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Studies on the genus *Stenolaius* Wittmer (Coleoptera: Malachiidae) I. Faunistic and ecological notes on known species

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Abstract

A contribution to the knowledge of the genus *Stenolaius* Wittmer, 1995 (Coleoptera: Malachiidae) is given. *Stenolaius angusticavatus* Wittmer, 1997 is recorded for the first time from Malaysia at four different localities, and was found syntopic with an undescribed species of *Stenolaius* in one of these. *Stenolaius diabolicus* (Pic, 1905) is recorded for the first time from Pahang in Malaysia, and was found syntopic with *S. angusticavatus*. In addition, a new record of *S. carinatifrons* (Pic, 1910) and a note on the type locality of *S. pisanganus* (Pic, 1921) are reported.

Key words: Coleoptera, Melyridae s.l., Malachiidae, *Stenolaius*, faunistics, syntopy, type locality.

Zusammenfassung

Ein Beitrag zur Kenntnis der Gattung *Stenolaius* Wittmer, 1995 (Coleoptera: Malachiidae) wird gegeben. *Stenolaius angusticavatus* Wittmer, 1997 wird das erste Mal für Malaysien von vier verschieden Lokalitäten gemeldet, und ist in einer von diesen zusammen mit einer unbeschriebenen *Stenolaius*-Art gefunden worden. *Stenolaius diabolicus* (Pic, 1905) wird erstmals für Pahang in Malaysien gemeldet, wo er zusammen mit *S. angusticavatus* nachgewiesen wurde. Zusätzlich wird ein neuer Nachweis für *S. carinatifrons* (Pic, 1910) mitgeteilt und eine Mitteilung zur Typuslokalität von *S. pisanganus* (Pic, 1921) gemacht.

Introduction

Stenolaius Wittmer, 1995 was erected for *Laius carinatifrons* Pic, 1910 (typus generis), *L. diabolicus* Pic, 1905, and *Stenolaius transversus* Wittmer, 1995 (Wittmer 1995: 358–359). Subsequently, Wittmer (1997: 207–211) transferred *L. corporaali* Pic, 1921 and *L. pisanganus* Pic, 1921 from *Laius* Guérin-Meneville, 1831 to *Stenolaius*, synonymised *L. martapuranus* Pic, 1905 and *L. triimpressus* Pic, 1921 with *S. diabolicus*, and described *S. mannaensis* Wittmer, 1997 and *S. angusticavatus* Wittmer, 1997 as new to science.

The species described by Pic (1905, 1910, 1921) and Wittmer (1997) form a homogenous group which seems to be monophyletic and can be recognised by their uniform external morphology (= eidonomy) and colouration. However, *S. transversus* differs from the aforementioned group in form and complexity of basal antennomeres, relative position of the epicranial excitators and bicoloured elytra.

The species of *Stenolaius* are distributed in the biogeographic region of Sundaland, and have not been found east of the Huxley and Wallace lines, in the Philippines or on Sulawesi.

Material and methods

This study is based upon the examination of 34 specimens. The label data and housing of these are detailed below. All specimens are dry preserved. The acronyms of collections referred to in the text are: cIP = author's collection; NMW = Naturhistorisches Museum, Vienna, Austria.

Identification of specimens was performed with a Leica Wild MZ6 binocular microscope. The respective taxa herein were identified using the taxonomic notes by Walter Wittmer, and accompanying illustrations made by Karel Majer. Both are based upon material compared by Wittmer with the original type material of the species described by Maurice Pic. Majer's illustrations are highly accurate and sufficient for proper species identification, but in some cases the right illumination and angle of viewing have to be found (Plonski, unpubl. data).

Locality labels (all of white paper, information printed) are cited verbatim and case-sensitive, following the convention detailed in Plonski (2014: 314). The label data are supplemented (or in one case corrected) with notes on the cited localities in order to enable the localisation of the collection sites. Place names (toponyms), their most common spellings and geo-references have been sourced online (i.e. Wikipedia: GeoHack, WikiMapia, and/or Geody).

The bibliographic and taxonomic references under each valid name have been compiled, and are intended as in Plonski (2013: 62).

Evidence for syntopy of several species is postulated below, and is thus open for criticism: Syntopy is here simply defined as "the joint occurrence of two species in the same habitat at the same time" (quoted from Wikipedia). The author is well aware of the common collecting and documentation practice, which implies that a given locality label may not refer to exactly one sampling event or one precise locality, but often represents a route through an area with more than one collecting point. A given population sample could therefore be artefactual in some respect, i.e. in species composition when different (micro-)habitats were sampled but using only one vial. See Shavit & Griesemer (2009, 2011) for more on the two-fold problem of locality.

Results

Stenolaius angusticavatus Wittmer, 1997

Stenolaius angusticavatus Wittmer, 1997: 210–211, figs. 105–109.

Type locality: Environment circa 1 km NNE (09°48'N 98°47'E) of town Phato, Chumpon province, Thailand.

Material examined: Malaysia: Kelantan: 1 ♂, 2 ♀♀ (cIP): "MALAYSIA W, 2013 \ KELANTAN, Kg. Tunku \ Mt. Noring Timur, 1200m \ 150 km S of JELI, 21.ii.- \ 14.iii., P. Chechovsky lgt."; 3 ♂♂ (cIP): "MALAYSIA W, KELANTAN \ 30 km NW of Gua Musang \ Ulu Lalat Mt. 800-1000m \ KAMPONG SUNGAI OM \ 27.v. - 19.vi. 2011 \ Petr Cechovsky lgt."; Pahang: 5 ♂♂ (NMW): "MALAYSIA-Pahang 350-550m \ 20km NE Raub, Lata Jarom \ Gg. Benom, 19.-22.2.1995 \ leg. M.Strba & R.Hergovits"; 2 ♂♂, 2 ♀♀ (cIP): "MALAYSIA; Tioman; 0-100m; \ rd. Kampong Tekek – K. Juara \ 4.-16.iii.1998; 2,48N 104,11E \ D. Hauck leg.".

Note on the cited localities: "Kg. Tunku" = Kompung [village] Tunku Abdul Rahman, also known as Kompung Kuala Balah (5°26'13" N, 101°54'35" E). "Mt. Noring Timur"

= Gunung [mountain] Noring Timur (5°21'29" N, 101°47'13" E). "Ulu Lalat Mt." = Bukit [hill] Ulu Lalat (4°59'28" N, 101°52'37" E). "Kampong Sungai Om" = a here unlocalised village (Sungai = stream); but see Zettel et al. (2012: 42), who give for the same toponyms (but different collection date!) the coordinates "4°59′–5°00′N, 101°52–53′E". "Lata Jarom" = Lata Jarum, a forest recreation area (03°56'04" N, 102°01'48" E), next to Kampung Ulu Dong (Raub district). "Gg. Benom" = Gunung Benom (3°49'26" N,102°5'29" E); specifically refers to the northern slopes in the Ulu Don subdistrict.

Note on the sample from the Bukit Ulu Lalat area: The three herein reported male specimens, whose identity is undoubted, are associated syntopically (viz. identical locality labels) with two additional male specimens and seven female specimens. The two additional males are not conspecific, and will be described in a subsequent study (Plonski, in prep.). Due to syntopy, the seven female specimens cannot be assigned with certitude to either of the two taxa.

Note on the sample from the Lata Jarum area: The five herein reported male specimens, whose identity is undoubted, are associated syntopically (viz. identical locality labels) with four male specimens of *S. diabolicus* and four female specimens that cannot be assigned with certitude to either of the two taxa.

Distribution: This species is more widely distributed than previously known: Heretofore, *S. angusticavatus* was only known from the type locality in Thailand. The above reported material represents the first records for the Federation of Malaysia, in the states of Kelantan (districts of Gua Musang, and Jeli / Kuala Krai) and Pahang (districts of Raub and Rompin). *Stenolaius angusticavatus* seems to be restricted to the Thai-Malay peninsula, and its known distribution currently includes the isthmus of Kra next to Bandon bay in the north, and the Seribuat archipelago in the south.

Stenolaius carinatifrons (Pic, 1910)

Laius carinatifrons Pic, 1910: 290. – Greiner 1937: 149. – Champion 1921a: 342–343.

Laius carinifrons [incorrect subsequent spelling]: Champion 1921b: 207.

Stenolaius carinatifrons: Wittmer 1995: 359. – Wittmer 1997: 208–209, figs. 95, 99, 102.

Type locality: Java: environment of town Sukabumi (6°55'10" S, 106°55'37" E), Sukabumi regency, West Java province, Indonesia.

Material examined: Indonesia: West Java: 1 ♂, 1 ♀ (NMW): "INDONESIA: W Java \ Gede-Pangrango Nat. P. \ Selabintana gate [sic!] to \ Sawer Wf., 1000-1200 m \ lg. Schuh 23.8.1994".

Note on the cited localities: "Sawer Wf." = Curug Sawer waterfalls (6°49'51" S, 106°55'56" E), an attraction within the Situgunung recreational park (part of the Gunung Gede Pangrango national park); "Selabintana gate" = misnamed; actually Situ Gunung gate (06°50′15″S 106°55′36″E) next to Desa [village] Kadudampit (Cisaat district, Sukabumi regency) (R. Schuh, pers. comm, 9.10.2015).

Distribution: Java (Pic 1910, Champion 1921a, Wittmer 1997), and West Malaysia, viz. Perak (Champion 1921b).

Stenolaius diabolicus (Pic, 1905)

Laius diabolicus Pic, 1905: 104. – Greiner 1937: 150.

Stenolaius diabolicus: Wittmer 1995: 359. – Wittmer 1997: 207–208, figs. 94, 98, 104.

Laius martapuranus Pic, 1915: 10–11. – Greiner 1937: 152. – Syn. t. Wittmer 1997.

Laius triimpressus Pic, 1921: 18. – Greiner 1937: 155. Syn. t. Wittmer 1997.

Laius triimpresus [incorrect subsequent spelling]: Wittmer 1997: 207.

Type locality: Sumatra: environment of town Palembang (02°59'10" S, 104°45'20" E), South Sumatra province, Indonesia.

Material examined: Malaysia: Pahang: 4 ♂♂ (NMW): "MALAYSIA-Pahang 350-550m \ 20km NE Raub, Lata Jarom \ Gg. Benom, 19.-22.2.1995 \ leg. M.Strba & R.Hergovits".

Notes on the cited localities and the sample: See above under *S. angusticavatus*.

Distribution: This species was described under the senior synonym based on material from Sumatra, and under the junior synonyms from Borneo, both from the same type locality, which is Martapura (South Kalimantan, Indonesia). Wittmer (1997) reports *S. diabolicus* from Perak (Malaysia) without more details. The above reported material represents the first record for the Malaysian state of Pahang.

Stenolaius pisanganus (Pic, 1921)

Laius pisanganus Pic, 1921: 18. – Greiner 1937: 153.

Stenolaius pisanganus: Wittmer 1997: 209.

Type locality: Sumatra: environment of village Pagaran Pisang (01°51'08" N, 98°53'34" E), Adiankoting district, North Tapanuli regency, North Sumatra province, Indonesia.

Note on the type locality: Pic (1921) gives only "Sumatra" as type locality. Wittmer (1997) cites the type labels, and communicates a toponym spelled "Pangherang Pisang" and the collector's name, viz. Elio Modigliani. Steenis-Kruseman (1950: 364; citing Modigliani 1894) gives the spelling "Pangheran Pisang". However, Modigliani (1894: 31–33) used the spelling "Pagarán Pisang". With Modigliani's itinerary (op. cit.) the type locality is here identified as the village georeferenced above.

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References

Champion G.C., 1921a: Notes on various African and Asiatic species of *Laius*, Guérin, with an account at their accessory ♂-characters (Coleoptera). – The Annals and Magazine of Natural History 9(7): 322–343.

Champion G.C., 1921b: On some additional species of *Laius*, Guérin, from the Malayan region (Coleoptera). – The Annals and Magazine of Natural History 9(8): 193–207.

Greiner J., 1937: Pars 159: Malachiidae. In: Schenkling S. (ed.): Coleopterorum Catalogus. – Dr. W. Junk, 's-Gravenhage, 199 pp.

Modigliani E., 1894: L'isola delle donne. Viaggio ad Engano. – U. Hoepli, Milano, 333 pp.

Pic M., 1905: Diagnoses de trois «*Laius*» des Indes Néerlandaises. – L'Échange 21: 104.

Pic M., 1910: Malachiides exotiques nouveaux (Col. Malacodermata). – Bulletin de la Société entomologique du France 1910: 290–292.

Pic M., 1915: Nouveautés rentrant dans diverses familles. – Mélanges exotico-entomologiques 14: 2–20.

Pic M., 1921: Nouveautés diverses. – Mélanges exotico-entomologiques 33: 1–32.

Plonski I.S., 2013: Studies on the genus *Intybia* Pascoe (Coleoptera: Malachiidae). I. Some nomenclatorial acts and faunistic records. – Zeitschrift der Arbeitsgemeinschaft Österreichischer Entomologen 65: 61–68.

Plonski I.S., 2014: Studies on the genus *Intybia* Pascoe, part II. Faunistic and taxonomic notes, with description of a new species in the *I. plagiata*-group (Coleoptera: Malachiidae). – Koleopterologische Rundschau 84: 313–320.

Shavit A. & Griesemer J., 2009: There and back again, or the problem of locality in biodiversity surveys. – Philosophy of Science 76: 273–294.

Shavit A. & Griesemer J., 2011: Transforming objects into data: how minute technicalities of recording „species localion" entrench a basic challenge for biodiversity. pp. 169–193. In: Carrier M. & Nordmann A. (eds.): Science in the context of application (Boston Studies in the Philosophy of Science 274). – Springer, Dordrecht – Heidelberg – London – New York, X + 492 pp.

Steenis-Kruseman M.J. van, 1950: Malaysian plant collectors and collections. In: Steenis C.G.G.J. van (ed.): Flora Malesiana 1(1). – M.V. Nordhom-Kolm, Djakarta, 639 pp.

Wittmer W., 1995: Zur Kenntnis der Familie Malachiidae (Coleoptera). 2. Beitrag. – Entomologica Basiliensia 18: 287–391.

Wittmer W., 1997: Zur Kenntnis der Gattungen *Intybia* Pasccoe und *Stenolaius* Wittmer (Coleoptera, Malachiidae). – Japanese Journal of Systematic Entomology 3(2): 181–211.

Zettel H., Lane D.J.W., Pangantihon C.V. & Freitag H., 2012: Notes on Notonectidae (Hemiptera: Heteroptera) from southeastern Asia, mostly from Brunei and the Philippines. – Acta Musei Nationalis Pragae 52(1): 29–48.

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