European Journal of Taxonomy 767: 40–54
https://doi.org/10.5852/ejt.2021.767.1485
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ISSN 2118-9773
www.europeanjournaloftaxonomy.eu
2021 · Frolov A.V. & Akhmetova L.A.

Research article

urn:lsid:zoobank.org:pub:9B651F61-7F2B-4D46-9390-4F54F8AEB0AE

Review of the Orphninae (Coleoptera: Scarabaeidae) of Sri Lanka, with description of a new species of genus *Orphnus* Macleay, 1819

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Abstract. The scarab beetles of the subfamily Orphninae (Coleoptera: Scarabaeidae) from Sri Lanka are reviewed. Four species of the genus *Orphnus* Macleay, 1819, are recorded from the island: *O. bicolor* (Fabricius, 1801), *O. parvus* (Wiedemann, 1823), *O. mysoriensis* Westwood, 1845, and *O. medvedevi* sp. nov. Lectotypes are designated for the three former names. Synonymy of *O. detegens* Walker, 1859, and *O. scitissimus* Walker, 1859, is discussed. Keys, illustrations of habitus and male genitalia, and distributional record maps are given for all species.

Keywords. Scarab beetles, Orphnines, Southeastern Asia, Ceylon.

Frolov A.V. & Akhmetova L.A. 2021. Review of the Orphninae (Coleoptera: Scarabaeidae) of Sri Lanka, with description of a new species of genus *Orphnus* Macleay, 1819. *European Journal of Taxonomy* 767: 40–54. https://doi.org/10.5852/ejt.2021.767.1485

Introduction

Scarab beetles of the subfamily Orphninae Erichson, 1847, are mostly distributed in the southern continents. The nominative and most speciose genus of this subfamily, *Orphnus* Macleay, 1819, has its centre of diversity in the Afrotropics. However, six nominal species including the type species of the genus, *O. bicolor* (Fabricius, 1801), are known from Southeast Asia including the island of Sri Lanka. Three species of *Orphnus* have been described from Sri Lanka: *O. nanus* Westwood, 1845, *O. detegens* Walker, 1859, and *O. scitissimus* Walker, 1859. Later, Arrow (1912) suggested that all these names are synonyms of two Indian species, *O. parvus* (Wiedemann, 1823) (the former name) and *O. mysoriensis* Westwood, 1845 (the two latter names).

The literature on Asian Orphninae is limited to primary sources with brief diagnoses of the species and catalogues, and provides a poor foundation for species identification. The shape of the aedeagi and internal sac armature, the most reliable diagnostic characters in Orphninae, were not described or illustrated by past authors.

Reasonable material on Orphninae from Sri Lanka had been accumulated in museums but has never been taxonomically examined. In this material, we recognized four species based on the external morphology and morphology of the male genitalia. Because of the inadequate original descriptions, it was necessary to compare this material with primary types. As a result, we found that the island is inhabited by four species, including two species not recorded from Sri Lanka before: *O. bicolor* and an undescribed species, a putative endemic of the island. The aim of the present contribution is to provide a taxonomic revision of the Orphninae from Sri Lanka, including lectotype designations for published names, description of the new species, re-evaluation of the synonymies proposed by Arrow, detailed illustrations of the male genitalia of all species, as well as a key to species and distribution maps.

Material and methods

Morphological terminology follows Frolov *et al*. (2016). Preparation of specimens, digital images, and locality map follow Frolov *et al*. (2017). Labels of the type specimens are cited verbatim with separate labels separated by a slash '/'.

The material used in this work is deposited in the following organisations:

BMNH = The Natural History Museum, London, United Kingdom
HNHM = Hungarian Natural History Museum (Termeszettudomanyi Muzeum), Budapest, Hungary
IRSNB = Institut Royal des Sciences naturelles de Belgique, Bruxelles, Belgium
MCSN = Museo Civico di Storia Naturale Giacomo Doria, Genova, Italy
MHNG = Muséum d'histoire naturelle de la Ville de Genève, Geneve, Switzerland
MNHB = Museum of Natural History, Leibniz Institute for Evolution and Biodiversity Science, Berlin, Germany
MNHN = Museum national d'histoire naturelle, Paris, France
NHMB = Naturhistorisches Museum, Basel, Switzerland
NMPC = National Museum, Prague, Czech Republic
OUM = Oxford University Museum of Natural History, Oxford, United Kingdom
ZIN = Zoological Institute, Russian Academy of Sciences, St. Petersburg, Russia
ZMUKG = Zoological Museum of Kiel University, Kiel, Germany
ZMUKK = Zoologisk Museum, Universitet Københavns, Copenhagen, Denmark

Results

Taxonomic treatments

Class Insecta Linneaus, 1758
Order Coleoptera Linnaeus, 1758
Family Scarabaeidae Latreille,1802
Subfamily Orphninae Erichson, 1847
Genus *Orphnus* Macleay, 1819

Orphnus mysoriensis Westwood, 1845
Figs 1–2

Orphnus mysoriensis Westwood, 1845: 176.
Orphnus detegens Walker, 1859a: 54 (synonymy by Arrow 1912).
Orphnus scitissimus Walker, 1859b: 220 (synonymy by Arrow 1912).

Orphnus mysoriensis – Lacordaire 1856: 130 (catalogue). — Gemminger & Harold 1869: 1073 (catalogue). — Arrow 1912: 29 (catalogue, synonymy). — Schmidt 1913: 80 (catalogue). — Mittal

2005: 46 (catalogue). — Frolov 2012: 794 (catalogue). — Khaustov & Frolov 2018: 182 (host of *Trochometridium tribulatum* Cross, 1965).
Orphnus detegens – Preudhomme de Borre 1886: 26 (catalogue).
Orphnus scitissimus – Preudhomme de Borre 1886: 26 (catalogue).

Differential diagnosis

Orphnus mysoriensis is similar to *O. medvedevi* sp. nov. in having the pronotum with a more or less developed tubercle on the base medially and the endophallus with one group of spinules. It differs from the latter in body length (8.0–10.0 mm, as opposed to 4.6–6.0 mm in *O. medvedevi* sp. nov.), spinules of endophallus as a rather dispersed group of more than 10 spinules (as opposed to a compact cluster consisting of less than 10 spinules in *O. medvedevi* sp. nov., Fig. 1G vs Fig. 3G), and tubercle on the base of pronotum normally with two punctures (as opposed to always smooth tubercle in *O. medvedevi* sp. nov.).

Type material of *Orphnus mysoriensis*

Lectotype (here designated, Fig. 1A–E, G)
INDIA • ♂; "Mysore / *Orphnus mysoriensis* Westw / TYPE WESTWOOD Trans. Ent. Soc. 4. 1846. P.176. Coll. Hope Oxon. / TYPE COL: 484 1/3 *Orphnus mysoriensis* Westw. HOPE DEPT.OXFORD"; OUM.

Paralectotypes
INDIA • 1 ♂; "Mysore / TYPE COL: 484 2/3 *Aegidium mysoriensis* Westw. HOPE DEPT.OXFORD"; OUM • 1 ♀; "Mysore / TYPE COL: 484 3/3 *Aegidium mysoriensis* Westw. HOPE DEPT.OXFORD"; OUM.

Type material of *Orphnus detegens*

Lectotype (here designated, Fig. 2E–G)
SRI LANKA • ♂; "Type / Ceylon 59 106 / *Orphnus detegens* Walker. a.n.H. (type) / detegens Wlk"; BMNH.

Additional material examined

SRI LANKA – **Central Province** • 3 ♂♂, 4 ♀♀; Kandy; 7°18′ N, 80°38′ E; MHNG • 2 ♂♂; same locality data as for preceding; MNHB • 7 ♂♂; same locality data as for preceding; 1–18 Apr. 1991; Jiri Kolibac leg.; NHMB • 1 ♀; same locality data as for preceding; 18 Mar. 1973; G. Zimmermann leg.; MNHB • 2 ♂♂; same locality data as for preceding; 1908; G.B. Longstaff leg.; OUM • 2 ♂♂, 2 ♀♀; Nalanda; 7°40′ N, 80°39′ E; V. De Poll leg.; MNHN • 1 ♀; same locality data as for preceding; 1889; I.Z. Kannegeter leg.; MNHN • 2 ♂♂, 1 ♀; Peradenyia; 7°16′ N, 80°35′ E; MHNG • 3 ♂♂; same locality data as for preceding; Friederichs S.G. leg.; MNHB • 2 ♂♂; same locality data as for preceding; 2 Apr. 1907; O. John leg.; ZIN • 1 ♂; same locality data as for preceding; 3 Apr. 1907; O. John leg.; ZIN • 2 ♂♂, 1 ♀; same locality data as for preceding; Apr. 1901; MNHN • 5 ♂♂; same locality data as for preceding; Apr. 1914; Friederichs S.G. leg.; MNHB • 2 ♂♂; same locality data as for preceding; Apr. 1939; J. Vinson leg.; MNHN • 1 ♀; Punduloya; 7°01′ N, 80°40′ E; OUM • 1 ♂, 1 ♀; Sigiriya; 7°57′ N, 80°45′ E; Oct. 1977; MCSN • 1 ♂, 1 ♀; same locality data as for preceding; Oct. 1977; NMPC • 1 ♂; Weragamtota; 7°19′ N, 80°59′ E; 13 Sep. 1953; F. Keiser leg.; NHMB. – **North Central Province** • 2 ♀♀; Anuradhapura; 8°19′ N, 80°24′ E; Friederichs S.G. leg.; MNHB • 4 ♂♂; Kala Oya; 8°13′ N, 80°06′ E; 7 Nov. 1983; MNHN • 1 ♂; same locality data as for preceding; 8 Nov. 1983; MNHN • 2 ♂♂; Nat. Park Wilpattu; 8°25′ N, 80°03′ E; 7 Oct. 1982; G.S. Medvedev leg.; ZIN • 1 ♂; Nat. Park Wilpattu, Talawila; 8°25′ N, 80°03′ E; 9 Oct. 1982; G.S. Medvedev leg.; ZIN • 1 ♂, 3 ♀♀; Wilpattu N.P. 17 km WNW entrance Tala Wila; 8°25′ N, 80°03′ E; 8 Oct. 1982; V.F. Zaitzev leg.; ZIN. – **North**

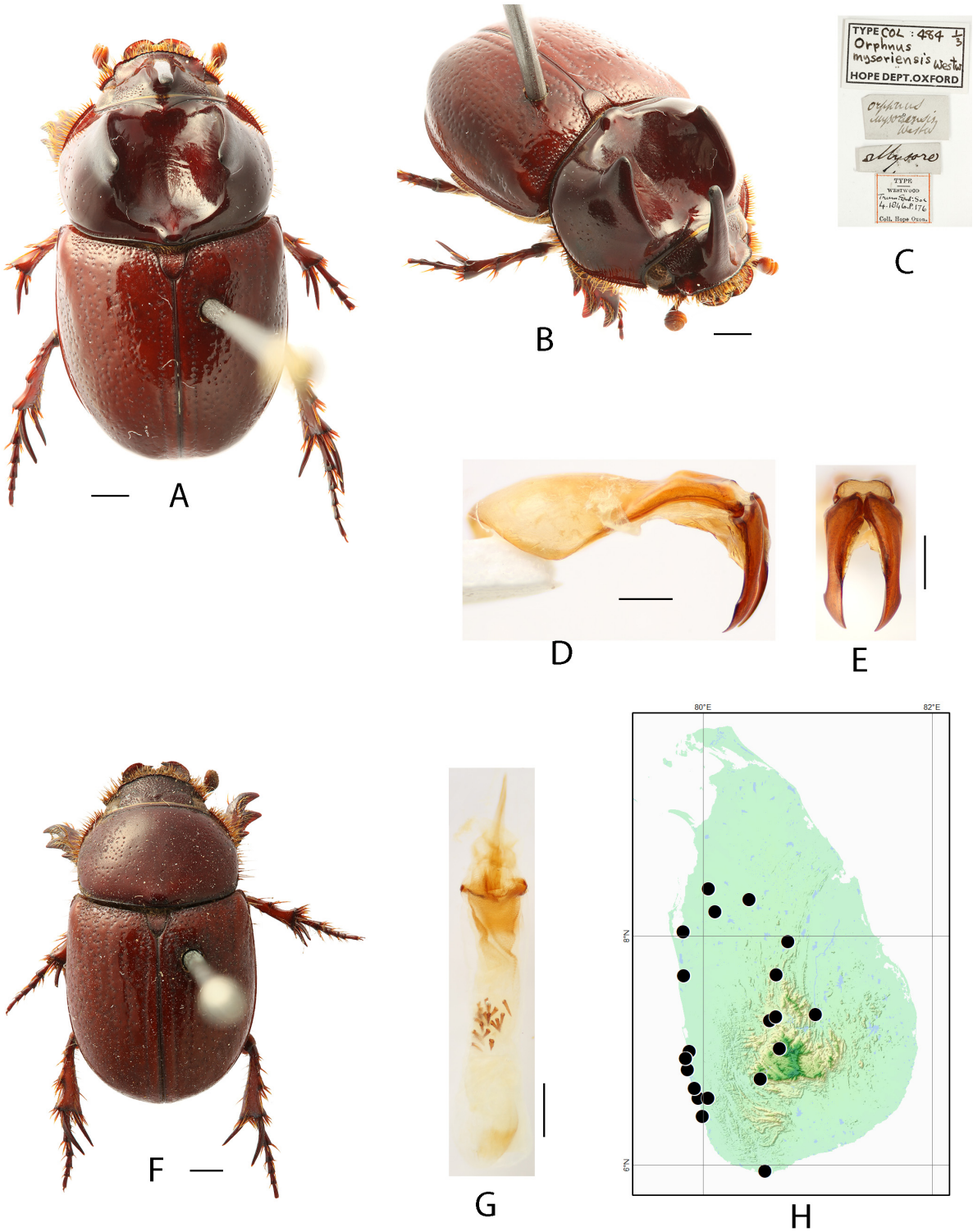

Fig. 1. *Orphnus mysoriensis* Westwood, 1845. **A–E**, **G**. Lectotype, ♂ (OUM). **F**. Paralectotype, ♀ (OUM). **A–B**, **F**. Habitus in dorsal view. **C**. Labels. **D**. Aedeagus in lateral view. **E**. Parameres in dorsal view. **G**. Endophallus. **H**. Distributional record map. Scale bars: A–B, F = 1.0 mm; D–E, G = 0.5 mm.

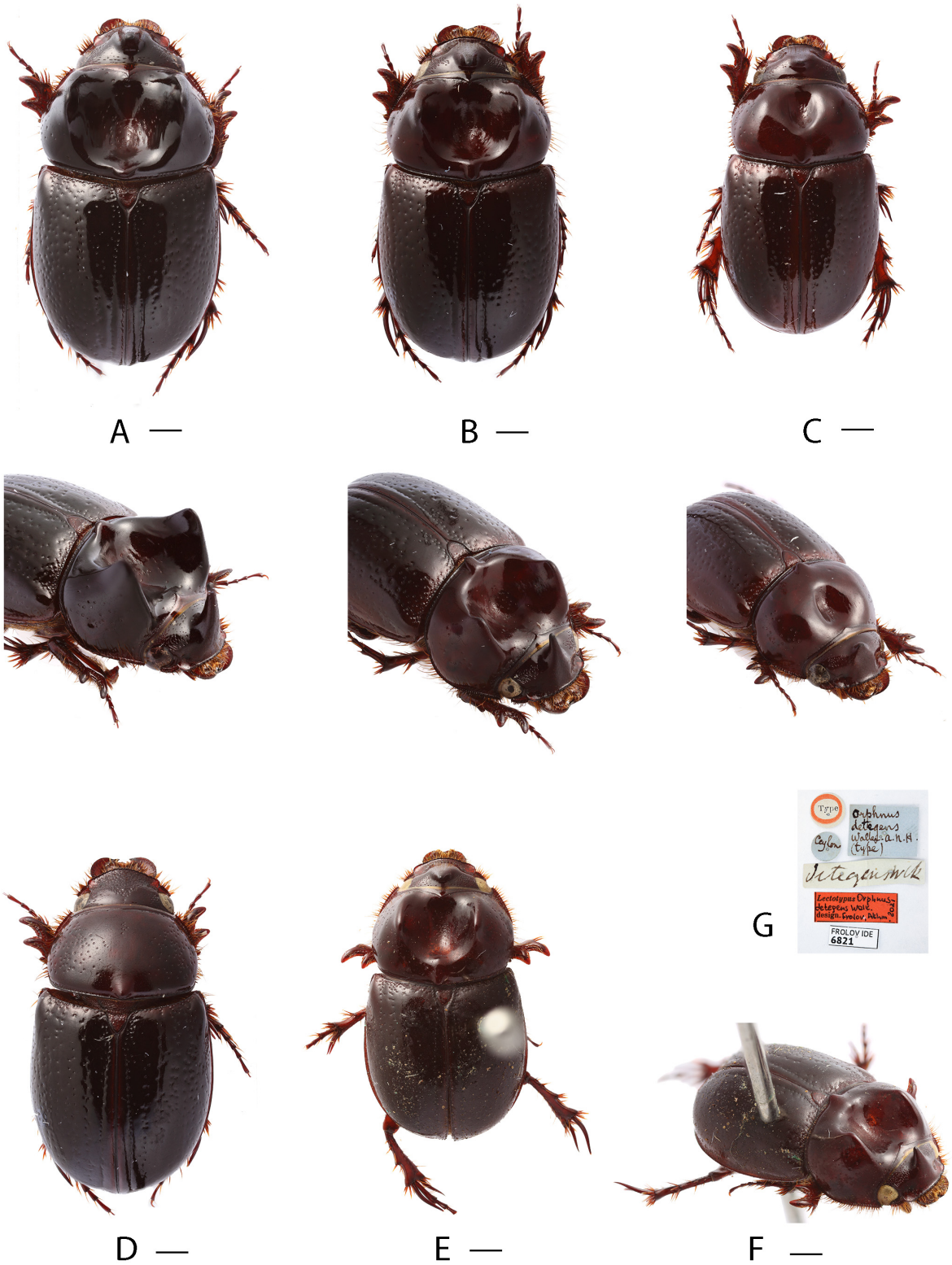

Fig. 2. *Orphnus mysoriensis* Westwood, 1845. **A–C**. ♂ (NHMB). **D**. ♀ (NHMB). **E–G**. Lectotype of *Orphnus detegens* Walker, 1859, ♂ (BMNH). **A–F**. Habitus in dorsal view. **G**. Labels. Scale bars = 1.0 mm.

Western Province • 2 ♂♂, 1 ♀; Puttalam; 8°02′ N, 79°50′ E; 1899; W. Horn leg.; MNHN • 1 ♂; Rajakadaluwa; 7°39′ N, 79°50′ E; 22 Aug. 1953; F. Keiser leg.; NHMB. – **Sabaragamuwa Province** • 2 ♀♀; Sabaragamuwa, Ratnapura; 6°45′ N, 80°30′ E; 20 Jan. 1970; Mussard, Besuchet, Lobl leg.; MCSN. – **Southern Province** • 3 ♀♀; Bentota; 6°26′ N, 79°60′ E; 14 Aug. 1978; P. Cabella leg.; MCSN • 1 ♂; same locality data as for preceding; 16 Aug. 1978; P. Cabella leg.; MCSN • 1 ♀; same locality data as for preceding; 20 Aug. 1978; P. Cabella leg.; MCSN • 3 ♂♂, 5 ♀♀; same locality data as for preceding; 23 Mar. 1973; G. Zimmermann leg.; MNHB • 1 ♀; Matara; 5°57′ N, 80°33′ E; 20 Oct. 1953; F. Keiser leg.; NHMB. – **Western Province** • 1 ♀; Colombo; 6°56′ N, 79°51′ E; MNHN • 1 ♂; same locality data as for preceding; MHNG • 1 ♂; same locality data as for preceding; Feb. 1884; MNHB • 1 ♂, 1 ♀; same locality data as for preceding; Mar. 1953; MHNG • 3 ♂♂; Hendala; 6°59′ N, 79°53′ E; 15 Aug. 1979; MNHN • 3 ♀♀; Kalutara; 6°35′ N, 79°58′ E; Mar. 1986; W.U.E. Just leg.; NMPC • 2 ♂♂; Kalutara Distr., Tebuwana; 6°35′ N, 80°03′ E; 13 Mar. 2000; S. Mahunka and L. Mahunka-Papp leg.; HNHM • 1 ♀; Mount Lavinia; 6°50′ N, 79°52′ E; 5 Apr. 1973; G. Benick leg.; MNHB • 5 ♂♂, 4 ♀♀; Wadduwa; 6°40′ N, 79°56′ E; V. De Poll leg.; MNHN. – **Sri Lanka (no exact locality)** • 9 ♂♂, 1 ♀; MNHN • 3 ♂♂, 2 ♀♀; IRSNB • 1 ♂; OUM • 1 ♂; NMPC • 2 ♂♂; ZIN • 4 ♂♂, 5 ♀♀; MNHB • 1 ♂, 1 ♀; MHNG • 1 ♀; Diener leg.; HNHM • 3 ♀♀; Friederichs S.G. leg.; MNHB • 2 ♀♀; S. Niethner leg.; MNHB • 1 ♂; Templeton leg.; OUM • 1 ♂; Walker leg.; BMNH • 2 ♂♂; Wollaston leg.; OUM • 11 ♂♂; 1871; Thwaites leg.; OUM • 2 ♂♂; 1873; Thwaites leg.; OUM • 5 ♂♂; 1889; H.Fruhstorfer leg.; MNHN • 1 ♂; Mar. 1889; H. Fruhstorfer leg.; MNHN.

Variation

Body length of the examined specimens varied from 8.0 to 10.5 mm (males) and from 7.0 to 9.0 mm (females). Head and pronotum armature in males varied from well-developed with long lateral pronotal processes and frontoclypeal horn (Fig. 2A) to excavated pronotum with gibbosities aside of the excavation and frontoclypeal tubercle (Fig. 2C), with intermediate variants (Fig. 2B).

Distribution

The species is distributed rather widely on Sri Lanka except for the eastern part (Fig. 1H).

Orphnus medvedevi sp. nov.
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Fig. 3

Differential diagnosis

Orphnus medvedevi sp. nov. is similar to *O. mysoriensis* in having the pronotum with more or less developed tubercle on base medially and endophallus with one group of spinules. It differs from the latter in shorter body (4.6–6.0 mm, as opposed to 8.0–10.0 mm. in *O. mysoriensis*), spinules of endophallus as a compact cluster consisting of less than 10 spinules (as opposed to a rather dispersed group of more than 10 spinules in *O. mysoriensis*, Fig. 3G vs Fig. 1G), and tubercle on the base of pronotum always smooth (as opposed to having normally two punctures in *O. mysoriensis*).

Etymology

The new species is named after Gleb Sergeevich Medvedev (1931–2009), a Russian coleopterist.

Type material

Holotype

SRI LANKA • ♂; “Shri Lanka Vilpattu [Sri Lanka, Wilpattu] 7.10.1982 G. Medvedev”; ZIN.

Paratypes

SRI LANKA • 2 ♀♀; "Shri Lanka Vilpattu [Sri Lanka, Wilpattu] 8.10.1982 G. Medvedev"; ZIN • 1 ♂, 6 ♀♀; "Sri Lanka. Nat. Park Wilpattu. Talawila 9.X.982. Medvedev"; ZIN • 13 ♂♂, 13 ♀♀; "Sri Lanka, Wilpattu N.P. 17 km WNW entrance Tala Wila, 8.X.1982 V.F. Zaitzev leg."; ZIN.

Description

Male, holotype (Fig. 3A, D–G)

Body. Length 6.0 mm. Colour uniformly brown.

Clypeus. Wide, with convex anterior margin, rounded laterally, finely crenulate. Genae small, not protruding past eyes. Frontal suture indistinct. Clypeus with long, slender horn directed upwards and slightly curved backwards apically. Dorsal surface of head finely punctate. Labrum deeply sinuate in the middle, distinctly protruding past clypeus.

Pronotum. With rounded sides, about 1.5 times as wide as long, with deeply concave disc, conical lateral processes aside excavation, and smooth, rounded tubercle medially near base. Anterior angles acute; posterior angles rounded, indistinct in dorsal view. Pronotum bordered on anterior margin and base. Lateral margins with long, sparse, brown setae. Sides irregularly punctate with round punctures separated by 3–5 puncture diameters.

Scutellum. Subtriangular, narrowly rounded apically, about 1/10 length of elytra.

Elytra. About as long as wide, with distinct humeral humps, widest in middle, lateral margins slightly rounded in basal half. First (sutural) stria distinct, as feebly impressed groove with row of punctures. Other stria before humeral humps as rows of round setiferous punctures, separated by more than 3 their diameters except for base of elytra. Elytral intervals covered with minute punctures.

Wings. Macropterous.

Legs. Protibiae with 3 outer teeth. Lateral margin basad of outer teeth not crenulate. Apical spur of protibia absent. Left protarsus absent. Middle and hind legs similar in shape; metafemora and metatibiae about ⅛ as long as the mesofemora and mesotibiae. Mesotibia and metatibiae somewhat triangular with 2 apical spurs, inner margin almost straight, with 1 transverse keel. Upper spur of tibiae as long as two basal tarsomeres. Claws ⅓ length of apical tarsomere. Femora almost impunctate.

Abdomen. Ventrally irregularly punctate, pubescent, with sparse, long setae. Abdominal sternite 8 medially shorter than sternites 4–7 combined. Pygidium invisible from above, with slightly truncate apex in caudal view. Plectrum triangular with rounded apex, wider than long.

Aedeagus. Parameres relatively short (0.5 length of phallobase), curved downwards, tapering apically, spear-shaped in dorsal view, with feebly visible lateral teeth (Fig. 3D–E). Endophallus with a compact cluster of 6 spinules (Fig. 3G).

Female

Female (Fig. 3H) differs from the male in having a relatively smaller pronotum without armature, frontoclypeus without process, and prothoracic spur present.

Variation

Body length of the paratypes varies from 5.9 to 4.6 mm (males) and 4.7 to 6.0 mm (females). Some of the paratypes have darker elytra. Head and pronotum armature in males paratypes varies from relatively

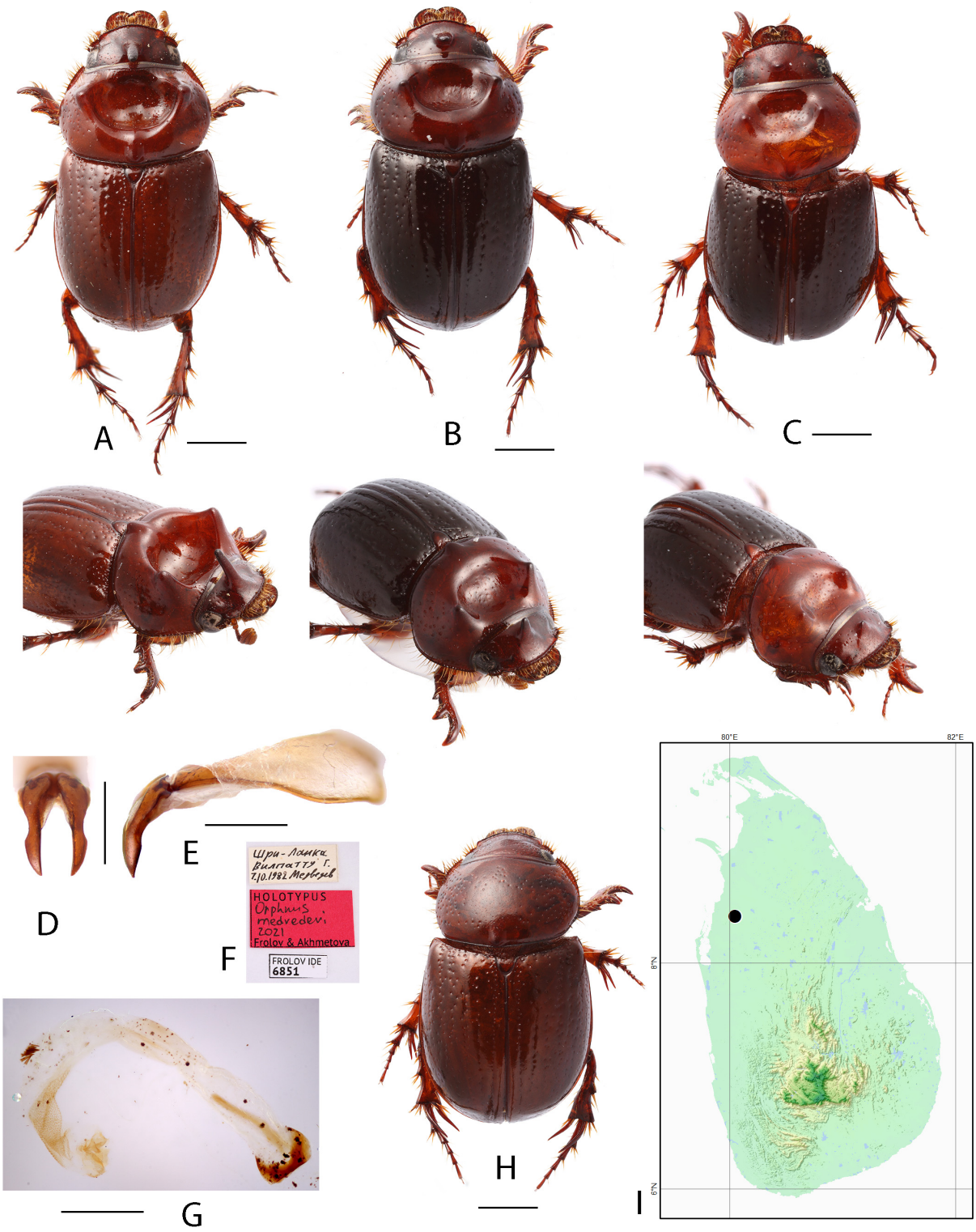

Fig. 3. *Orphnus medvedevi* sp. nov. **A**, **D–G**. Holotype, ♂ (ZIN). **B–C**. Paratypes, ♂ (ZIN). **H**. Paratype, ♀ (ZIN). **A–C**, **H**. Habitus in dorsal view. **D**. Parameres in dorsal view. **E**. Aedeagus in lateral view. **F**. Labels. **G**. Endophallus. **I**. Distributional record map. Scale bars: A–C, H = 1.0 mm; D–E, G = 0.5 mm.

well-developed, similar to that of the holotype, to excavated pronotum with gibbosities beside the excavation and frontoclypeal tubercle (Fig. 3C), with intermediate variants (Fig. 3B).

Distribution

The species is known from one locality in north-western Sri Lanka (Fig. 3I).

Orphnus bicolor (Fabricius, 1801)
Fig. 4

Scarabaeus bicolor Fabricius, 1801: 9.

Orphnus bicolor – MacLeay 1819: 119. — Westwood 1845: 176. — Lacordaire 1856: 130 (catalogue). — Gemminger & Harold 1869: 1072 (catalogue). — Arrow 1912: 29 (catalogue). — Schmidt 1913: 79 (catalogue). — Frolov 2012: 793 (catalogue).

Differential diagnosis

Orphnus bicolor is similar to *O. parvus* in having the pronotum without tubercle on base medially and endophallus with a few groups of spinules. It differs from the latter in having the parameres in dorsal view with small but distinct notches basad of the lateral teeth (Fig. 4F), longer parameres (about 0.7 length of phallobase [Fig. 4E] as opposed to 0.5 length of phallobase in *O. parvus* [Fig. 5E]), and abdominal sternite 8 medially longer than sternites 4–7 combined (as opposed to sternite 8 medially as long as sternites 4–7 combined in *O. parvus*).

Type material

Lectotype (here designated, Fig. 4A–F)
INDIA • ♂; "TYPE / Ind. orient. Daldorff Mus. T. Lund *Geotrupes bicolor* F. / Lectotype *Geotrupes bicolor* F. A.Frolov des. 2016"; ZMUKG.

Paralectotype
INDIA • 1 ♂; "TYPE / Paralectotype *Geotrupes bicolor* F. A.Frolov des. 2016"; ZMUKG.

Additional material examined

SRI LANKA – **Central Province** • 1 ♂; Weragamtota; 7°19′ N, 80°59′ E; 13 Sep. 1953; F. Keiser leg.; NHMB. – **Southern Province** • 1 ♂, 1 ♀; Tissamaharana; 6°17′ N, 81°17′ E; 30 Oct. 1983; MNHN.

Variation

Body length of the examined specimens varies from 7.5 to 9.0 mm (males) and 8.6 mm (female).

Distribution

The species was described form "East India". In Sri Lanka, it is known from two rather distant localities in the centre and on the southern coast (Fig. 4I).

Orphnus parvus (Wiedemann, 1823)
Fig. 5

Geotrupes parvus Wiedemann, 1823: 6.
Orphnus nanus Westwood, 1845: 177 (synonymy by Arrow 1912).

Orphnus parvus – Gemminger & Harold 1869: 1073 (catalogue). — Arrow 1912: 30 (catalogue). — Schmidt 1913: 80 (catalogue). — Frolov 2012: 794 (catalogue).

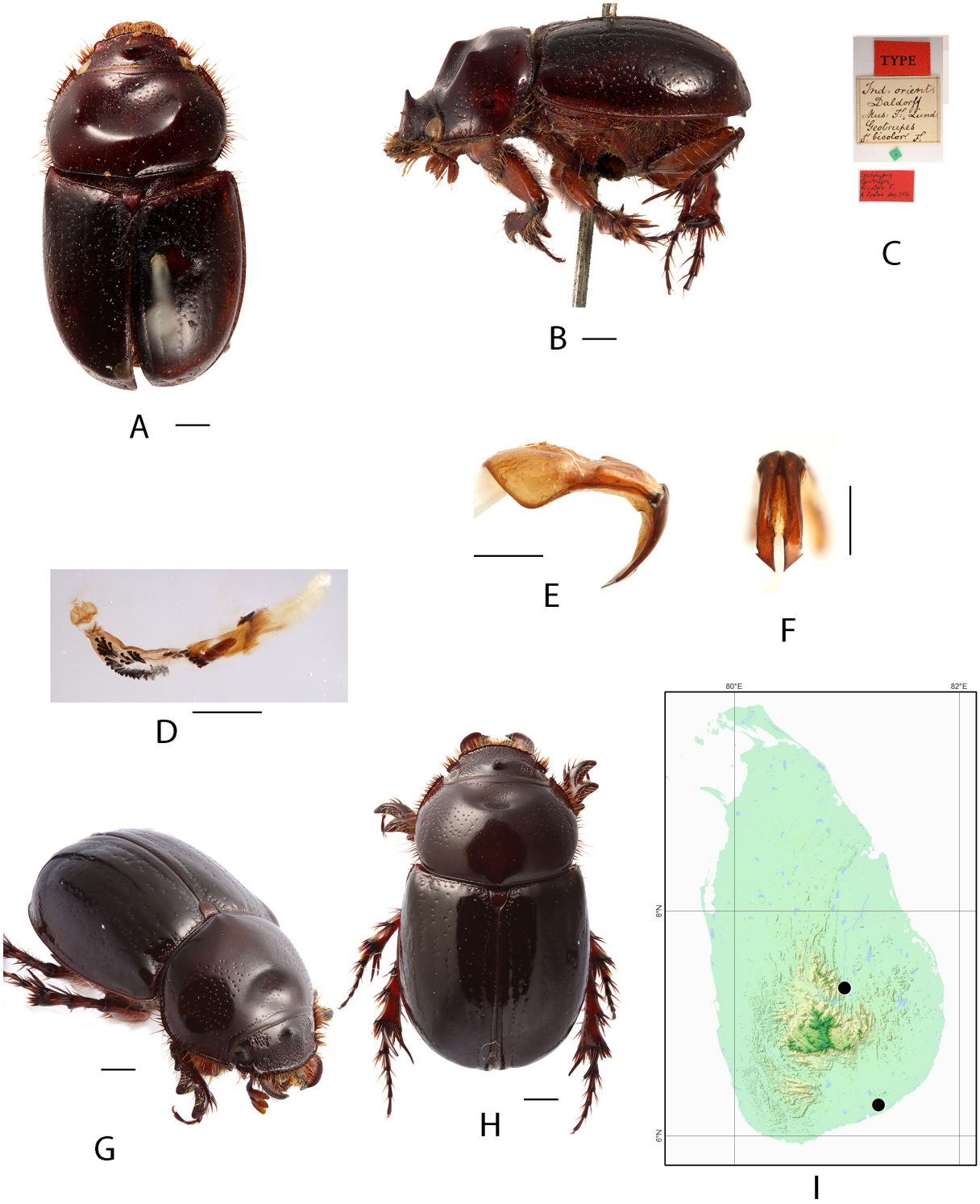

Fig. 4. *Orphnus bicolor* (Fabricius, 1801). **A–F**. Lectotype, ♂ (ZMUKG). **G–H**. ♀ (MNHN). **A–B**, **G–H**. Habitus in dorsal view. **C**. Labels. **D**. Endophallus. **E**. Aedeagus in lateral view. **F**. Parameres in dorsal view. **I**. Distributional record map. Scale bars: A–B, G–H = 1.0 mm; D–F = 0.5 mm.

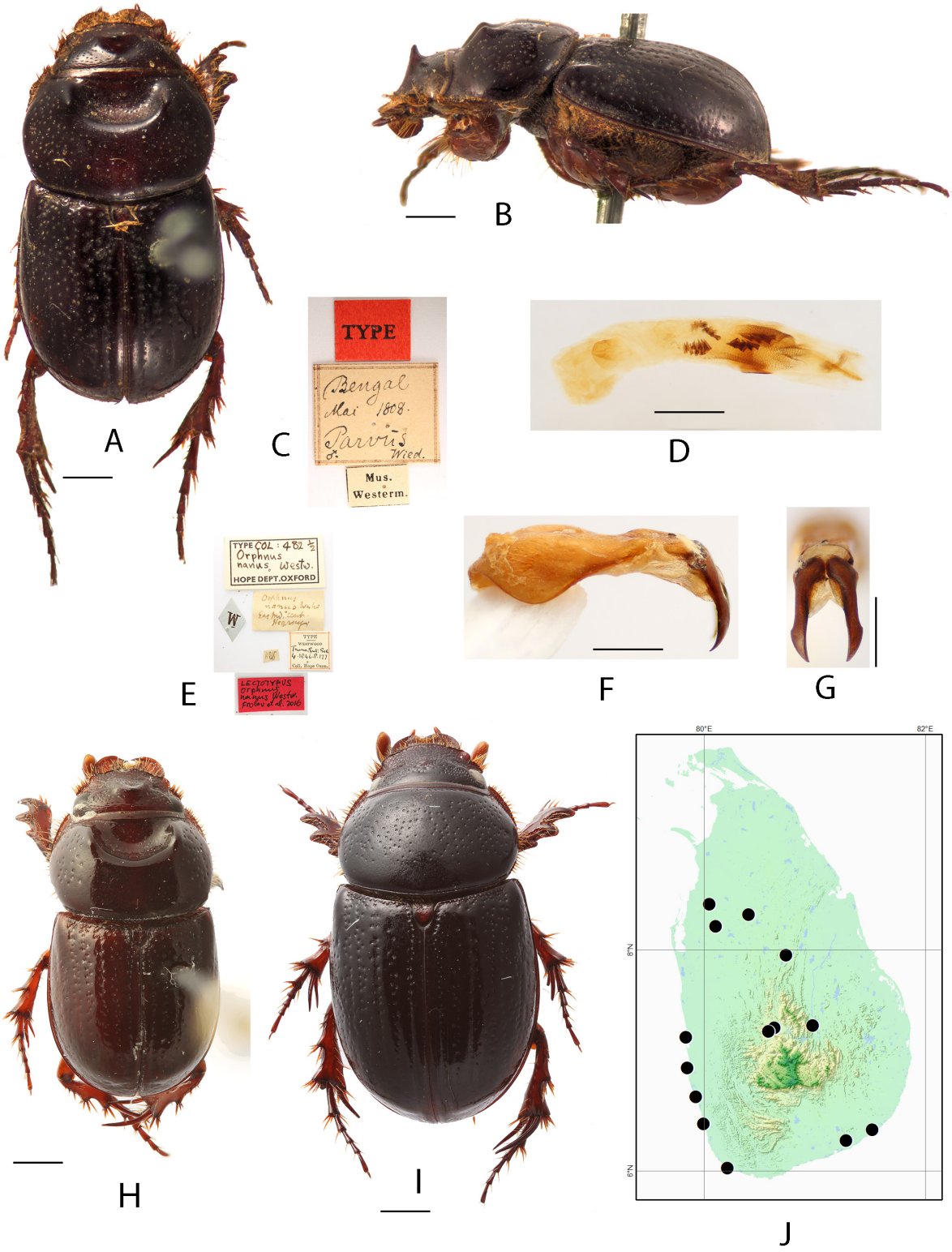

Fig. 5. *Orphnus parvus* (Wiedemann, 1823). **A–C**. Lectotype, ♂ (ZMUKK). **D–H**. Lectotype of *Orphnus nanus* Westwood, 1845, ♂ (ZMUKK). **I**. ♀ (MNHN). **A–B, H–I**. Habitus in dorsal view. **C**, **E**. Labels. **D**. Endophallus. **F**. Aedeagus in lateral view. **G**. Parameres in dorsal view. **J**. Distributional record map. Scale bars: A–B, H–I = 1.0 mm; D, F–G = 0.5 mm.

Differential diagnosis

Orphnus parvus is similar to *O. bicolor* in having the pronotum without a tubercle on base medially and endophallus with a few groups of spinules. It differs from the latter in having the parameres in dorsal view without notches basad of lateral teeth (Fig. 5G), shorter parameres (about 0.5 length of phallobase [Fig. 5E] as opposed to 0.7 length of phallobase in *O. bicolor* [Fig. 4E]), and abdominal sternite 8 medially as long as sternites 4–7 combined (as opposed to sternite 8 medially distinctly longer than sternites 4–7 combined in *O. bicolor*).

Type material of *Geotrupes parvus*

Lectotype (here designated, Fig. 5A–C)
INDIA • ♂; "Bengal Mai 1808 Parvus ♂ Wied. / Mus. Westerm. / TYPE"; ZMUKK.

Paralectotype
INDIA • 1 ♂; "Mus. Westerm. / TYPE"; ZMUKK.

Type material of *Orphnus nanus*

Lectotype (here designated, Fig. 5D–H)
INDIA • 1 ♂; "TYPE COL : 482 1/2 *Orphnus nanus* Westw. HOPE DEPT.OXFORD / *Orphnus nanus* Westw East Ind [...] Hearsey / TYPE WESTWOOD Trans. Ent. Soc. 4.1846.P.177 Coll. Hope Oxon. / […] / W / LECTOTYPUS *Orphnus nanus* Westw. Frolov et al. 2016"; ZMUKK.

Paralectotype
INDIA • 1 ♂; "TYPE COL : 482 2/2 *Orphnus nanus* Westw. HOPE DEPT.OXFORD / TYPE WESTWOOD Trans. Ent. Soc. 4.1846.P.177 Coll. Hope Oxon. / Prof. Westwood's private collection purchased from Miss Swann 1895 Collected by Gen. Hearsey in India / [9…H] / *Orphnus nanus* Westw"; ZMUKK.

Additional material examined

SRI LANKA • **Central Province** – 2 ♂♂; Kandy; 7°18′ N, 80°38′ E; MHNG • 1 ♀; Peradenyia; 7°16′ N, 80°35′ E; MHNG • 1 ♂, 1 ♀; same locality data as for preceding; Friederichs S.G. leg.; MNHB • 1 ♂; same locality data as for preceding; 3 Apr. 1907; O. John leg.; ZIN • 1 ♀; Sigiriya; 7°57′ N, 80°45′ E; Oct. 1977; MHNG • 2 ♀♀; Weragamtota; 7°19′ N, 80°59′ E; 13 Sep. 1953; F. Keiser leg.; NHMB. – **North Central Province** • 1 ♀; Anuradhapura; 8°19′ N, 80°24′ E; Friederichs S.G. leg.; MNHB • 1 ♂; Kala Oya; 8°13′ N, 80°06′ E; 7 Nov. 1983; MNHN • 1 ♀; same locality data as for preceding; 8 Nov. 1983; MNHN • 1 ♀; Vilpattu Nat. Park, Talawila; 8°25′ N, 80°03′ E; 9 Nov. 1983; G.S. Medvedev leg.; ZIN. – **Southern Province** • 1 ♀; 9 km SW of Yala; 6°22′ N, 81°31′ E; 21 Oct. 1982; V.F. Zaitzev leg.; ZIN • 8 ♂♂; Southern Province, Bentota; 6°26′ N, 79°60′ E; 23 Mar. 1973; G. Zimmermann leg.; MNHB • 1 ♂; Point de Galle; 6°01′ N, 80°13′ E; MHNG • 1 ♂; Tissamaharama; 6°17′ N, 81°17′ E; 8 Aug. 1978; P. Cabella leg.; MCSN • 2 ♂♂, 2 ♀♀; same locality data as for preceding; 30 Oct. 1983; MNHN • 2 ♂♂; Yala; 6°22′ N, 81°31′ E; 21 Oct. 1982; G.S. Medvedev leg.; ZIN. – **Western Province** • 1 ♂; Colombo; 6°56′ N, 79°51′ E; Friederichs S.G. leg.; MNHB • 1 ♂; same locality data as for preceding; Mar. 1953; G. Frey leg.; MHNG • 1 ♂, 1 ♀; Negombo; 7°12′ N, 79°50′ E; 23 Mar. 1973; B. Huttler leg.; NMPC • 1 ♀; Wadduwa; 6°40′ N, 79°56′ E; V. De Poll leg.; MNHN. – **Sri Lanka (no exact locality)** • 2 ♂♂, 1 ♀; OUM • 1 ♀; MHNG • 1 ♂; MNHB • 1 ♂; Friederichs S.G. leg.; MNHB • 1 ♂; Parry leg.; IRSNB • 1 ♂; S. Niethner leg.; MNHB.

Variation

Body length of the examined specimens varies from 6.1 to 8.2 mm (males) and 6.0 to 7.5 mm (females).

Distribution

The species is distributed rather widely throughout Sri Lanka except for the north-eastern part (Fig. 5J).

Key to species of Orphnus from Sri Lanka (males)

1. Pronotum with more or less developed tubercle on base medially (Figs 1A–B, 2A–C, 3A–C). Endophallus with 1 group of spinules (Figs 1G, 3G) 2
– Pronotum without tubercle on base medially (Figs 4A, H, 5A, H). Endophallus with more than 1 distinct group of spinules (Figs 4D, 5D) 3

2. Larger: body length 8.0–10.0 mm. Spinules of endophallus as a rather dispersed group of more than 10 spinules (Fig. 1G). Tubercle on base of pronotum normally with 2 punctures; punctures may be close to each other or indistinct in some specimens .....***Orphnus mysoriensis*** Westwood, 1845
– Smaller: body length 4.6–6.0 mm. Spinules of endophallus in a compact cluster consisting of less than 10 spinules (Fig. 3G). Tubercle on base of pronotum smooth ..... ***Orphnus medvedevi*** sp. nov.

3. Parameres in dorsal view with small but distinct notches basad of lateral teeth (Fig. 4F). Parameres longer, about 0.7 length of phallobase (Fig. 4E). Abdominal sternite 8 medially longer than sternites 4–7 combined .....***Orphnus bicolor*** (Fabricius, 1801)
– Parameres in dorsal view without notches basad of lateral teeth (Fig. 5G). Parameres shorter, about 0.5 length of phallobase (Fig. 5F). Abdominal sternite 8 medially as long as sternites 4–7 combined .....***Orphnus parvus*** (Wiedemann, 1823)

Discussion

Since the shape of aedeagi and internal sac armature were not utilized by the previous authors dealing with Asian Orphninae, we decided to re-examine the types of the two species described by Walker from Sri Lanka but later synonymised by Arrow (1912). Walker (1859a, 1859b) described two species of *Orphnus*, *O. detegens* and *O. scitissimus*. In the original description of the former, males and females are mentioned. However, only one specimen of the type series was found in the BMNH collection. This specimen (Fig. 2E–F) is a male designated here as the lectotype. It agrees with the original description of *O. detegens* and the type and other material of *O. mysoriensis* and therefore we can confirm synonymy proposed by Arrow (1912).

Despite every effort was made to trace the type (types) of *O. scitissimus* in the institutions that may house Walker's collection, we failed to find any specimens that could be considered as the types. The original description was apparently based on a female and fits the diagnosis of *O. mysoriensis,* although it is very brief and does not include diagnostic characters of this species. The size indicated (8.5 mm) agrees with *O. mysoriensis* but not with *O. medvedevi* sp. nov., which is significantly smaller. Therefore, we follow Arrow, who might have seen Walker's specimens, and consider of *O. scitissimus* as a synonym of *O. mysoriensis*.

Our results show that the fauna of the Orphninae of Sri Lanka, despite the relatively small size of the island, is comprised of four species and is comparable to the fauna of the whole mainland Asia which is inhabited by five species of *Orphnus* occurring from Northern India to Vietnam (Arrow 1912). Three of the four species also occur in India which can be explained by the relatively recent land connection of Sri Lanka and the Indian Peninsula.

Acknowledgements

We thank Maxwell Barclay (BMNH), Giulio Cuccodoro (MHNG), Alain Drumont (IRSNB), Jiří Hájek (NMPC), Bernd Jaeger (MNHB), Michael Kuhlmann (ZMUKG), Darren Mann (OUM), the

late Otto Merkl (HNHM), Olivier Montreuil (MNHN), Roberto Poggi (MCSN), Alexey Solodovnikov (ZMUKK), and Eva Sprecher (NHMB) for providing access to the specimens and for help during our visits to their institutions. We are especially thankful to Maxwell Barclay, Darren Mann and Amoret Spooner (OUM), and Aidan O'Hanlon (National Museum of Ireland, Dublin) for their help in tracing Walker's types. Two anonymous reviewers provided valuable comments on the draft manuscript. The study was performed in the framework of the Russian State research project AAAA-A19-119020690101-6.

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Manuscript received: 26 April 2021
Manuscript accepted: 27 July 2021
Published on: 6 September 2021
Topic editor: Nesrine Akkari
Section editor: Max Barclay
Desk editor: Pepe Fernández

Printed versions of all papers are also deposited in the libraries of the institutes that are members of the *EJT* consortium: Muséum national d'histoire naturelle, Paris, France; Meise Botanic Garden, Belgium; Royal Museum for Central Africa, Tervuren, Belgium; Royal Belgian Institute of Natural Sciences, Brussels, Belgium; Natural History Museum of Denmark, Copenhagen, Denmark; Naturalis Biodiversity Center, Leiden, the Netherlands; Museo Nacional de Ciencias Naturales-CSIC, Madrid, Spain; Real Jardín Botánico de Madrid CSIC, Spain; Zoological Research Museum Alexander Koenig, Bonn, Germany; National Museum, Prague, Czech Republic.

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Zeitschrift/Journal: European Journal of Taxonomy

Jahr/Year: 2021

Band/Volume: 0767

Autor(en)/Author(s): Frolov Andrey V., Akhmetova Lilia A.

Artikel/Article: Review of the Orphninae (Coleoptera: Scarabaeidae) of Sri Lanka, with description of a new species of genus Orphnus Macleay, 1819 40-54