A peculiar new species of the leleupidiine genus *Colasidia* Basilewsky from Vietnam (Coleoptera: Carabidae: Zuphiinae)

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Colasidia abramovi sp. n. is described from Vietnam. It is the second species of the genus recorded from this country. In view of its large size and extremely elongate head it is one of the most striking species of its genus. The new species is inserted into the most recent key to the whole genus (Baehr, 1997).

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Introduction

Through courtesy of Boris Kataev, Zoological Institute, St. Petersburg (ZIN) within a sample of Australian-Oriental Carabidae sent for determination, I received a single specimen of the genus *Colasidia* Basilewsky from Vietnam for possible identification. This genus of small, strangely shaped, probably more or less subterranean or at least strictly geophilous beetles was so far known from the southern Oriental Region including the southern Malayan Peninsula, Sumatra, and Borneo, from the eastern part of New Guinea, and from north-eastern Australia (Baehr, 1988a, 1988b, 1990, 1991, 1993, 1997, 2000, 2004). For a long time the genus was unknown from mainland Asia further north than the southern part of the Malayan Peninsula, but Baehr (2005) described the first species from Thailand, and recently Park & Will (in press) are describing another species from Vietnam, thus demonstrating that the range of the genus *Colasidia* includes large parts of southern Asia and reaches far into Indochina. In Nepal, Sikkim, and north-eastern India *Colasidia* is replaced by the closely related genus *Gunvorita* Landin (Baehr, 1998, 2001, 2002), and in southern India by the genus *Paraleleupidia* Basilewsky (Mateu, 1981, Baehr, 1990) which, however, is more remotely related to both genera mentioned above.

The present paper is a further supplement to my monograph of the Oriental-Australian species of the genus *Colasidia* (Baehr, 1997).

Material and methods

For dissection of the male genitalia the specimen was soaked in a wet jar for one night, the genitalia were then cleaned for a short while in hot 4% KOH. For the description normal taxonomic methods were used. The description follows the style of my synoptic paper of the Oriental-Australian *Colasidia* (Baehr, 1997).

The habitus photograph was obtained using SPOT Advanced, version for Windows 3.5, and subsequently was worked using MS Corel Photo Paint 11.

Measurements were taken using a stereo microscope with an ocular micrometer. Length has been measured from apex of labrum to apex of elytra. Length of pronotum was measured along midline, width of base of pronotum at the extreme tips of the basal angles. Length of head was taken from apex of labrum to anterior border of “neck”, length of orbit was likewise measured to anterior margin of “neck”.

Genus ***Colasidia*** Basilewsky, 1954

For information about taxonomy and distribution of the genus *Colasidia* see Baehr (1997, 2004, 2005).

So far 34 species were described and an additional species presently is being described (Park & Will, in press). Most species were recorded from northern Borneo (Sarawak and Sabah) and Sumatra, fewer from Malaysia, Thailand, and New Guinea, one from Queensland, north-eastern Australia (Baehr, 1997, 2004, 2005), and together with the herein described species, two from Vietnam. Strangely enough, no one species was ever recorded from Java or any other islands of the Sunda Insular belt south and east of Java, nor from the Moluccas, nor from the western part of New Guinea. The reasons for this apparent deficiency presently are unknown.

Colasidia abramovi sp. n.
(Figs 1, 2)

Holotype. Male, Vietnam, Kon Tum Prov. Central Highlands, 2-3 km W of Ngoc Linh Mt. 15°05´N 107°57´E, 1700-1900 m, 25.III-14.IV.2004, A.V. Abramov / *?Colasidia* sp. det. B. Kataev 2005 (ZIN).

Diagnosis. Large, reddish-piceous species, distinguished from all other recorded species, including the other described species from Vietnam, by very large body size, the extremely elongate, posteriorly evenly tapering head with fairly small eyes and extremely elongate, weakly convex orbits; further characterized by narrow prothorax, wide, flattened elytra with almost transverse apical margin, and the short, compact aedeagus bearing a short, obtuse, slightly upturned apex, and several barely sclerotized, complexly folded pieces in the internal sac.

Description. Measurements. Length: 6.8 mm; width: 2.35 mm. Ratios. Length/width of head: 2.20; length orbit/eye: 4.1; length/width of pronotum: 1.24; width widest part/base of pronotum: 1.61; width pronotum/head: 1.36; length/width of elytra: 1.47; width elytra/pronotum: 2.11.

Colour. Dark reddish-piceous, neither margins nor suture of elytra perceptibly lighter. Labrum, palpi, antennae, and tibiae slightly paler, reddish.

Head. Extremely narrow and elongate, not perceptibly widened behind eyes, widest at position of eyes, orbits extremely elongate, very slightly convex, and in basal half continuously narrowed to neck. Eyes small in comparison with orbits, laterally barely projecting, length less than 1/4 of orbit length. Surface above and behind eye with narrow, deep sulcus. Clypeus basally in middle with punctiform groove, frons immediately behind clypeal suture in middle slightly raised, posteriad of the raised area with very shallow transverse impression. Apical margin of clypeus almost straight, lateral angles (above bases of antennae) barely projecting. Labrum anteriorly rather excised, lateral angles rounded, 4-setose, inner setae shorter than outer ones, lateral margin densely pilose. Mandibles short. Mentum with triangular, at apex faintly excised tooth. Labium in middle truncate, but paraglossae surpassing glossa, bisetose. Maxillary palpus elongate, apical palpomere cylindrical, with apex obtusely rounded. Terminal palpomere of labial palpus large and very elongate, more than twice as long as wide. Antenna rather short, barely attaining middle of pronotum. Median antennomeres about 1.5 times as wide as long, 3rd antennomere but slightly shorter than 1st, about 1.5 times as long as 2nd antennomere. Surface of head without microreticulation, very glossy. Punctures very coarse, sparse, diameter of punctures smaller than distance between punctures. Pilosity sparse, very elongate, moderately erect, inclined anteriorly. Only anterior supraorbital seta discernible from pilosity, but slightly longer, the position of posterior supraorbital setae not localized.

Pronotum. Narrow and elongate, cordate, considerably widened anteriad, much longer than wide, considerably wider than head, widest in anterior third. Upper surface rather convex, faintly sulcate along median line. Lateral margin in anterior two thirds convex, evenly narrowed to posterior angles, in basal third very slightly oblique, in front of basal angles incurved. Apex wide, faintly excised, anterior angles convex, barely projecting. Base narrow, basal angles obtuse. Lateral margin in anterior third slightly raised, near base perceptibly more raised, with distinct border line and narrow marginal channel. Median line distinct, anteriorly faintly impressed, near base much deeper. Prebasal grooves barely recognizable. Anterior marginal seta very elongate, situated at apical third of pronotum, slightly in front of widest diameter, position of posterior seta uncertain, both setae either broken, or not distinguished from pilosity. Surface without microreticulation, very glossy, with very coarse, rather sparse punctures. Diameter of punctures about as wide as distance between them. Pilosity rather sparse, very elongate, rather erect, irregularly reclinate.

Elytra. Wide and fairly short, laterally evenly but gently rounded, widest slightly behind middle, upper surface comparatively flattened. Humeri rounded, but rather projecting. Apex wide, almost transverse, straight, barely redressed to suture. Striae rather irregularly marked by rows of very coarse punctures, punctures irregular at sides. Diameter of punctures considerably wider than distance between them. Fixed setae in 3rd interval very difficult to recognize within coarse punctures. Series of marginal pores extremely difficult to detect when setae broken, apparently consisting of 8 basal, 3 postmedian, 6 apical pores, and 1 pore at apex of 3rd stria. Setae very elongate. Surface without microreticulation, very glossy. Pilosity rather sparse, very elongate, rather regular, moderately reclinate, comparatively erect. Hind wings reduced.

Lower surface. Proepisternum, apart from apical corner, impunctate and impilose. Prosternum sparsely punctate and setose. Mesepisternum, metepisternum, and abdominal sterna sparsely punctate and pilose, both terminal sterna more densely pilose. Metepisternum short, about quadrangular. Terminal sternum in male bisetose.

Legs. In comparison to other species of the genus remarkably elongate and slender.

Male genitalia. Genital ring irregularly triangular and rather symmetrical, basal part very short, apex rather wide, convex. Aedeagus short and compact, with short, rather narrow, slightly

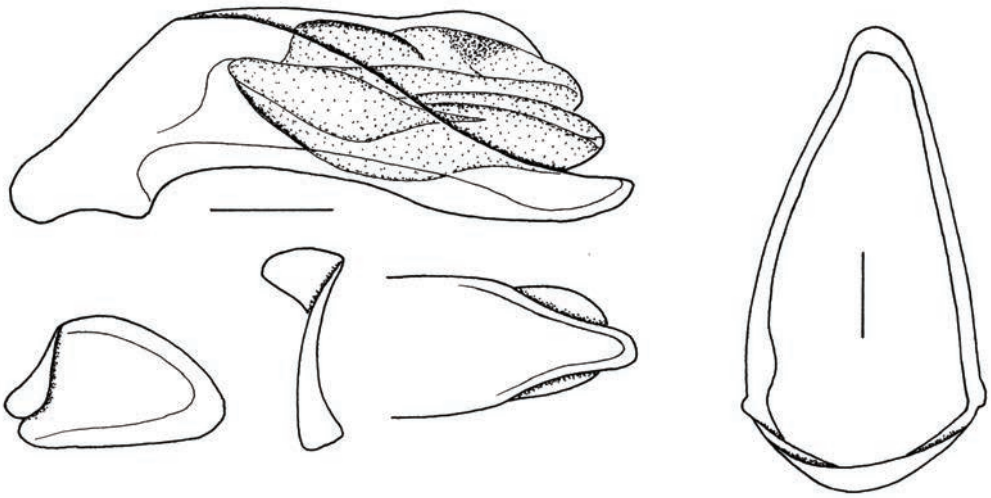

Fig. 1. *Colasidia abramovi* sp. n. Male genitalia: aedeagus (left side), shape of apex of aedeagus (from below), left and right parameres, genital ring. Scales: 0.25 mm.

upturned, at tip obtuisely rounded apex. Lower surface very gently bisinuate. Orificium elongate, situated mainly on the upper surface. Internal sac without any distinctly sclerotized pieces, with some folds. Both parameres fairly short and triangular towards apex, of very different size and shape.

Female genitalia. Unknown.

Variation. Unknown.

Distribution. Central Vietnam. Known only from type locality.

Collecting circumstances. Largely unknown. Holotype collected between 1700 and 1900 m.

Etymology. The name is a patronym and honours Alexey Abramov who collected the specimen.

Relationships. Apparently a unique species, so far without any relatives in the nearer vicinity. Certainly it is by no means closely related to the other species recorded from Vietnam (Park & Will, in press) which is a much smaller, rather normal shaped species that belongs in the main body of the genus.

Recognition

To facilitate identification of the new species, it is introduced into the most recent key to all then known species of the genus (Baehr, 1997).

1. Head about parallel sided, or wider across eyes than across orbits; posterior part of head usually considerably rounded (doubtful specimens under both couplets). 2
– Head decidedly wider at posterior angles or across orbits than across eyes; posterior part of head less rounded, somewhat square 13
2. Size very large, body length 6.8 mm; head extremely elongate, 2.2 times as long as wide (Fig. 2); aedeagus short and compact (Fig. 1). Vietnam . . . . . *C.* ***abramovi*** sp. n.
– Size smaller, body length < 5.8 mm, usually smaller; head far less elongate, < 1.6 times as long as wide; aedeagus differently shaped. 2a

2a. = 2. of key (Baehr, 1997).

Remarks

The very large body size and the extremely elongate head at the first glance distinguishes the new species from almost all known species of the genus *Colasidia*. Only the single species recorded from Australia, *C. monteithi* Baehr, has a comparable elongate head, though even so this is less conspicuous than in the new species.

As Baehr (1997) suggested, the most plesiotypic species of the genus *Colasidia* probably occur in southern Malaysia, i.e. fairly large, rather dorsally flattened species with moderately large, posteriorly rounded heads and comparatively large eyes. Within the genus morphological clines at the one hand lead to species having short and wide, posteriorly rather triangular heads and comparatively compact and convex elytra, and on the other hand to narrow and elongate species with fairly elongate heads and small eyes. Were it not for the strangely shaped head and the fairly small eyes, *C. abramovi* sp. n. with its wide, depressed elytra would be well comparable to some of the putative most plesiotypic species, but its head is outstanding in shape and structure.

The Australian *C. monteithi*, on the other hand, is a narrow, elongate, and dorsally convex species with extremely small eyes, which denotes another final point of the cline.

It is remarkable, thus, that the two species that occur at the utmost north-eastern and south-eastern

Fig. 2. *Colasidia abramovi* sp. n. Holotype. Body length: 6.8 mm.

margins of the genus' range, so much deviate in the shape of their heads from the "normal" species that occur in the centre of the range. The reasons for this are unknown, because the environments of both species probably are not perceptibly different from those in which the other species occur.

Unfortunately, very little is known about habits and ecology of any species, apart from that those specimens which bear information about sampling circumstances usually were collected by either sifting of ground litter or by Berlese extraction of the upper soil substrate, probably including leaf litter. Those specimens of which any information is available, were collected in rain forest, but for many species virtually nothing is known about collecting circumstances. Therefore, nothing can be suggested at present about putative differences of habitats in species that deviate conspicuously in their body shape and structure.

What can be said, is, that the complete range of the genus certainly is not yet fully recorded and that additional species could not only be detected within the range, i.e. in areas so far devoid of any records, but probably also at the northern and north-eastern margin of the range, in Indochina and perhaps also in south-western China.

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References

Baehr, M. 1988a. Revision of the Australian Zuphiinae 2. *Colasidia monteithi* sp. nov. from North Queensland, first record of the tribe Leleupidiini in Australia (Insecta: Coleoptera: Carabidae). *Memoirs of the Queensland Museum*, **25**: 135-140 (1987).

Baehr, M. 1988b. Three new Leleupidiini from Sarawak (Coleoptera, Carabidae, Zuphiinae). *Mitteilungen der Münchner Entomologischen Gesellschaft*, **78**: 115-123.

Baehr, M. 1990. Four new species of Leleupidiini from the Oriental Region (Coleoptera, Carabidae, Zuphiinae). *Mitteilungen der Münchner Entomologischen Gesellschaft*, **80**: 9-19.

Baehr, M. 1991. On new and rare Leleupidiini from the Oriental and Australian Regions (Coleoptera, Carabidae, Zuphiinae). *Mitteilungen der Münchner Entomologischen Gesellschaft*, **81**: 193-202.

Baehr, M. 1993. *Colasidia convexior*, sp. n., a further new leleupidiine beetle from Sumatra (Coleoptera, Carabidae, Zuphiini). *Mitteilungen der Münchner Entomologischen Gesellschaft*, **83**: 39-42.

Baehr, M. 1997. Leleupidiini from the Oriental Region. 1. New species of the genus *Colasidia* Basilewsky (Insecta, Coleoptera, Carabidae, Zuphiinae). *Revue Suisse de Zoologie*, **104**: 611-659.

Baehr, M. 1998. Leleupidiini from the Oriental Region. 2. The leleupidiine genus *Gunvorita* Landin (Insecta, Coleoptera, Carabidae, Zuphiinae). *Revue Suisse de Zoologie*, **105**: 261-318.

Baehr, M. 2000. A new species of the leleupidiine genus *Colasidia* Basilewsky from New Guinea (Coleoptera, Carabidae, Zuphiinae). *Spixiana*, **23**: 41-45.

Baehr, M. 2001. Four new species of the leleupidiine genus *Gunvorita* Landin from Nepal (Insecta: Coleoptera: Carabidae: Zuphiinae). *Stuttgarter Beiträge zur Naturkunde Serie A.*, **627**: 1-18.

Baehr, M. 2002. A further new species of the leleupidiine genus *Gunvorita* Landin from Nepal (Insecta, Coleoptera, Carabidae, Zuphiinae). *Spixiana*, **25**: 239-243.

Baehr, M. 2004. *Colasidia* wau, a new leleupidiine species from Papua New Guinea (Insecta, Coleoptera, Carabidae, Zuphiinae). *Revue Suisse de Zoologie*, **111**: 175-181.

Baehr, M. 2005. New species of the leleupidiine genus *Colasidia* Basilewsky from mainland Asia (Insecta: Coleoptera: Carabidae: Zuphiinae). *Stuttgarter Beiträge zur Naturkunde Serie A.*, **675**: 1-13.

Mateu, J. 1981. A propos des Leleupidiini Basilewsky (sic!) en Asie (Col. Carabidae). *Revue Suisse de Zoologie*, **88**: 715-722.

Park, J. K. & K. W. Will, in press. A new species of *Colasidia* Basilewsky (Coleoptera: Carabidae) from Vietnam. *Entomologica Americana.*

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