

Contribution to the knowledge of the genus *Atractonotus* Perroud, 1846 (Coleoptera: Carabidae: Anthiini)

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Abstract

Atractonotus mulsanti Perroud, 1846 is illustrated, remarkable and newly recorded from Angola. Two new synonyms are proposed: *Atractonotus mulsanti* Perroud, 1846 (= *Atractonota mulsanti* ssp. *sansibarica* Kolbe, 1898 syn. n., *Atractonotus mulsanti* ssp. *perturbatus* Basilewsky, 1980 syn. n.).

Zusammenfassung

Atractonotus mulsanti Perroud, 1846 wird als neu für die Fauna von Angola beschrieben und abgebildet. Zwei neue Synonyme werden vorgeschlagen: *Atractonotus mulsanti* Perroud, 1846 (= *Atractonota mulsanti* ssp. *sansibarica* Kolbe, 1898 syn. n., *Atractonotus mulsanti* ssp. *perturbatus* Basilewsky, 1980 syn. n.).

Key words: Taxonomy, distribution, new synonymy, Coleoptera, Carabidae, *Atractonotus*, Afrotropical region

Introduction

The genus *Atractonotus* Perroud, 1846 belongs to the family Carabidae, subfamily Harpalinae, tribe Anthiini, subtribe Cypholobina (OBER 2002, LORENZ 2005) and contains one species and two subspecies distributed in Afrotropical Region (BASILEWSKY 1955, 1963, 1964, 1980, 1983, LORENZ 1998, 2005).

Material and methods

The following abbreviations are used in the text:

EW - elytral width (maximal linear transverse distance).

TL - total length (linear distance from anterior margin of head to apex of elytra).

Separate labels are indicated by slashes (/).

Remarks of the author are found in square brackets []. Moreover, following abbreviations refer to the collections, in which the examined material is deposited:

- JHAC Jiří Háva, Private Entomological Laboratory and Collection, Prague, Czech Republic;
 JKOC Jan Kobylák, private collection, Prague, Czech Republic;
 JROC Jakub Rolčík, private collection, Prague, Czech Republic;
 MRAC Musée Royal de l'Afrique Centrale, Tervuren, Belgie;
 NME Naturkundemuseum Erfurt, Germany;
 NMPC National Museum, Prague, Czech Republic;
 OHOC Oldřich Hovorka, private collection, Prague, Czech Republic;
 VBEC Vladimír Beneš, private collection, Prague, Czech Republic.

Result

Atractonotus Perroud, 1846

Atractonotus mulsanti Perroud, 1846

Atractonotus mulsanti Perroud, 1846:60.

Anthia minima Bertoloni, 1857:313 (Csiki, 1929 as syn.).

Anthia baucis Dohrn, 1881:326 (Csiki, 1929 as syn.).

Atractonotus mulsanti ssp. *perturbatus* Basilewsky, 1980:499 syn. n.

Atractonota mulsanti var. *sansibarica* Kolbe, 1898:59 syn. n.

Type material. Holotype (♂): „Maputa, Zululand“ \ ex coll. Dr. Breuning“ \ “HOLOTYPUS” [red printed label] \ “*Atractonotus mulsanti* s. *perturbatus* nov. P. Basilewsky det., 1979” (MRAC). Paratypes (6 exx.): the same data as holotype; (2 exx.): “Mocambique, Lourenso Marques, 1950” \ “Noel Ferreira leg.”; (1 ex.): “Mozambique, Rikatla, H. A. Junod”, (all in MRAC).

Material examined. “Angola, Omupanda, 6-vii. C. Koch [lgt.]”, 1 ex., P. Basilewsky det., (MRAC); “Botswana C, Gweta env., 29-30.xi.2003, [K.] Werner lgt., 2 exx., J. Háva det., (VBEC); “Botswana, S of Ghanzi, 22.i.1978, Holm, Jacobs, Kirsten, Scholz [lgt.]”, 2 exx., P. Basilewsky det., (MRAC); “Botswana, 20 km SSW Gaborone, 21.febr.1988, R.D. Ward, coll.”, 2 exx., P. Basilewsky det., (MRAC); “Botswana, 20 km SSE of Gaborone, 16-19.dec.1987, R.D. Ward, coll.”, 1 ex., P. Basilewsky det., (MRAC); “Botswana, 138 km N of Nata, 26.dec.1987, R.D. Ward, coll.”, 2 exx., P. Basilewsky det., (MRAC); “Botswana, Gaborone, 6-12.dec.1987, R.D. Ward, coll.”, 1 ex., P. Basilewsky



Figs 1: *Atractonotus mulsanti* Perroud, 1846: habitus dorsal aspect

det., (MRAC); “Kalahari”, 1 ex., P. Basilewsky det., (MRAC); „Botswana bor., Maun, Island Safari Lodge env., 2-15.i.1994, M. Snižek lgt.”, 2 ex., J. Háva det., (JHAC); “Mozambique, Sofala pr., 10 km NW Save, 6.xii.2003, J. Halada lgt.”, 3 ex., J. Háva det., (VBEC); “[Mozambique] Zulu, Trägårdh.”, 3 ex., P. Basilewsky det. as *pertubatus*, (MRAC); “Mozambique, Chemba, A. Chaver [lgt.], 1929”, 3 ex., P. Basilewsky det., (MRAC); “Mozambique: Chemba, 1931, A. Ravet [lgt.]”, 2 ex., P. Basilewsky det., (MRAC); “[Namibia] Eava 383, 22°06' S 18°56' E, Gobabis, 19-20.jan.1975”, 1 ex., P. Basilewsky det., (MRAC); “[Namibia] Richtbofen 126, 22°34' S 17°45' E, Windhoek, 1-31.jan.1975, Red sand dune”, 3 ex., P. Basilewsky det., (MRAC); “[S Africa] N. Transvaal: Messina, A. L. Capener, don H. Synyve 1-1957”, 1 ex., P. Basilewsky det., (MRAC); “[S Africa] Transvaal, Gravelotte, Beacon Ranch, Jan.1966, D. J. Brothers [lgt.]” 1 ex., P. Basilewsky det., (MRAC); “[S Africa] Transvaal, Warmbaths, 1.1909, G. Kobrow [lgt.]”, 1 ex., P. Basilewsky det., (MRAC); “[S Africa] N. Tvl., Pietersburg, xii.1965, L. Schulze, 23.54S-29.23E”, 1 ex., P. Basilewsky det., (MRAC); “RSA, North Province, Thabazimbi, 7.xi.2003, Smrž lgt.”, 1 ex., J. Háva det., (VBEC); “[S Africa] Orange”, 1 ex., P. Basilewsky det., (MRAC); “[S Africa] Orange Fr. St., Bothaville, 3.10.98, Dr.Brauns [lgt.]”, 2 ex., P. Basilewsky det., (MRAC); “[S Africa] Bothaville, O.F.S.”, 2 ex., P. Basilewsky det., (MRAC); “Süd Afrika, N. Bechuanaland, Makala-Mabäle, 25-27.xii.06, S.G. Sainer [lgt.]”, 1 ex., P. Basilewsky det., (MRAC); “S Africa, Bechuanaland, Ngamiland, Nov.1930-Jan1931, G.D. Hale Carpenter, B.M. 1931-160”, 1 ex., P. Basilewsky det., (MRAC); “[Tanzania] Afr. Or. Allemande, Kurasim, ex. Staudinger”, \ “Comp. Typ Basilewsky” [red printed label], 1 ex., P. Basilewsky det. as *zanzibarius*, (MRAC); [Tanzania] “Afr. Or. Allemande, Kurasim, ex. Staudinger”, 1 ex., P. Basilewsky det. as *zanzibarius*, (MRAC); “D. O. Afr. (Ertl), Lukuledi [Tanzania], Don de M. Torley”, 5 ex., P. Basilewsky det. as *zanzibarius*, (MRAC); “D. O. Afr. (Ertl), Bihwana [Tanzania], Don de M. Torley”, 1 ex., P.

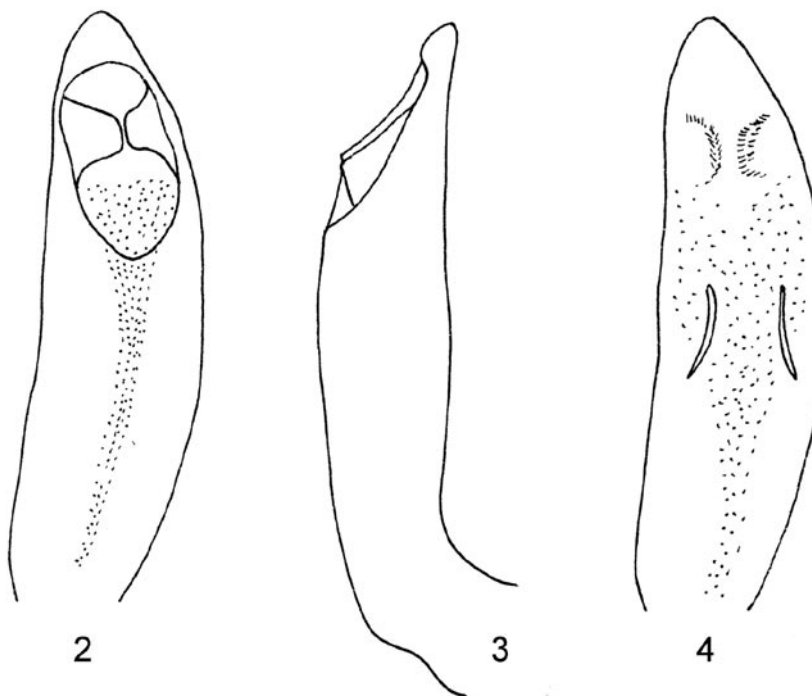
Basilewsky det. as *zanzibarius*, (MRAC); “Afr. Or. Allemande, Lukuledi [Tanzania], ex Staudinger”, 2 ex., P. Basilewsky det. as *zanzibarius*, (MRAC); “Afr. Or., Lindi [Tanzania]”, \ “(don I.R.Sc. N.B.) coll. Basilewsky”, 1 ex., P. Basilewsky det. as *zanzibarius*, (MRAC); “D. O. Afr.: Lindi [Tanzania], x-1905, ex coll. Glermont”, 1 ex., P. Basilewsky det. as *zanzibarius*, (MRAC); „Dar es Salaam” [Tanzania], 1 male, J. Háva det. as *sansibaricus*, (JHAC); “D.O.Afr. N. Danda” [Tanzania], 3 ex., P. Basilewsky det. as *zanzibarius*, (MRAC); “D. O. Afr., Lukuledi [Tanzania]”, 1 ex., P. Basilewsky det. as *zanzibarius*, (MRAC); „Zambia – SW, 30 km W Livingstone, 19-22.xii.2002, J. Halada lgt.” 22 ex., J. Háva det., (JHAC, NMPC, OHOC, JROC, VBEC, NME); “Zambia S., 30 km W Livingstone, 28.xi.2003, [K.] Werner lgt.”, 2 ex., J. Háva det., (VBEC); “[Zambia] Matopos, Matabele, G.A.K.Marshall, 1917-55”, 1 ex., P. Basilewsky det., (MRAC); “[Zambia] Zambesi, Bradshaw, 1878”, 1 ex., P. Basilewsky det., (MRAC); “Zimbabwe, Mvuma route Gutuchatsworth env., 24.11.98, Smrž lgt.”, 1 ex., J. Háva det. as *sansibaricus*, (JKOC); “[Zimbabwe] S Rhodesia, Sawmills, 21.2.1924, R. H. R. Stevenson [lgt.]”, 1 ex., P. Basilewsky det., (MRAC); “[Zimbabwe] S Rhodesia, Salisbury, J. Frey 1933”, 1 ex., P. Basilewsky det., (MRAC); “[Zimbabwe] S Rhodesia, Bulawayo, 26.ii.1929, R. H. R. Stevenson [lgt.]”, 1 ex., P. Basilewsky det., (MRAC); “[Zimbabwe] N.W. Rhodesia”, 1 ex., P. Basilewsky det., (MRAC); “[Zimbabwe] Rhodesia, Plumtree, G.A.K. Marshall [lgt.], 1917-55”, 1 ex., P. Basilewsky det., (MRAC); “[Zimbabwe] Rhodesia, Salisbury, 17.i.13, J. A.O'Neil”, 1 ex., P. Basilewsky det., (MRAC).

Short redescription. Measurements: TL 11-16.5 mm EW 2.5-3.7 mm. Narrow and elongated species. Integument black, legs and abdominal sternites sometimes brown-black.

Head elongated, approximately 1.5 times longer than wide. Eyes large, convex. Dorsal surface of the head punctured and setose on posterior half. Vertex flattened or depressed in the middle. Antennae long, longer than head and prothorax together. Four basal antennomeres covered with white pubescence; rest of the antennomeres (starting fifth one) markedly flattened.

Pronotum convex, elongated, always more than 2 times longer than wide. Pronotal apex and base more densely punctured and setose than rest of its surface; two distinct elongated and rounded keels present (pronotal sculpture as on Fig. 1). Proepisternite visible from above. Legs relatively long, with numerous short white hairs. Prosternum with scattered white setae, which are more dense on meso- and metasternum.

Elytrae convex, elongated, about twice as long as wide. Elytral apex sharp, margins distinct sinuate. First to eighth elytral intervals strongly, sharply keeled; keels in fourth and sixth intervals shortened posteriad. Elytral striae distinctly punctured. Elytra strongly narrowed towards base, humerus absent, elytral base narrower than maximal pronotal width, subequal to width of pronotal base. Elytral pattern (Fig. 1) is formed by white and



Figs 2-4. *Atractonotus mulsanti* Perroud, 1846: 2 - aedeagus, dorsally; 3 - aedeagus, laterally; 4 - aedeagus, interior structure.

dense pubescence; there is an anterior rounded macula, reaching from fifth to seventh interval, and a posterior transverse band, which is sometimes reduced. White elytral pubescence forms sometimes indistinct maculae (or elongated stripes) near scutellum and elytral apex. Abdominal sternites relatively scarcely punctured and setose.

Male genitalia as on Fig. 2-4.

Female externally similar to the male.

Remarks. TOMMASINI & MARINI (1988) cited original description and photographs of syntypes of the *A. minima* Bertolini, 1857. The species *Anthia minima* and *Anthia baucis* Dohrn, 1881 are mentioned as synonyms by CSIKI (1929). The subspecies *sansibaricus* is only largest variety of typical *mulsanti*, the subspecies *perturbatus* is only a colour variability and differs from typical *mulsanti* only by the posterior white fasciae divided to the isolated spots, both subspecies are junior synonyms of *A. mulsanti*.

Distribution. The species is known from Botswana, Mozambique, Namibia, South Africa, Tanzania, Zambia and Zimbabwe, new for Angola.

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