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New species and records of the genus *Basanus* Lacordaire (Insecta: Coleoptera: Tenebrionidae)*

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New species and records of the genus *Basanus* Lacordaire (Insecta: Coleoptera: Tenebrionidae). - Newly collected specimens of the genus *Basanus* Lacordaire, 1859 from southeastern Asia are presented, including new distributional data and new species: *Basanus halmahericus* sp. n. (Moluccas: Halmahera), *Basanus luzonicus* sp. n. (Philippines: Luzon), *Basanus poringicus* sp. n. (Borneo: Sabah). For *Basanus philippinensis* Gebien, 1925 lectotype and paralectotypes are designated.

Keywords: Tenebrionidae - *Basanus* - new species - distribution - figures.

INTRODUCTION

The genus *Basanus* Lacordaire, 1859 was revised by Gebien (1925), a few further species were described by Schawaller (1995) and by Masumoto & Merkl (2003). The congeners are distributed in the Palaearctic Far East (including the Ussuri Region, Korea, Japan and Taiwan), continental southeastern Asia, the Himalayas, the Philippines, the Sunda Islands, Moluccas and New Guinea. In this contribution, accumulated specimens from different collections are presented, including new taxa and new distributional data. Two additional new species are available but are not described because of the lack of males.

The generic and specific characters of *Basanus* have been discussed by Schawaller (1995). Unfortunately, the shape of the aedeagus within this genus is relatively simple and not distinctly modified between the species (compare Figs 1-5). The generic limits of *Basanus* Lacordaire, 1859, *Spiloscapha* Bates, 1873 and *Scaphidema* Redtenbacher, 1849 are still unclear. Doyen *et al.* (1989) listed some adult and larval synapomorphic characters and included *Basanus* in the subtribe Scaphidemini within the tribe Diaperini.

Acronyms of depositories

CHBM	Collection Prof. Dr Hans Bremer, Zoologische Staatssammlung, München
CRGT	Collection Dr Roland Grimm, Tübingen
CSBC	Collection Stanislav Bečvář, České Budějovice
HNHM	Hungarian Natural History Museum, Budapest (Dr Ottó Merkl)
MHNG	Muséum d'histoire naturelle, Genève (Dr Giulio Cuccodoro)
NHMB	Naturhistorisches Museum, Basel (Dr Michel Brancucci)
NHMB-F	Naturhistorisches Museum, Basel, collection G. Frey (Dr Eva Sprecher)
SMNS	Staatliches Museum für Naturkunde, Stuttgart (author)
SMTD	Staatliches Museum für Tierkunde, Dresden (Olaf Jäger)

* Contributions to Tenebronidae, no. 55. - For no. 54 see Zootaxa, special issue Martens, 2006.
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THE SPECIES STUDIED

Basanus amamianus Chujo, 1966 Fig. 6

MATERIAL: Japan, Ryukyu Islands, Okinawa, Yona, Kunigami, 18.-20.III.1991, leg. T. Ueno, 1 ex. SMNS.

DISTRIBUTION: Japan, Ryukyu Islands (type locality).

Basanus erotyloides Lewis, 1891

MATERIAL: China, Shaanxi Prov., Taibai Shan above Houzhenzi, 1300-1700 m, 9.VI.-3.VII.1998, leg. J. Martens & P. Jäger, 1 ex. SMNS. – Japan, Ehime Pref., Mt. Takanawasan, 7.V.1997, leg. H. Kan, 2 ex. SMNS. – Japan, Kyushu, Ohita Pref., Yoshibu, 19.VIII.1995, leg. T. Ueno, 2 ex. SMNS. – Annam, Phuc-Son, holotype of syn. *annamitus* Gebien, 1925, SMTD.

DISTRIBUTION: Japan (type locality), China, Indochina.

Basanus fruhstorferi Gebien, 1940 Fig. 7

MATERIAL: S Celebes (Sulawesi), Lompa-Battau, 3000 ft., III.1896, leg. H. Fruhstorfer, holotype NHMB-F (labelled as type), 1 paratype SMTD (labelled as cotype).

DISTRIBUTION: Sulawesi (type locality).

Basanus halmahericus sp. n. Figs 1, 8

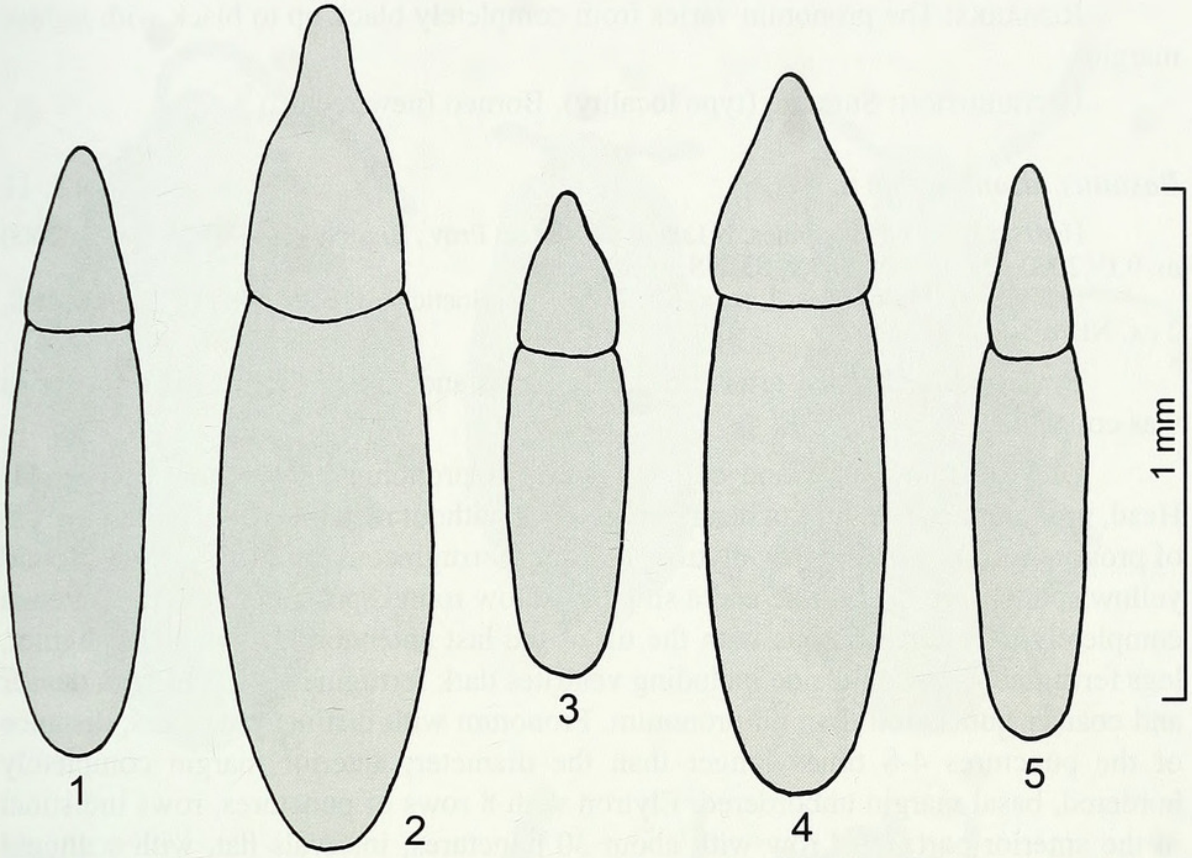
HOLOTYPE (♂): Moluccas (=Maluku), Halmahera, Sidangoli, Batu Putih, 100 m, 23.XI.1999, leg. A. Riedel, SMNS.

PARATYPES: Moluccas, Halmahera, Ibu, Desa Nanas, Gunung (= Mt.) Gamkonora, 100-1000 m, 27.XI.1999, leg. A. Riedel, 2 ex. SMNS. – Moluccas, Halmahera, Buli, Maba, 20-200 m, 6.-7.XI.1999, leg. A. Riedel, 1 ex. SMNS.

ETYMOLOGY: Named after the island Halmahera where the type series was collected.

DESCRIPTION: Shape and colour pattern of pronotum and elytra see Fig. 8. Head, pronotum and scutellum black with greenish metallic shine; elytron with identical metallic shine and with a bigger round yellow spot before the middle and a smaller yellow round spot before the tip; antenna completely black, legs light ferrugineous with darker tibiae; ventral side black, ventrites red ferrugineous. Head with denser and coarser punctation than on pronotum. Pronotum with distinct punctures, distance of the punctures 4-8 times longer than the diameter; anterior margin completely bordered, basal margin unbordered. Elytron with 8 rows of punctures, rows indistinct in the anterior part, third row with about 25 punctures; intervals flat, with scattered punctures; lateral margin to be seen nearly on its total length. Aedeagus see Fig. 1. Body length 7.2-8.0 mm.

DIAGNOSIS: To be recognized by the metallic dorsal side with small and round elytral spots and by the shape of the aedeagus. A similar colour pattern and also a metallic surface possess *Basanus hellus* Gebien, 1925 from the Philippines, but this species is distinctly smaller (body length 4.2 mm) and the body is highly convex, so that the lateral margin of the elytra can be seen in dorsal view only near the shoulders, whereas in *Basanus halmahericus* sp. n. the lateral margin can be seen nearly on its total length.



FIGS 1-5

Aedeagus of *Basanus* species in dorsal view. 1: *B. halmahericus* sp. n., holotype, SMNS. 2: *B. javanus*, aberant non-type, W Malaysia, CSBC. 3: *B. luzonicus* sp. n., holotype, SMNS. 4: *B. philippinensis*, lectotype, NHMB-F. 5: *B. poringicus* sp. n., holotype, MHNG.

Basanus javanus Chevrolat, 1878 Figs 2, 9

MATERIAL: S Sulawesi, Tanah Toraja, Pulu Pulu, 1700 m, 13.-16.VIII.1990, leg. A. Riedel, 5 ex. SMNS. – Sulawesi, Kotamobagu, Modoinding, Gunung (= Mt.) Ambang, 1100-1450 m, 6.XII.1999, leg. A. Riedel, 1 ex. SMNS. – SE Burma, 5.XI.1989, leg. S. Stahnke, 1 ex. SMNS. – NE Laos, Hua Phan Prov., Ban Saluei, Phu Phan Mt, 1500-2000 m, 26.IV.-11.V.2001, leg. J. Bezdek, 2 ex. SMNS. – W Malaysia, Island Tioman, Kampong Tekek, 9.III.1998, leg. L. Dembický & P. Pacholátko, 1 ex. NHMB. – W Malaysia, Perak, Maxwell Hill above Taiping, 900-1000 m, 12.-16.I.1995, leg. S. Bečvář, 1 ex. CSBC. – N Thailand, W Chiang Mai, Doi Suthep Pui NP, 30.V.1999, leg. R. Grimm, 1 ex. CRGT.

REMARKS: The single male from W Malaysia/Maxwell Hill possesses a somewhat different colour pattern with the anterior elytral spots round (Fig. 9) and not banded (Schawaller 1995: fig. 5) as usually present in this species. The other diagnostic characters (thick antennae, ventral side black, shape of the aedeagus: Fig. 2) coincide.

DISTRIBUTION: Java (type locality), Borneo, Sulawesi (new record), Myanmar, Laos, Vietnam, W Malaysia (new record), Thailand (new record).

Basanus longior Gebien, 1925 Fig. 10

MATERIAL: Sumatra, 1 ex. NHMB-F. – W Sumatra, Payakumbuh, Harau Valley, 9.-29.X.1991, leg. A. Riedel, 1 ex. SMNS. – Borneo, Sabah, Mt. Kinabalu NP, Poring Hot Springs, 520 m, 13.V.1987, leg. A. Smetana, 1 ex. SMNS (duplicate from MHNG).

REMARKS: The pronotum varies from completely black up to black with lighter margins.

DISTRIBUTION: Sumatra (type locality), Borneo (new record).

Basanus luzonicus sp. n. Figs 3, 11

HOLOTYPE (♂): Philippines, N Luzon, Mountain Prov., Bontoc Region, NW Barlig, 2000 m, 9.IV.2000, leg. L. Dembický, SMNS.

PARATYPES: Philippines, Luzon, Mt. Polis, leg. Boettcher, 12 ex. SMTD, 2 ex. SMNS, 2 ex. NHMB-F.

ETYMOLOGY: Named after the Philippine Island Luzon, where the type series was collected.

DESCRIPTION: Shape and colour pattern of pronotum and elytra see Fig. 11. Head, pronotum and scutellum dark ferrugineous without metallic shine, lateral margin of pronotum somewhat lighter; elytron also dark ferrugineous and with a bigger round yellow spot before the middle and a smaller yellow round spot before the tip; antenna completely dark ferrugienous with the tip of the last antennomere somewhat lighter, legs ferrugineous; ventral side including ventrites dark ferrugineous. Head with denser and coarser punctation than on pronotum. Pronotum with distinct punctures, distance of the punctures 4-8 times longer than the diameter; anterior margin completely bordered, basal margin unbordered. Elytron with 8 rows of punctures, rows indistinct in the anterior part, third row with about 30 punctures; intervals flat, with scattered punctures; lateral margin to be seen in dorsal view nearly on its total length. Aedeagus see Fig. 3. Body length 5.2-6.2 mm.

DIAGNOSIS: To be recognized by the smaller body size, by the elytral colour pattern, by the indistinct elytral rows and by the shape of the aedeagus. *Basanus luzonicus* sp. n. is quite similar to *Basanus philippinensis* Gebien, 1925 also from the Philippines, but in this species the elytral colour pattern is different (anterior spot transverse, band-like and with sutural interruption, Fig. 12), the punctural rows on the elytra are dense and distinct and the aedeagus is slightly different (compare Figs 3-4).

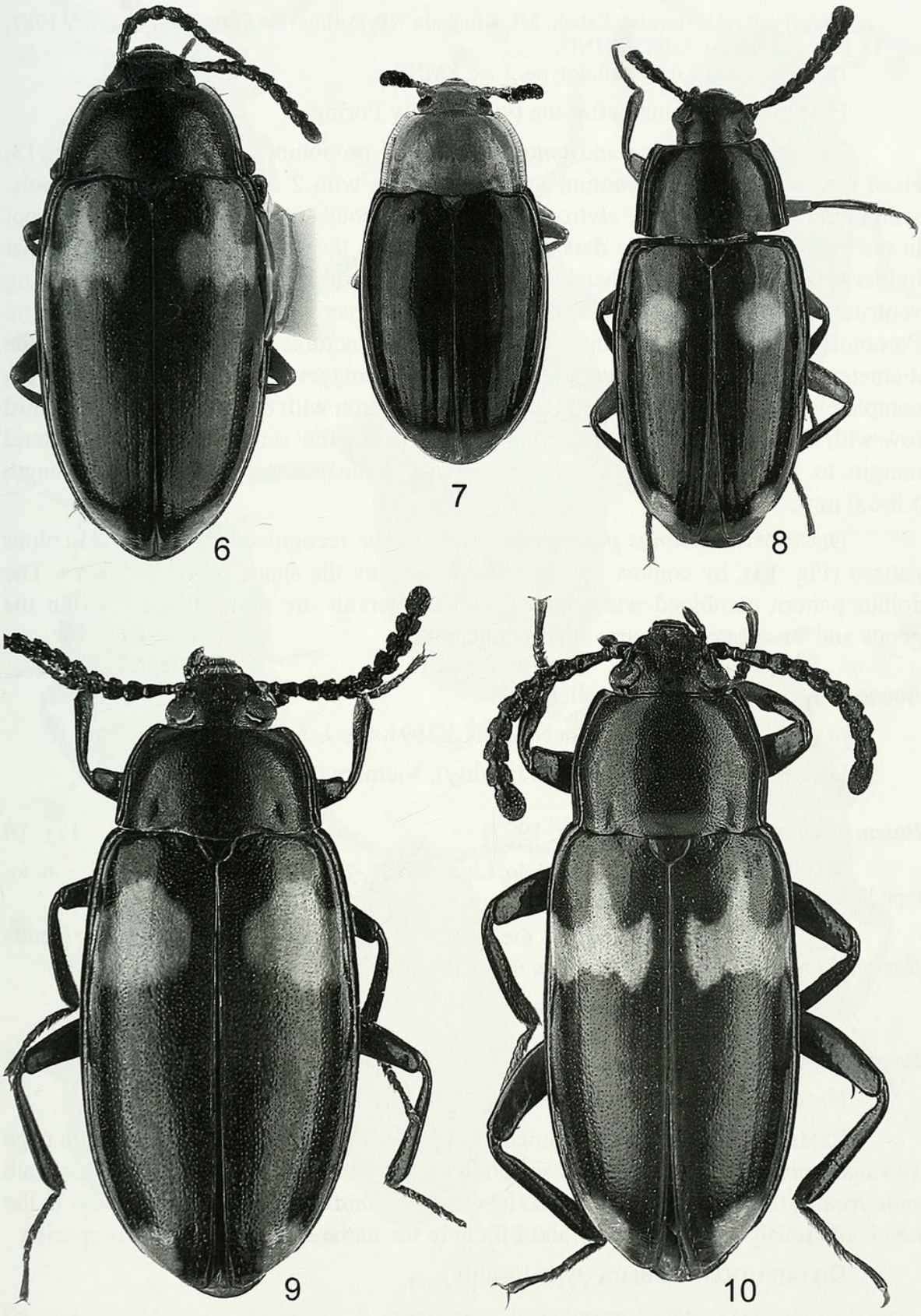
REMARKS: This species-group includes also 2 additional new species from Borneo and Sumatra, which are listed below, but which are not described because of the lack of males. Both have a similar dorsal colour pattern (Figs 16-17) as in *Basanus luzonicus* sp. n. (Fig. 11), but a different dorsal punctation and a different structure of the elytral intervals.

Basanus philippinensis Gebien, 1925 Figs 4, 12

MATERIAL: Philippines, leg. Semper, 1 ♂ cotype NHMB-F, designated herewith as lectotype. – Philippines, Luzon, Malinao, Tayabas, leg. Baker, 1 ♀ cotype NHMB-F, 1 cotype SMTD, both designated herewith as paralectotypes. – Philippines, Luzon, Mt. Makiling, leg. Baker, 1 cotype SMTD, designated herewith as paralectotype.

REMARKS: The lectotype and paralectotypes are designated in order to preserve stability of the nomenclature in this group, according to the Article 74.7.3 of the International Code of Zoological Nomenclature (1999).

DISTRIBUTION: Philippines (type localities).



FIGS 6-10

Dorsal view of *Basanus* species. 6: *B. amamianus,* non-type, Okinawa, SMNS. 7: *B. fruhstorferi*, paratype, SMTD. 8: *B. halmahericus* sp. n., holotype, SMNS. 9: *B. javanus*, aberrant non-type, W Malaysia, CSBC. 10: *B. longior*, non-type, Sumatra, SMNS.

Basanus poringicus sp. n. Figs 5, 13

HOLOTYPE (♂): Borneo, Sabah, Mt. Kinabalu NP, Poring Hot Springs, 500 m, 8.V.1987, leg. D. Burckhardt & I. Löbl, MHNG.

PARATYPE: Same data as holotype, 1 ex. SMNS.

ETYMOLOGY: Named after the type locality Poring.

DESCRIPTION: Shape and colour pattern of pronotum and elytra see Fig. 13. Head red ferrugineous, pronotum red ferrugineous with 2 darker longitudinal spots, scutellum red ferrugineous; elytron darker ferrugineous and with a large, yellow spot in the anterior part; antenna dark ferrugineous with the 3 basal segments somewhat lighter and coloured like the head, legs completely ferrugineous; ventral side including ventrites red ferrugineous. Head with denser and coarser punctation than on pronotum. Pronotum with distinct punctures, distance of the punctures 2-5 times longer than the diameter, additionally with scattered and distinctly bigger punctures; anterior margin completely bordered, basal margin unbordered. Elytron with 8 rows of punctures, third row with about 50 punctures; intervals convex, with a few scattered punctures; lateral margin to be seen nearly on its total length. Aedeagus see Fig. 5. Body length 5.8-6.0 mm.

DIAGNOSIS: *Basanus poringicus* sp. n. can be recognized by the dorsal colour pattern (Fig. 13), by convex elytral intervals and by the shape of the aedeagus. The colour pattern combined with convex elytral intervals are quite unusual within the genus and do not occur in any other congeners.

Basanus soppongensis Schawaller, 1995

MATERIAL: Vietnam, Nam Cat NP, 4.-11.V.1994, leg. J. Zacharda, 1 ex. CHBM.

DISTRIBUTION: Thailand (type locality), Vietnam (new record).

Basanus sulawesicus (Schawaller, 1997) Fig. 14

MATERIAL: C Sulawesi, Palu, Palolo, Lindu NP, 25.-27.VIII.1990, leg. A. Riedel, ♂ holotype SMNS.

REMARKS: Transferred from the genus *Spiloscapha* Bates, 1873 to the genus *Basanus* Lacordaire, 1859 by Schawaller (2004).

DISTRIBUTION: Sulawesi (type locality).

Basanus sumatranus Gebien, 1925 Fig. 15

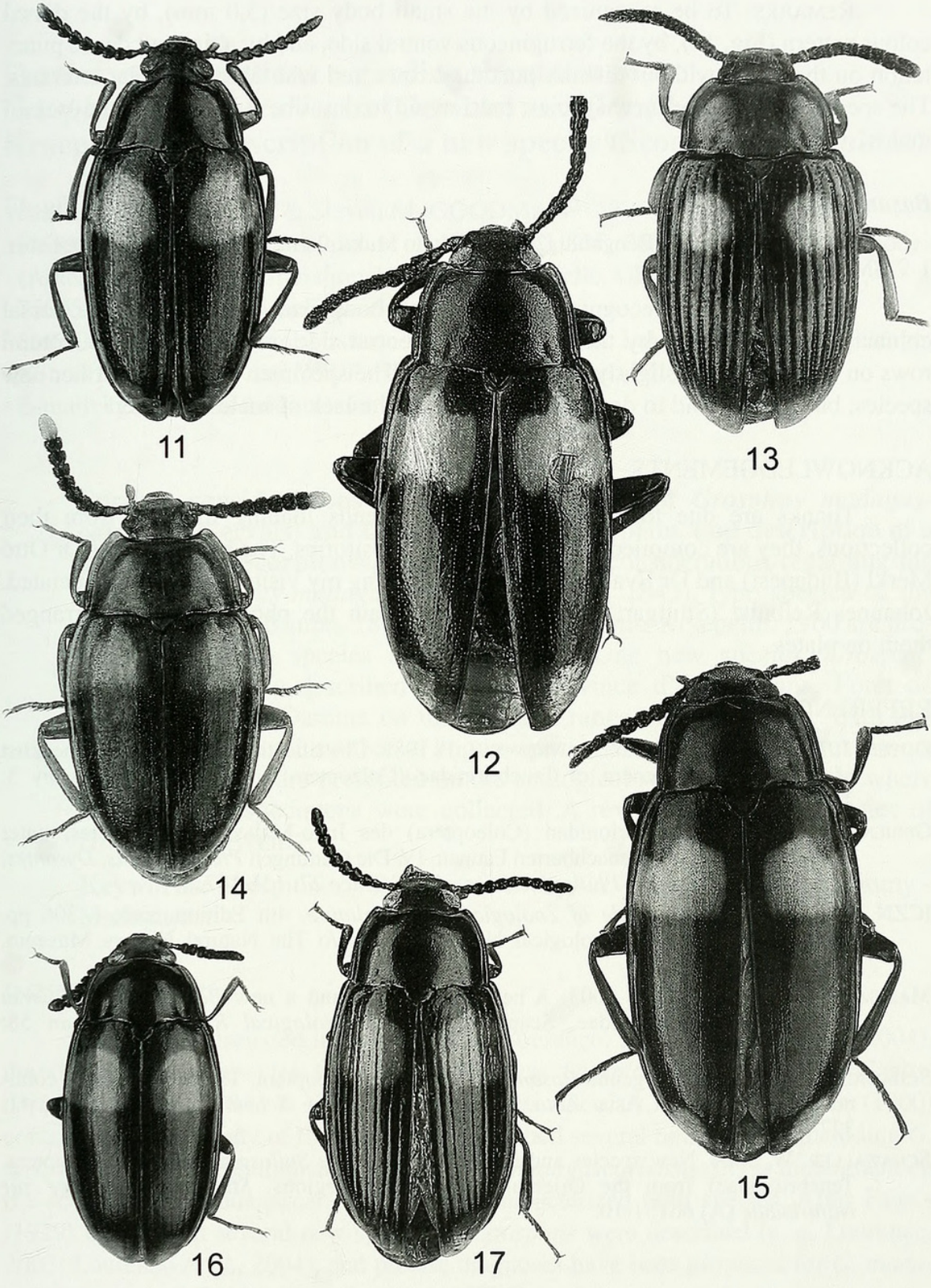
MATERIAL: Sumatra, Solok, ♀ holotype NHMB-F (labelled as type)

REMARKS: Gebien (1925) named this species for the first time in the key on page 145 *sumatrensis* and later in the description on page 147 and in the legend of the plate *sumatranus*, the type specimen is also labelled as *sumatranus*. Thus, *sumatrensis* in the key is obviously a printing error and I fix here the name *sumatranus* for this species.

DISTRIBUTION: Sumatra (type locality).

Basanus sp. A ♀ Fig. 16

MATERIAL: Borneo, Sabah, Mt. Kinabalu NP, Headquarters, 1560 m, 3.-13.VIII.1988, leg. A. Smetana, 1 ♀ MHNG.



FIGS 11-17

Dorsal view of *Basanus* species. 11: *B. luzonicus* sp. n., holotype, SMNS. 12: *B. philippinensis*, lectotype, NHMB-F. 13: *B. poringicus* sp. n., holotype, MHNG. 14: *B. sulawesicus*, holotype, SMNS. 15: *B. sumatranus*, holotype, NHMB-F. 16: *Basanus* sp. A, ♀, Borneo, MHNG. 17: *Basanus* sp. B, ♀, Sumatra, SMNS.

REMARKS: To be recognized by the small body size (5.0 mm), by the dorsal colour pattern (Fig. 16), by the ferrugineous ventral side, and by a fine but dense punctation on the elytra without distinct punctural rows and with absolutely flat intervals. The specimen presents a new species, but I avoid to describe it because of the lack of males.

Basanus sp. B ♀ Fig. 17

MATERIAL: Sumatra, Bengkulu, 20 km S Muko Muko, 20 m, 16.VIII.1981, leg. D. Erber, 1 ♀ SMNS.

REMARKS: To be recognized by the small body size (5.5 mm), by the dorsal colour pattern (Fig. 17), by the ferrugineous ventral side, and by distinct punctural rows on the elytra with slightly convex intervals. The specimen presents a further new species, but I also avoid to describe it because of the lack of males.

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