

Revision on the genus *Brachydora* (Coleoptera: Buprestidae: Agrilinae)

David FRANK

Kotorská 22, 140 00 - Praha 4, Czech Republic
e-mail: davidfrank@email.cz

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Abstract. The genus *Brachydora* Obenberger, 1923 is revised based on comparative study of extensive material including types of all revised taxa. *Brachydora monstrum* Obenberger, 1923 is synonymized with *B. sicardi* (Théry, 1912). Lectotypes are designated for following taxa to ensure their correct application and recognition in future: *Brachydora granulum* (Fairmaire, 1902); *B. sicardi* and *B. monstrum*. Redescriptions of holotypes and lectotypes are added for species *Brachydora crassa* Théry, 1937, *B. deformis*, *B. granulum* and *B. sicardi*. All herein included taxa are illustrated with colour photographs of habitus and (except for *B. granulum*) a male aedeagus. A key to all taxa is presented.

INTRODUCTION

Obenberger (1923) established the genus *Brachydora* for three species from which *Brachydora monstrum* Obenberger, 1923 was described as new and two remaining species were transferred from the genus *Paradora* Kerremans, 1900: *Brachydora deformis* (Fairmaire, 1901) which was described in the genus *Discoderes* Chevrolat, 1838 and transferred to *Paradora* by Théry (1905), and *B. sicardi* (Théry, 1912). Obenberger in his description designated *B. monstrum* as the type species of this genus. Obenberger (1928) transferred *Discoderes granulum* Fairmaire, 1902 to the genus *Brachydora*, and Théry (1937) described *B. crassa*.

Brachydora deformis, *B. granulum* and *B. sicardi* correspond to the description of this genus: ‘Forme très raccourcie, très bombée et inégale; ressemble plutôt à un *Chlamys* (Chrysomelide) à cause des élévations nombreuses du dessus qui lui donnent un aspect très particulier, isolé dans toute la famille. [Very shortened, very arched and uneven shape; rather resembles a *Chlamys* (Chrysomelidae) because of the numerous elevations of the top which give it a very particular aspect, isolated in the whole family.]’, but *B. crassa* is different from them. Théry probably had intended to describe it as *Paradora* because holotype specimen has a label ‘*Paradora crassa* Type’ (Fig. 4) but finally he described it as *Brachydora*. *Brachydora crassa* might belong to other genus (absent elytral tubercules, very different surface of pronotum and elytra, presence of pronotal carina, female ventrite IV without transverse striae, different aedeagus) but a higher taxonomy of subtribus *Toxoscelina* Majer, 2001 is not an aim of this work; for more information see ‘Remarks’ under *B. crassa*.

MATERIAL AND METHODS

The revision is based on the study of type material and additional specimens available to me. Specimens were compared using methods of standard comparative morphology. The terminology follows standard papers about Buprestidae with necessary specific terms of dorsal morphology which are shown in Fig. 1.

The measures were measured by ocular (eyepiece) micrometer. The length of body was measured as the distance between anterior margin of the head and the apex of elytra. The width of body was measured at widest point across elytra. The length of aedeagus was measured as the distance between its base and the apex of parameres. The width of aedeagus was measured at its widest point.

The names of states and provinces of states mentioned in the examined material are according to Wikipedia (en.wikipedia.org). All old maps were studied on <https://www.oldmapsonline.org/>.

The old and incorrectly transcribed names of localities were specified based on Viette (1991) and studying of old maps.

Exact label data are cited for all type specimens; a double vertical line (||) divides the data on different labels and a single vertical line (|) divides the data in different rows. Type localities are cited in the original spelling. Other comments and remarks are placed in square brackets: [p] - preceding data are printed, [h] - preceding data are handwritten, [w] - white label, [r] - red label. Old labels which are not bright white but white-brown or creamy coloured are indicated [w(c)].

All examined type specimens were provided with an additional red printed label (with handwritten date) expressing the type status of each specimen. The exact wording is cited at the 'Type material examined' of each taxon. The specimens were provided also with a determination white printed label (with handwritten date) where it was necessary. Its design is shown e.g. in Fig. 11.

Old name-bearing types from MNHN were not remounted and dissected because they are in thick layer of glue and could be damaged. Aedeagi were dissected from paralectotype specimen (*B. sicardi*) or specimens compared with those types (*B. crassa*, *B. deformis*).

Studied specimens are deposited in following collections:

- DFPC David Frank, private collection, Praha, Czech Republic;
- EJBS Eduard Jendek, private collection, Bratislava, Slovakia;
- MNHN Muséum National d'Histoire Naturelle, Paris, France (Antoine Mantilleri);
- NHMB Naturhistorisches Museum, Basel, Switzerland (Matthias Borer, Christoph Germann);
- NMPC National Museum, Praha, Czech Republic (Lukáš Sekerka);
- VKSC Vítězslav Kubáň collection, Šlapanice, Czech Republic (will be deposited in NMPC).

TAXONOMY

Brachydora Obenberger, 1923

Brachydora: Obenberger, 1923: 30 (original description); Obenberger, 1935: 794 (catalogue); Bellamy (1985): 423 (catalogue); Kubáň, Majer & Kolibáč (2001): 208 (placed to subtribe Toxoscelina); Bellamy (2001): 59 (catalogue); Bellamy (2003): 75 (catalogue); Bellamy (2006): 9; 168 (annotated catalogue); Bellamy (2008): 1754 (catalogue).

Type species. *Brachydora monstrum* Obenberger, 1923 [= *Brachydora sicardi* (Théry, 1912) **syn. nov.**] (by original designation).

Key to species of *Brachydora*

- 1 Surface of pronotum and elytra with macropunctures around irregular striae (Figs. 1f, g), pronotal and elytral tubercles (Figs. 1a-e) well developed..... 2
- Surface of pronotum and elytra with irregular rhomboidal cells, pronotal tubercles slightly indicated, elytral tubercles missing. (Figs. 2, 3, 5-7) *B. crassa* Théry, 1937
- 2 Body wider (length/width ratio: < 1.78) and bigger (> 4.40 mm) 3
- Body slender (length/width ratio: 2.28) and smaller (3.28 mm). Figs. 9, 10. *B. granulum* (Faimaire, 1902)
- 3 Pronotal principal tubercle (Fig. 1a) slightly indicated; elytral humeral tubercles (Fig. 1c) bigger than elytral sutural tubercles (Fig. 1d); aedeagus widely rhomboidal (Fig. 20); bigger species (5.09-6.48 mm). Figs. 12, 13, 15, 16, 20 *B. deformis* (Faimaire, 1901)
- Pronotal principal tubercle well developed; elytral humeral tubercles equal size or smaller than elytral sutural tubercles; aedeagus narrowly rhomboidal (Fig. 21); smaller species (4.40-5.23 mm). Figs. 21, 23, 24, 26-31 ..
..... *B. sicardi* (Théry, 1912)

Brachydora crassa Théry, 1937

(Figs. 2-8, 19)

Brachydora crassa Théry, 1937: 87 (original description, incl. Fig. 3); Bellamy (2001): 59 (catalogue); Bellamy (2006): 168 (annotated catalogue); Bellamy (2008): 1754 (catalogue).

Type locality. ‘Mahatsinjio (17°40’ S. - 45°5’ E.)’ [see ‘Remarks’].

Type material examined. HOLOTYPE (by monotypy): unsexed specimen (4.40×2.16 mm; Figs. 2-4), ‘MAHATSINJO | près Tananarive [w, p] || Paradora | crassa | Thery | TYPE [w, h/p]’ (MNHN).

The specimen was provided with an additional red printed label: ‘HOLOTYPE | (by monotypy) | *Brachydora* | *crassa* | THÉRY, 1937 | David Frank labelled XI.2022 [date handwritten]’.

Additional material examined (16 ♂♂, 15 ♀♀, 95 unsexed specimens): MADAGASCAR: TOAMASINA PROV.: Madagascar Est, Distr. Mananara N., Seranambe II-62, Vadon et Peyrieras, 5 ♂♂, 4 ♀♀, 8 unsexed (5 ♂♂, 2 ♀♀, 8 unsexed MNHN; 1 ♀ DFPC; 1 ♀ VKSC); Distr. Mananara N., Seranambe X-62, Vadon et Peyrieras, 1 ♂, 3 ♀♀, 2 unsexed (MNHN); Distr. Mananara N., Seranambe X-63, Vadon et Peyrieras, 1 ♀ (MNHN); MADAGASCAR-EST, SERANAMBE-I-64, VADON & PEYRIERAS, 2 ♂♂, 2 ♀♀, 30 unsexed (1 ♂, 1 ♀, 30 unsexed MNHN; 1 ♂, 1 ♀ DFPC); MADAGASCAR-EST, Dist. Mananara-N, Seranambe, Vadon-Peyrieras, JANVIER 65, 13 unsexed (MNHN); MADAGASCAR-EST, Dist. Mananara-N, Seranambe, Vadon-Peyrieras, JANV. 65, 25 unsexed (MNHN); MADAGASCAR-EST, Dist. Mananara-N, Seranambe, Vadon-Peyrieras, JANV. 69, 1 unsexed (MNHN); MADAGASCAR-EST, Dist. Mananara-N, Seranambe, Vadon-Peyrieras, 1 ♂, 3 unsexed (2 NMPC, ex coll. Bílý, ex coll. Kabourek, Figs. 5-8, 19; 2 EJBS); Madagascar Est, Distr. Maroantsetra, Fampanambo, III-62, Vadon et Peyrieras, 1 ♀, 1 unsexed (MNHN); Madagascar Est, Distr. Maroantsetra, Ambodivoangy, I.65, Vadon et Peyrieras, 5 unsexed (MNHN); Madagascar Est, distr. Mananara - N., Antanambe, XI.65, Vadon-Peyrieras,

1 unsexed (MNHN); MADAGASCAR-EST, MT.ANTAMAPONA, XII.63, VADON & PEYRIERAS, 4 ♂♂, 1 unsexed (MNHN); MADAGASCAR-EST, MT.ANTAMAPONA, II.64, VADON & PEYRIERAS, 1 ♂ (MNHN); MADAGASCAR-EST, Dist. Mananara-N, Mont Antampona, III.1967, Vadon-Peyrieras, 3 unsexed (MNHN); Madagascar Est, Distr. Maroantsetra, I. Nosy-Mangabe, Vadon et Peyrieras, 2 ♂♂, 4 ♀♀ (MNHN); FIANARANTSOA PROV.: Madagascar Est, Vondrozo, II.1966, collect. J. Vadon, 2 unsexed (MNHN).

Redescription of holotype. Preserved unsexed specimen (Figs. 2, 3), left middle leg and antennae are missing, right middle leg is without last tarsomere, and tarsus of right hind leg is glued separately. Fore legs are covered by glue and potential damage is not visible. Length 4.40 mm, width 2.16 mm, length/width ratio: 2.04.

Body narrowly elliptic, black with white pubescence concentrated into fasciae or patches.

Head black, with irregular rhomboidal cells and white pubescence. Eyes oval. Frons $4.0\times$ as wide as diameter of eye, impressed with shallow medial sulcus.

Pronotum trapezoidal, narrowing anteriorly with rounded sides, black, with irregular rhomboidal cells and white pubescence, $1.7\times$ as wide as long. Anterior margin arcuate, lobe protruding. All pronotal tubercles only slightly indicated; pronotal minor tubercles before basal margin. Sinuate pronotal carina around lateral margin along almost whole length. Lateral margin black, not curved. Basal margin irregularly bisinuate, pubescent.

Scutellum large, triangular, black and smooth.

Elytra black, with irregular rhomboidal cells and white pubescence. Elytra at base as wide as base of pronotum; narrowed at basal third, covering almost whole abdomen, sides of abdomen slightly exposed only in the third quarter. Elytral tubercles not developed; white pubescence concentrated into four broken fasciae at each quarter and several small patches on each elytron. Epipleura black, macropunctate.

Legs black; femora and tibiae macropunctate, with sparse white pubescence. Middle tibiae with small spines on inner sides, hind tibiae with small spines on inner sides and big spines on outer sides. Tarsi black, tarsal claws divergent and simple.

Ventral side black; thorax with irregular rhomboidal cells and short white pubescence. Abdominal ventrites macropunctate around irregular striae, densely pubescent around basal margin of each ventrite.

Variation. Body ($n = 27$) length: 3.28-5.28 (average 4.43) (6 ♂♂ 3.52-4.72, average 4.15; 5 ♀♀ 4.00-5.09, average 4.72) mm, width: 1.36-2.56 (average 2.04) (6 ♂♂ 1.44-2.24, average 1.85; 5 ♀♀ 1.76-2.48, average 2.21) mm, length/width ratio: 2.00-2.50 (6 ♂♂ 2.11-2.50, average 2.26; 5 ♀♀ 2.00-2.27, average 2.14). Antennae serrate from antennomere V. Pubescence slightly variable but \pm uniform. Aedeagus ($n = 2$) length: 0.81-0.82 mm, width: 0.51-0.57 mm, length/width ratio: 1.45-1.57. Aedeagus triangular, widest at base. Basal margin of each paramere with two pubescent spurs (Fig. 19).

Differential diagnosis. *Brachydora crassa* can be easily distinguished from the other species by surface of pronotum and elytra with irregular rhomboidal cells, by pronotal tubercles only slightly indicated and by elytral tubercles missing. For additional characters see Key to species.

Distribution. Madagascar (known from Fianarantsoa and Toamasina provinces).

Remarks. Théry (1937) mentioned a type locality ‘Mahatsinjo (17°40′ S. - 45°5′ E.)’ in his description and the type specimen has locality data ‘Mahatsinjo près Tananarive’. There are several villages named Mahatsinjo on Madagascar (eg. 19°9′30″S, 46°41′11″E Antananarivo prov.; 18°49′1″S 47°34′45″E Antananarivo prov. (now NE part of Antananarivo City); 17°44′48″S, 47°0′58″E Mahajanga prov. (south); 16°59′20″S, 46°39′3″E Mahajanga prov. (north)) but none of them is on coordinates 17°4′S, 45°5′E. According to Viette (1991) ‘... l’étiquette “Mahatsinjo près Tananarive” provenaient de deux petits villages, portant le nom de Mahatsinjo, situés dans les forêts de la vallée de La Mandraka, à 80/ 90 km à l’E. de Tananarive... [...] the label “Mahatsinjo near Tananarive“ comes from two small villages, bearing the name of Mahatsinjo, located in the forests of the valley of La Mandraka, 80/90 km to the E. from Antananarivo...’]. I found a place named Mahatsinjo near Mandraka (18°54′43″S, 47°55′10″E) in an U. S. Army map from 1941 (Geographical Section, General Staff, No. 4243, Published by War Office, 1941. Fourth Edition 1943; <https://maps.lib.utexas.edu/maps/ams/madagascar/txu-pclmaps-oclc-6595341-tananarive-tamatave-14-15.jpg>) on coordinates ca 18°51′51″S, 47°57′59″E (ca 7.3 km NE of Mandraka) but exact location of the type locality is probably impossible.

Brachydora crassa is substantially distinct from the remaining three congeners and it is uncertain if this species belongs to the genus *Brachydora*. There are more than twenty genera in subtribe Toxoscelina from Madagascar described in last hundred years (Obenberger, Théry, Descarpentries, Bellamy) but all works contain only descriptions of individual genera and key to genera is still missing. I did not study all species/genera from this subtribus therefore *Brachydora crassa* is kept in this genus.

***Brachydora deformis* (Fairmaire, 1901)**

(Figs. 12-17, 20)

Discoderes deformis Fairmaire, 1901: 163 (original description); Fairmaire (1902): 350 (noted); Kerremans, 1903: 223 (catalogue); Marie & Lesne, 1917: 40 (catalogue).

Paradora deformis: Théry, 1905: 125 (redescription).

Brachydora deformis: Obenberger (1923): 31 (transferred to *Brachydora*); Bellamy (2001): 59 (catalogue);

Bellamy (2006): 168 (annotated catalogue); Bellamy (2008): 1754 (catalogue); Viette, Bellamy & Aberlenc (2009): 64 (noted).

Type locality. ‘Plateau de Hukuru (Perrier)’ [see ‘Remarks’].

Type material examined. HOLOTYPE (by monotypy): ♀ (6.48×4.00 mm; Figs. 12-14), ‘Hukuru | Perrier [w(c); h] || TYPE [w, p; red letters] || MUSÉUM PARIS | 1906 | Coll. Léon FAIRMAIRE [blue, p] || deformis | Frm | A. Théry det. [w, h/p]’ (MNHN, ex coll. Fairmaire).

The specimen was provided with an additional red printed label: ‘HOLOTYPE | (by monotypy) | *Discoderes* | *deformis* | FAIRMAIRE, 1901 | David Frank labelled XI.2022 [date handwritten]’ and also white printed label: ‘*Brachydora* | *deformis* | (FAIRMAIRE, 1901) | David Frank det. XI.2022 [date handwritten]’.

Additional material examined (2 ♂♂, 4 unsexed specimens): MADAGASCAR: Madag., 2 unsexed (MNHN, ex coll. Sicard); ‘Madagascar | Fairmaire [w, h] || *Brachydora* | *deformis* | Fairm | PARATYPE [w, h/p] (Théry’s label)’, 1 ♂ (NHMB, ex coll. Frey) (labelled as paratype, see ‘Remarks’); FIANARANTSOA PROV.: Ambongo, Perrier,

1 unsexed (MNHN, ex coll. Perrier de la Bathie); TOLIARA PROV.: Zombitse-Vohibasia N.P., Isoky forest, river, Ambakak, 658m, 22°40.852'S 44°51.455'E, 19/1 2014, dr. Häckel lgt., 1 ♂ (NMPC; Figs. 15-17, 20). WITHOUT LOCALITY DATA: 1 unsexed (MNHN, ex coll. Fairmaire).

Redescription of holotype. Preserved ♀ specimen (Figs. 12, 13), only antennae missing from antennomere IV [or V respectively]. Right ventral part of specimen is covered by glue and potential damage of legs is not visible. Length 6.48 mm, width 4.00 mm, length/width ratio: 1.62.

Body broadly elliptic, black with short white pubescence concentrated into fasciae or patches.

Head black, macropunctate around irregular striae, frons with sparse short white pubescence. Eyes large, oval. Frons 3.0× as wide as diameter of eye, impressed with shallow medial sulcus. Antennae black; maxillae, labium, maxillary palpi and labial palpi brown, densely pubescent.

Pronotum trapezoidal, narrowing anteriorly, black, macropunctate around irregular striae, moderately densely micropunctate, 2.0× as wide as long. Anterior margin arcuate, lobe protruding. Pronotal principal tubercle slightly indicated; pronotal minor tubercles well developed. Small shallow impression on each side of pronotum and sides before base with short white pubescence. Lateral margin black, strongly curved before base. Basal margin moderately bisinuate.

Scutellum large, triangular, black and smooth.

Elytra black, macropunctate around irregular striae, moderately densely micropunctate. Slightly narrower than pronotum at base; narrowed at mid-length, not covering whole abdomen, sides of abdomen exposed in middle third. Elytral humeral tubercles big and sharp, sutural and apical tubercles small and rounded. Short white pubescence concentrated into two short fasciae at apical third and before apex and one patch at basal third on each elytron. Epipleura widened at basal quarter, macropunctate.

Legs black; femora and tibiae macropunctate with sparse short white pubescence. Tarsi black, tarsal claws divergent and simple.

Ventral side densely macropunctate around irregular striae with short white pubescence. Hypomeron and metasternum with striae at apical half and irregular cells at basal half, metasternum with short white pubescence at central part. Abdominal ventrites densely macropunctate around irregular striae, short white pubescence denser at central and apical parts of each ventrite.

Variation. Body (n = 5) length: 5.09-6.48 (average 5.91) mm, width: 3.00-4.00 (average 3.50) mm, length/width ratio: 1.62-1.78 (average 1.69). Pronotal minor and elytral humeral tubercles are always well developed, the others have variable size, sometimes only slightly indicated. Antennae serrate from antennomere V. Middle tibiae with small spines on inner sides, hind tibiae with small spines on inner sides and big spines on outer sides (it is not visible on the type specimen because legs are submerged in glue). Aedeagus (n = 1) length: 1.25 mm, width: 0.66 mm, length/width ratio: 1.89. Aedeagus widely rhomboidal, widest at apical quarter. Apical sides of parameres with dense pubescence (Fig. 20).

Differential diagnosis. *Brachydora deformis* can be distinguished from *B. sicardi* by having pronotal principal tubercule slightly indicated, by elytral humeral tubercules bigger than elytral sutural tubercules and by widely rhomboidal aedeagus; from *B. granulum* and *B. crassa* by broadly elliptic body, and from *B. crassa* also by surface of pronotum and by elytra with macropunctures around irregular striae. For additional characters see Key to species.

Distribution. Madagascar (known from Fianarantsoa and Toliara provinces).

Remarks. Fairmaire (1901) mentioned ‘un seul individu’ in his description of *Discoderes deformis*. I studied a specimen from NHMB (ex coll. Frey) labelled ‘Brachydora | deformis | Fairm | PARATYPE [w, h/p] (Théry’s label and handwriting)’. This specimen is not included in the type series and it was provided with an additional red printed label: ‘This specimen is not | PARATYPE because this | species was described | only from one specimen | David Frank XI. 2022’.

‘Plateau de Hukaru’ is incorrect transcription of Plateau de l’Ankara (or Massif de l’Ankara, or Causses de l’Ankara) (Viette, 1991) ca 75 km SW of Maevatanàna on position ca 17°20’42’’S, 46°14’24’’E.

***Brachydora granulum* (Fairmaire, 1902)**

(Figs. 9-11)

Discoderes granulum Fairmaire, 1902: 350 (original description); Théry, 1905: 116 (redescription); Marie & Lesne, 1917: 40 (catalogue).

Brachydora granulum: Obenberger, 1928: 342 (transferred to *Brachydora*); Obenberger, 1935: 795 (catalogue); Bellamy (2001): 59 (catalogue); Bellamy (2006): 168 (annotated catalogue); Bellamy (2008): 1755 (catalogue).

Type locality. ‘Ankarahitra (*H. Perrier*)’ [see ‘Remarks’].

Type material examined. LECTOTYPE (present designation): unsexed specimen (3.28×1.44 mm; Figs. 9-11), ‘Hukirih | Perrier [w(c); h] || TYPE [w, p; red letters] || MUSÉUM PARIS | 1906 | Coll. Léon FAIRMAIRE [blue, p] || *Discoderes | granulum | Frm Madag [w(c), h]’* (MNHN, ex coll. Fairmaire).

The specimen was provided with an additional red printed label: ‘LECTOTYPE | *Discoderes | granulum | FAIRMAIRE, 1902 | David Frank des. XI.2022 [date handwritten]’* and also white printed label: ‘*Brachydora | granulum | (FAIRMAIRE, 1902) | David Frank det. XI.2022 [date handwritten]’*.

Redescription of lectotype. Preserved unsexed specimen (Figs. 9, 10), only left fore leg without last tarsomere. Ventral part of specimen is covered by glue and potential damage of other legs is not visible. Length 3.28 mm, width 1.44 mm, length/width ratio: 2.28.

Body narrowly elliptic, black with sparse short white pubescence, on elytra concentrated into patches.

Head black, macropunctate around irregular striae, frons with sparse short white pubescence. Eyes oval. Frons 4.2× as wide as diameter of eye, impressed with shallow medial sulcus. Antennae black, serrate from antennomere V.

Pronotum trapezoidal, narrowing anteriorly with rounded sides, black, macropunctate around irregular striae, sparsely micropunctate, 2.1× as wide as long. Anterior margin arcuate, lobe protruding. All pronotal tubercules small but developed; pronotal principal

tubercle bigger than pronotal minor tubercles. Small shallow impression on each side of pronotum. Lateral margin black, strongly sinuate curved before base. Basal margin irregularly bisinuate, pubescent.

Scutellum large, triangular, black and smooth.

Elytra black, macropunctate around irregular striae, moderately densely micropunctate. Slightly narrower than pronotum at base; narrowed at mid-length, not covering whole abdomen, sides of abdomen exposed in middle third. All elytral tubercles small but developed, rounded. Short white pubescence concentrated into three small patches at thirds and before apex on each elytron. Epipleura black, macropunctate.

Legs black; femora and tibiae macropunctate around short striae, with sparse short white pubescence. Tarsi black, tarsal claws divergent and simple.

Ventral side densely macropunctate around irregular striae with short irregular white pubescence.

Differential diagnosis. *Brachydora granulum* can be distinguished from *B. deformis* and *B. sicardi* by narrowly elliptic body and small tubercles, and from *B. crassa* by surface of pronotum and elytra with macropunctures around irregular striae. For additional characters see Key to species.

Distribution. Madagascar (known from Mahajanga province).

Remarks. Fairmaire (1902) did not specify explicitly how many specimens he had at his disposal when describing *Discoderes granulum* nor mentioned any depository. He mentioned only a single length measurement ‘Long. *cir* 3 mill.’ which is almost identical to length of a specimen from Fairmaire’s collection in MNHN (3.28 mm). Therefore the specimen is designated as a lectotype in order to conserve the status of this taxon and avoid any further misinterpretations.

Fairmaire (1902) presents ‘Ankarahitra (*H. Perrier*)’ as a type locality in his description but ‘Hukirih | Perrier’ is written on a locality label (Fig. 11). It is probably misinterpretation of Hukaru (or Hukuri). ‘Plateau de Hukaru’ is incorrect transcription of Plateau de l’Ankara (or Massif de l’Ankara, or Causses de l’Ankara) (Viette, 1991). Ankirihitra is located on north border of Plateau de l’Ankara (Viette, 1991) on coordinates 16°46’19”S, 46°26’36”E.

***Brachydora sicardi* (Théry, 1912)**

(Figs. 1, 18, 21-31)

Paradora Sicardi Théry, 1912: 118 (original description).

Brachydora Sicardi: Obenberger (1923): 31 (transferred to *Brachydora*); Obenberger, 1935: 795 (catalogue); Bellamy (2001): 59 (catalogue); Bellamy (2006): 169 (annotated catalogue); Bellamy (2008): 1755 (catalogue).

Brachydora monstrum Obenberger, 1923: 31 (original description, incl. Fig. 4); Obenberger, 1935: 795 (catalogue); Bellamy (2001): 59 (catalogue); Bellamy (2003): 75 (catalogue, noted as type species of *Brachydora*); Bellamy (2006): 168 (annotated catalogue); Bellamy (2008): 1755 (catalogue). **syn. nov.**

Type localities. *B. sicardi*: ‘Madagascar, Montagne d’Ambre’ [Madagascar, Antsiranana Prov., NP Montagne d’Ambre, 12°34’17”S, 49°9’44”E]; *B. monstrum*: ‘Madagascar’.

Type material examined. *Brachydora sicardi*: LECTOTYPE (present designation): unsexed specimen (4.40×2.64 mm; Figs. 23-25), 'Mont.d'Ambre | Madagasc. | Sicard [w, h] || Brychydora | monstrum | Ob. | = sicardi | Thery | Sur les Types [w, h] || Paradora | Sicardi | Thery | TYPE [w, h/p]' (MNHN).

PARALECTOTYPES (1 ♂, 8 unsexed): 2 unsexed specimen (on one pin), 'Mt.d'Ambre, | Madagascar. [w, p] || MUSEUM PARIS | 1930 | COLL SICARD [blue, p] || Sicardi m | A. Théry det. [w, h/p]' (MNHN, ex coll. Sicard); 3 unsexed specimen (two on one pin; one singl), 'Mt.d'Ambre, | Madagascar. [w, p] || MUSEUM PARIS | 1930 | COLL SICARD [blue, p] || Sicardi m | Thery det. [w, h/p]' (MNHN, ex coll. Sicard); 2 unsexed specimen (on one pin), 'Mt.d'Ambre | Madagascar. [w, p] || MUSEUM PARIS | 1930 | COLL SICARD [blue, p] || Sicardi m | Thery det. [w, h/p]' (MNHN, ex coll. Sicard); 1 ♂ (Figs. 21, 22, 26 - 28), 1 unsexed 'Mt.d'Ambre, | Madagascar. [w, p] || Brachydora | Sicardi | Thery | PARATYPE [w, h/p]' (NHMB, ex coll. Frey).

All specimens were provided with an additional red printed label: 'LECTOTYPE [or PARALECTOTYPE respectively] | *Paradora* | *sicardi* | THÉRY, 1912 | David Frank des. XI.2022 [date handwritten]' and also white printed label: '*Brachydora* | *sicardi* | (THÉRY, 1912) | David Frank det. XI.2022 [date handwritten]'.

Brachydora monstrum: LECTOTYPE (present designation): ♀ (5.05×3.18 mm; Figs. 1, 18, 29-31), 'Madagascar [w, h] || TYPUS [r, p] || Mus. Nat. Prague | Inv. 23588 [orange, p/h] || Brachydora | Monstrum | m. Type | Det. D^r Obenberger [w, h/p]' (NMPC).

The specimen was provided with an additional red printed label: 'LECTOTYPE | *Brachydora* | *monstrum* | OBERBERGER, 1923 | David Frank des. XI.2022 [date handwritten]' and also white printed label: '*Brachydora* | *sicardi* | (THÉRY, 1912) | David Frank det. XI.2022 [date handwritten]'.

Additional material examined (6 unsexed specimens): MADAGASCAR: ANTSIRANANA PROV.: Madagascar Est, Belalona, 30 km S. O. Sambava, II. 1970, Vadon et Peyrieras; 3 unsexed (2 MNHN; 1 DFPC); MAHAJANGA PROV.: Soalala, Perrier, 1 unsexed (MNHN, ex coll. Fairmaire). WITHOUT LOCALITY DATA: 2 unsexed (MNHN).

Redescription of lectotype (♂, NHMB). Preserved ♂ specimen (Figs. 26-28), only part of right hind tarsus is missing, and parts of left fore leg, left antenna and right hind tarsus are broken off and glued separately. Length 4.64 mm, width 2.54 mm, length/width ratio: 1.82.

Body broadly elliptic, black with sparse and very short white pubescence.

Head black, macropunctate around irregular striae, frons with sparse short white pubescence at central part of frons. Eyes large, oval. Frons 3.0× as wide as diameter of eye, impressed with shallow medial sulcus. Antennae black, serrate from antennomere V; maxillae, labium, maxillary palpi and labial palpi dark brown, pubescent.

Pronotum trapezoidal, narrowing anteriorly with rounded sides, black, macropunctate around irregular striae, sparsely micropunctate, 1.9× as wide as long. Anterior margin arcuate, lobe protruding. All pronotal tubercles well developed; pronotal principal tubercle bigger than pronotal minor tubercles. Small shallow impression on each side of pronotum. Lateral margin black, strongly sinuate curved before base. Basal margin irregularly bisinuate.

Scutellum large, triangular, black and smooth.

Elytra black, macropunctate around irregular striae, sparsely micropunctate, irregularly sparsely pubescent. Slightly narrower than pronotum at base; narrowed at mid-length, not covering whole abdomen, sides of abdomen exposed in middle third. Elytral humeral tubercles big and sharp but slightly smaller than elytral sutural tubercles. Elytral apical tubercles small and rounded. Epipleura widened at basal quarter, macropunctate.

Legs black; femora and tibiae macropunctate with sparse short white pubescence. Middle tibiae with small spines on inner sides, hind tibiae with small spines on inner sides and big spines on outer sides. Tarsi black, tarsal claws divergent and simple.

Ventral side densely macropunctate around irregular striae and pubescent. Hypomeron and prosternal process with irregular cells and short white pubescence. Metathorax and basal

part of abdominal ventrite I densely pubescent at central part. Abdominal ventrites II-IV with irregular short white pubescence.

Aedeagus. Length: 1.25 mm, width: 0.51 mm, length/width ratio: 2.43. Aedeagus narrowly rhomboidal, widest at apical quarter. Apical sides of parameres with sparse pubescence (Fig. 21).

Variation. Body (n = 14) length: 4.40-5.23 (average 4.80) mm, width: 2.55-3.18 (average 2.89) mm, length/width ratio: 1.56-1.82 (average 1.67). Elytral apical tubercles can vary in size, the others are \pm uniform.

Differential diagnosis. *Brachydora sicardi* can be distinguished from *B. deformis* by having all pronotal tubercles well developed, by elytral humeral tubercles smaller than elytral sutural tubercles and by narrowly rhomboidal aedeagus; from *B. granulum* and *B. crassa* by broadly elliptic body, and from *B. crassa* also by surface of pronotum and elytra with macropunctures around irregular striae. For additional characters see Key to species.

Distribution. Madagascar (known from Antsiranana and Mahajanga provinces).

Remarks. Théry (1912) mentioned in his description ‘Un exemplaire de ma collection et collection du D^r SICARD’ but without specification of their type status. I found a specimen in MNHN with Théry’s handwritten locality label and Théry’s determination label ‘Paradora | Sicardi | Thery | TYPE’. This specimen is designated as a lectotype in order to conserve the status of this taxon and avoid any further misinterpretations. There are also seven specimens in MNHN from Sicard’s collection with printed locality labels but without determination labels. They are included into the type series as paralectotypes. I studied also two specimens from NHMB (ex coll. Frey) which have mounting cards and printed locality labels identical to specimens from Sicard’s collection. They have Théry’s determination paratype labels ‘Brachydora | Sicardi | Thery | PARATYPE’ (not *Paradora*) therefore it is clear they were labelled later, but they are also included in the type series as paralectotypes.

Obenberger (1923) did not specify explicitly how many specimens he had at his disposal when describing *Brachydora monstrum* nor mentioned any depository. I studied a specimen from NMPC, where Obenberger’s collection is deposited, which has Obenberger’s handwritten determination label marked ‘Type’. Therefore the specimen is designated as a lectotype in order to conserve the status of this taxon and avoid any further misinterpretations.

I studied the lectotype of *B. monstrum* and found that this specimen is within variability of *B. sicardi* and belong to this taxon. Therefore *B. monstrum* is synonymized with *B. sicardi*.

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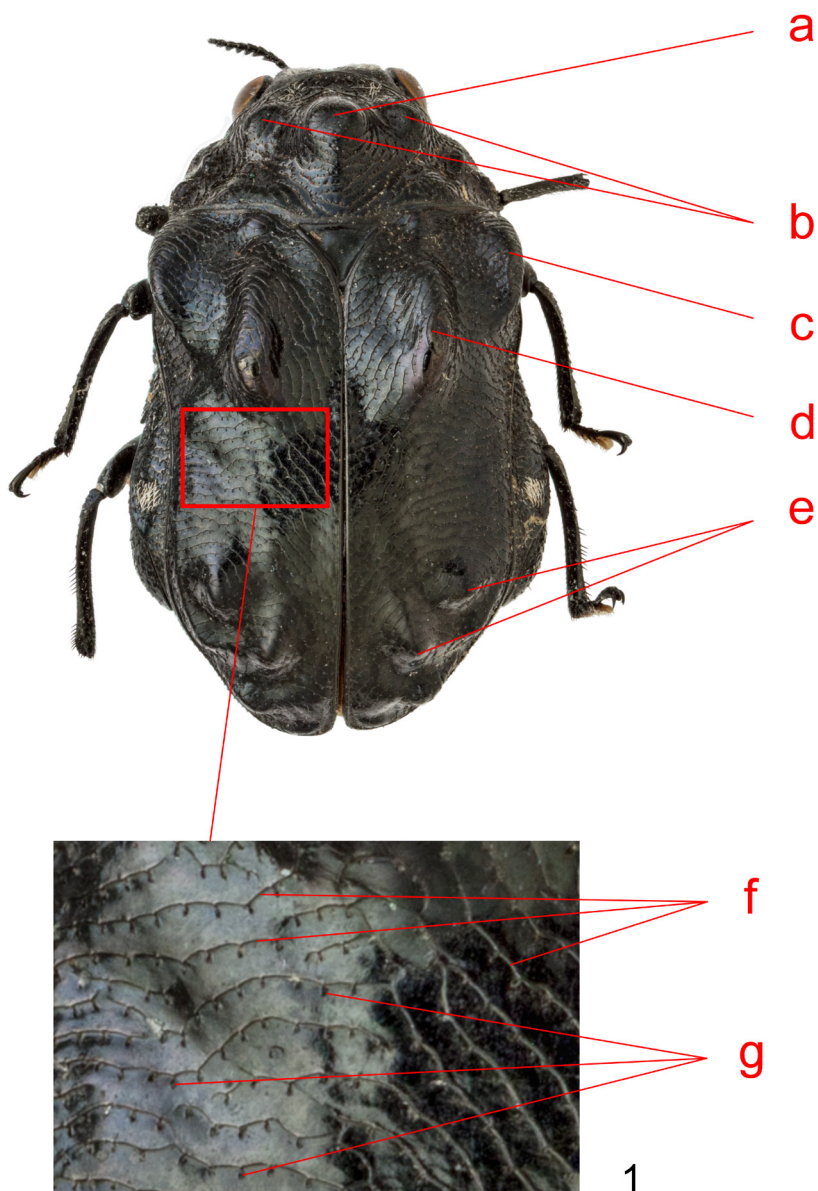
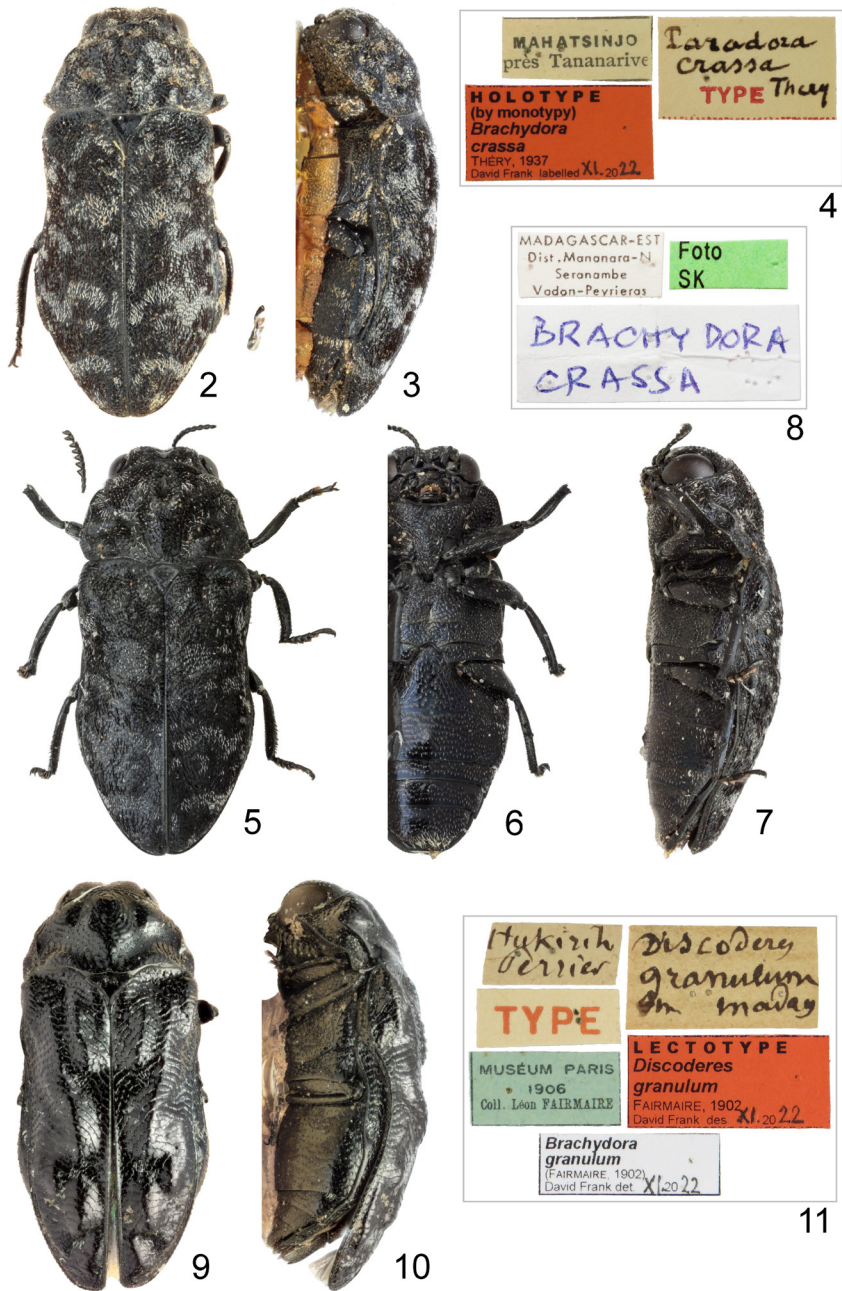


Fig. 1. *Brachydora* specific terms of dorsal morphology: a- pronotal principal tubercule; b- pronotal minor tubercules; c- elytral humeral tubercule; d- elytral sutural tubercule; e- elytral apical tubercules; f- striae; g- macropunctures (*B. monstrum* Obenberger, 1923 (lectotype, ♀ 5.05 mm) = *B. Sicardi* Théry, 1912) © S. Vrabec.



Figs. 2-11. 2-4. *Brachydora crassa* Théry, 1937 (holotype, 4.40 mm). 5-8. *B. crassa* (♂ 4.50 mm, NMPC) © S. Vrabec. 9-11. *B. granulum* (Fairmaire, 1902) (lectotype, 3.28 mm). 2, 5, 9- dorsal view; 6- ventral view; 3, 7, 10 - lateral view; 4, 8, 11- labels.



12



13



14

E AF. SW MADAGASCAR Toliara Prov.
Zombitse-Vohibasia N.P. Isoky forest, river
Ambakak, 658m 22°40'852"S 44°51'455"E
19/1 Exp.M. Trýzna-2014 lgt dr.Hackel

17



15



16



18

0,5 mm



19



20

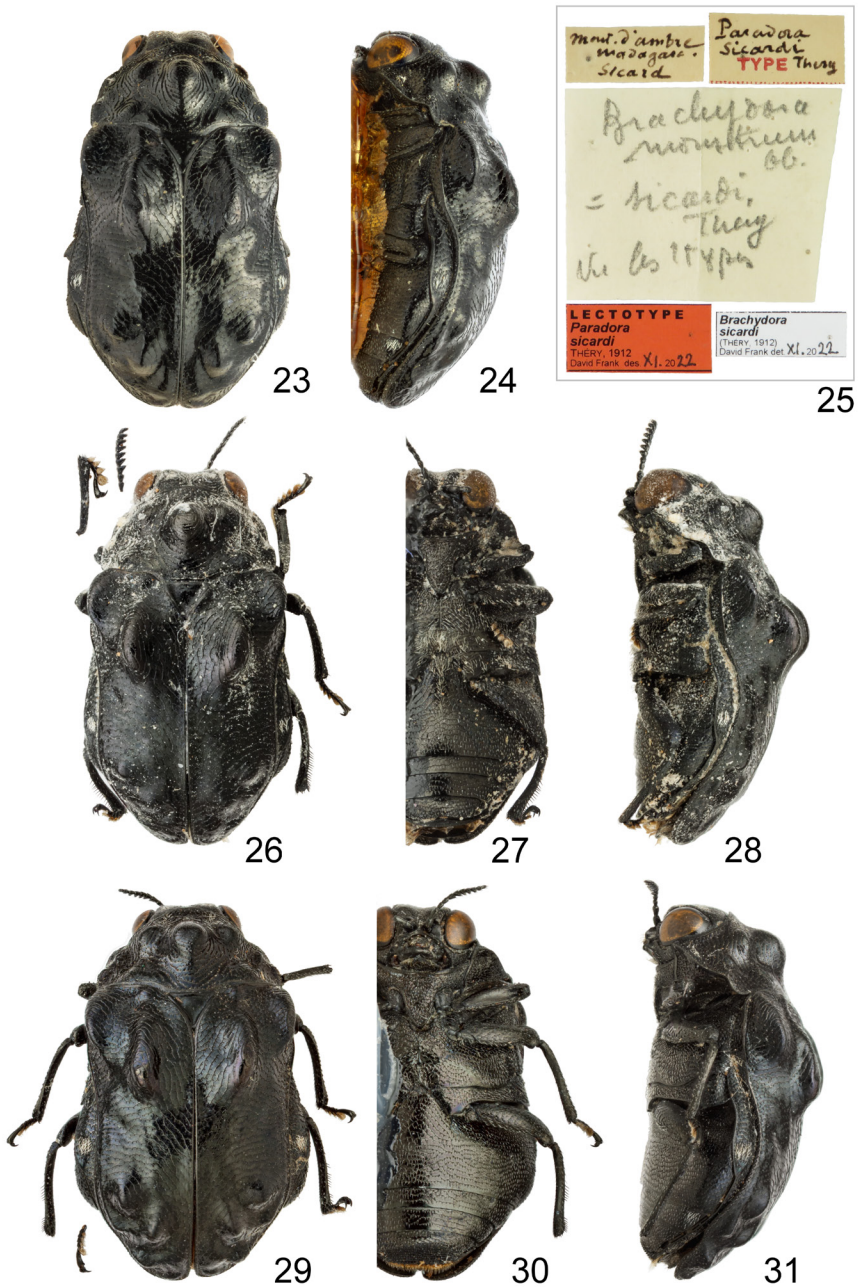


21



22

Figs. 12-22. 12-14. *Brachydora deformis* (Fairmaire, 1901) (holotype, 6.48 mm). 15-17. *B. deformis* (♂ 6.32 mm, NMPC) © S. Vrabec. 18. *B. monstrum* Obenberger, 1923 (lectotype) = *B. Sicardi* Théry, 1912, © S. Vrabec. 19. *B. crassa* Théry, 1937 (NMPC, ♂ 4.50 mm) © S. Vrabec. 20. *B. deformis* (♂ 6.32 mm, NMPC) © S. Vrabec. 21-22. *B. sicardi* Théry, 1912 (paralectotype ♂ 4.64 mm, NHMB) © S. Vrabec. 12, 15- dorsal view; 13, 16- lateral view; 14, 17, 18, 22- labels; 19-21- aedeagus.



Figs. 2-11. 23-25. *Brachydora sicardi* Théry, 1912 (lectotype, 4.40 mm). 26-28. *B. sicardi* Théry, 1912 (paralectotype, ♂ 4.64 mm, NHMB) © S. Vrabec. 9-11. *B. monstrum* Obenberger, 1923 (lectotype, 5.05 mm) = *B. Sicardi* Théry, 1912, © S. Vrabec. 23, 26, 29- dorsal view; 27, 30- ventral view; 24, 28, 31- lateral view; 25- labels.

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