventral, biseriate adhesive vestiture. Fourth tarsomere triangulate. Claws without teeth along the inner margin. Fore tibia on the outer edge with two short blunt spines.

Male genitalia as in fig. 6-7.

DISCUSSION

M. vanharteni sp. n. differs from *M. saulcyi* (fig. 8) by the absence of long black setae, the light orange brown appearance, the completely brown palps and antennae, the shape of the united pale orange spot at the apex of the elytrae and the shape of the dark markings on the elytrae. In *M. saulcyi*, the pronotum is much broader; head, pronotum, antennae and legs are black, the light markings are deep orange, the whole lateral border of the elytrae is black, except for the end of interval 1, where the united orange markings reach the margin of the elytrae. The basal black marking is shorter, because the subhumeral orange spot extends more towards the base of the elytra. The front margins of the apical orange spots are rounded and not more or less straight as in *M. vanharteni* n.sp. *M. saulcyi* is bigger and stouter: 13.5 – 14 mm. The new species is easily distinguished from other *Macrocheilus* species in the adjacent countries: *M. dorsiger* Chaudoir, 1876 and *Macrocheilus scapularis* Reiche, 1843 (syn. *M. boopis* Roth, 1851 and *M. fenestratus* Raffray, 1886), both from Ethiopia. *M. dorsiger* is a very small, orange-brown species (about 7 mm) with a drop-like dark marking along the suture. *M. scapularis* is smaller too (about 9-10 mm), black with only two post-humeral yellow-brown spots. Both species therefore are not to be confused with *M. vanharteni* n.sp.

INTRASPECIFIC DIFFERENCES

Between the holotype and the paratype are slight differences in colour: the basal dark marking in the paratype is of a somewhat darker brown than in the holotype and its lateral interval of the elytra somewhat more orange-brownish. The short tooth before the hind angles of the pronotum is blunt instead of acute. The orange colour of the light spots is somewhat deeper.

TL: 13.1 mm; MW: 10.6 mm; LP/WP: 0.80; LE/WE: 1.05

ETYMOLOGY

We have named the species after Tony van Harten because of his important contribution to the knowledge of the Arabian insect fauna.

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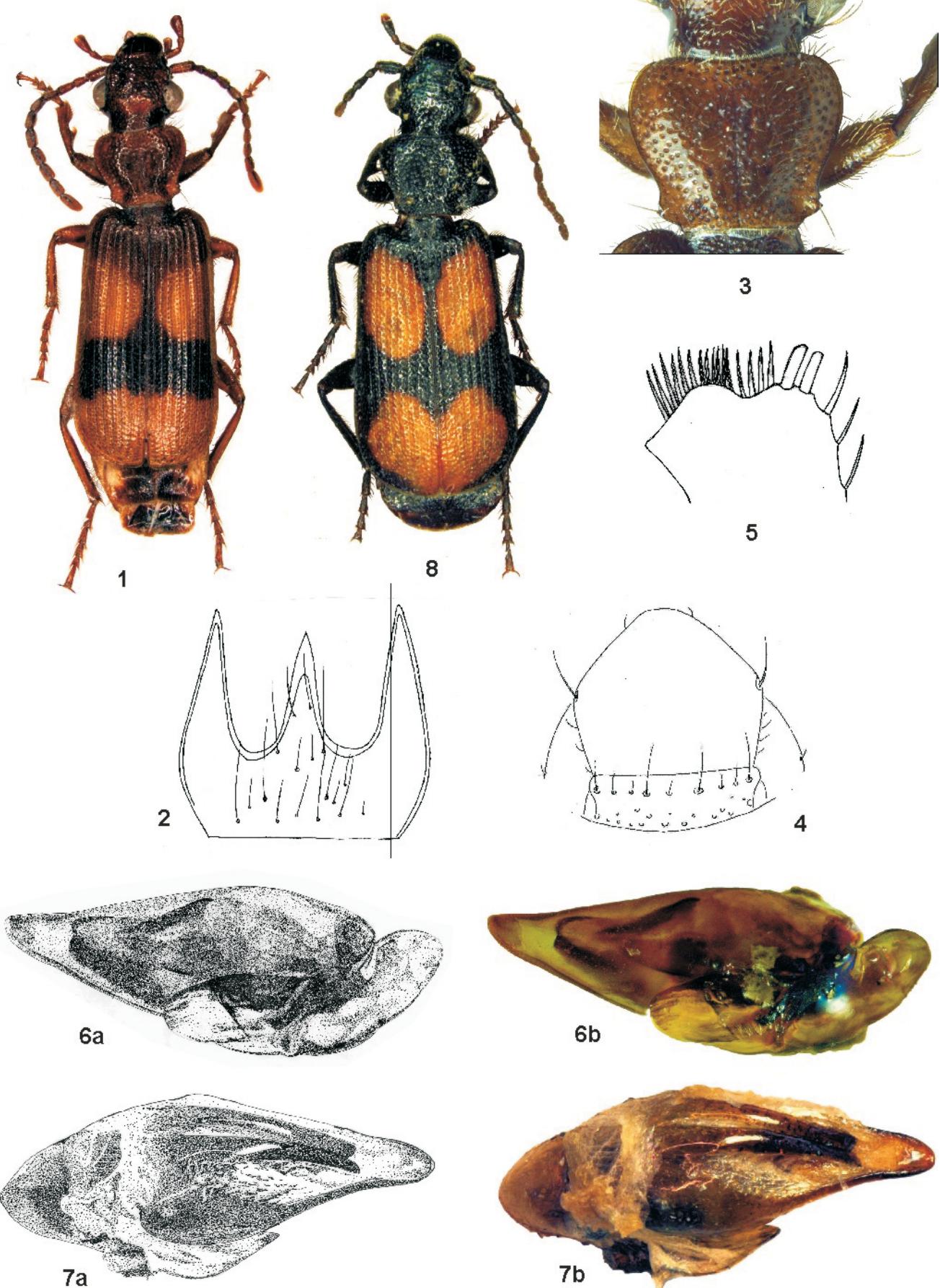


Fig. 1-7. *Macrocheilus vanharteni* sp.n. 1. Habitus. 2. Mentum. 3. Pronotum. 4. labrum, clypeus, mandibles. 5. spines of mesotibia. 6a-b. ventral view of aedeagus. 7a-b. dorsal view of aedeagus. **Fig. 8.** *M. saulcyi*, from Djezin, Libanon, det. Ing. Jedlicka

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