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**Revision of the genus *Amarygmus* DALMAN, 1823
and of related genera. Part LXVI.
Description and illustration of new species and subspecies of
Amarygmus from New Guinea
(Coleoptera: Tenebrionidae: Amarygmini)**

Hans J. BREMER

Abstract

The following new species and subspecies of *Amarygmus* DALMAN, 1823 s. str. from New Guinea are described and illustrated: *A. (A.) abdominalis* sp. n., *A. (A.) akteae* sp. n., *A. (A.) allocerus* sp. n., *A. (A.) alloeus* sp. n., *A. (A.) anonymus* sp. n., *A. (A.) arboreus* sp. n., *A. (A.) arfakensis* sp. n., *A. (A.) asekiensis* sp. n., *A. (A.) auricollis* sp. n., *A. (A.) beatulus* sp. n., *A. (A.) beccarii* sp. n., *A. (A.) caeruleus* sp. n., *A. (A.) chimbuensis* sp. n., *A. (A.) debilis* sp. n., *A. (A.) defector* sp. n., *A. (A.) epistomaticus* sp. n., *A. (A.) fabricii* sp. n., *A. (A.) incessus* sp. n., *A. (A.) ixalus* sp. n., *A. (A.) kauensis* sp. n., *A. (A.) laniger* ssp. *lullula* ssp. n., *A. (A.) lethaeus* sp. n., *A. (A.) letho* sp. n., *A. (A.) minor* sp. n., *A. (A.) mirabilis* sp. n., *A. (A.) mokwamensis* sp. n., *A. (A.) nervosus* sp. n., *A. (A.) parargus* sp. n., *A. (A.) phoebus* sp. n., *A. (A.) profectus* sp. n., *A. (A.) prosper* sp. n., *A. (A.) sylvanus* sp. n., *A. (A.) thesileoides* sp. n., *A. (A.) torpidus* sp. n., *A. (A.) wisseli* sp. n., and *A. (A.) zethum* sp. n.

Introduction

The number of species of the genus *Amarygmus* DALMAN, 1823 on New Guinea is very high. I guess that at least 400 different species are occurring there.

The first systematic attempt to classify the Tenebrionidae of New Guinea has been performed by GEBIEN (1920). In his outstanding paper on the Tenebrionidae of the Papuan faunal area he recognized 39 different species of *Amarygmus*. Later-on KASZAB (1939, 1955, 1958, 1970) described 11 additional new species of this genus. In several papers (BREMER 2001, 2003, 2005, 2006a,b, 2007, 2008a,b, 2011) I added further species. Furthermore, I revised the Amarygmini of the Bismarck Archipelago (BREMER 2002a: 22 species, most of them endemic) and of the Solomon Islands (BREMER 2009: 26 species, most of them endemic). There are also endemic species on the islands of Moluccas (BREMER 2004c, BREMER 2010, GRIMM 2012). 206 species of *Amarygmus* have to be regarded as validly described from New Guinea.

During the last 50 years GRESSITT, SEDLACEK, BRANDT, RIEDEL, ULLRICH, ÈIŽEK, SKALE, WEIGEL, and AOKI collected an outstandingly large number of Tenebrionidae on New Guinea. These collections have only been partially evaluated. From the material of these collectors I am describing 35 more new species of *Amarygmus* s. str. (from New Guinea) and one new subspecies of *A. laniger* GEBIEN, 1920 (from the Woodlark Island east of New Guinea). Forthcoming papers will contain additional descriptions of new species but also determination keys to species groups and to species.

Methods

Morphometry: Body length” represents the distance between the middle of anterior edge of pronotum and apices of elytra, “body width” the maximum width across the elytra; “length of elytra” the distance between the base of scutellum and apices of elytra; “length of pronotum” the distance between the middle of their anterior and posterior edges when both edges are on the same level.

Data on the label: The data on the labels are given in the original language and with the abbreviations used by the authors.

Abbreviations of depositories

BMH = Bishop Museum Honolulu, Hawai'i, U. S. A. (via the Hungarian Natural History Museum, Budapest)
 CA = Collection of the Entomological Laboratory of Dr. KIYOSHI ANDO, Osaka, Japan
 CG = Collection of Dr. ROLAND GRIMM, Neuenbürg, Germany
 CS = Collection of ANDRÉ SKALE, Hof/Saale, Germany
 CW = Collection of ANDREAS WEIGEL, Wernburg, Germany
 NHMP = National History Museum, Prague, Czech Republic
 SMNS = Staatliches Museum für Naturkunde, Stuttgart, Germany
 ZSM = Zoologische Staatssammlung, Munich, Germany

Descriptions of new species

Amarygmus (Amarygmus) abdominalis sp. n.

(Fig. 1A-E)

Holotype, ♀, ZSM: W-Papua, Manokwari Prov., 18 km NE Ransiki, 1°09'21"S-134°77'12"E, 2.-6.II.2007, leg. A. SKALE, Kahlschlag [clearing, deforested area].

Paratype (♀): dito (CS) – W-Papua, Manokwari Pr., 14 km NE Ransiki, Warbiati (Oransbari), 1°18.25'S-134°14.14'E, 2.III.2007, leg. A. WEIGEL, Cutt. Area (1 ♀ CG).

Diagnosis. Of medium size; oval; elytra with incised striae and with strial punctures of medium size, these punctures are relatively closely set; elytral intervals slightly convex on disc, laterally moderately convex. Frons of medium width. Antennae of medium length. Metasternum deeply incised along median line. Elytra coppery, moderately lustrous, pronotum coppery, more opaque than elytra. Legs dark brown.

Concerning size, body shape, elytral striation, width of frons and colouration very similar to *Amarygmus diversipes* BREMER, 2007 from the Nabire Prov. of Irian Jaya. Males of *A. diversipes* possess an excavation on the inner side of protibiae, moreover, the antennae of *A. diversipes* are definitely longer than those of *A. abdominalis* sp. n. Many species with this excavation on inner side of protibiae are known from New Guinea (BREMER 2007). However, it is presently unknown whether *A. abdominalis* sp. n. has to be assigned to this group because males of *A. abdominalis* sp. n. are currently unknown.

A similar body shape, elytral striae and width of frons is also present in *A. (A.) szentivanyi* BREMER, 2003, from the southern part of Papua New Guinea (near Port Moresby); in this species the strial punctures of elytra are much smaller than those of *A. abdominalis* sp. n., the antennae are longer, the pronotum is more lustrous and its punctures are much smaller, but males of *A. szentivanyi* do not possess this gender sign on protibiae which *A. diversipes* shows.

Description. Body length: 6.1-6.3 mm. Body width: 3.5-3.6 mm.

Ratios. Pronotum: width/length 1.79-1.89; width hind corners/width front corners 1.94-1.97. Elytra: length/width 1.39-1.50; length elytra/length pronotum 3.28-3.46; maximum width elytra/maximum width pronotum 1.31-1.34.

Colouration. Upper side coppery, moderately lustrous, pronotum somewhat more opaque than elytra (because of narrower punctation). Metasternum black, sternites dark brown. Antennomeres 1-4 dark brown, 5-11 black, opaque. Femora and tibiae brown to dark brown, but lighter brown than underside, tarsi light brown.

Head. Frons of medium width, as wide as antennomere 5 long, with minute, not too closely set punctures. Genae moderately raised towards lateral margins, anteriorly terminating at the level of the middle part of fronto-clypeal suture. Fronto-clypeal suture barely incised. Clypeus stretched forwards, nearly flat, punctation as on frons. Mentum wide, with bent lateral margins and rounded transition between sides and base; only a little convex transversely. Underside of neck with small, irregularly set punctures. Mandibles with a longitudinal sulcus on outer surface, apically bifid.

Pronotum. Moderately convex transversely and longitudinally. Widest at base, anteriorly narrowing and bent. Hind corners very obtuse, but angular; front corners rounded in dorsal view. Anterior margin not excavated. Lateral and anterior margins bordered. Lateral borders in dorsal view narrowly visible in the hind 60 percent. Front and hind corners in lateral view angular, both with the same obtuse angle. Surface with small, distinct, relatively closely set punctures.

Scutellum. Triangular; impunctate.

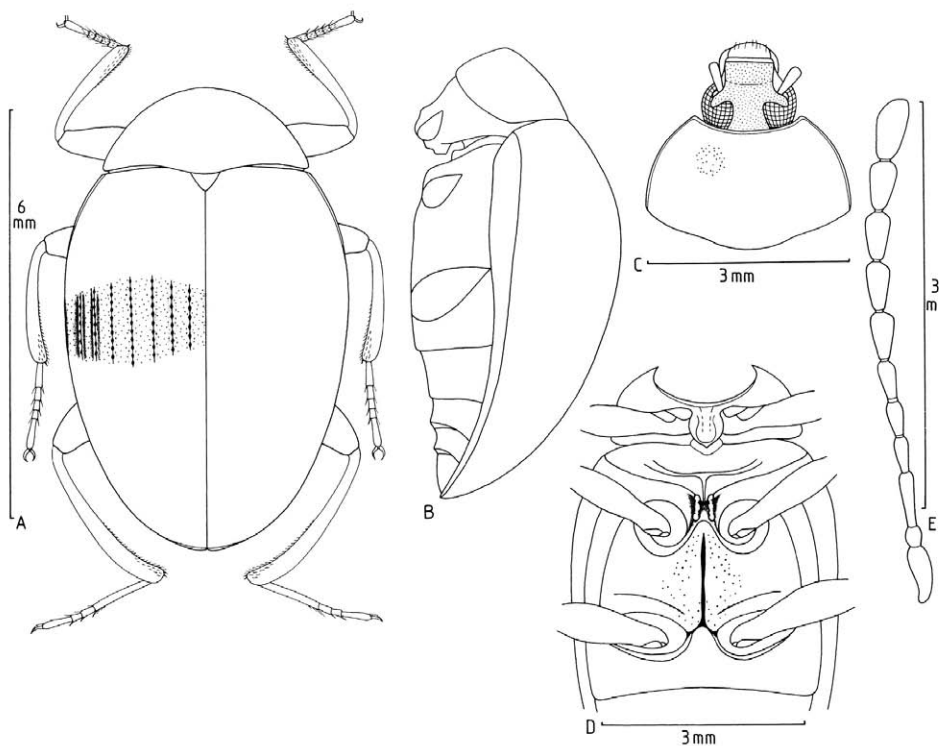


Fig. 1: *Amarygmus (Amarygmus) abdominalis* sp. n.: **A** Habitus, ♀; **B** Body, lateral view; **C** Head and pronotum; **D** Pro-, meso- and metasternum; **E** Antenna.

Elytra. Ovate; clearly convex transversely, less convex longitudinally. Maximum of width and height at the end of first third. Shoulders rounded. Apices of elytra mutually rounded. Lateral edges in dorsal view very narrowly visible within the anterior two third, invisible in the posterior third. Surface with clearly incised striae with relatively large, closely set punctures; their distances on disc in row 4 equal about to half of the diameter of a puncture; about 42 punctures in row 4. Intervals slightly convex on disc, more convex laterally, with minute, distinct, relatively closely set punctures.

Prosternum. Anterior margin continuously and narrowly bent upwards. Apophysis oval, with a small apical “nose” in the middle; lateral margins moderately raised along procoxae, space in between as a shallow median groove.

Mesosternum. Hind part of mesosternum with rough, lifted lateral margins, space in between depressed and with a few hairs of medium length; its anterior margin deeply excavated in the middle.

Metasternum. Anterior margin between mesocoxae rounded, bordered. Disc convex transversely; with some minute, distinct punctures along median line. Median line deeply incised over the whole length.

Sternites. Anterior margin between metacoxae ogive, bordered. Sternites with tiny, widely separated punctures, looking alike impunctate at lower magnification.

Antennae. Reaching over 40 percent of elytra. Length/width ratio of antennomeres 1-11 equals to 16:7 / 10:6 / 19:5½ / 13:6 / 13:6 / 14½:7½ / 18:8 / 19:8 / 20:9 / 19:9 / 22:10.

Legs. Short. Femora towards second thirds club-like broadened. Protibiae bent in basal half, straight in apical half; mesotibiae nearly straight; metatibiae nearly straight in basal half, distinctly incurved in apical half. Soles of protarsomeres 1-3 (in the female!) with a very close pilosity which may feign the pilosity of a male. Lengths of protarsomeres 1-5 as 7:6:5:4½:20; lengths of mesotarsomeres 1-5 as 15:9:5:5:20; lengths of metatarsomeres 1-4 as 38:13:10:20.

Etymology. *Abdominalis* (Lat.) = *adj.* of abdomen.

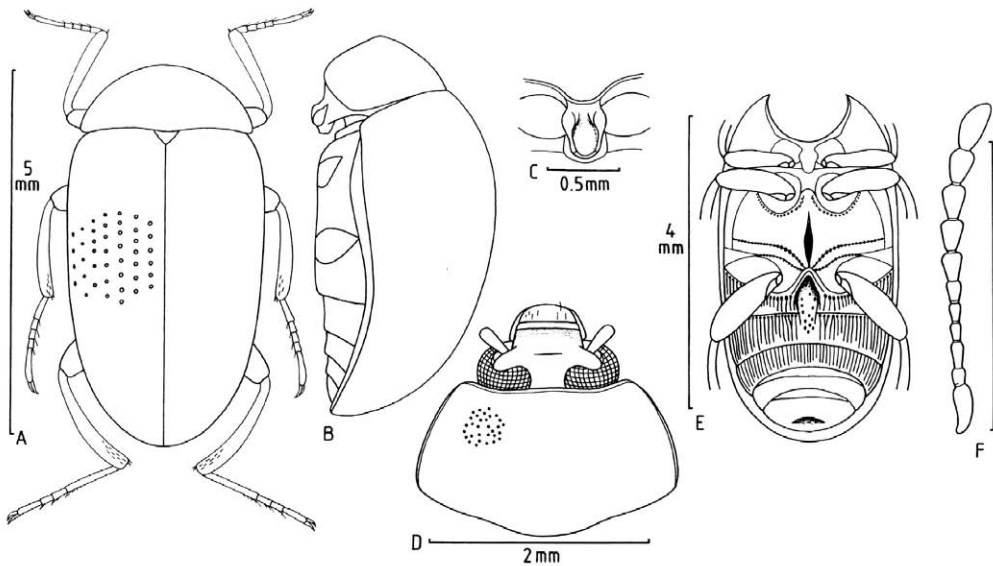


Fig. 2: *Amarygmus (Amarygmus) akteae* sp. n.: **A** Habitus, ♀; **B** Body, lateral view; **C** Prosternal apophysis; **D** Head and pronotum; **E** Underside; **F** Antenna.

***Amarygmus (Amarygmus) akteae* sp. n.**

(Fig. 2A-F)

Holotype, ♂, SMNS: Irian Jaya: Prov. Jayawijaya, Wamena, Angguruk-Tanggeam, 1500-1800, 28.IX.1991, leg. A. RIEDEL.

Paratype: dito (1 ♂ ZSM).

Annotation: I was not successful to prepare the aedeagus, but the type specimens are certainly males.

Diagnosis. Small, narrow, elongate, slightly oval, markedly convex transversely. Elytra allusively narrowing posteriorly. Characterized by a special form of the upper side of head: clypeus with two different forms of surface, one with a dark colour and a structure as on frons, and a second one, situated in front of it, presenting a slightly more brown colour, it is somewhat descending anteriorly; the border between both parts of clypeus agrees with a hyperbole ridge. Elytra elongate, with rows of medium-sized punctures and flat intervals on disc (but somewhat convex intervals laterally). The underside is special with closely punctured inner rims of borders (on metasternum and sternites, see below) and with micro-ridges on sternites; in males additionally with a median depression on sternites 1+2 and a postero-median depression on sternite 5. Antennae of medium length. Protarsomeres 1-3 not widened in males. Elytra green, lustrous, pronotum dark green and scarcely lustrous; femora and tibiae dark brown, tarsi yellowish brown; antennae brown.

A similar structure of upper side of clypeus is known to occur in members of a species group affine *Amarygmus solitarius* BREMER, 2003; the following species also belong to this group: *A. epistomaticus* sp. n., and *A. ixalus* sp. n.

Amarygmus chimbuensis sp. n. (from the Chimbu Prov. of Papua New Guinea) is somewhat larger (body length 5.65 mm), its upper side of head is less lustrous, the fronto-clypeal suture is less impressed, the pronotum is black, the punctures of the elytral rows are slightly smaller and they do not shine as in *A. akteae*, the basal half of metatibiae is straight (the metatibiae of *A. akteae* sp. n. are uniformly bent). The characteristic structure of upper side of clypeus which *A. akteae* sp. n. shows is not obvious in *A. chimbuensis* sp. n.

Amarygmus epistomaticus sp. n. (from the lowlands and mountains of medium height of the Morobe Prov. of Papua New Guinea) presents about the same colouration of upper side as *A. akteae* sp. n.; its body length is 4.7-5.3 mm; the frons of *A. epistomaticus* sp. n. is much narrower than that of *A. akteae* sp. n., the shape of the legs is about the same as it is in *A. akteae* sp. n.

Amarygmus ixalus sp. n. (from the Biak and Waigeo Islands of Irian Jaya) has a body length of 4.63-4.86 mm. The elytra are shorter than those of *A. akteae* sp. n. The colouration of upper side is either blue or violet and not as lustrous as the colouration of elytra of *A. akteae* sp. n., moreover, the legs are brown; the frons of

A. ixalus **sp. n.** is definitely narrower than that of *A. akteae* **sp. n.**, its protibiae are more bent and thicker than those of *A. akteae* **sp. n.**

Amarygmus solitarius BREMER, 2003 from the Morobe Prov. of Papua New Guinea is somewhat more compact, its body length is 5.4 mm; it has a uniformly black upper side.

Description. Body length: 4.9+5.2 mm. Body width: 2.6+2.6 mm.

Ratios. Pronotum: width/length 1.92+1.97; width hind corners/width front corners 1.85+1.87. Elytra: length/width 1.64+1.68; length elytra/length pronotum 3.63+3.83; maximum length elytra/maximum length pronotum 1.15+1.16.

Colouration. Elytra green, lustrous, punctures of elytral rows are more intensively shining than the intervals; pronotum green, somewhat opaque; upper side of head shining. Femora and legs dark brown, tarsi light brown. Antennomeres brown to dark brown. Underside dark brown, lustrous.

Head. Frons of medium width, somewhat wider than lengths of antennomeres 3+4 jointly (like 18:15); very lustrous, with tiny, widely separated punctures. Genae slightly lifted towards lateral margins, anteriorly terminating a little in front of the level of the middle part of fronto-clypeal suture. Fronto-clypeal suture somewhat impressed, scarcely incised. Clypeus moderately stretched forwards. From fronto-clypeal suture the clypeus is anteriorly somewhat ascending towards a bent margin, in front of this margin it is clearly descending, especially in the lateral parts; the descending frontal parts are also lustrous and by their surface structure they do not essentially differ from that of the hind parts. Mentum reversely trapezoidal, with flat, lustrous lateral margins, space in between opaque, convex transversely. Underside of neck opaque, with a few tiny punctures. Mandibles with a sulcus on outer surface, apically bifid.

Pronotum. Markedly convex transversely, moderately convex longitudinally. Widest at base; anteriorly narrowing and bent. Hind corners angular, angle about 100°, front corners rounded, obtuse. Anterior margin slightly excavated. Lateral and anterior margins continuously bordered. Lateral borders in dorsal view narrowly visible in the hind half, in frontal half they become extremely narrow to invisible. Hind and front corners in lateral view obtuse, the front ones rounded, the hind ones angular. Surface with small, distinct, not very closely but very irregularly set punctures.

Scutellum. Triangular, impunctate.

Elytra. Elongate, slightly narrowing posteriorly; widest shortly behind shoulders. Markedly convex transversely, moderately convex longitudinally. Maximum of height at the end of hind quarter. Shoulders rounded, somewhat bossing. Apices of elytra mutually rounded. Lateral edges in dorsal view nearly invisible. Surface with rows of medium-sized punctures which become indistinct near apex; distances between punctures on disc in row 4 equal to 2 to 3-times the diameter of a puncture; about 21 punctures in row 4. Intervals on disc flat, laterally slightly convex, with tiny, very widely separated punctures which just become visible at 50-fold magnification.

Prosternum. Anterior margin narrowly and continuously bent upwards, but widely trough-like retracted towards apophysis in front of apophysis, there a narrow, low median keel is passing into apophysis. Apophysis somewhat widened along procoxae, and there its margins are somewhat lifted ventrad, space in between as a median groove; posterior to procoxae the sides are slightly narrowing with straight margins; apex broadly pointed.

Mesosternum. Hind part with slightly lifted lateral margins; its anterior margin excavated in the middle.

Metasternum. Anterior margin between mesocoxae rounded, bordered; inner rim of border, also in its lateral part below mesocoxae, distinctly punctured. The posterior rim in front of the metacoxae is also punctured. Disc with tiny, very widely separated punctures. Median line deeply incised in the hind three quarter.

Sternites. Anterior margin between metacoxae ogive; inner rim, and also the lateral rims posterior to metacoxae, narrowly punctured. Median part of sternite 1 and anterior part of sternite 2 impressed (certainly only in males). Anterior margin of sternite 2 with a closely punctured, transverse track of punctures, this track is interrupted in the depressed median part. Apical part of sternite 5 impressed (certainly only in males). Lateral parts of discs of sternites 1, 2, 3 with longitudinal, narrow, low and closely set micro-ridges.

Antennae. Of medium length in the male, reaching over a quarter of elytra. Length/width ratio of antennomeres 1-11 in the male equals to 12:6 / 6:4½ / 9:4 / 6:4 / 6:4 / 5½:5 / 10:6½ / 11:7 / 11:7 / 11:7 / 17:7½.

Legs. Short. Femora towards second thirds club-like broadened. Protibiae straight; meso- and metatibiae moderately bent, metatibiae moderately bent. Lengths of protarsomeres 1-5 as 6:5:4:4:19; lengths of mesotarsomeres 1-5 as 14:7:6:6:19; lengths of metatarsomeres 1-4 as 32:11:7:17.

Etymology. Aktea, from ‘Ἀκταίη (Greek mythology), one of the Danaïdes.

***Amarygmus (Amarygmus) allocerus* sp. n.**
(Fig. 3A-I)

Holotype, ♂, ZSM: Indonesia, Irian Jaya, Asori N Somyangga, 2°37'S-136°13'E, KU, 7.I.2000, leg. A. WEIGEL.

Diagnosis. Small, elongate oval, narrow; elytra with rows of large punctures which, near apex and laterally, are impressed and connected by lines; elytral intervals on disc flat, laterally and apically convex; frons relatively narrow; antennae relatively short and with the six ultimate antennomeres broadened, antennomere 6 with a thorn-like projection on inner side apically (Fig. 3H). Protarsomeres 1-3 very slender in males, Upper side dark brown, metallic, lustrous; femora and tibiae brown, lustrous, tarsi light brown, antennae light brown.

This species is characterized by the six broadened ultimate antennomeres and by a thorn-like projection on antennomere 6 (in most related species the ultimate five antennomeres are broadened, and they do not present a thorn-like projection on antennomere 6).

I only know three species with six broadened ultimate antennomeres, *A. (A.) dotalis* BREMER, 2003, *Amarygmus thesileoides* sp. n. and *Amarygmus caeruleus* sp. n.; *A. dotalis* occurs from Ceram to Halmahera on the Moluccas, this species presents the same body size, but *A. dotalis* has no projection on antennomere 6, and all elytral intervals are convex; *A. thesileoides* sp. n. is known from the Morobe Prov. of Papua New Guinea, and, besides other characters, it is much larger (body length: 8.26 mm). *A. caeruleus* sp. n. is also larger (body length 7.01 mm), the body shape of this species is quite different, see Fig. 12A.

Description. Body length: 4.2 mm. Body width: 2.2 mm.

Ratios. Pronotum: width/length 1.79; width hind corners/width front corners 1.79. Elytra: length/width 1.60; length elytra/length pronotum 3.25; maximum width elytra/maximum width pronotum 1.14.

Colouration. See "Diagnosis". Underside brown, lustrous, except sternites 4+5 which are black.

Head. Frons not very wide, width equals to the length of antennomere 3; with tiny, widely separated punctures. Genae slightly raised towards their lateral margins; anteriorly they terminate approximately at the level of the middle part of fronto-clypeal suture. Fronto-clypeal suture incised in its middle part. Clypeus moderately stretched forwards, slightly convex longitudinally, punctured as on frons. Mentum reversely trapezoidal, with flat, lustrous lateral margins, space in between convex transversely, less lustrous. Mandibles with a longitudinal sulcus on outer surface, apically bifid.

Pronotum. Convex transversely, regularly convex in the hind half, in the frontal half the transverse convexity is only present in the middle part, the lateral parts are sloping like a clined plane. Widest at base; anteriorly narrowing, with straight sides within hind 40 percent, the sides are bent in the anterior 60 percent. Hind corners in dorsal and lateral view angular, obtuse; front corners in dorsal and lateral view rounded. Anterior margin straight. Lateral and anterior margins bordered. Lateral borders narrowly visible only in the hind half. Surface slightly microreticulated, with minute, widely separated punctures.

Scutellum. Triangular, impunctate.

Elytra. Elongate ovate; markedly convex transversely, moderate convex longitudinally; maximum of height and width at the end of the anterior fifth of elytra. The lateral margins of elytra are continuing the lateral margins of pronotum without any break. Shoulders rounded; somewhat accentuated. Apices of elytra mutually rounded. Lateral edges in dorsal view shortly visible on shoulders and within apical third. Surface with rows of large punctures which are partially very closely set on disc and partially connected by very faint lines; distances between punctures on disc in row 4 equal to ½- to 1-time diameter of a puncture, about 24 punctures

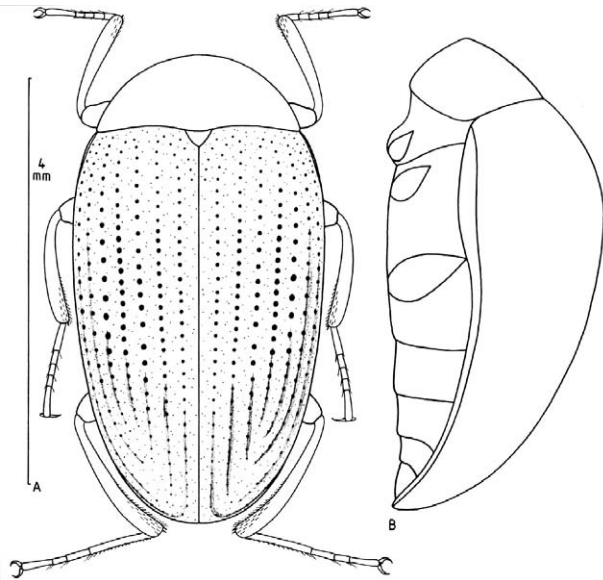


Fig. 3 A-B: *Amarygmus (Amarygmus) allocerus* sp. n.: **A** Habitus, ♂; **B** Body, lateral view.

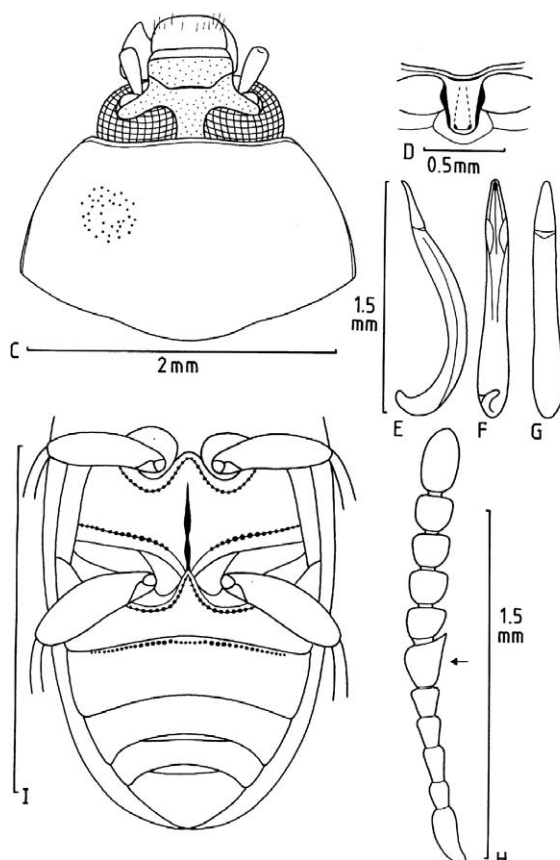


Fig. 3 C-I: *Amarygmus (Amarygmus) allocerus* sp. n.: C Head and pronotum; D Prosternal apophysis, E Aedeagus, lateral view; F Aedeagus, ventral view; G Aedeagus dorsal view; H Antenna, ♂, the arrow points to the antennomere 6 with its dent-like extension; I Metasternum and sternites.

ratio of antennomeres 1-11 equals to $12:5\frac{1}{2}/5\frac{1}{2}:4/8\frac{1}{2}:4/5\frac{1}{2}:4/7:5/8:7/7:7/7\frac{1}{2}/8:8/8:8/13\frac{1}{2}:8$.

Legs. Short. Femora towards second thirds club-like broadened. Protibiae slightly bent; mesotibiae moderately bent; metatibiae moderately bent in basal half, more bent in apical half. Lengths of protarsomeres 1-5 as $5:4:3\frac{1}{2}:3:12$; lengths of mesotarsomeres 1-5 as $12:6:5:4:13$; lengths of metatarsomeres 1-4 as $30:12:6:13$.

Etymology. Allocerus, formed from ἄλλοι (Greek) = different, and -κέρω (Greek) = horn (in insects also used for antennae).

***Amarygmus (Amarygmus) alloeus* sp. n.**

(Fig. 4A-E)

Holotype, ♀, ZSM: Papua New Guinea, Madang Prov., Kau Wildlife Area, Baitabag Vill., lat. S $5^{\circ}08'$ long. $145^{\circ}46'$, 50 m a. s. l., X-XII.1999, LUKAŠ EÍŽEK lgt. (left middle legs, right metatarsomeres, left antennomeres 9-11 missing).

Paratype: Papua-New Guinea, Madang Prov., Umgebung [environs] Madang, III.1979, Dr. W. G. ULLRICH leg. (1 ♀ ZSM).

Diagnosis. Small, oval, moderately convex transversely, lateral edges of elytra are visible in their whole length in dorsal view; elytra with rows of medium-sized punctures and flat, scarcely punctured intervals, maximum of elytral width approximately in the middle; sides of pronotum are either slightly narrowing towards hind corners and then the maximum of pronotal width is about in the middle, or they are subparallel

in row 4; laterally the rows 7 and 8 are impressed, and their punctures are mostly connected by lines; in the apical part of elytra clear striae are found. Intervals flat on disc, impunctate, they are convex laterally and apically.

Prosternum. Anterior margin narrow-ly bent upwards laterally, this border is not present in the middle (see Fig. 3D). Apophysis of medium width, somewhat projecting caudad, along procoxae lateral margins widened, somewhat broadened and lifted, space in between as a median groove; behind procoxae lateral margins narrower than along procoxae, with sub-parallel sides and with somewhat raised lateral margins; apex widely pointed.

Mesosternum. Upper side of hind part flat, smooth, its anterior margin distinctly excavated in the middle.

Metasternum. Anterior margin between mesocoxae rounded, bordered. Disc impunctate. Suture in front of metacoxae punctured. Median line deeply incised over the whole length.

Sternites. Anterior margin between metacoxae ogive; rim of the lateral borders behind metacoxae narrowly punctured; medially these punctures leave the rim and extended anteriorly with straight lines, these punctured lines meet in an acute angle anteriorly (Fig. 3I). Sternites 1 and 2 also narrowly punctured. Anterior margin of sternite 2 transversely with a punctured track. Discs of sternites impunctate.

Antennae. See "Diagnosis". Reaching over one quarter of elytra. Length/width

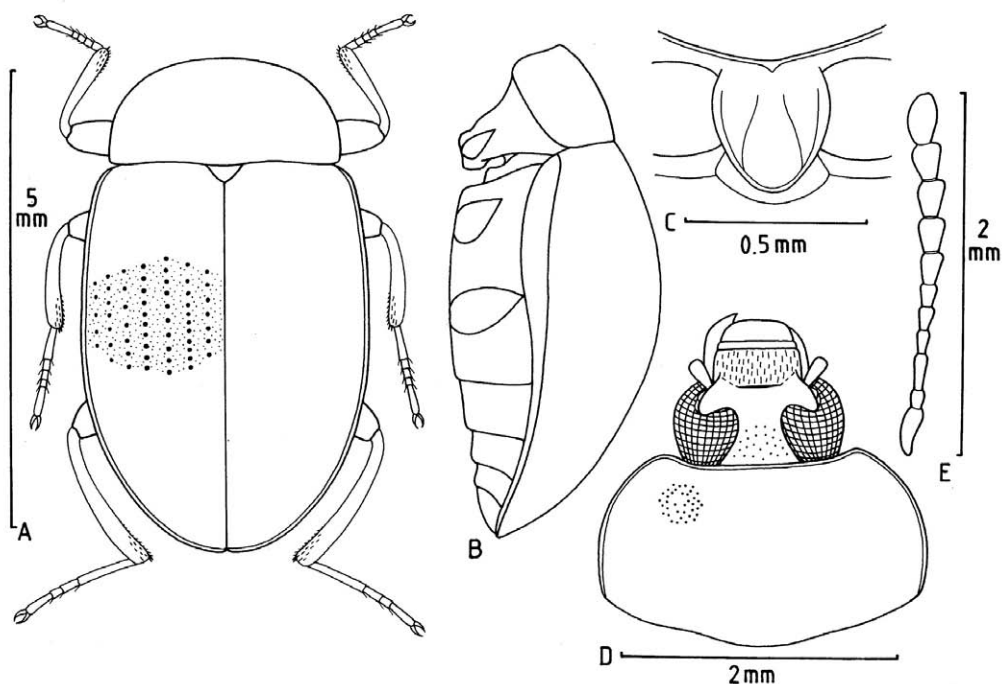


Fig. 4: *Amarygmus (Amarygmus) alloeus* sp. n.: **A** Habitus, ♀; **B** Body, lateral view; **C** Prosternal apophysis; **D** Head and pronotum; **E** Antenna.

in the hind half; frons of medium width; antennae relatively short. Elytra and pronotum blue and forming a contrast to the brown legs and antennae.

Amarygmus alloeus sp. n. differs from *A. letho* sp. n., *A. parvus* BREMER, 2003 and *A. ixalus* sp. n. which have a similar size and colouration.

Amarygmus letho sp. n. is slightly larger (body length 5.6-6.1 mm), but has also a blue pronotum and blue elytra. However, the legs are clearly darker and do not form a similar colour contrast between pronotum, elytra and legs; *A. letho* presents a stronger elytral convexity transversely than *A. alloeus* sp. n., insofar the lateral elytral edges are not as easily visible in their whole length in dorsal view; the maximum of elytral width is clearly more in front to that of *A. alloeus* sp. n.; pronotum is clearly widest at base in *A. letho* sp. n.

Amarygmus parvus has a body length of 5.2-5.7 mm. The punctures of the elytral rows are of the same size as in *A. alloeus* sp. n., but the punctures of the elytral intervals of *A. parvus* are distinct (in *A. alloeus* sp. n. punctures of the intervals are much smaller and indistinct); maximum of width of pronotum of *A. parvus* is clearly at base; frons is slightly wider in *A. parvus*. *A. parvus* presents blue elytra but, in contrast to *A. alloeus* sp. n., a charcoal-grey pronotum.

A. ixalus sp. n. displays either a blue or violet colour of upper side but also yellowish brown legs and antennae; its body length is 4.6+4.9 mm; the transverse elytral convexity is much stronger than that of *A. alloeus* sp. n., and the lateral edges of elytra are narrower in dorsal view, the maximum of elytral width is more in front of that of *A. alloeus* sp. n.; but it also presents elytral rows of medium-sized punctures and flat intervals; the frons of *A. ixalus* sp. n. is somewhat narrower than that of *A. alloeus* sp. n.

Description. Body length: 5.0-5.1 mm. Body width: 2.7-2.8 mm.

Ratios. Pronotum: width/length 1.77-1.80; width hind corners/width front corners 1.61-1.67. Elytra: length/width 1.38-1.41; length elytra/length pronotum 3.19-3.30; maximum width elytra/maximum width pronotum 1.29-1.31.

Colouration. Elytra, pronotum and frons blue, pronotum slightly darker blue than elytra, moderately lustrous. Genae and clypeus dark brown. Underside auburn. Femora lighter brown than underside; tibiae and tarsi light brown. Antennae brown, antennomeres 6-11 somewhat darker brown than antennomeres 1-5.

Head. Frons of medium width, as wide as the lengths of antennomeres 3+4 jointly, with minute, not very closely set, indistinct punctures. Genae moderately raised towards their lateral margins; anteriorly terminating in front of the level of the middle part of fronto-clypeal suture. Fronto-clypeal suture incised in the middle. Clypeus is stretched forwards, nearly flat, covered with minute punctures from which short, recumbent hairs originate. Mentum widened anteriorly, with slightly bent sides; lateral margins flat, lustrous, space in between slightly convex, less lustrous. Underside of neck with large, closely set punctures. Mandibles with a longitudinal sulcus on outer surface, apically bifid.

Pronotum. Wide, short. Moderately convex transversely and longitudinally, sides of pronotum either very slightly narrowing towards hind corners (then maximum of width in the middle), or the sides are subparallel in the hind half. Hind corners angular, obtuse; front corners rounded, obtuse. Lateral and anterior margins bordered. Lateral borders well visible in dorsal view. Hind and front corners in lateral view rounded, obtuse. Surface with small, relatively closely set punctures.

Scutellum. Triangular; with a few tiny punctures.

Elytra. Ovate. Moderately convex across and along; maximum of width and height near the middle; lateral edges broadly visible from above; shoulders rounded and somewhat accentuated; apices mutually rounded. Surface with rows of small to medium-sized punctures they become evanescent near apex; distances between punctures on disc in row 4 equal to $1\frac{1}{2}$ - to 2-times the diameter of a puncture, 38 punctures in row 4. Intervals flat, with tiny, widely separated punctures which just become visible at 50-fold magnification.

Prosternum. Anterior margin narrowly bent upwards, with a very short triangular process towards apophysis in the middle. Apophysis oval, lateral margins somewhat lifted, especially along procoxae, space between lateral margins along procoxae with a median groove.

Mesosternum. Centre of hind part smooth, lateral parts uneven; its anterior margin somewhat excavated in the middle.

Metasternum. Anterior margin between mesocoxae rounded, bordered. Disc with some minute punctures from which short, recumbent hairs originate. Median line somewhat incised in the hind quarter and in the anterior part of metasternum.

Sternites. Anterior margin between metacoxae ogive, bordered. All sternites with minute, distinct punctures.

Antennae. Short. Reaching over one tenth of elytra. Length/width ratio of antennomeres 1-11 equals to $12:6 / 6:4 / 10:3\frac{1}{2} / 6:4 / 6:4 / 6:4\frac{1}{2} / 8:6 / 8:7 / 9:7\frac{1}{2} / 8:7\frac{1}{2} / 13:7\frac{1}{2}$.

Legs. Short. Femora with closely set punctures, towards second thirds club-like broadened. Pro- and mesotibiae slightly bent in basal half, straight in apical half, metatibiae straight in basal half, slightly incurved in apical half. Lengths of protarsomeres 1-5 as $3:3:3:3:14$; lengths of mesotarsomeres 1-5 as $11:4\frac{1}{2}:4\frac{1}{2}:4:13$; lengths of metatarsomeres 1-4 as $27:9:5:24$.

Etymology. *Alloeus* (Greek) from ἄλλοι = different.

***Amarygmus (Amarygmus) anonymus* sp. n.**

(Fig. 5A-E)

Holotypus, ♀, ZSM: Indonesia, Irian Jaya, Asori N Somyangga, $2^{\circ}37'S-136^{\circ}13'E$, KÜ, 7.I.1999, leg. A. WEIGEL.

Diagnosis. Very small; oval, upper side blue, elytra with rows of punctures and flat intervals, frons wide, pronotum with indistinct punctures, antennae relatively short.

Amarygmus alloeus sp. n., *Amarygmus letho* sp. n., *A. (A.) parvus* BREMER, 2003 are also oval and possess a blue colour of upper side; but they are definitely larger (see also *A. alloeus* sp. n.).

Description: Body length: 3.0 mm. Body width: 1.9 mm.

Ratios. Pronotum: width/length 2.03; width hind corners/width front corners 1.79. Elytra: length/width 1.39; length elytra/length pronotum 3.68; maximum width elytra/maximum width pronotum 1.31.

Colouration. Upper side blue, including frons, slightly lustrous, pronotum with a grey tinge; genae and clypeus dark brown. Femora and tibiae dark brown, tarsomeres lighter brown. Underside dark brown, lustrous.

Head. Frons relatively wide, width equals to the lengths of antennomeres 3+4+5 jointly; with small, widely separated punctures. Genae moderately lifted towards lateral margins, anteriorly terminating in front of the level of the middle part of fronto-clypeal suture. Fronto-clypeal suture somewhat impressed. Clypeus short, relatively wide; its punctures somewhat more distinct, larger and closer set than on frons. Mentum reversely trapezoidal; with flat, lustrous lateral margins; space in between somewhat opaque, slightly convex

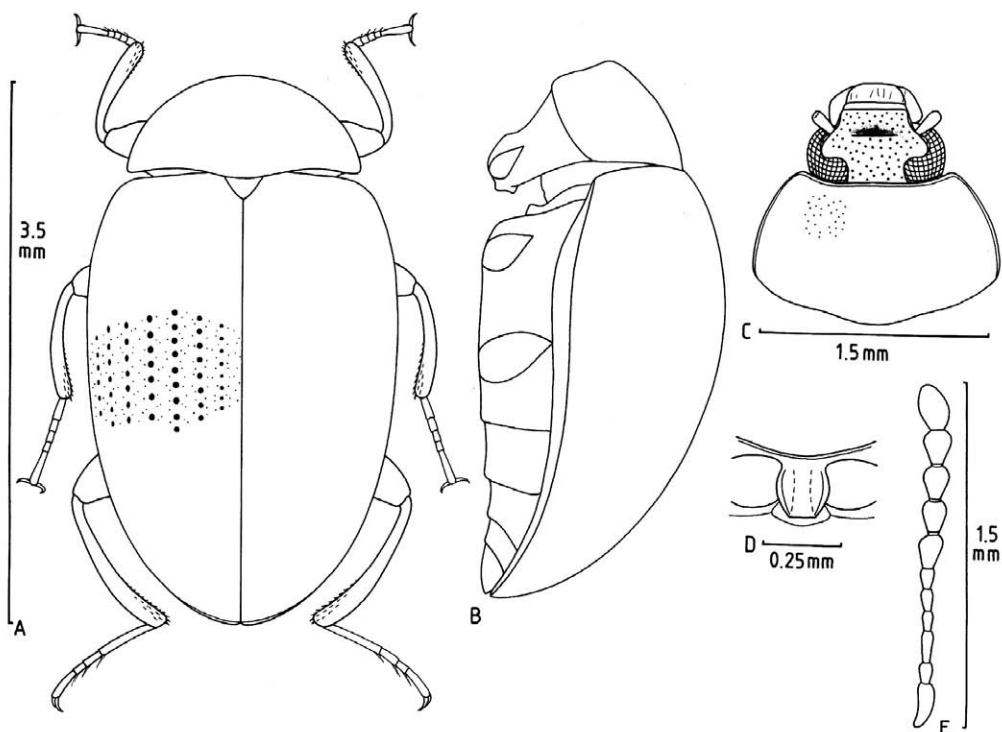


Fig. 5: *Amarygmus (Amarygmus) anonymus* sp. n.: **A** Habitus, ♀; **B** Body, lateral view; **C** Head and pronotum; **D** Prosternal apophysis; **E** Antenna.

transversely. Underside of neck with medium-sized, closely set punctures on a strongly microreticulated ground. Mandibles with a longitudinal sulcus on outer surface, apically bifid.

Pronotum. Distinctly convex transversely, slightly convex longitudinally. Widest at base; anteriorly narrowing and bent. Hind corners angular, obtuse, front corners rounded. Anterior margin not excavated. Lateral and anterior margins bordered. Lateral borders in dorsal view very narrowly visible in the hind half, invisible in the frontal half. Front and hind corners in lateral view rounded and obtuse. Surface with minute, indistinct and irregularly set punctures.

Scutellum. Triangular, with a few tiny punctures.

Elytra. Oval, slightly elongate. Very convex transversely, moderately convex longitudinally. Maximum of width and height somewhat in front of the middle of elytra. Shoulders rounded and slightly accentuated. Apices of elytra mutually rounded. Lateral edges in dorsal view invisible. Surface with rows of punctures of medium size, they become evanescent near apex; distances between punctures on disc in row 4 approximately 2-times the diameter of a puncture; about 25 punctures in row 4. Intervals flat, with very tiny punctures (just visible at 50-fold magnification) which are very widely separated.

Prosternum. Anterior margin continuously and narrowly bent upwards. Apophysis oval, behind procoxae slightly descending, lateral margins along procoxae somewhat lifted ventrad, space in between as a median groove of medium depth; apically with an inconspicuous "nose" in the middle.

Mesosternum. Hind part short, wide; its anterior margin with a very shallow excavation in the middle.

Metasternum. Anterior margin between mesocoxae rounded, bordered. On the anterior third of disc with widely separated large punctures; posteriorly nearly impunctate. Median line neither incised nor impressed.

Sternites. Anterior margin between metacoxae ogival, bordered. Sternites impunctate.

Antennae. Reaching over the first quarter of elytra. Length/width ratio of antennomeres 1-11 equals to 7:4 / 5:2½ / 7½:2½ / 4:2½ / 4½:2½ / 4½:3 / 5½:4 / 6:5 / 6:5½ / 6:5½ / 10:6.

Legs. Short. Femora towards second thirds club-like broadened. Protibiae moderately bent; meso- and metatibiae markedly bent. Lengths of protarsomeres 1-5 as 2:2:2:10; lengths of mesotarsomeres 1-5 as 5:4:3:3:10; lengths of metatarsomeres 1-4 as 16:7:3:11.

Etymology. Anonymus, from ἀίψιός (Greek) = unnamed.

Amarygmus (Amarygmus) arboreus sp. n.

(Fig. 6A-H)

Holotype, ♂, ZSM: Papua N. G., Morobe Prov., Aseki, Oiwa, 12.III.1998, A. RIEDEL.

Diagnosis. Of medium size, convex, elytra ovate. Elytra and pronotum black and with somewhat reduced lustre. Elytra with rows of medium-sized punctures and flat intervals on disc, laterally slightly convex. Pronotum relatively narrow, with acutely projecting front corners and slightly concave sides behind front corners. Frons of medium width. Antennae of medium length. Legs of medium length; protarsomeres 1-3 not widened in males.

Amarygmus wauensis KASZAB, 1970 is very similar and the next relative. This species has nearly the same body length and shape as *A. arboreus sp. n.* (body length 7.6-8.9 mm), but its pronotum is clearly dull and the elytra are definitely lustrous, this discrepancy of lustre is striking (the lustre of *A. arboreus sp. n.* is generally slightly reduced, but alike on pronotum and elytra), the elytra are somewhat shorter in *A. wauensis*, and the front corners of pronotum of *A. wauensis* are not as sharply projecting as those of *A. arboreus*. The length of antennae, the width of frons and the shape and length of legs are the same in both species.

Amarygmus seiunctus BREMER, 2003 from Irian Jaya is also similar. This species is generally more shining than *A. arboreus*, the pronotum is wider and does not present as clearly projecting front corners as *A. arboreus sp. n.* does, the frons of *A. seiunctus* is narrower, but the antennae show the same length in both species.

Description. Body length: 8.7 mm. Body width: 5.2 mm

Ratios. Pronotum: width/length 1.57; width hind corners/width front corners 1.69. Elytra: length/width 1.35; length elytra/length pronotum 3.14; maximum width elytra/maximum width pronotum 1.48.

Colouration. Upper side, see "Diagnosis"; legs, antennae and underside black.

Head. Frons of medium width, approximately as wide as antennomere 3 long; relatively flat, with tiny, widely separated punctures. Genae short, suddenly and clearly raised towards lateral margins, anteriorly terminating posterior to the level of the middle part of fronto-clypeal suture. Fronto-clypeal suture allusively incised in the middle. Clypeus stretched forwards, slightly convex transversely; with tiny, indistinct, very widely separated punctures. Mentum reversely trapezoidal, with a rounded transition between sides and base; lateral margins flat, space in between convex transversely. Underside of neck with a few small, inconspicuous punctures. Mandibles with a longitudinal sulcus on outer surface, apically bifid.

Pronotum. Relatively narrow if compared with maximum width of elytra. Convex transversely and longitudinally. Widest at base. Hind corners indistinct, allusively rounded. Sides in their posterior 40 percent nearly subparallel, thence clearly bent and, towards front corners, narrowing with straight sides; the front corners are formed by the anteriorly projecting lateral margins of pronotum. Anterior margin clearly excavated and bordered. Lateral borders in dorsal view very narrowly visible in the posterior 40 percent, anteriorly invisible in the anterior 60 percent. Hind and front corners in lateral view angular, the hind ones very obtuse, the front ones rectangular. Surface with minute, indistinct punctures.

Scutellum. Triangular; impunctate.

Elytra. Ovate, convex transversely, somewhat less convex longitudinally. Maximum of width and height at the end of first third. Shoulders very obtusely angled. Apices of elytra mutually rounded. Lateral edges in dorsal view very narrowly visible at shoulders and in the hind third. Surface with rows of medium-sized punctures which are somewhat impressed; this gives the feigned impression that the intervals are slightly convex; distances between punctures on disc in row 4 equal to the diameter of a puncture; about 47 punctures in row 4. Intervals on disc flat, laterally slightly convex, impunctate.

Prosternum. Anterior margin continuously and narrowly bent upwards. Apophysis flat and somewhat horizontally protruding caudad; somewhat widened along procoxae, but the lateral margins are scarcely lifted there; space in between without a median groove; sides straight and somewhat narrowing posterior to procoxae; apex broadly rounded.

Mesosternum. Hind part with a smooth surface; its anterior margin widely and shallowly excavated in the middle.

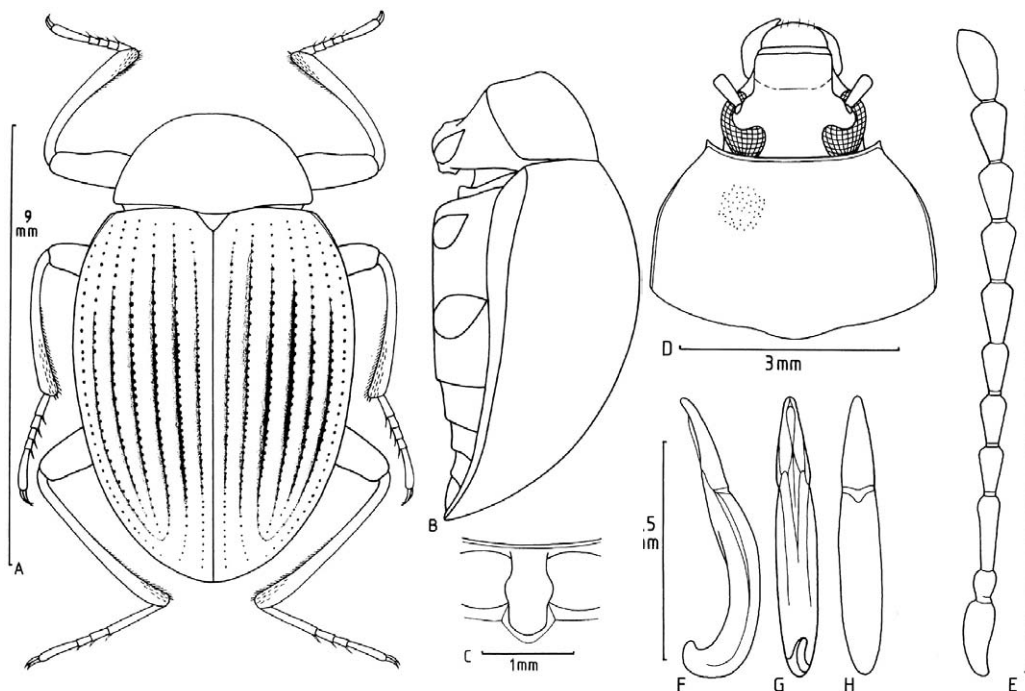


Fig. 6: *Amarygmus (Amarygmus) arboreus* sp. n.: **A** Habitus, ♂; **B** Body, lateral view; **C** Prosternal apophysis; **D** Head and Pronotum; **E** Antenna; **F** Aedeagus, lateral view; **G** Aedeagus, ventral view; **H** Aedeagus, dorsal view.

Metasternum. Slightly lustrous. Anterior margin between mesocoxae rounded, bordered. With a few minute punctures within anterior apophysis, otherwise impunctate. Median line very shallowly impressed.

Sternites. Dull. Anterior margin between metacoxae ogive. Sternites impunctate. Sternite 5 apically without a depression in males.

Antennae. Reaching over 40 percent of elytra. Length/width ratio of antennomeres 1-11 equals to $12:6\frac{1}{2} / 7:5 / 16:4\frac{1}{2} / 10:5 / 10:5 / 10:5 / 13:6 / 12:6\frac{1}{2} / 13:6\frac{1}{2} / 13:6\frac{1}{2} / 16:7$.

Legs. Of medium length. Femora moderately broadened towards second thirds. Tibiae relatively tender; protibiae moderately bent in basal half, nearly straight in apical half; mesotibiae moderately bent and slightly broadened towards apex; metatibiae slightly bent in basal half, somewhat more incurved in apical half. Lengths of protarsomeres 1-5 as 5:5:5:5:19; lengths of mesotarsomeres 1-5 as 12:8:6:6:20; lengths of metatarsomeres 1-4 as 25:9:7:19.

Etymology. *Arboreus* (Lat.) = belonging to a tree.

Amarygmus arfakensis sp. n.

(Fig. 7A-G)

Holotype, ♂, CA: Damaisi, Mt. Arfak (2000 m), W-Papua, Indonesia, 9.II.2011, J. AOKI leg. (spray) (left forelegs missing).

Diagnosis. Of medium size, relatively wide; elytra somewhat elongate and subparallel in the middle; with rows of medium-sized punctures. Legs relatively long and tender; protibiae with a slight excavation on inner side and a broadening on inner side apically; protarsomeres 1-3 not widened in males. Antennae very long and tender. Pronotum filthy green, lustrous; elytra dark coppery, femora and protibiae dark brown; antennomeres 1-8 brown, 9-11 dark brown.

Belongs to a species group affine *Amarygmus oculus* MACLEAY, 1886. All species of this group have a more or less marked excavation on inner side of protibiae and a broadening of their apical parts in males and long, tender antennae. Concerning annotations on the species of this group see BREMER 2007. Most

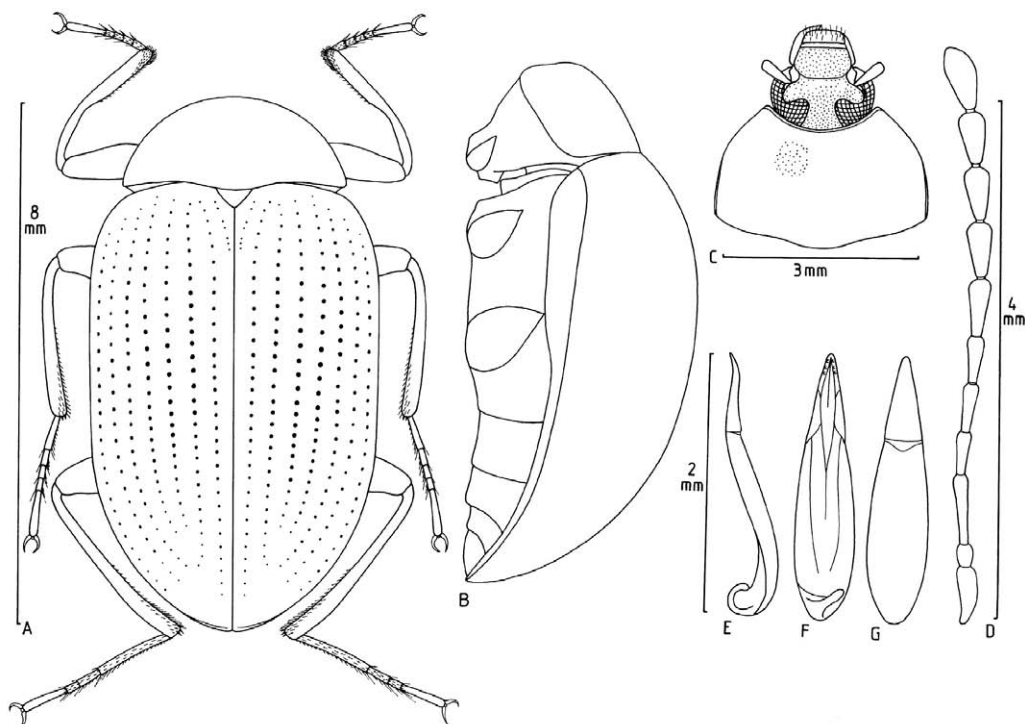


Fig. 7: *Amarygmus (Amarygmus) arfakensis* sp. n.: **A** Habitus, ♂; **B** Body, lateral view; **C** Head and pronotum; **D** Antenna; **E** Aedeagus, lateral view; **F** Aedeagus, ventral view; **G** Aedeagus, dorsal view.

species of this group possess elytral striae and not rows of elytral punctures as *A. arfakensis* sp. n. does. *Amarygmus ovatulus* BREMER, 2007 (pp.19-20, Fig. p.42) (from Lake Wissel of Irian Jaya) and *Amarygmus varicolor* GEBIEN, 1920 (BREMER 2002a, 194-195, Fig. p.217) (from New Britain, Bismarck Archipelago, and from Papua New Guinea) are the only species with rows of elytral punctures which I know. *A. ovatulus* is smaller (body length 6.1-6.5 mm) than *A. arfakensis* sp. n.; its elytra are more oval, the punctures of the elytral intervals of *A. ovatulus* are closely set and distinct (those of *A. arfakensis* sp. n. are impunctate). *A. varicolor* is larger (body length 9.9-12.0 mm), the elytra are narrower, and it presents a very unusual aedeagus which is so different from those of other *Amarygmus* species that I am not certain whether this species should remain in the genus *Amarygmus* DALMAN.

Description. Body length: 7.8 mm. Body width: 4.1 mm.

Ratios. Pronotum: width/length 1.83; width hind corners/width front corners 2.03. Elytra: length/width 1.58; length elytra/length pronotum 3.85; maximum width elytra/maximum width pronotum 1.32.

Colouration. Upper side, femora, tibiae, antennae, see "Diagnosis"; tarsi brown. Underside brown, opaque.

Head. Frons of medium width, slightly narrower than length of antennomere 3 (like 20:22); with minute, indistinct punctures. Genae lifted towards lateral margins, anteriorly terminating near the level of the middle part of fronto-clypeal suture. Fronto-clypeal suture slightly impressed, scarcely incised. Clypeus stretched forwards, allusively convex, punctured as on frons. Mentum reversely trapezoidal, with flat, lustrous lateral margins, space in between slightly convex transversely. Mandibles sulcated on outer surface, apically bifid.

Pronotum. Relatively short, convex transversely and longitudinally. Widest at base. Lateral margins subparallel in hind 40 percent, thence narrowing towards front corners and bent. Hind corners angular, moderately obtuse. Front corners rectangular, somewhat protruding. Anterior margin deeply excavated. Lateral and anterior margins bordered. Lateral borders in dorsal view visible only in the hind 60 percent. Front and hind corners in lateral view angular, front ones slightly obtuse, hind ones markedly obtuse. Surface with minute, not very closely set punctures.

Scutellum. Triangular, impunctate.

Elytra. Elongate, relatively wide, with subparallel sides between shoulders and hind third. Markedly convex transversely. Maximum of height at the end of first third. Shoulders angular, obtuse, somewhat bossing. Apices of elytra mutually rounded. Lateral edges in dorsal view very narrowly visible in the middle. Surface with rows of medium-sized punctures which become smaller near apex; their distances on disc in row 4 equal to 2-times the diameter of a punctures; about 24 punctures in row 4. Intervals flat, impunctate.

Underside only partially examined because of the bad condition of the holotype.

Antennae. Long, tender, reaching towards middle of elytra. Length/width ratio of antennomeres 1-11 equals to 18:9 / 8:7 / 27:6½ / 18:6½ / 18:7 / 22:7 / 21:8 / 13:9½ / 22:9½ / 21:10 / 26:11.

Legs. Relative long and tender. Femora moderately broadened towards second thirds. Protibiae, see "Diagnosis"; mesotibiae moderately bent; metatibiae nearly straight in basal 60 percent, slightly incurved in apical 40 percent. Lengths of protarsomeres 1-5 as 9:9:9:8:31; lengths of mesotarsomeres 1-5 as 24:11:9:9:31; lengths of metatarsomeres 1-4 as 51:18:9:32.

Etymology. Arfakensis, from Mt. Arfak where the holotype has been collected.

***Amarygmus (Amarygmus) asekiensis* sp. n.**

(Fig. 8A-E)

Holotype, ♀, SMNS: PNG [Papua New Guinea], Morobe Prov., Aseki, 1500-1650 m, 14.X.1992, leg. A. RIEDEL (right antennomeres 10 and 11 missing).

Diagnosis. Of medium size; elytra very long, with posteriorly slightly narrowing sides, with rows of medium-sized punctures and with flat intervals; pronotum markedly convex; frons relatively wide; antennae very short. Prosternal apophysis without a median groove, its apex with a posteriorly protruding median cone. Upper side brightly coppery, with a golden tinge (also upper side of head).

Very similar to *Amarygmus thesileoides* sp. n. concerning body shape, punctuation, and width of frons. *Amarygmus thesileoides* sp. n. also occurs in Morobe Prov. of Papua New Guinea. Differences: the colour of the upper side of *A. thesileoides* sp. n. is green that of *A. asekiensis* sp. n. is brightly coppery, the antennae of *A. asekiensis* sp. n. are shorter, especially the antennomeres 7-11, the metatibiae are not as much bent as in *A. thesileoides* sp. n., the elytra are somewhat shorter.

Amarygmus nervosus sp. n. is another related species; *A. asekiensis* sp. n. is larger (body length of *A. nervosus* sp. n. 7.1-7.2 mm), the elytra of *A. asekiensis* sp. n. are longer (length/width ratio of *A. nervosus* sp. n. 1.66-1.67:1), and the frons of *A. asekiensis* sp. n. is narrower;

Other related species are *Amarygmus incessus* sp. n. and *Amarygmus beccarii* sp. n.; see also at these species.

Description. Body length: 8.3 mm. Body width: 3.6 mm.

Ratios. Pronotum: width/length 1.74; width hind corners/width front corners 1.95. Elytra: length/width 1.92; length elytra/length pronotum 3.68; maximum width elytra/maximum width pronotum 1.10.

Colouration. Upper side, see "Diagnosis". Legs dark brown. Antennae brown. Pro-, meso- and metasternum brown, very lustrous; sternites somewhat opaque, with a golden tinge.

Head. Frons relatively wide, width approximately equals to lengths of antennomeres 3-5 jointly; relatively flat; with minute, not very closely set punctures. Genae slightly raised towards their lateral margins; anteriorly terminating in front of the level of the middle part of fronto-clypeal suture. Fronto-clypeal suture arched, slightly incised in its middle part. Clypeus moderately stretched forwards; slightly convex transversely and longitudinally; punctures somewhat narrower set than on frons. Mentum reversely trapezoidal, its lateral margins flat, lustrous, space in between dull, convex transversely. Underside of neck microreticulated, with a few small punctures which are so indistinct that it looks like impunctate at lower magnification. Mandibles with a longitudinal sulcus on outer surface, apically bifid.

Pronotum. Relatively narrow. Markedly convex transversely, moderately convex longitudinally. Maximum of width at base; anteriorly narrowing, with straight sides within basal half, bent within apical half. Hind corners angular; angle about 100°; front corners angular, angle about 100°. Anterior margin nearly straight. Lateral and anterior margins bordered. Lateral borders in dorsal view narrowly visible in basal three fourth; invisible in apical fourth. Front corners in lateral view nearly rounded, obtuse, hind corners angular, obtuse, but less so than front corners. Surface with small, distinct, not very closely set punctures.

Scutellum. Triangular, with a few tiny punctures

Elytra. Very long; widest shortly behind shoulders, slightly narrowing towards hind fourth; markedly convex transversely; moderately convex longitudinally; maximum of height approximately at the end of anterior fourth. Shoulders rounded, somewhat bossing. Apices of elytra mutually rounded. Lateral edges in

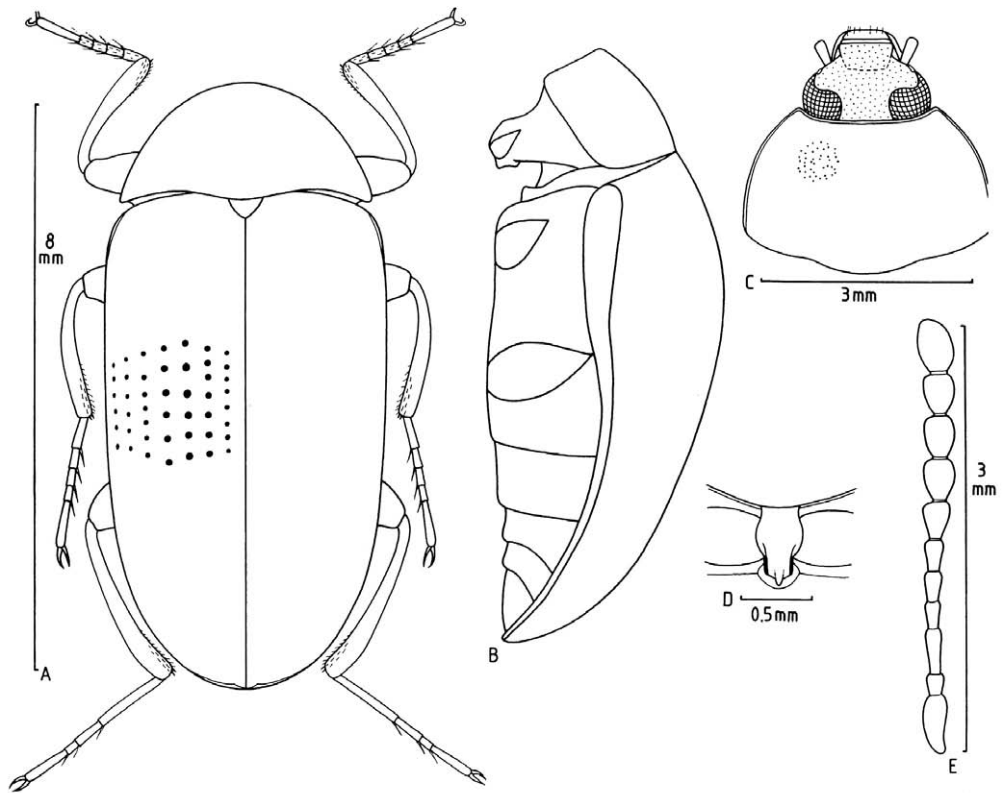


Fig. 8: *Amarygmus (Amarygmus) asekiensis* sp. n.: **A** Habitus, ♀; **B** Body, lateral view; **C** Head and pronotum; **D** Prosternal apophysis; **E** Antenna.

dorsal view only partially and narrowly visible along the middle. Surface with rows of medium-sized punctures which become evanescent near apex; distances of punctures on disc in row 4 equal to 3- to 4-times the diameter of a puncture; about 23 punctures in row 4. Intervals flat, impunctate.

Prosternum. Lateral parts of anterior margin narrowly bent upwards; in front of apophysis this border is missing. Prosternal apophysis not very wide, with bent sides laterally along procoxae which are not lifted ventrad; space in between without a median groove; behind the procoxae the sides are slightly narrowing, with somewhat lifted lateral margins; apex with a small, posteriorly projecting median cone.

Mesosternum. Surface of hind part smooth; its anterior margin excavated in the middle.

Metasternum. Anterior margin between mesocoxae rounded, broadly bordered; inner rim of this border and the rim behind mesocoxae with small, inconspicuous, closely set punctures. Disc impunctate. Median line indistinctly incised in the hind half.

Sternites. Anterior margin between metacoxae ogive, broadly bordered; inner rim of this border and laterally also the rims behind metacoxae with small, closely set, distinct punctures. Anterior margin of sternite 2 without a transverse track of punctures. Sternite 1 with minute, distinct, but very widely separated punctures; sternites 2-4 with tiny, widely separated punctures; sternite 5 impunctate.

Antennae. Short. Reaching posteriorly with one antennomere beyond base of elytra. Length/width ratio of antennomeres 1-11 equals to 16:9 / 8:6 / 16:6 / 9:6 / 8½:6 / 10:6½ / 14:10 / 15:10½ / 16:10½ / 14:11 / 21:12.

Legs. Short. Femora towards second thirds club-like broadened. Pro- and mesotibiae moderately bent; metatibiae slightly bent in the basal half, somewhat more incurved in apical half. Lengths of protarsomeres 1-5 as 11:10:8:8:29; lengths of mesotarsomeres 1-5 as 19:13:12:9:29; lengths of metatarsomeres 1-4 as 45:15:10:29.

Etymology. Asekiensis, from Aseki, the name of the location where the holotype has been collected.

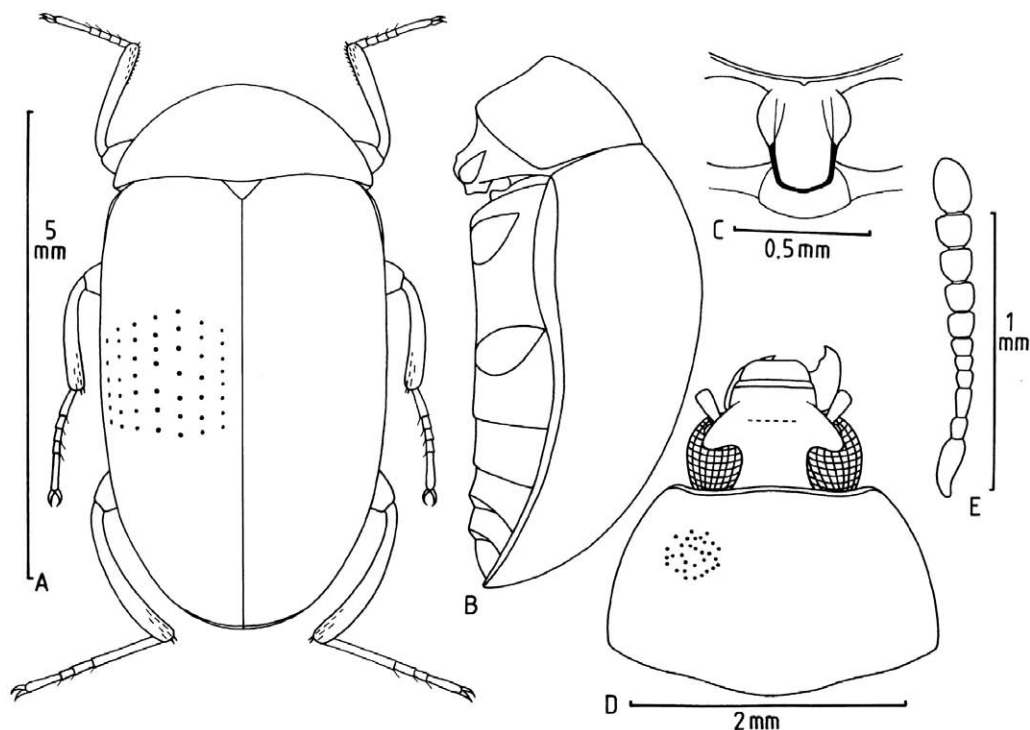


Fig. 9: *Amarygmus (Amarygmus) auricollis* sp. n.: **A** Habitus, ♀; **B** Body, lateral view; **C** Prosternal apophysis; **D** Head and pronotum; **E** Antenna.

***Amarygmus (Amarygmus) auricollis* sp. n.**

(Fig. 9A-E)

Holotype, ♀, ZSM: W-Papua, Manokwari Prov., Mokwam, 1400-1800 m, 01°43'06''S-133°68'54''E, 24.-28.II.2007, leg. A. SKALE.

Diagnosis. Small; elongate oval; markedly convex transversely and longitudinally; elytra with rows of medium-sized punctures and flat, impunctate intervals; frons of medium width; antennae short. Elytra dark green, pronotum in view from behind green, in dorsal view and in view from the front reddish golden; femora and tibiae black.

Size, body shape, elytral punctation and lustre similar to *Amarygmus parargus* sp. n., but this species does not present a golden pronotum in dorsal view or in view from the front; the elytra of *A. parargus* sp. n. are longer (length/width 1.69:1 in *A. parargus* sp. n. vs. 1.57:1 in *A. auricollis* sp. n.).

Concerning similarity to *A. phoebus* sp. n. which has been collected at the same location, see *A. phoebus* sp. n.

Description. Body length: 5.2 mm. Body width: 2.7 mm.

Ratios. Pronotum: width/length 2.00; width hind corners/width front corners 1.77. Elytra: length/width 1.57; length elytra/length pronotum 3.55; maximum width elytra/maximum width pronotum 1.13.

Colouration. Upper side, see "Diagnosis". Genae and clypeus black. Antennomeres 1 black, 2-3 dark brown, 4-11 black. Femora and tibiae black, tarsi brown. Underside black.

Head. Frons of medium width, as wide as the lengths of antennomeres 2-5 jointly; with small, indistinct, not very closely set punctures. Genae scarcely raised towards lateral margins; anteriorly terminating in front of the level of the middle part of fronto-clypeal suture. Fronto-clypeal suture neither impressed nor incised, it can be located best by the change of colour which occurs at the border between frons and clypeus. Clypeus nearly flat, punctation inconspicuous. Mentum reversely trapezoidal, with wide, flat, lustrous lateral margins;

space in between narrow, obtuse, clearly convex transversely. Underside of neck strongly microreticulated, with only a few small punctures. Mandibles with a longitudinal sulcus on outer surface, apically bifid.

Pronotum. Markedly convex transversely, moderately convex longitudinally. Widest at base; anteriorly narrowing and bent. Hind corners angular, obtuse, anterior corners rounded. Anterior margin straight. Lateral and anterior margins bordered. Lateral borders in dorsal view very narrowly visible. Front corners in lateral view widely rounded, hind corners rectangular. Surface with minute, widely and irregularly separated punctures.

Scutellum. Triangular, impunctate.

Elytra. Elongate, oval. Sides slightly bent. Markedly convex transversely, relatively strongly bent longitudinally; maximum of height at the end of first third. Shoulders rounded, somewhat accentuated. Apices of elytra mutually rounded. Lateral edges in dorsal view visible only in the hind quarter. Surface with rows of punctures of medium-size; their distances on disc in row 4 equal to 2 to 3-times the diameter of a puncture; about 20 punctures in row 4. Intervals flat, impunctate.

Prosternum. Anterior margin continuously and narrowly bent upwards, with a short triangular keel in the middle. Apophysis of medium width, along procoxae widened and lateral margins raised ventrad, space in between as a wide, not very deep groove; behind procoxae the sides are straight, and the lifted lateral margins are somewhat narrowing apically; apex broadly rounded, but its margin is also narrowly lifted.

Mesosternum. Surface of hind part smooth; its anterior margin is widely excavated.

Metasternum. Anterior margin between mesocoxae rounded, bordered. Disc opaque, impunctate. Median line deeply incised in the hind half. Inner rims behind mesocoxae and rims in front of metacoxae with small, inconspicuous punctures.

Sternites. Anterior margin between metacoxae ogive; inner rim of this border and behind metacoxae with small punctures; small punctures also on anterior edge of sternite 2. Sternites opaque, impunctate.

Antennae. Short, reaching over one tenth of elytra. Length/width ratio of antennomeres 1-11 equals to 12:7½ / 6:5 / 7:4 / 5:4 / 4:4 / 5:4½ / 6½:6 / 9:8 / 9:9 / 8:9 / 15:9.

Legs. Short. Femora towards second thirds club-like broadened. Protibiae straight; mesotibiae moderately bent; metatibiae somewhat more bent than mesotibiae. Lengths of protarsomeres 1-5 as 4:4:4:3:16; lengths of mesotarsomeres 1-5 as 12:6:6:5:17; lengths of metatarsomeres 1-4 as 33:12:8:17.

Etymology. Auricollis, from aurum (Lat.) = gold, collis (Lat.) = elevation, also used for pronotum in insects.

***Amarygmus (Amarygmus) beatulus* sp. n.**

(Fig. 10A-E)

Holotype. ♀. ZSM: Irian Jaya, Paniai Prov., Epomani, km 145, 550-750 m, 15.-16.I.1996, leg. A. RIEDEL.

Diagnosis. Small; convex transversely, pronotum narrower than base of elytra (lateral margins between both with an obtuse angle); elytra elongate oval, with maximum of width behind middle; elytra with rows of relatively closely set punctures and with flat intervals; pronotum short, markedly convex transversely; frons relatively wide; fronto-clypeal suture scarcely visible; antennae short. Characterized by colourful elytra and a blue pronotum; disc of elytra in dorsal view dark red to violet, in more lateral view also yellowish, green, lateral part also blue, shoulders in view from the front green; legs and antennae black.

I do not know any other *Amarygmus* of the Papuan faunal area with this combination of body shape and colouration.

Description. Body length: 6.0 mm. Body width: 3.5 mm.

Ratios. Pronotum: width/length 1.79; width hind corners/width front corners 1.69. Elytra: length/width 1.62; length elytra/length pronotum 3.75; maximum width elytra/maximum width pronotum 1.51.

Colouration. Upper side and legs, see "Diagnosis". Antennae black, but apical ¼ of antennomere 11 yellow. Underside dark brown to black.

Head. Upper side flat, only lateral margins of genae slightly lifted; with tiny, widely separated punctures both on frons and clypeus. Frons relatively wide, width equals approximately to lengths of antennomeres 3-6 jointly. Fronto-clypeal suture neither incised nor impressed and scarcely visible. Mandibles with a longitudinal sulcus on outer surface, apically bifid.

Pronotum. Short and narrow; markedly convex transversely, moderately convex longitudinally; widest about 5 percent anteriorly to hind corners; hind corners rounded; front corners angular, moderately protruding and slightly obtuse. Sides bent. Anterior margin moderately excavated. Lateral and anterior margins bordered.

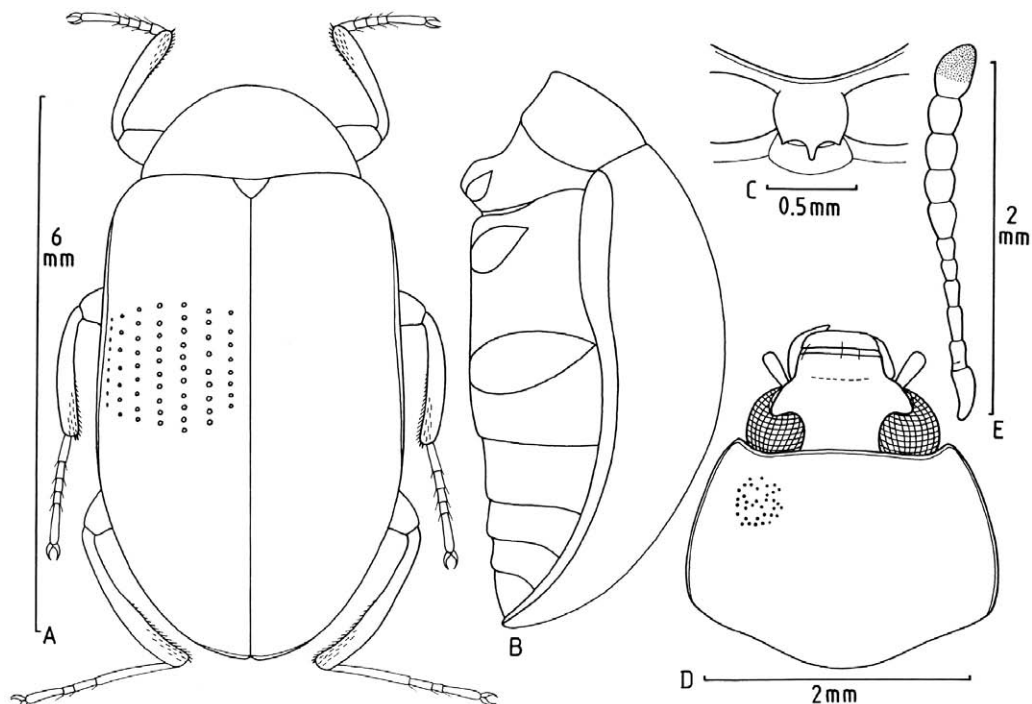


Fig. 10: *Amarygmus (Amarygmus) beatulus* sp. n.: **A** Habitus, ♀; **B** Body, lateral view; **C** Prosternal apophysis; **D** Head and pronotum; **E** Antenna.

Lateral borders in dorsal view very narrowly visible. Front corners in lateral view angular, slightly obtuse; hind corners rounded and strongly obtuse. Surface with tiny, very widely separated punctures.

Scutellum. Triangular, with a few tiny punctures.

Elytra. Markedly convex, oval, with the maximum of width behind middle, maximum of height in front of middle. Shoulders rounded, conspicuously bossing. Apices of elytra mutually rounded. Lateral edges in dorsal view visible except at shoulders and apex. Surface with rows of medium-sized, closely set punctures; their distances on disc in row 4 equal to 1 to 2-times the diameter of a puncture; about 36 punctures in row 4. Intervals flat, with tiny, widely separated punctures which just become visible at 50-fold magnification.

Prosternum. Anterior margin continuously and narrowly bent upwards, with a straight part in front of apophysis in the middle. Apophysis short, wide, sides rounded, only an allusive groove in the middle; apex with a markedly projecting cone in the middle, lateral parts of apex pointed.

Mesosternum. Hind part with a smooth surface, its anterior margin deeply excavated, the edges of excavation pointed.

Metasternum. Anterior margin between mesocoxae rounded, bordered. Rim behind mesocoxae and rim behind metacoxae punctured. Disc nearly impunctate, only in the depressed part of median line with a few minute punctures. Median line broadly impressed.

Sternites. Anterior margin between metacoxae ogive, bordered. Inner rim of border behind lateral parts of metacoxae punctured. Discs of sternites with a few minute punctures.

Antennae. Short; reaching over one tenth of elytra. Length/width ratio of antennomeres 1-11 equals to 11:5 / 7:4 / 10:3½ / 6:3½ / 6:4 / 6:4½ / 10:8 / 10:8½ / 9:9 / 9:9 / 17:9½.

Legs. Short. Femora towards second thirds club-like broadened. Protibiae slightly bent; meso- and metatibiae moderately bent. Lengths of protarsomeres 1-5 as 7:6:6:6:19; lengths of mesotarsomeres 1-5 as 13:8½:7½:6:21; lengths of metatarsomeres 1-4 as 39:12:8:20.

Etymology. *Beatulus* (Lat.), *dimin.* of *beatus* = happy, emotional.

***Amarygmus (Amarygmus) beccarii* sp. n.**

(Fig. 11A-H)

Holotype, ♀, SMNS: Irian Jaya: Jayawijaya, Paß, Habbema-See/Wamena-Tal, 3450 m, 19.-20.X.1993, leg. A. RIEDEL.**Paratypes**: dito (1 ♂ SMNS, 1 ♂ ZSM, 1 ♀ SMNS, 1 ♀ ZSM) – Irian Jaya: Jayawijaya, Habbema-See [Lake Habbema], 3000-3350 m, 17.X.1993, leg. A. RIEDEL (1 ♀ SMNS).**Diagnosis.** Of medium size; elongate, elytra long, narrow, with subparallel sides over a long distance; with rows of medium-sized, widely separated punctures; conspicuously convex transversely, only a little convex longitudinally, with flat, scarcely punctured intervals. Frons of medium width, in females distinctly wider than in males. Antennae short, slightly shorter in females than in males. Metasternum vaulted. Sternite 5 postero-medially impressed in the male, but their protarsomeres 1-3 not widened.Very near to *Amarygmus incessus* sp. n. which also occurs in the Highlands of Irian Jaya. This species is somewhat larger (body length 7.3 mm); it possesses somewhat longer elytra (length/width ratio 1.99), the punctures of the elytral rows are somewhat closer set; the frons is wider; the pronotum is more convex and longer, and its puncture are more conspicuous; the fronto-clypeal suture is more impressed, and the clypeus is convex longitudinally (in *A. beccarii* nearly flat).Also similar to *Amarygmus asekiensis* sp. n. and to *A. nervosus* sp. n.:*Amarygmus nervosus* sp. n. does not show, in contrast to *A. beccarii* sp. n., a vaulted metasternum, its median line is only shallowly impressed, and large, coarse punctures are present in the lateral parts of metasternum; the antennae of the females are markedly shorter than in males, moreover the prosternal apophysis differs from that of *A. beccarii*. It is only moderately longer than *A. beccarii* sp. n. (body length of *A. nervosus* sp. n.: 7.1-7.6 mm).*Amarygmus asekiensis* sp. n. is larger than *A. beccarii* sp. n. (body length 8.3 mm), its elytra are longer (length/width ratio 1.92), and the frons is wider.**Description.** Body length: 6.3-6.9 mm. Body width: 2.9-3.3 mm.

Ratios. Pronotum: width/length 1.78-1.93; width hind corners/width front corners 1.61-1.85. Elytra: length/width 1.77-1.92; length elytra/length pronotum 4.03-4.31; maximum width elytra/maximum width pronotum 1.21-1.28.

Colouration. Upper side dark coppery, lustrous; underside dark brown, nearly black; metasternum lustrous, sternites somewhat less lustrous. Femora and tibiae dark brown, tarsi brown.

Head. Frons not very wide, width wider than length of antennomere 3 in a male (like 13:9); females display a markedly wider frons, somewhat narrower than the lengths of antennomeres 2-5 jointly (like 23:25). Tiny, widely separated punctures which leave an area behind fronto-clypeal suture vacant. Genae entirely on the upper side of head, somewhat raised towards their lateral margins; anteriorly terminating in front of the level of the middle part of fronto-clypeal suture. Fronto-clypeal suture slightly impressed in its middle part. Clypeus shortly stretched forwards, nearly flat, punctures tiny, but somewhat narrower set than on frons. Mentum reversely trapezoidal, with flat lateral margins; space in between somewhat convex transversely, dull. Underside of neck microreticulated, slightly lustrous, with small, indistinct, but closely set punctures. Mandibles with a longitudinal sulcus on outer surface, apically bifid.

Pronotum. Moderately narrow and convex transversely and longitudinally. Widest at base; sides anteriorly narrowing and bent. Hind corners angular, slightly obtuse; front corners widely rounded. Anterior margin straight. Lateral and anterior margins bordered. Lateral borders in dorsal view narrowly visible in hind three quarter, nearly invisible in frontal quarter. Front corners in lateral view narrowly rounded, hind corners angular, with an angle of about 95°. Surface with small, indistinct, irregularly and relatively widely separated punctures.

Scutellum. Triangular; with a few tiny punctures.

Elytra. Elongate, relatively narrow; with straight and parallel sides over a long distance; markedly convex transversely, only slightly convex longitudinally (nearly flat in the middle part longitudinally); maximum of length about at one third of elytra. Shoulders rounded; scarcely bossing. Apex of elytra mutually rounded. Lateral edges in dorsal view very narrowly visible posterior to shoulders. Surface with rows of medium-sized punctures which become evanescent near apex; distances between punctures on disc in row 4 equal to 2- to 3-times the diameter of a puncture, about 21 punctures in row 4. Intervals flat, with a few tiny, widely separated punctures.

Prosternum. Anterior margin narrowly and continuously bent upwards, somewhat retracted posteriorly in the middle. Apophysis oval, somewhat posteriorly protruding; lateral margins along procoxae slightly lifted; space in between as a shallow groove.

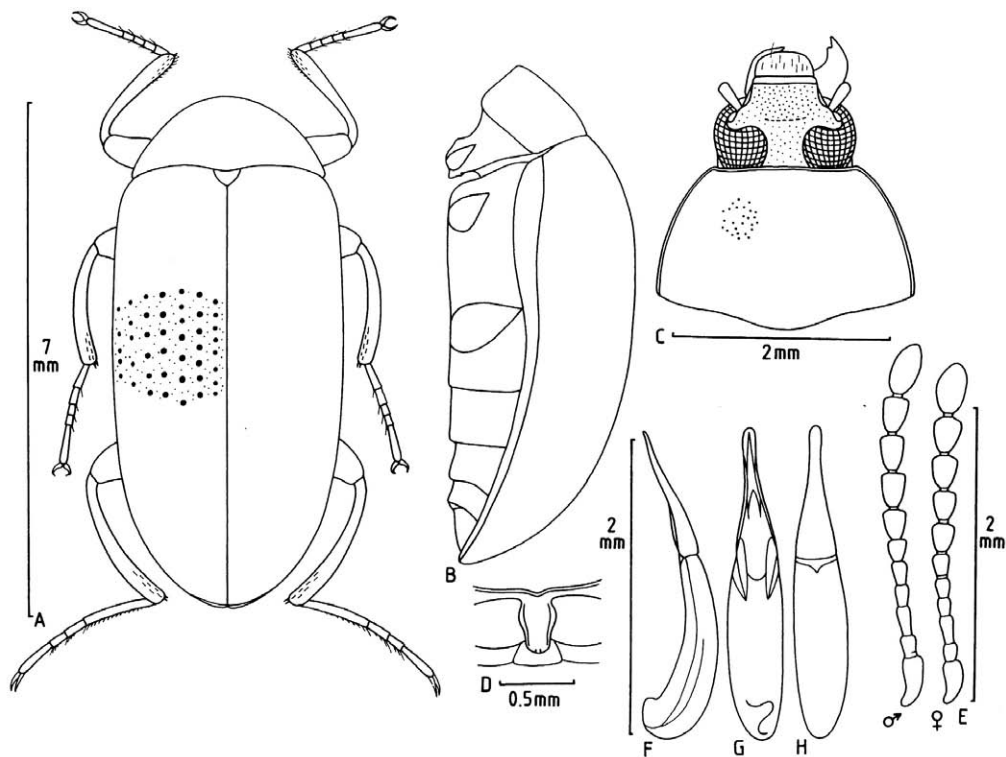


Fig. 11: *Amarygmus (Amarygmus) beccarii* sp. n.: **A** Habitus, ♂; **B** Body, lateral view; **C** Head and pronotum; **D** Pro-sternal apophysis; **E** Antennae, ♂ and ♀; **F** Aedeagus, lateral view; **G** Aedeagus, ventral view; **H** Aedeagus, dorsal view.

Mesosternum. Hind part short, narrow, with a longitudinal sulcus on each side; its anterior margin slightly excavated in the middle.

Metasternum. Vaulted. Anterior margin between mesocoxae rounded, bordered. Disc with tiny, widely separated punctures. Median line incised in the posterior half.

Sternites. Anterior margin between metacoxae ogive, bordered. Anterior half of sternite 1 with medium-sized, relatively closely set punctures; posterior half of sternite 1 and sternite 2 with tiny, widely separated punctures; sternites 3-5 impunctate. Sternite 5 impressed posterior-medially in the males.

Antennae. Short, reaching over one tenth of elytra in males, over one fifteenth in females. Length/width ratio of antennomeres 1-11 in a male equals to 13:6 / 6:5 / 9:4½ / 7:4½ / 7:4½ / 7:5½ / 9:7 / 11:7½ / 12:8 / 12:8 / 18:8; in a female to 11:6 / 6:5 / 8:4 / 6:4 / 5:4½ / 6:5½ / 8:7½ / 9:8 / 10:9 / 9½:9 / 16:9.

Legs. Short. Profemora moderately broadened towards their second thirds. Protibiae slightly bent, meso- and metatibiae more bent than protibiae. Lengths of protarsomeres 1-5 as 6:5:4½:4:24; lengths of mesotarsomeres 1-5 as 16:10:7:7:24; length of metatarsomeres 1-4 as 39:13:10:24.

Etymology. Beccarii, honouring Odoardo Beccari, 1843-1920, Italian naturalist and explorer who travelled on New Guinea 1872 and again 1875-1876. His collection of birds of paradise is deposited in the Museum of Genova.

Amarygmus (Amarygmus) caeruleus sp. n.

(Fig. 12A-E)

Holotype, ♀, ZSM: W-Papua, Raja Ampat Prov., Waigeo Isl., Lopintol, Bajon-River, 0°07'S-130°53'E, 11.I.2004, leg. A. SKALE.

Diagnosis. Of medium size, elongate oval, distinctly convex transversely, somewhat convex longitudinally; elytra with rows of small, relatively distantly positioned punctures and flat, impunctate intervals. Frons wide, antennae short, with the six ultimate antennomeres enlarged. Upper side brilliantly blue, including head and tibiae.

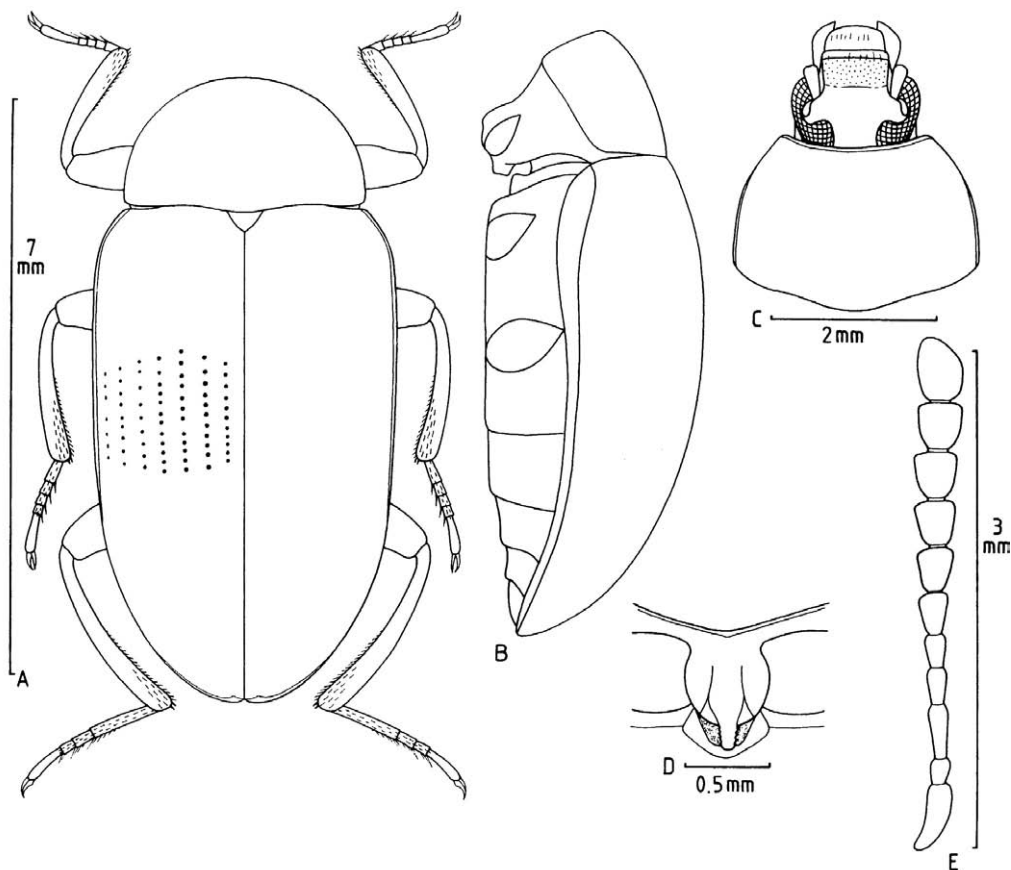


Fig. 12: *Amarygmus (Amarygmus) caeruleus* sp. n.: **A** Habitus, ♀; **B** Body, lateral view; **C** Head and pronotum; **D** Prosternal apophysis; **E** Antenna.

There are two undescribed species with a very similar body shape and colouration in NE Papua New Guinea.

Description. Body length: 7.0 mm. Body width: 3.4 mm.

Ratios. Pronotum: width/length 1.89; width hind corners/width front corners 1.89. Elytra: length/width 1.53; length elytra/length pronotum 3.61; maximum width elytra/maximum width pronotum 1.25.

Colouration. Upper side, see "Diagnosis". Antennae black. Underside, including the basal 80 percent of femora, black (apical 20 percent blue), metasternum lustrous, sternites opaque. Tarsi black.

Head. Frons flat, wide, with indistinct, minute, relatively widely separated punctures. Genae raised and therefore well separated from frons; anteriorly they terminate somewhat behind the level of the middle part of fronto-clypeal suture. Fronto-clypeal suture slightly impressed, scarcely incised. Clypeus distinctly stretched forwards, slightly convex transversely, its punctures slightly larger and more distinct than on frons. Mentum reversely trapezoidal; lateral margins flat, lustrous; space in between slightly convex transversely. Underside of neck with small, relatively closely set punctures. Mandibles with a longitudinal sulcus on outer surface, apically bifid.

Pronotum. Convex transversely and longitudinally. Widest at base; the hind 40 percent with subparallel sides, anteriorly thence bent and narrowed towards front corners. Hind corners angular, very obtuse; front corners difficult to judge in dorsal view because they are not well visible. Anterior margin straight. Lateral and anterior margins bordered. Lateral borders in dorsal view very narrowly visible within hind 30 percent. Front corners in lateral view about rectangular; hind corners angular, obtuse. Surface impunctate.

Scutellum. Triangular; impunctate.

Elytra. Elongate oval. Convex transversely, slightly convex longitudinally. Maximum of width and height nearly in the middle. Shoulders angular, obtuse. Apices of elytra mutually rounded. Lateral edges in dorsal view very narrowly visible. Surface with rows of small punctures which become evanescent near apex; their distances on disc in row 4 equal to 2 to 3-times the diameter of a puncture; about 35 punctures in row 4. Intervals flat, impunctate.

Prosternum. Anterior margin narrowly bent upwards, somewhat retracted towards apophysis in the middle. Apophysis special with button-like raised lateral margins along procoxae and the space in between as a deep, narrow median groove; behind procoxae the apophysis is somewhat descending, and the lateral margins are a little narrowing; apex with a distinct, posteriorly protruding median cone.

Mesosternum. Hind part short, smooth, anterior margin excavated in the middle.

Metasternum. Anterior margin between mesocoxae rounded, bordered. Disc with minute, widely separated punctures. Median line incised in the posterior three-fourth.

Sternites. Anterior margin between metacoxae ogive, bordered. Anterior half of sternite 1 striolated in longitudinal direction, posterior half with minute punctures. Sternites 2-5 nearly impunctate.

Antennae. Reaching over one fifth of elytra. Length/width ratio of antennomeres 1-11 equals to 18:7 / 7:6 / 13:6 / 10:6 / 10:7 / 13:9 / 14:10 / 15:11 / 14:12 / 14:12 / 21:13.

Legs. Short. Femora towards second thirds broadened. Pro- and mesotibiae nearly straight; metatibiae moderately bent. Lengths of protarsomeres 1-5 as 5:5:5:4:21; lengths of mesotarsomeres 1-5 as 12:7:7:4:23; lengths of metatarsomeres 1-4 as 33:11:9:22.

Etymology. *Caeruleus* (Lat.) = blue.

***Amarygmus (Amarygmus) chimbuensis* sp. n.**

(Fig. 13A-E)

Holotype, ♀, ZSM: Papua New Guinea, Simbu Prov., Mu village, near Kundiawa, 4°42'S-145°02'E, 1900 m, 17.-20.III.2001, LUKAŠ EÍŽEK lgt.

Diagnosis. Of medium size, elongate oval, markedly convex transversely; elytra with rows of medium-sized, well separated punctures, intervals flat; pronotum with indistinct, relatively closely set punctures; upper side of head flat, but it is separated into two differently coloured areas (frons and hind part of clypeus dark brown, frontal part of clypeus lighter brown (with a hyperbole border between both parts); frons wide; antennae relatively short; protibiae straight. Elytra green, lustrous, pronotum dark green; femora and tibiae black, antennae brown.

Concerning body shape and punctuation of elytra *Amarygmus chimbuensis* sp. n. is related to *Amarygmus solitarius* BREMER, 2003, *A. epistomaticus* sp. n., *A. ixalus* sp. n. and to *A. akteae* sp. n., the first two species occur on Northeastern and Central Papua New Guinea, *A. ixalus* sp. n. on Biak Island in western Irian Jaya, and *A. akteae* sp. n. is present in the Highlands of the Jayawijaya Prov. of Irian Jaya.

Amarygmus solitarius from the Morobe Prov. displays, in contrast to *A. chimbuensis* sp. n., a uniformly black upper side, its protibiae are moderately bent, its metatibiae are more bent in the basal half, however, its elytral punctuation, the shape of upper side of head and its antennae are similar to those of *A. chimbuensis* sp. n.

Amarygmus epistomaticus sp. n. (body length 4.7+5.3 mm) has the same colouration of upper side as *A. chimbuensis* sp. n., but its body is narrower, its frons is much narrower, and the meso- and metatibiae are more bent.

Amarygmus ixalus sp. n. is smaller (body length 4.6-4.9 mm); the elytra are more oval and shorter (elytral length/width ratio 1.45-1.55). The upper side is either blue or violet.

Amarygmus akteae sp. n.: concerning differences see *A. akteae* sp. n.

Description. Body length: 5.7 mm. Body width: 3.1 mm.

Ratios. Pronotum: width/length 2.06; width hind corners/width front corners 1.88. Elytra: length/width 1.65; length elytra/length pronotum 4.19; maximum width elytra/maximum width pronotum 1.23.

Colouration. Elytra green, slightly lustrous; pronotum black, metallic; frons and hind parts of clypeus are coloured as pronotum, frontal parts of clypeus are dark brown; femora and tibiae dark brown; tarsi brown; antennae brown. Underside brown.

Head. Upper side nearly flat; frons wide, as wide as lengths of antennomeres 2-4 jointly; with minute, relatively closely set punctures. Genae scarcely raised towards lateral margins; anteriorly terminating in front of the level of the middle part of fronto-clypeal suture. Fronto-clypeal suture incised in its middle. Clypeus

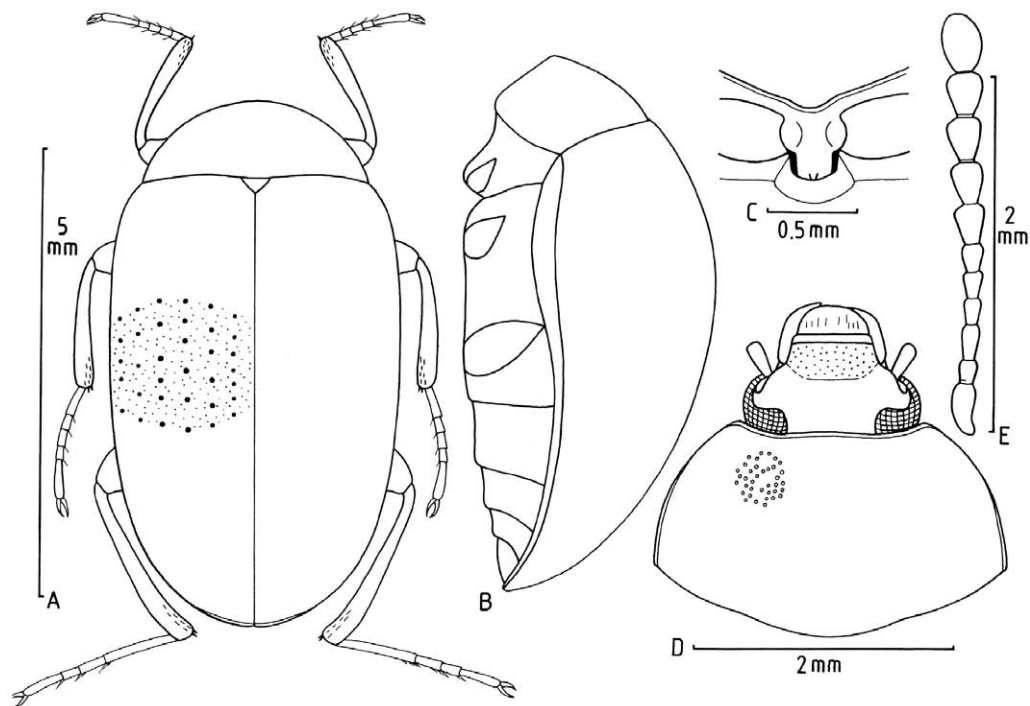


Fig. 13: *Amarygmus (Amarygmus) chimbuensis* sp. n.: **A** Habitus, ♀; **B** Body, lateral view; **C** Prosternal apophysis; **D** Head and pronotum; **E** Antenna.

moderately stretched forwards. Mentum reversely trapezoidal, sides slightly bent, with flat, lustrous lateral margins; space in between convex transversely, dull. Underside of neck with a few small punctures. Mandibles with a longitudinal sulcus on outer surface, apically bifid.

Pronotum. Convex transversely, less convex longitudinally; widest at base, anteriorly narrowing and bent; hind corners in dorsal view angular, slightly obtuse, front corners rounded. Anterior margin straight; lateral and anterior margins bordered; lateral borders in dorsal view narrowly visible only in the hind 40 percent. Hind and front corners in lateral view obtuse, the front ones rounded, the hind ones angular. Surface with small, closely set, but inconspicuous punctures.

Scutellum. Triangular; with a few tiny punctures.

Elytra. Elongate oval; markedly convex transversely, somewhat less convex longitudinally; maximum of width and height at the end of first third. Shoulders rounded, slightly bossing. Apices of elytra mutually rounded. Lateral edges invisible in dorsal view. Surface with rows of medium-sized punctures which are situated in some distance from each other; distances between punctures on disc in row 4 equal to 3- to 4-times the diameter of a puncture; about 18 punctures in row 4. Intervals flat, impunctate.

Prosternum. Anterior margin continuously and narrowly bent upwards, slightly retracted towards apophysis in the middle. Apophysis not very wide, ascending towards the level along procoxae and descending between this level and apex, but somewhat protruding posteriorly; along procoxae widened and lateral margins raised ventrad; space in between as a deep median groove; posterior to procoxae sides are narrowing and bent towards middle of apex.

Mesosternum. Upper side of hind part smooth; anterior margin deeply excavated in the middle.

Metasternum. Anterior margin between mesocoxae rounded, bordered. Rim below mesocoxae punctured. Median line impressed and incised in its posterior half. Disc with minute, distinct, widely separated punctures.

Sternites. Anterior margin between metacoxae ogive, distinctly bordered. Rim caudad to metacoxae with inconspicuous punctures. Sternite 1 with minute, widely separated punctures from which tiny hairs originate; sternite 2 with tiny punctures and hairs; sternites 3-5 impunctate.

Antennae. Reaching over a quarter of elytra. Length/width ratio of antennomeres 1-11 equals to 11:6 / 6:5 / 9½:4½ / 9:4½ / 9:5 / 8:5½ / 10:7½ / 12:8½ / 12:9 / 12:9 / 16:10.

Legs. Of medium length; femora towards second thirds club-like broadened. Tibiae relatively thin, apically somewhat broadened; protibiae straight; mesotibiae slightly bent in basal part, straight in apical part; metatibiae straight in basal part, slightly incurved in apical part. Lengths of protarsomeres 1-5 as 6:6:5:5:19; lengths of mesotarsomeres 1-5 as 14:8:7:7:19; lengths of metatarsomeres 1-4 as 37:15:9:20.

Etymology: Chimbuensis, named after the Prov. of Chimbu, where the holotype has been collected.

***Amarygmus (Amarygmus) debilis* sp. n.**

(Fig. 14A-E)

Holotype, ♀, BMH: New Guinea: NW, Nabire, S. Gelvink Bay, 10-40 m, 1.-4.IX.1962, J. SEDLACEK Collector, BISHOP (right middle and hind legs missing).

A second specimen is markedly damaged, therefore, it was not labeled as paratype; its data: New Guinea (NW), Nabire, S. Gelvink Bay, 5-50 m, 25.VIII.-2.IX.1967, J. SEDLACEK Collector, BISHOP. It is deposited in ZSM.

Diagnosis. Very small; elongate, narrow; elytra with subparallel sides, rows of punctures and flat intervals; frons wide; antennae relatively long. Upper surface dark blue, femora and tibiae nearly black.

Very similar to *Amarygmus mirabilis* sp. n. concerning body shape, body length, colouration of pronotum and elytra, length of elytra, and width of frons.

Differences between *Amarygmus debilis* sp. n. and *A. mirabilis* sp. n.: The pronotum of *A. debilis* sp. n. is wider than that of *A. mirabilis* sp. n. (width/length ratio 1.64:1 vs. 1.32:1); the maximum width of elytra is about at a quarter of length of elytra in *A. debilis* sp. n., at the middle in *A. mirabilis* sp. n.; the upper surface of frons of *A. debilis* sp. n. is conspicuous by the deeply incised fronto-clypeal suture (in its middle part), in *A. mirabilis* sp. n. the upper surface is flat, and the fronto-clypeal suture is slightly incised and inconspicuous.

Description. Body length: 3.7 mm. Body width: 1.7 mm.

Ratios. Pronotum: width/length 1.64; width hind corners/width front corners 1.85. Elytra: length/width 1.81; length elytra/length pronotum 3.55; maximum width elytra/maximum width pronotum 1.19.

Colouration. Pronotum and elytra dark blue, somewhat lustrous, Underside including femora dark brown, lustrous, tibiae dark brown, tarsi brown; sternites somewhat less lustrous than metasternum. Antennomeres 1-5 brown, 6-11 black.

Head. Frons wide, wider than lengths of antennomeres 3-5 jointly (like 22:17½), slightly convex and sloping to the incised and impressed fronto-clypeal suture; with minute, widely separated punctures. Genae moderately raised towards lateral margins, anteriorly terminating in front of the level of the middle part of fronto-clypeal suture. Fronto-clypeal suture incised and somewhat impressed in its middle part. Clypeus moderately stretched forwards, slightly convex longitudinally; punctured as on frons. Mentum widened anteriorly, with bent lateral sides and flat, lustrous lateral margins, space in between also lustrous, somewhat convex transversely and with a few minute punctures. Underside of neck with a few tiny punctures. Mandibles with a longitudinal sulcus on outer surface, apically bifid.

Pronotum. Markedly convex transversely, slightly convex longitudinally. Widest between hind 40 percent and hind corners where the sides are subparallel; towards middle and front corners narrowing and moderately bent. Hind corners very obtuse; front corners angular, obtuse. Anterior margin slightly excavated. Lateral and anterior margins continuously bordered. Lateral borders in dorsal view narrowly visible in their whole length. Front corners in lateral view rectangular, hind corners rounded. Surface with small, distinct, somewhat irregularly set punctures.

Scutellum. Triangular, impunctate.

Elytra. Elongate, narrow; markedly convex transversely, moderately convex longitudinally; maximum of width and height at the end of first fifth; sides behind maximum subparallel. Shoulders rounded, slightly accentuated; apices of elytra mutually rounded; lateral edges in dorsal view very narrowly visible in the hind third. Surface with rows of medium-sized punctures which are not connected by lines and which become evanescent near apex; distances between punctures on disc 2 to 3-times the diameter of a punctures; about 25 punctures in row 4. Intervals flat, impunctate.

Prosternum. Anterior margins narrowly bent upwards. Apophysis along procoxae wing-like widened; behind procoxae much narrower and with somewhat lifted, subparallel lateral margins; apex with a posteriorly projecting cone.

Mesosternum. Surface of hind part smooth; its anterior margin excavated in the middle.

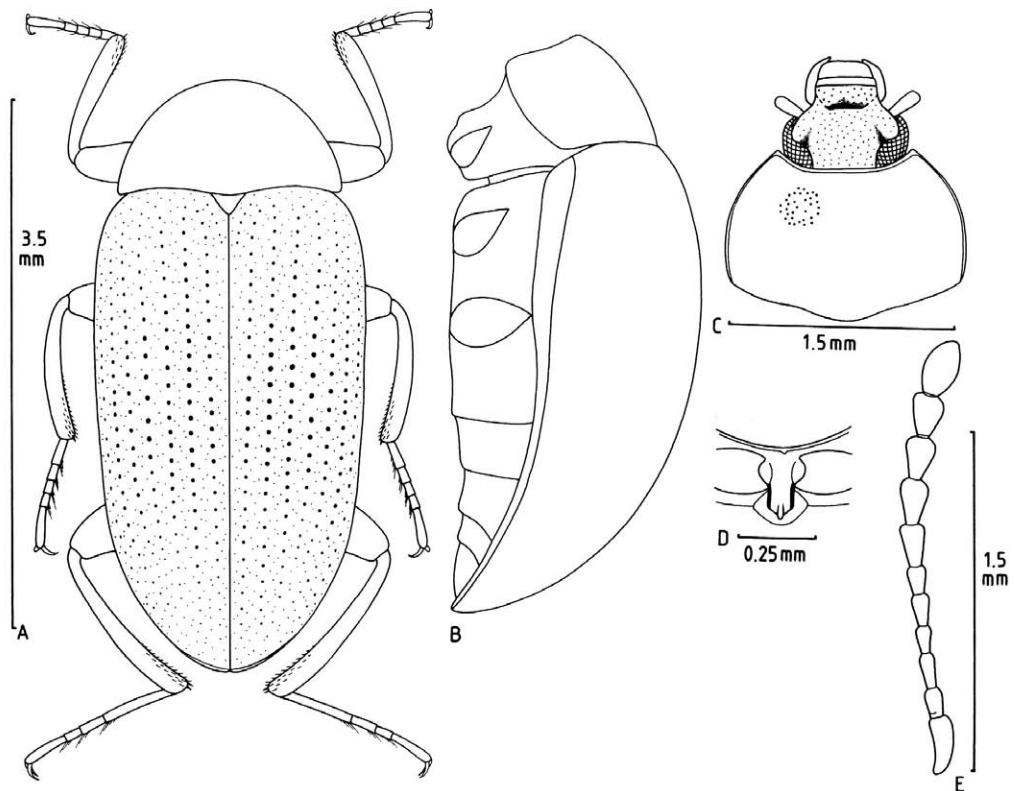


Fig. 14: *Amarygmus (Amarygmus) debilis* sp. n.: **A** Habitus; **B** Body, lateral view; **C** Head and pronotum; **D** Prosternal apophysis; **E** Antenna.

Metasternum. Anterior margin between mesocoxae rounded, broadly bordered, inner rim of border (also below mesocoxae) coarsely punctured. Disc impunctate. Median line impressed in its hind half.

Sternites. Anterior margin between metacoxae ogive, inner rim of border (also behind metacoxae) coarsely punctured. Sternites impunctate.

Antennae. Reaching over about 40 percent of elytra. Length/width ratio of antennomeres 1-11 equals to $10:4\frac{1}{2} / 6:3\frac{1}{2} / 7:3 / 5:3 / 5\frac{1}{2}:3\frac{1}{2} / 7:3\frac{1}{2} / 9:4\frac{1}{2} / 9:6 / 9:6 / 9:6\frac{1}{2} / 13:7$.

Legs. Of medium length. Femora towards second thirds club-like broadened. Protibiae slightly bent; mesotibiae moderately bent; metatibiae straight in basal half, slightly incurved in apical half. Lengths of protarsomeres 1-5 as $4:4:4:3:10$; lengths of mesotarsomeres 1-5 as $10:5:4:3:11$; lengths of metatarsomeres 1.4 as $22:8:5:10$.

Etymology. *Debilis* (Lat.) = fragile, delicate.

***Amarygmus (Amarygmus) defector* sp. n.**

(Fig. 15A-E)

Holotype. ♀, ZSM: Indonesia, W-Papua, 50 km SE Kaimana, Triton Bay, vic. Kamaka vill., S $3^{\circ}49'50''$ /E $134^{\circ}11'27''$, 10-50 m, 2.-5.II.2011, A. SKALE leg. (006) (somewhat immature).

Diagnosis. Of medium size, narrow, elongate; elytra markedly convex transversely, widest shortly behind shoulders, very slightly narrowing posteriorly, with rows of medium-sized punctures and with flat intervals on disc (postero-laterally the intervals are slightly convex); pronotum moderately convex transversely, with small, distinct, relatively closely set punctures; frons of medium width; antennae short. Colouration, see below.

Very similar to *Amarygmus profectus* sp. n.. This species also occurs at the same location. *A. defector* sp. n. may easily be confused with *A. profectus*. But the shape of the pronotum is somewhat different, the frons is wider and the antennae are shorter.

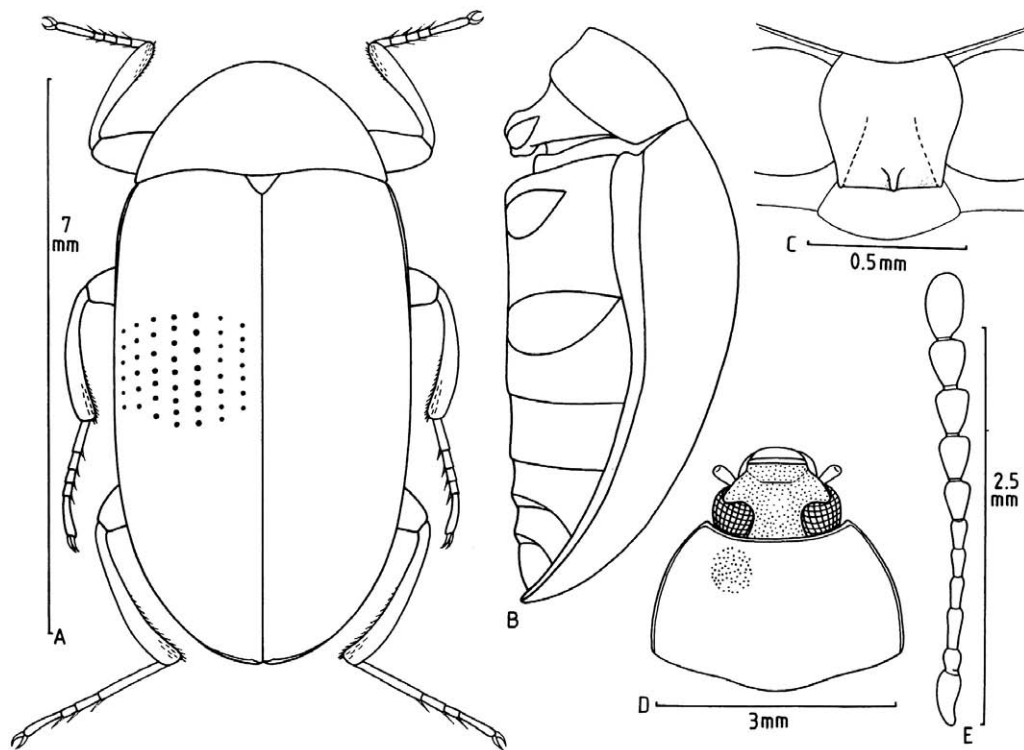


Fig. 15: *Amarygmus (Amarygmus) defector* sp. n.: **A** Habitus, ♀, **B** Body, lateral view; **C** Prosternal apophysis; **D** Head and pronotum; **E** Antenna.

Description. Body length: 6.6 mm. Body width: 3.2 mm.

Ratios. Pronotum: width/length 1.71; width hind corners/width front corners 1.85. Elytra: length/width 1.74; length elytra/length pronotum 3.36; maximum width elytra/maximum width pronotum 1.13.

Colouration. Upper side brown, lustrous, pronotum with a slightly golden shimmer; scutellum lighter brown than the rest of upper side; legs brown; antennomeres 1-5 brown, 6-11 black. Underside brown, lustrous.

Head. Bent markedly downwards, in dorsal view invisible. Frons of medium width, wider than lengths of antennomeres 3+4 jointly (as 22:18), covered with minute, relatively closely set punctures. Genae towards their lateral margins slightly raised, anteriorly terminating somewhat in front of the level of the middle part of fronto-clypeal suture. Fronto-clypeal suture slightly incised in its middle part. Clypeus moderately stretched forwards, very slightly convex, punctures as on frons. Mentum reversely trapezoidal, lateral margins flat, lustrous; space in between somewhat convex transversally, opaque. Underside of neck with small, not very closely set punctures. Mandibles on outer sides sulcated, apically bifid.

Pronotum. Relatively long; somewhat but not as clearly convex transversely as in other elongate species, the lateral parts are less convex within the anterior 40 percent than the median part; moderately convex longitudinally. Widest at base; narrowing anteriorly, with straight sides within posterior 40 percent, thence anteriorly bent. Hind corners angular, slightly obtuse in dorsal view; front corners accentuated, but not clearly angular. Anterior margin slightly excavated. Lateral and anterior margins bordered. Front corners in lateral view widely rounded, hind corners angular, slightly obtuse. Surface with small, distinct, irregularly set punctures.

Scutellum. Triangular, impunctate.

Elytra. Elongate, posteriorly very slightly narrowing, markedly convex transversely, moderately convex longitudinally. Maximum of height at the end of first quarter. Shoulders rounded and somewhat baggily accentuated. Apices of elytra mutually rounded. Lateral edges in dorsal view very narrowly visible in the posterior 80 percent. Surface with rows of medium-sized punctures which are still discernable near apex,

their distances on disc in row 4 equal to $1\frac{1}{2}$ - to 2-times the diameter of a puncture; about 36 punctures in row 4. Intervals on disc flat, latero-posteriorly somewhat convex; they are impunctate.

Prosternum. Anterior margin narrowly bent upwards laterally, this border is widely interrupted in the middle. Apophysis short, nearly plain, lateral margins bent, apically tripartite with a median cone which is separated laterally from somewhat lifted points by a narrow depression.

Mesosternum. Hind part laterally with a shallow sulcus on each side; its anterior margin excavated in the middle.

Metasternum. Anterior margin between mesocoxae rounded, bordered; inner rim of the border (also laterally behind mesocoxae) with coarse punctures. Median line incised in its whole length, lateral of it with some minute, widely separated punctures.

Sternites. Anterior margin between metacoxae ogive, faintly bordered; inner rim of border (also laterally behind metacoxae) with coarse punctures. Sternites impunctate.

Antennae. Reaching over one fifth of elytra. Length/width ratio of antennomeres 1-11 equals to $12:6\frac{1}{2} / 6:5 / 11:4\frac{1}{2} / 7:4\frac{1}{2} / 8:5 / 7:5\frac{1}{2} / 10:8 / 12:9 / 13:9\frac{1}{2} / 12:9\frac{1}{2} / 19:10$.

Legs. Short. Femora towards second thirds club-like broadened. Protibiae bent and flat, on underside somewhat indented; mesotibiae moderately bent; metatibiae nearly straight in basal half, slightly incurved in apical half. Lengths of protarsomeres 1-5 as 8:8:6:6:21; lengths of mesotarsomeres 1-5 as 15:11:7:5:21; lengths of metatarsomeres 1-4 as 37:12:7:21.

Etymology. Defector (Lat.) = defector.

Amarygmus (Amarygmus) epistomaticus sp. n.

(Fig. 16A-I)

Holotypus, ♂, BMH: New Guinea (NE), Lae, sea level, July 26, 1955, J. L. GRESSITT.

Paratype: dito (1 ♀ BMH) - New Guinea: NE, Karimui, 1080 m, 14.-15.VII.1963, J. SEDLACEK (1 ♂ ZSM) [Karimui, SW of Goroka, 6°32'S-144°47'E]. The only difference of this paratype from holotype is the presence of more impressed rows (nearly striae) in the lateral and hind part of elytra. Probably it is a subspecies of *A. epistomaticus sp. n.*

Diagnosis. Small, narrow; elongate, slightly oval and narrowing posteriorly; characterized by a very special form of upper side of head; the fronto-clypeal suture, scarcely incised, is situated just in front of eyes; the clypeus presents two different structures, one with the dark colour and structure as the frons, and a second one, situated in front of it, presenting a brown colour and a surface without punctures (at 50-fold magnification); the border between both structures is like a hyperbole (together with the genae). Elytra elongate, sides somewhat narrowing posteriorly, markedly convex transversely, with rows of medium-sized punctures and flat intervals. Elytra and pronotum green, lustrous; legs dark brown, tarsi yellowish brown; antennae yellowish brown.

A similar structure of upper side of head is known to occur in *Amarygmus solitarius* BREMER, 2003, *A. akteae sp. n.*, *A. chimbuensis sp. n.* and *A. ixalus sp. n.* *Amarygmus solitarius* is more compact, presents a much wider frons and a dark, nearly black upper side. It has been collected in the Morobe Province of Papua New Guinea. Concerning differences to *Amarygmus chimbuensis sp. n.* and *A. ixalus sp. n.*, see *A. chimbuensis sp. n.* and *A. ixalus sp. n.* *Amarygmus cylindricus* (GEBIEN, 1920) which has been collected at the same location as *A. epistomaticus sp. n.* does not show these special form of clypeus, its frons is wider, and the punctuation on pronotum is closer set and larger.

Description. Body length: 4.7+5.3 mm. Body width: 2.3+2.6 mm.

Ratios. Pronotum: width/length 1.80+1.90; length elytra/length pronotum 3.33+3.57; maximum width elytra/maximum width pronotum 1.11+1.14.

Colouration. See "Diagnosis". Underside dark brown.

Head. Frons relatively narrow, as wide as antennomere 4 long; frons short because the anteriorly terminating fronto-clypeal suture is situated just in front of anterior margin of eyes, with tiny, indistinct, well separated punctures. Genae narrow, situated entirely on the upper side of head, only slightly raised towards their lateral margins; anteriorly terminating approximately at the level of the middle part of fronto-clypeal suture. Fronto-clypeal suture slightly incised in the middle. Clypeus, see "Diagnosis". Mentum reversely trapezoidal, with flat, lustrous lateral margins; space in between opaque, convex transversely. Mandibles with a longitudinal sulcus on outer side, apically bifid.

Pronotum. Convex transversely and longitudinally. Widest at base, anteriorly narrowing and bent. Hind corners angular, obtuse; front corners rounded. Anterior margin straight. Lateral and anterior margins bordered

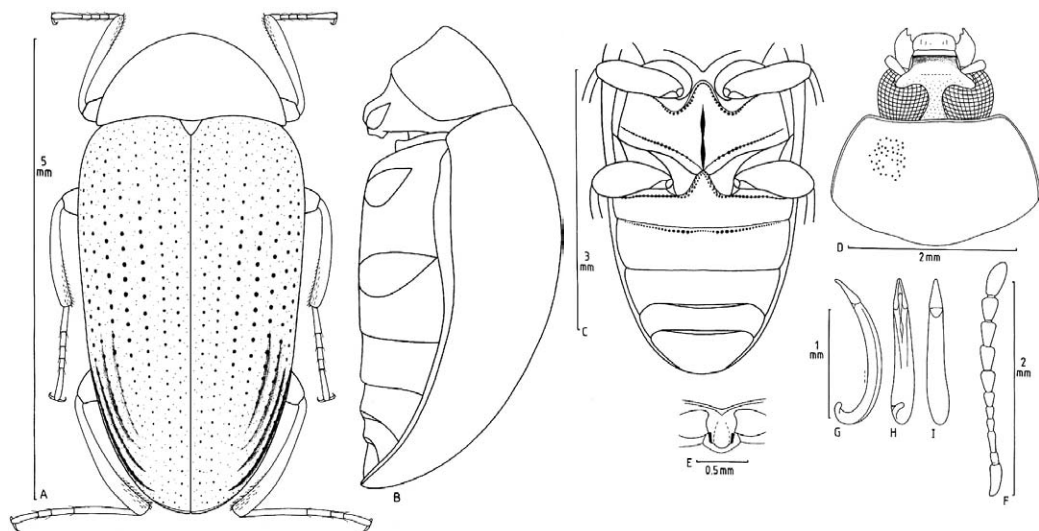


Fig. 16: *Amarygmus (Amarygmus) epistomaticus* sp. n.: **A** Habitus, ♂; **B** Body, lateral view; **C** Metasternum and sternites; **D** Head and pronotum; **E** Prosternal apophysis; **F** Antenna; **G** Aedeagus, lateral view; **H** Aedeagus, ventral view; **I** Aedeagus, dorsal view.

Lateral borders in dorsal view narrowly visible in the hind half. Front and hind corners in lateral view angular, obtuse. Surface with small, somewhat irregularly set punctures.

Scutellum. Triangular, impunctate.

Elytra. Shape, see “Diagnosis”. Markedly convex transversely, moderately convex longitudinally; maximum of width and height about at the end of the frontal fifth. Shoulders rounded, somewhat accentuated. Apices of elytra mutually rounded. Lateral edges in dorsal view very narrowly visible at shoulders and in the hind third. Surface with rows of medium-sized punctures, the rows 7+8 pass into stria near apex; distances between punctures on disc in rows 4 equal to 2 to 3-times the diameter of a puncture; about 22 punctures in row 4. Intervals flat on disc, inconspicuously convex laterally, with tiny, widely separated punctures which become visible at 50-fold magnification.

Prosternum. Anterior margin continuously and narrowly bent upwards, in front of apophysis this margin is straight. Apophysis of medium width, along procoxae widened and lateral margins raised, space in between with a wide, not very deep groove; behind procoxae the sides are straight, and the lifted lateral margins are somewhat narrowing apically; apex broadly rounded.

Mesosternum. Hind part short, smooth; its anterior margin excavated in the middle.

Metasternum. Anterior margin between mesocoxae rounded, bordered; inner rim of this border and the rim extending below mesocoxae punctured. The rim in front of metacoxae is also punctured. Disc with a few tiny, very widely separated punctures. Median line deeply incised in the hind half.

Sternites. Anterior margin between metacoxae ogive, bordered, inner rims behind metacoxae punctured; these tracks of punctures are leaving these rims towards the median area and extent anteriorly to form an acutely angled point alike a triangle. Anterior margin of sternite 2 is also bordered with a transverse track of small, closely set punctures. Discs of sternites impunctate.

Antennae. Reaching over one third of elytra. Length/width ratio of antennomeres 1-11 equals to 12:5 / 6:4 / 8:3½ / 5:4 / 6:4 / 6½:5 / 9:6½ / 10:6½ / 10:7 / 10:7 / 16:7.

Legs. Short. Femora towards second thirds club-like broadened. Pro- and mesotibiae slightly bent; metatibiae more bent than mesotibiae. Lengths of protarsomeres 1-5 as 5:5:5:4½:16; lengths of mesotarsomeres 1-5 as 13:6:5:5:15; lengths of metatarsomeres 1-4 as 32:11:6:15.

Etymology. *Epistomaticus*, from *epistoma* (= clypeus).

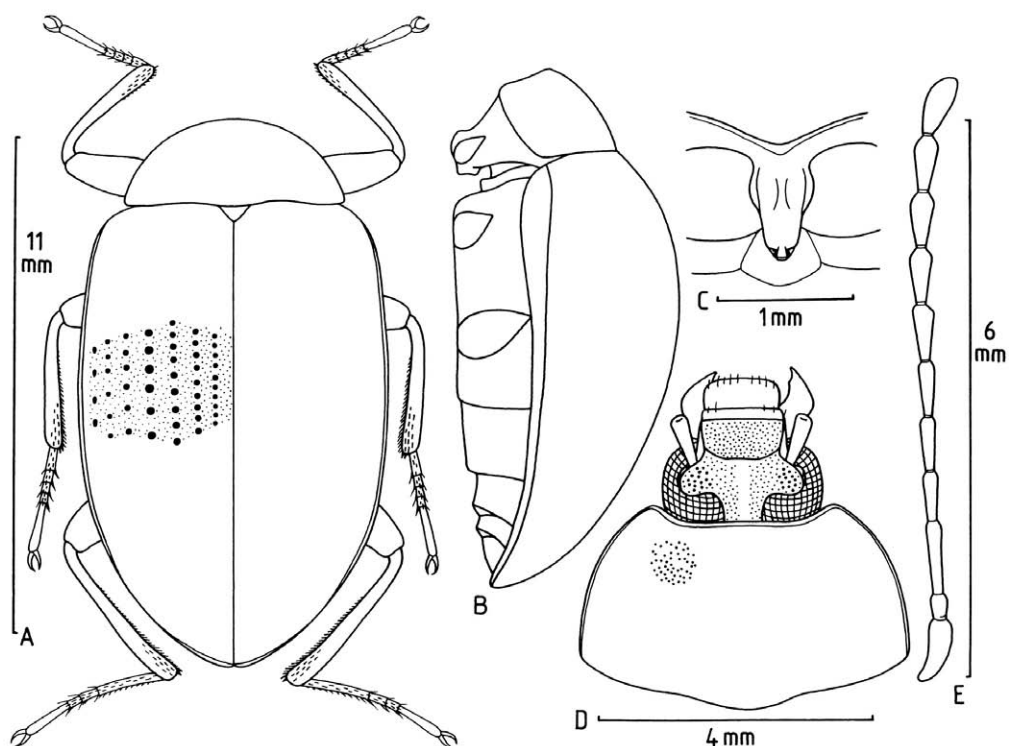


Fig. 17: *Amarygmus (Amarygmus) fabricii* sp. n.: **A** Habitus, ♀; **B** Body, lateral view; **C** Prosternal apophysis; **D** Head and pronotum; **E** Antenna.

***Amarygmus (Amarygmus) fabricii* sp. n.**

(Fig. 17A-E)

Holotype, ♀, ZSM: Irian Jaya, Paniai Prov., Epomani, Ugida, km 179, 1350-1400 m, 19.-20.I.1996, leg. A. RIEDEL.

Paratypes: dito (1 ♀ ZSM) – Irian Jaya, Paniai Prov., Epomani, km 165, 700-800 m, 17.I.1996, leg. A. RIEDEL (1 ♀ ZSM) – W-Papua, Manokwari Prov., vic. Mokwam (Siyoubriag), 1400-1800 m, 1°06'26''S-133°54'41''E, 24.-28.II.2007, leg. A. WEIGEL UWS/UWP (1 ♀ CW).

Diagnosis. Very similar to *Amarygmus ruficrurus* BLANCHARD, 1853 (redescription and illustration: BREMER 2004c, 116-118), with which it shares most external characters, among them the protruding apical cone of prosternal apophysis. The only easily recognizable difference concerns distinctly shorter antennae (the antennomeres 7-10 are more widened anteriorly and somewhat shorter than those of *A. ruficrurus*). Additional differences are a somewhat narrower prosternal apophysis, the hind part of mesosternum is not raised towards neighbouring structures (as it is found in *A. ruficrurus*) and the lack of anteriorly protruding, hook-like corners of the excavation of the anterior margin of the hind part of mesosternum (these mesosternal corners are regularly bent downwards to the level of the anterior part of mesosternum in *A. fabricii* sp. n.).

Similar also to *Amarygmus versteegi* GEBIEN, 1920; this species presents smaller and narrower set punctures of the elytral rows, its pronotum is not as closely punctured as that of *A. fabricii* sp. n., and its frons is narrower.

A similar body shape, long antennae and a similar prosternal apophysis is also found in *Amarygmus oculus* MACLEAY, 1886 and its subspecies; in contrast to *A. fabricii* sp. n. this species presents somewhat convex and clearly punctured elytral intervals; in addition, the numerous taxa affine *A. oculus* have bent protibiae with an excavation of the inner side of protibiae in males (males of *A. fabricii* sp. n. are currently unknown, therefore statements on this sexual character in males of *A. fabricii* sp. n. are presently impossible).

Description. Body length: 10.8-11.2 mm. Body width: 5.8-5.9 mm.

Ratios. Pronotum: width/length 1.88-2.00; width hind corners/width front corners 1.80-1.89. Elytra: length/width 1.52-1.59; length elytra/length pronotum 3.93-4.18; maximum width elytra/maximum width pronotum 1.33-1.35.

Colouration. Upper side coppery, lustrous; underside black; femora dark reddish brown; tibiae and tarsi dark brown to black; basal antennomeres dark brown, apical ones black.

Head. Frons relatively narrow, somewhat narrower than length of antennomere 4 (as 14:16). Genae distinctly raised towards lateral margins. Fronto-clypeal suture straight in its middle part and distinctly impressed. Clypeus stretched forwards, somewhat convex transversely and longitudinally. Frons with minute, indistinct punctures; punctures of clypeus somewhat narrower and larger; from the clypeal punctures very short hairs originate (visible at 25-fold magnification). Mentum reversely trapezoidal; its lateral margins flat, lustrous, space in between opaque, convex transversely. Underside of neck with many small, closely set punctures. Mandibles with a longitudinal groove on outer surface, apically bifid.

Pronotum. Wide; not very convex transversely and longitudinally, therefore the lateral borders are well visible in dorsal view. Widest at base; sides are narrowing anteriorly, they are moderately bent. Front corners widely rounded. Anterior margin slightly excavated. Lateral and anterior margins continuously bordered. Front and hind corners obtuse in lateral view. Surface with small, conspicuous punctures.

Scutellum. Triangular; with somewhat rounded sides, with a few tiny punctures.

Elytra. Elongate, but rather wide. Elytra with slightly bent sides over a long distance. Longitudinally somewhat convex. Maximum of height and width approximately in the middle. Moderately convex transversely; in dorsal view the lateral edges are visible in their whole length, but not very broadly. Shoulders somewhat accentuated. Apices of elytra mutually rounded. Surface with rows of rather large punctures which are not connected by lines; in the rows 1+2 the punctures are smaller and narrower set than those of the rows 3-8; about 25 punctures in row 4. Intervals flat, with tiny punctures which become visible at 25-fold magnification.

Prosternum. Anterior margin narrowly bent upwards, somewhat retracted towards apophysis in the middle. Apophyse relatively narrow and lateral margins only slightly widened and lifted along procoxae, space in between as a shallow median groove; the lateral margins are narrowing posterior to procoxae, and they are more and more depressed towards the median part, therefore in this part of apophysis the lateral margins are on a lower level than the median part; apically with a median, strongly protruding cone; apophysis lustrous, without hairs. Episterna with very small, medially with larger, indistinct punctures.

Mesosternum. Anterior margin of hind part deeply excavated in the middle, lateral margins of this excavation broadly bent upwards, but anteriorly not hook-like protruding.

Metasternum. Anterior margin between mesocoxae rounded, bordered. Median line indistinctly incised over the whole distance. Disc with tiny, widely separated punctures.

Sternites. Anterior margin between metacoxae narrowly ogive, faintly bordered. Discs of all sternites with minute, rather closely set punctures, laterally with strigose structures. Sternite 5 with a few long, recumbent hairs.

Antennae. Thin; reaching to the middle of elytra. Length/width ratio of antennomeres 1-11 equals to 19:7 / 8:5½ / 20:5 / 16:5 / 16:5 / 18:5 / 20:6½ / 18:7½ / 17:7½ / 17:7½ / 21:7½.

Legs. Legs of medium length. Femora towards second thirds club-like broadened. Tibiae relatively thin and approximately straight; mesotibiae with an area of inconspicuous, half-erected bristles near apex on inner side. Protarsi (in ♀!) with a brush-like pilosity on the soles. Lengths of protarsomeres 1-5 as 7:8:6:6:30; lengths of mesotarsomeres 1-5 as 11:9:8:7:33; lengths of metatarsomeres 1-4 as 37:16:10:34.

Etymology. Reminding of JOHANN CHRISTIAN FABRICIUS, 1745-1808, who decribed the first species of the genus *Amarygmus* DALMAN, 1823 (as *Erotylus morio* FABRICIUS, 1775).

***Amarygmus (Amarygmus) incessus* sp. n.**

(Fig. 18A-E)

Holotype, ♀, SMNS: Irian Jaya, Paniai, Mulia(s.) Wuyuneeri, 1700-2200 m, 6.VII.1994, A. RIEDEL leg.

Diagnosis. Of medium size, elongate, narrow; elytra very long and with parallel sides over a long distance, with rows of punctures of medium size and flat intervals; pronotum distinctly convex and with small, closely set punctures. Prosternal apophysis short, its apex with a median, posteriorly projecting cone. Elytra and pronotum dark coppery.

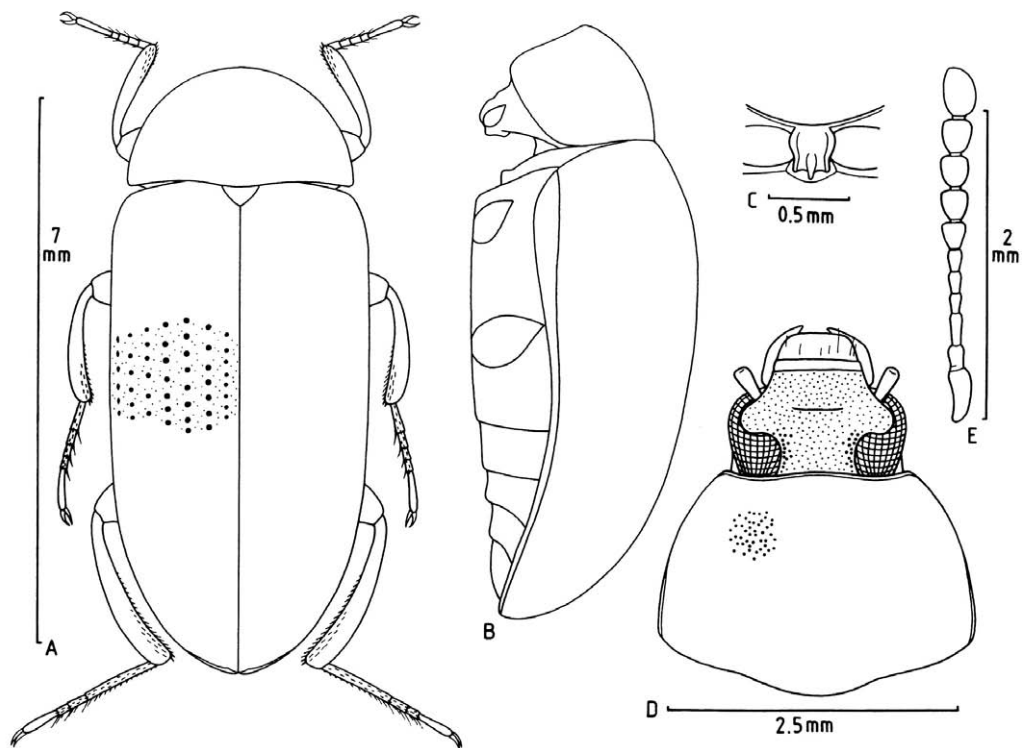


Fig. 18: *Amarygmus (Amarygmus) incessus* sp. n.: **A** Habitus, ♀; **B** Body, lateral view; **C** Prosternal apophysis; **D** Head and pronotum; **E** Antenna.

Very similar to *Amarygmus beccarii* sp. n., for differences see *A. beccarii* sp. n. Also similar to *A. asekiensis* sp. n., this species presents also similarly long elytra; in contrast to *A. incessus* sp. n. this species has no median groove on prosternal apophysis. *A. uhligi* BREMER, 2003 (pp.30-31, Fig. p.54) from Papua New Guinea (Sattelberg) possesses similarly long elytra as *A. incessus* sp. n. (length/width ratio of elytra 1.95), but it is somewhat smaller (body length 6.4 mm), its colour of upper side is greenish blue; in contrast to *A. incessus* sp. n. its elytra are narrowing posteriorly between shoulders and hind quarter.

Description. Body length: 7.3 mm. Body width: 2.9 mm.

Ratios. Pronotum: width/length 1.59; width hind corners/width front corners 1.73. Elytra: length/width 1.99; length elytra/length pronotum 3.38; maximum width elytra/maximum width pronotum 1.07.

Colouration. Upper side dark coppery, metallic, lustrous. Femora and tibiae dark brown, tarsi brown. Antennomere 1+2 brown, 3-11 black (apical part of antennomere 11 brightened). Underside brown.

Head. Frons wide, somewhat wider than lengths of antennomeres 2-5 jointly (like 30:32); with minute, distinct, moderately closely set punctures. Genae on upper side of head, moderately raised towards lateral margins; anteriorly terminating in front of the level of the middle part of fronto-clypeal suture. Fronto-clypeal suture somewhat impressed in its middle part. Clypeus shortly stretched forwards, somewhat convex longitudinally; punctured as on frons. Mentum reversely trapezoidal, with flat, lustrous lateral margins; space in between opaque, somewhat convex transversely. Underside of neck microreticulated, with a few small, indistinct punctures. Mandibles with a longitudinal sulcus on outer surface, apically bifid.

Pronotum. Relatively narrow. Distinctly convex transversely and longitudinally. Widest at base. Sides anteriorly narrowing and bent. Hind corners angular, very obtuse; front corners weakly angular, very obtuse. Anterior margin slightly excavated. Lateral and anterior margins continuously and narrowly bordered. Lateral borders narrowly visible in the hind half. Front and hind corners in lateral view widely rounded. Surface with small, conspicuous, relatively closely set punctures.

Scutellum. Triangular, with a few tiny punctures.

Elytra. Very long, narrow; sides parallel over a long distance; markedly convex transversely, moderately convex longitudinally; maximum of height somewhat in front of middle. Shoulders rounded, scarcely bossing. Apices of elytra mutually rounded. Lateral edges in dorsal view nearly invisible. Surface with rows of medium-sized punctures which become evanescent near apex, their distances on disc in row 4 equal about to 2-times the diameter of a puncture; approximately 28 punctures in row 4. Intervals flat, impunctate.

Prosternum. Lateral parts of anterior margin narrowly bent upwards; in front of apophysis this border is widely interrupted in the middle. Apophysis short, lateral margins along procoxae slightly lifted ventrad, space in between as a shallow, wide, median groove; posterior to procoxae sides slightly narrowing, with elevated lateral margins; apex with a distinct, posteriorly projecting cone.

Mesosternum. Hind part with broad, raised, posteriorly narrowing lateral margins. Its anterior margin deeply excavated in the middle.

Metasternum. Lustrous. Anterior margin between mesocoxae rounded, bordered. Inner rim of border and rims behind mesocoxae with small, closely set punctures. Disc nearly impunctate. Median line broadly impressed in the hind half.

Sternites. Somewhat opaque. Anterior margin ogive, bordered, inner rim of border and continuing to rims behind metacoxae with small, closely set punctures; anterior margin of sternite 2 without punctures. Disc of sternites 1-3 with minute, widely separated punctures. Sternites 4+5 impunctate.

Antennae. Short, reaching over base of elytra with one antennomere. Length/width ratio of antennomeres 1-11 equals to 12:6 / 6:5 / 10:4½ / 6½:4½ / 7:4½ / 5½:5 / 8:7 / 8:8½ / 9:8½ / 9:9 / 16:10.

Legs. Short. Femora towards their second thirds club-like broadened. Tibiae anteriorly broadened; protibiae slightly bent; meso- and metatibiae somewhat more bent than protibiae. Lengths of protarsomeres 1-5 as 7:6:6:6:22; lengths of mesotarsomeres 1-5 as 17:10:6:6:22; lengths of metatarsomeres as 39:13:8:23.

Etymology. Incessus (Lat.) = walking along (with the similar *Amarygmus beccarii* **sp. n.** and *A. asekiensis* **sp. n.**).

***Amarygmus (Amarygmus) ixalus* sp. n.**

(Fig. 19A-H)

Holotype, ♂, ZSM: Indonesia, Irian Jaya, Biak NE, 10 km N Bosnik, 10.II.1998, prim. forest, leg. A. WEIGEL, KL.

Paratypes: dito (1 ♂ CW) (several antennomeres missing) – W-Papua, Raja Ampat Prov., Waigeo Isl., Lopintol, 0°07'54"S-130°53'46"E, 11.I.2004, leg. A. SKALE (1 ♀ CS) (several antennomeres missing).

Diagnosis. Small, oval, very convex transversely; elytra with rows of medium-sized punctures and flat intervals. Frons relatively narrow; the clypeus presents two different structures, one with a the dark blue colour and structure as on frons, it forms together with genae a hyperbole towards a second one, situated in front of it, which presents a brown colour and a surface without punctures (at 50-fold magnification). Antennae short. Legs of medium length. Protarsomeres 1-3 slightly widened in males. Upper side of holotype and of one paratype violet, of the other paratype blue; legs and antennae brown.

Concerning structure of clypeus and body shape this species is related to *Amarygmus solitarius* BREMER, 2003, *A. epistomaticus* **sp. n.**, *A. chimbuensis* **sp. n.** (all from Papua New Guinea) and to *A. akteae* **sp. n.** (Highlands of the Jayawijaya Prov. of Irian Jaya); these species present about the same body size (body lengths of *A. solitarius* 5.4 mm, of *A. epistomaticus* **sp. n.** 4.7+5.3 mm, of *A. chimbuensis* **sp. n.** 5.7 mm). Body length of *A. akteae* **sp. n.** is 4.9-5.2 mm. Concerning differences, see these species.

A similar species is also *A. parvus* BREMER, 2003 (pp.29-30). *A. parvus* is slightly larger (body length 5.2+5.7 mm; its elytral intervals present a punctuation which is minute but well discernable (the elytral intervals of *A. ixalus* **sp. n.** are impunctate), the legs of *A. parvus* are dark (those of *A. ixalus* **sp. n.** light brown), the front corners of pronotum are angular (those of *A. ixalus* **sp. n.** widely rounded); the frons of *A. parvus* is somewhat wider than that of *A. ixalus*. *A. parvus* does not possess the special structure of clypeus which *A. ixalus* **sp. n.** shows.

Description. Body length: 4.6-5.5 mm. Body width: 2.7-3.0 mm.

Ratios. Pronotum: Width/length 1.96-2.07; width hind corners/width front corners 1.90-1.98. Elytra: length/width 1.45-1.55; length elytra/length pronotum 3.55-3.83; maximum width elytra/maximum width pronotum 1.19-1.25.

Colouration. Upper side, including frons, dark violet in holotype and one paratype, blue in another paratype. Genae and clypeus brown. Legs and antennae light brown to brown. Underside brown, lustrous, this is in contrast to the light brown femora.

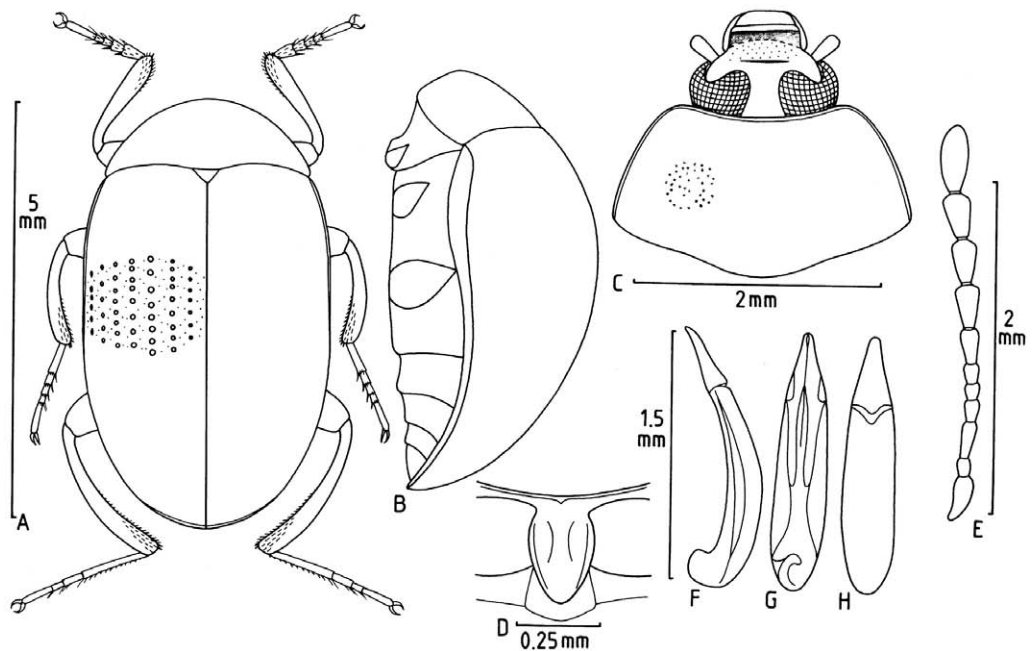


Fig. 19: *Amarygmus (Amarygmus) ixalus* sp. n.: **A** Habitus, ♂; **B** Body, lateral view; **C** Head and pronotum; **D** Prosternal apophysis; **E** Antenna; **F** Aedeagus, lateral view; **G** Aedeagus, ventral view; **H** Aedeagus, dorsal view.

Head. Frons as wide as antennomere 3 long, with minute, inconspicuous, not very closely set punctures. Genae slightly elevated towards their lateral margins, anteriorly terminating somewhat in front of the level of the middle part of fronto-clypeal suture. Fronto-clypeal suture slightly incised and impressed in its middle part. Clypeus moderately protruding; concerning its structure, see "Diagnosis". Mentum reversely trapezoidal, lateral margins flat, lustrous, space in between slightly convex transversely, opaque. Mandibles with a longitudinal sulcus on outer surface, apically bifid.

Pronotum. Wide. Convex transversely, somewhat less convex longitudinally. Widest at base; anteriorly narrowing and bent, more bent in the frontal half. Hind corners angular, with an angle of about 100°, front corners widely rounded. Anterior margin slightly excavated. Lateral and anterior margins continuously bordered. Lateral borders in dorsal view narrowly visible in their whole length. Front corners in lateral view widely rounded, obtuse, hind corners angular, angle about 110°. Surface with small, superficial punctures which are irregularly set.

Scutellum. Triangular, impunctate.

Elytra. Somewhat elongate, oval; markedly convex transversely, moderately convex longitudinally; maximum of width and height somewhat in front of middle. Shoulders rounded. Apices of elytra mutually rounded. Lateral edges in dorsal view narrowly visible nearly over their whole lengths. Surface with rows of medium-sized punctures which become evanescent near apex; their distances on disc in row 4 equal to 2 to 3-times the diameter of a puncture; about 26 punctures in row 4. Intervals flat, impunctate.

Prosternum. Anterior margin continuously and narrowly bent upwards, with a short process towards apophysis. Apophysis oval, lateral margins somewhat elevated along procoxae; space in between as a moderately deep median groove; posterior to procoxae the sides are narrowing and bent, and they are continuing into a narrowly rounded apex.

Mesosternum. Hind part opaque; its anterior edge excavated in the middle.

Metasternum. Anterior margin between mesocoxae rounded, bordered. Anterior half with large punctures which, just behind the anterior margin, look scarred; the posterior half nearly impunctate, metasternum bald (in the male!). Median line moderately incised.

Sternites. Anterior margin between metacoxae ogive, faintly bordered; inner rim of border behind metacoxae with large punctures. Sternites somewhat opaque, impunctate.

Antennae. Reaching over one fifth of elytra. Length/width ratio equals to $12:6 / 5:4\frac{1}{2} / 10:4 / 6:4 / 5:4 / 6:4\frac{1}{2} / 9:6 / 12:6\frac{1}{2} / 13:6\frac{1}{2} / 12:7 / 19:8$.

Legs. Of medium length. Femora towards second thirds distinctly club-like broadened. Protibiae straight in holotype, on inner side distinctly broadened towards apex (certainly only in males), protibiae moderately bent in paratypes, on inner side distinctly broadened towards apex. Mesotibiae moderately bent. Metatibiae moderately bent and broadened towards apex. Lengths of protarsomeres 1-5 as $9:7\frac{1}{2}:5:4:20$; lengths of mesotarsomeres 1-5 as $10:8:6:4:18$; lengths of metatarsomeres 1-4 as $30:11:6:17$.

Etymology. *Ixalus* from ἰαλεῖν (Greek) = free jumper (most *Amarygmus* jump like Alticinae; this species has markedly club-like broadened femora, and it is certainly able to jump very well).

***Amarygmus (Amarygmus) kauensis* sp. n.**

(Fig. 20A-E)

Holotype, ♀, ZSM: Papua New Guinea, Madang Prov., Kau Wildlife Area, Baitabag Vill., lat. S 5°08' long. E 145°46', 50 m a.s.l., X-XII.1999, LUKAŠ ÈIZEK lgt.

Diagnosis. Tiny; oval; markedly convex. Elytra with rows of medium-sized punctures and flat intervals. Frons wide. Antennae short. Pronotum blue, elytra sea-blue. Antennae and legs brown.

In size and body shape similar to *Amarygmus anonymus* sp. n. from Irian Jaya. *A. kauensis* sp. n. has somewhat wider elytra; the protibiae of *A. kauensis* sp. n. are nearly straight, those of *A. anonymus* sp. n. are somewhat bent; the frons of *A. kauensis* sp. n. is also wide, but slightly narrower than that of *A. anonymus* sp. n., the femora, tibiae and antennae of *A. kauensis* sp. n. are light brown, those of *A. anonymus* sp. n. are dark brown to black.

Description. Body length: 3.2 mm. Body width: 2.0 mm.

Ratios. Pronotum: width/length 1.90; width hind corners/width front corners 1.81. Elytra: length/width 1.33; length elytra/length pronotum 3.29; maximum width elytra/maximum width pronotum 1.30.

Colouration. Upper side, legs and antennae, see "Diagnosis". Underside dark brown, lustrous (femora lighter brown than underside).

Head. Frons wide, as wide as lengths of antennomeres 3-5 jointly; with minute, indistinct, widely separated punctures. Genae moderately raised towards lateral margins, anteriorly terminating in front of the level of the middle part of fronto-clypeal suture. Fronto-clypeal suture slightly impressed in its middle part and shallowly incised. Clypeus short, slightly convex longitudinally; punctured as on frons. Mentum reversely trapezoidal; lateral margins flat, lustrous, space in between opaque, slightly convex transversely. Underside of neck with small, closely set punctures. Mandibles with a longitudinal sulcus on outer surface, apically bifid.

Pronotum. Relatively wide and short. Convex transversely, slightly convex longitudinally. Widest at base; anteriorly narrowing and regularly bent. Hind corners angular, very obtuse; front corners rounded. Anterior margin slightly excavated, but a little protruding towards head in its middle part. Lateral and anterior margins bordered. Lateral borders in dorsal view narrowly visible. Front corners in lateral view rounded, obtuse; hind corners allusively angular and very obtuse. Surface with small, widely separated punctures. Mentum reversely trapezoidal; with flat, lustrous lateral margins; space in between opaque, slightly convex transversely. Underside of neck with small, closely set punctures. Mandibles with a longitudinal sulcus on outer surface, apically bifid.

Scutellum. Triangular, with a few tiny and inconspicuous punctures.

Elytra. Oval, markedly convex transversely, moderately convex longitudinally. Maximum of width and height somewhat in front of middle. Shoulders rounded. Apices of elytra mutually rounded. Lateral edges in dorsal view narrowly visible. Surface with rows of medium-sized punctures which become evanescent in apical part; their distances on disc in row 4 equal to about 3-times the diameter of a puncture; approximately 23 punctures in row 4. Intervals flat, impunctate (viewed at 50-fold magnification).

Prosternum. Anterior margin narrowly bent upwards, slightly retracted towards apophysis in the middle. Apophysis semi-oval; lateral margins along procoxae somewhat raised ventrad, space in between as a shallow median groove; apex narrowly rounded.

Mesosternum. Hind part with rough lateral margins and a smooth middle; its anterior margin deeply excavated in the middle.

Metasternum. Lustrous. Anterior margin between mesocoxae rounded, bordered. with large, somewhat oblong, closely set punctures in the anterior apophysis. Anterior part of disc also with some large punctures; hind part nearly impunctate. Median line superficially incised.

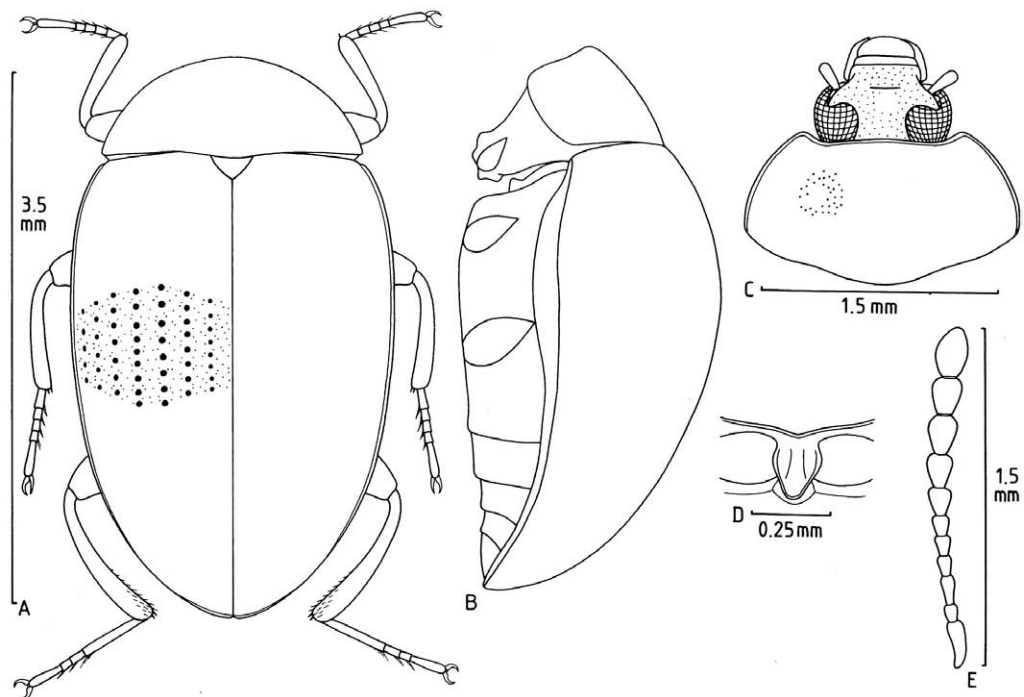


Fig. 20: *Amarygmus (Amarygmus) kauensis* sp. n.: **A** Habitus, ♀, **B** Body, lateral view; **C** Head and pronotum; **D** Prosternal apophysis; **E** Antenna.

Sternites. Opaque. Anterior margin between metacoxae ogive, bordered. Anterior parts of sternites 1+2 somewhat striolated and with large, superficial punctures; hind parts of sternites 1+2 and the sternites 3-5 with minute punctures.

Antennae. Short, reaching over one fifth of elytra. Length/width ratio of antennomeres 1-11 equals to $9:3\frac{1}{2} / 4:3 / 7:3 / 3\frac{1}{2}:3 / 3:3 / 4:3\frac{1}{2} / 6\frac{1}{2}:4\frac{1}{2} / 7:5 / 7:6 / 7:6 / 10\frac{1}{2}:6$.

Legs. Short. Femora towards second thirds club-like broadened. Pro- and mesotibiae nearly straight; metatibiae moderately bent. Lengths of protarsomeres 1-5 as $3:3:2\frac{1}{2}:2\frac{1}{2}:10$; lengths of mesotarsomeres 1-5 as $9:4\frac{1}{2}:3\frac{1}{2}:3\frac{1}{2}:11$; lengths of metatarsomeres 1-4 as $17:5:4:11$.

Etymology. Kauensis = from Kau, the location where the holotype has been collected.

***Amarygmus (Amarygmus) laniger* GEBIEN, 1920 ssp. *lullula* ssp. n.**

Holotype, ♂, BMH: New Guinea: Papua, Woodlark I. [$9^{\circ}05'S-152^{\circ}50'E$] (Murua), Kulumadau Hill, Feb. 16, 1957, W. BRANDT Collector.

Paratype: dito (1 ♀ ZSM).

Diagnosis. Of medium size, oval. Elytra with deeply incised striae and markedly convex intervals; frons of medium width; antennae of medium length; prosternal apophysis long, narrow; protibiae slightly bent in basal half, nearly straight in apical half; mesotibiae nearly straight; metatibiae moderately bent. Protarsomeres 1-3 in males not widened. Metasternum in the male with closely set punctures and long hairs.

I consider this taxon to be a subspecies of *Amarygmus laniger* GEBIEN, 1920. Both taxa are very alike concerning shape of elytra, of pronotum, width of frons, pilosity of metasternum in males and length and shape of antennae, *Amarygmus laniger* GEBIEN s. str. has been collected only in the western parts of Irian Jaya. – The ssp. *lullula* is from the Woodlark Island (east of New Guinea), it has the same body and elytra length, but its mesotibiae are straighter in their basal part than those of *A. laniger* s. str. and its tip of aedeagus is less bent ventrad (body length of *A. laniger* s. str.: 8.1-9.5 mm; its elytral length/width ratio is 1.37-1.44). A redescription of *A. laniger* s. str. is published in BREMER 2003, 42-44, and an illustration at p.58.

Description. Body length: 8.5+9.6 mm. Body width: 4.9+5.3 mm.

Ratios. Pronotum: width/length 1.7+1.7; width hind corners/width front corners 1.60+1.67. Elytra: length/width 1.38+1.41; length elytra/length pronotum 3.24+3.39; maximum width elytra/maximum width pronotum 1.39+1.40.

Colouration. Upper side black, slightly lustrous; femora, tibiae, antennae black, tarsi dark brown. Underside black.

Head. Frons of medium width and as wide in both sexes, slighter narrower than length of antennomere 3 in the male (like 16:18), with minute, inconspicuous punctures. Genae raised towards their lateral margins, anteriorly terminating approximately at the level of the middle part of fronto-clypeal suture. Fronto-clypeal suture slightly impressed across the head. Clypeus stretched forwards, slightly vaulted transversely and longitudinally; punctured as on frons. Mentum widened anteriorly, with bent lateral margins and rounded transition between sides and base; lateral margins flat, lustrous, space in between less lustrous, convex transversely. Underside of neck with small, narrowly set, indistinct punctures. Mandibles with a longitudinal sulcus on outer side, apically bifid.

Pronotum. Moderately convex transversely and longitudinally; widest at base, sides subparallel in the hind half, bent in the middle, narrowing in the frontal half with straight sides. Front and hind corners angular, hind ones obtuse, front ones protruding to the front and with an acute angle. Anterior margin excavated. Lateral margins bordered, anterior margin also bordered, but the border is somewhat alleviated in the middle. Lateral borders in dorsal view narrowly visible in their whole length. Front corners in lateral view with an angle of about 85°, hind corners are very obtuse. Surface with minute, inconspicuous punctures.

Scutellum. Triangular; impunctate.

Elytra. Oval; convex transversely and longitudinally. Maximum of width and height approximately in the middle. Shoulders angular, very obtuse; apices of elytra mutually rounded. Lateral edges on dorsal view narrowly visible in their whole length. Surface with deeply incised striae and markedly convex intervals; the punctures in the striae are somewhat elongate, small, not notching; their distances on disc in row 4 equal about to ½ to 1-time the diameter of a puncture. Intervals impunctate.

Prosternum. Anterior margin continuously bent upwards, but the part in front of apophysis straight and slightly raised. Apophysis narrow, relatively long; protruding well caudad; along procoxae somewhat widened and lateral margins raised, space in between as a not too deep median groove; posterior to procoxae sides are slightly narrowing and bent; apex narrowly rounded.

Mesosternum. Lateral margins of hind part slightly raised and uneven; centre smooth; its anterior margins deeply excavated in the middle.

Metasternum. Somewhat lustrous. Anterior margin between mesocoxae rounded, broadly bordered. Disc with small to medium punctures which are closely set; from these punctures relatively long, mostly recumbent, yellow hairs originate in the male; of smaller punctures without long hairs in females. Median line scarcely impressed or incised.

Sternites. Moderately opaque. Anterior margin between metacoxae ogive, faintly bordered. Sternite 1 with small, closely set, but inconspicuous punctures; sternites 2-5 impunctate; sternite 5 postero-medially not impressed in the male.

Antennae. Of medium length, reaching over half of elytra in the male, in the female they are somewhat shorter. Length/width ratio of antennomeres 1-11 equals in the male to 12:6½ / 7:5 / 18:5½ / 13:6 / 13:6 / 12:6 / 14:7 / 12:7 / 12:7 / 12:7 / 15:7, in the somewhat smaller female to 11:7 / 5½:4 / 14:4½ / 9:4½ / 9:4½ / 10:4½ / 12:6 / 11:6½ / 11:6½ / 10:7 / 14:7.

Legs. Of medium length. Femora towards their second thirds club-like broadened. Tibiae, see "Diagnosis", but in the male moderately broadened on inner side in apical third and, in this area, with tiny tubercles from which obliquely projecting bristles of medium length originate. Lengths of protarsomeres 1-5 as 6:4:4:4:21; lengths of mesotarsomeres 1-5 as 12:6:6:5:21; lengths of metatarsomeres 1-4 as 25:9:5:21.

Etymology. *Lullula* (noun) is the genus name of the bird wood-lark; *Amarygmus laniger* ssp. *lullula* has been collected on the Woodlark-Island east of New Guinea.

***Amarygmus (Amarygmus) lethaeus* sp. n.**

(Fig. 21A-E)

Holotype, ♀, BMH: New Guinea (NE), Wau, Morobe Distr., 1200-1300 m, 6.VI.1962, J. SEDLACEK Collector, BISHOP.

Paratype: N. G. [New Guinea], Bulldog Rd., 2400 m, 9.I.1962, J. & M. SEDLACEK Collectors, BISHOP (1 ♀ ZSM).

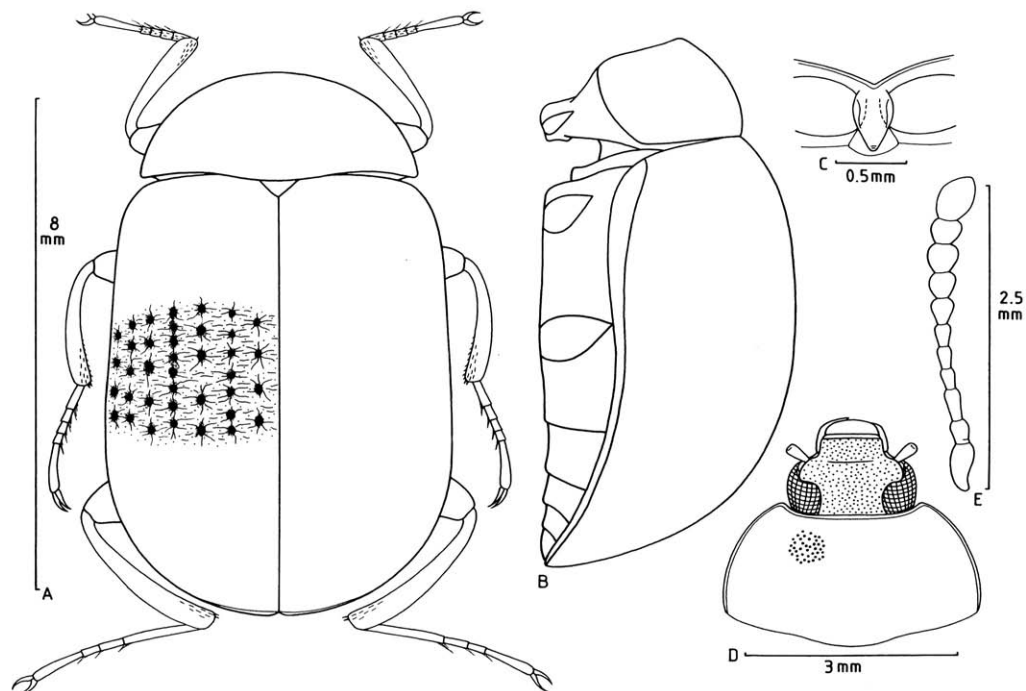


Fig. 21: *Amarygmus (Amarygmus) lethaeus* sp. n.: **A** Habitus, ♀; **B** Body, lateral view; **C** Prosternal apophysis; **D** Head and pronotum; **E** Antenna.

Diagnosis. Of medium size; stout; elytra somewhat elongate, markedly convex transversely, with subparallel sides, large punctures in the rows, flat intervals; from elytral punctures tiny hairs originate (visible at 50-fold magnification in oblique view); pronotum without impressions and without short hairs, but with small, distinct, closely set punctures; frons wide; antennae short and antennomeres 1-5 bald. Upper side brown, pronotum with a golden tinge.

Concerning size, body shape, elytra with large punctures in rows, and wide frons with some similarity with *Amarygmus novotnyi* BREMER, 2003 (pp.36, 37), but *A. novotnyi* shows a more uneven elytral surface which looks like chagreened, the pronotum presents a clear depression near base on each side and a reddish tinge, it lacks the tiny hairs on elytra, and the antennae are longer.

Amarygmus crassicornis GEBIEN, 1920 (redescription and illustration: BREMER 2008a, 14-15, fig. p.46), a species with short, recumbent hairs on pronotum and elytra, also displays a similar shape, but it is larger; the elytral intervals are somewhat convex; the frons is relatively narrow, and the antennomeres 1-5 present short, projecting hairs. Additionally related species are *A. montivagus* GEBIEN, 1920, *A. productus* BREMER, 2008, *A. tapiniensis* BREMER, 2011; all these species possess much longer antennae, no depression near base on pronotum, and they do not present tiny hairs on elytra.

Description. Body length: 7.7+8.4 mm. Body width: 4.1+4.4 mm.

Ratios. Pronotum: width/length 1.91+1.95; width hind corners/width front corners 1.83+1.90. Elytra: length/width 1.51+1.61; length elytra/length pronotum 3.87+4.10; maximum width elytra/maximum width pronotum 1.20+1.31.

Colouration. Upper side brown, with some metallic shine, pronotum more golden. Femora and tibiae dark brown, tarsi brown. Antennomeres 1-5 brown, 6-11 dark brown. Underside dark brown.

Head. Frons relatively wide, as wide as the lengths of antennomeres 3-6 jointly, situated on a slightly higher level than the medial part of genae; with minute, indistinct punctures. Genae more lustrous than frons, with somewhat raised lateral margins; anteriorly terminating slightly in front of the level of the middle part of fronto-clypeal suture. Fronto-clypeal suture not incised, slightly impressed. Clypeus stretched forwards, nearly flat, with minute, indistinct, widely separated punctures. Mentum reversely trapezoidal, with flat,

lustrous lateral margins; space in between slightly convex, moderately opaque. Underside of neck lustrous, with small, distinct, closely set punctures. Mandibles with a longitudinal sulcus on outer surface, apically bifid.

Pronotum. Moderately convex transversely; slightly convex longitudinally; widest at base; anteriorly narrowing and bent. Hind corners angular, slightly obtuse; front corners in dorsal view indistinctly angular, nearly rounded, obtuse. Anterior margin slightly excavated. Lateral and anterior margins bordered; lateral borders in dorsal view very narrowly visible in their whole length; hind corners in lateral view angular, obtuse, front corners rounded; surface: see "Diagnosis".

Scutellum. Triangular; impunctate.

Elytra. Elongate, with subparallel sides; markedly convex transversely, moderately convex longitudinally; maximum of height near middle. Shoulders somewhat pointed. Apices of elytra mutually rounded. Lateral edges in dorsal view nearly invisible. Surface with rows of large, widely separated punctures which somewhat become evanescent near apex; their distances on disc in row 4 equal to 2 to 3-times the diameter of a puncture; about 15 punctures in row 4; intervals flat, with tiny, widely separated punctures which just become visible at 50-fold magnification, from these elytral punctures the tiny hairs originate.

Prosternum. Anterior margin continuously and narrowly bent upwards, moderately retracted towards apophysis in the middle. Apophysis somewhat ascending between anterior margin and level along procoxae, and descending behind procoxae towards the somewhat protruding and narrowly rounded apex; widest between procoxae where the lateral margins are slightly raised ventrad, space in between as a shallow median groove.

Mesosternum. Surface of hind part smooth; its anterior margin excavated in the middle.

Metasternum. Anterior margin between mesocoxae rounded, bordered. Area along median line slightly impressed and smooth, laterally of it with shallow, transverse micro-ridges and small punctures in the anterior half; nearly impunctate in the posterior half.

Sternites. Anterior margin between metacoxae ogive, bordered. Sternites 1+2 with minute, widely separated punctures; the other sternites nearly impunctate.

Antennae. Short; reaching over one fifth of elytra. Length/width ratio of antennomeres 1-11 equals to 12:6 / 9:5 / 10:5 / 8:5 / 8:5½ / 8:6 / 9:8½ / 11:9½ / 11:9½ / 9½:9½ / 18:12.

Legs. Short. Femora towards second thirds club-like broadened. Protibiae straight on outer side, apically somewhat broadened on inner side; mesotibiae slightly bent; metatibiae moderately bent. Lengths of protarsomeres 1-5 as 8:8:7:7:30; lengths of mesotarsomeres 1-5 as 19:10:10:8:30; lengths of metatarsomeres 1-4 as 43:16:11:32.

Etymology. Lethaeus (Lat.) = belonging to underworld.

***Amarygmus (Amarygmus) letho* sp. n.**

(Fig. 22A-H)

Holotype, ♂, ZSM: W-Papua, Manokwari Prov., 18 km NE Ransiki, 1°09'21"S-134°77'12"E, 2.-6.III.2007, leg. A. SKALE, Kahlschlag [clearing, deforested area] (left hind leg missing).

Paratypes: Papua: Fly R., Olsobie, 400 m, 23.8.1969, J. & M. SEDLACEK Collectors BISHOP (1 ♂ BMH) – Papua: Fly R., Kiunga, 35 m, August 1969, J. & M. SEDLACEK Collectors BISHOP (1 ♂ BMH).

Diagnosis. Small, slightly elongate oval; markedly convex transversely; elytra with rows of medium-sized punctures, flat intervals which are nearly impunctate; upper side dark blue, legs brown. Frons of medium width. the clypeus does not present two differently coloured structures as mentioned with *A. epistomaticus* sp. n.. Antennae of medium length, the last 5 antennomeres much wider than the preceding ones. Protarsomeres 1-3 slightly widened in the male; on the back of meso- and metafemora with long, thin, recumbent hairs (certainly only in males). Metasternum with a long and deep incision along the median line and with thin, recumbent hairs on each side (certainly only in males).

A similar species, also from the Prov. Manokwari, is *Amarygmus parvus* BREMER, 2003 (pp. 29, 30). This species possesses a similar body shape, elytral rows of punctures, and also a dark blue upper side. *A. parvus* present the same size (body length 5.2-5.7 mm). The punctures of the elytral rows are slightly larger, but the punctures of the elytral intervals of *A. parvus* are minute and distinct (punctures of the intervals are invisible at the same magnification, 25-fold, in *A. letho* sp. n.); punctures on pronotum and frons of *A. parvus* are distinct and closely set, those of *A. letho* sp. n. are tiny and indistinct; width of frons and length of antennae are approximately the same in both species.

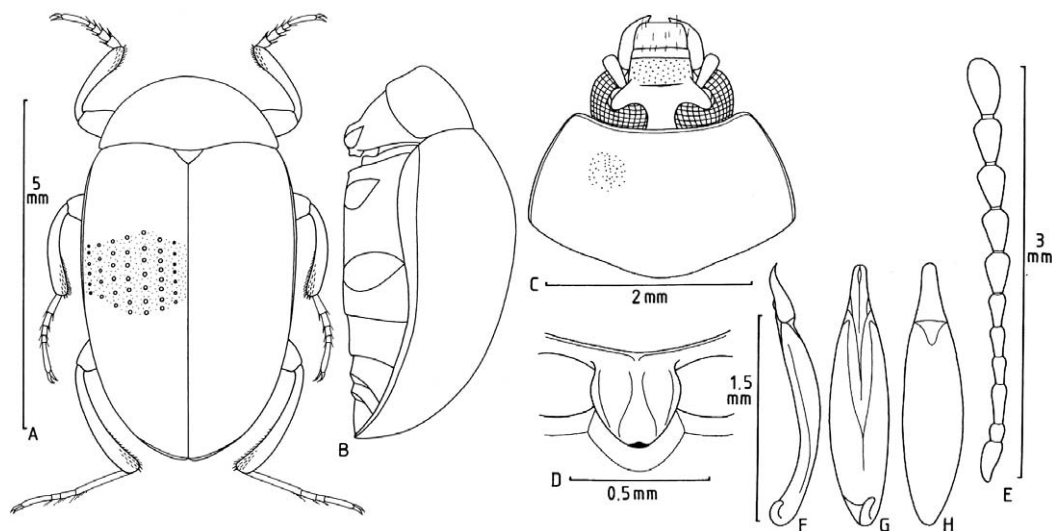


Fig. 22: *Amarygmus (Amarygmus) letho* sp. n.: **A** Habitus, ♂; **B** Body, lateral view; **C** Head and pronotum; **D** Prosternal apophysis; **E** Antenna; **F** Aedeagus, lateral view; **G** Aedeagus, ventral view; **H** Aedeagus, dorsal view.

Another related species is *A. ixalus* sp. n.; this species displays either a blue or violet colour of upper side, the same body shape, rows of similar punctures on elytra, similarly bent tibiae, and a similarly narrow frons. But *A. ixalus* sp. n. is somewhat smaller (body length 4.63+4.86 mm), the legs of *A. ixalus* sp. n. are light brown, and the front corners of *A. ixalus* sp. n. are widely rounded, those of *A. letho* sp. n. are angular. The upper side of clypeus of *A. ixalus* sp. n. presents two differently coloured areas.

Description. Body length: 4.9-5.8 mm. Body width: 2.9-3.2 mm.

Ratios. Pronotum: width/length 1.81-1.88; width hind corners/width front corners 1.67-2.03. Elytra: length/width 1.41-1.48; length elytra/length pronotum 3.41-3.45; maximum width elytra/maximum width pronotum 1.23-1.28.

Colouration. Upper side including frons dark blue to dark violet, slightly lustrous; genae and clypeus brown. Scutellum brown. Femora and tibiae dark brown to black, tarsomeres light brown. Antennomeres 1-5 brown, 6-11 black. Underside brown.

Head. Frons longitudinally somewhat convex, of medium width, as wide as the length of antennomere 3, with tiny, widely separated punctures. Genae well separated from frons; clearly raised towards lateral margins; anteriorly terminating in front of the level of the medium part of fronto-clypeal suture. Fronto-clypeal suture markedly impressed and also distinctly incised. Clypeus longitudinally clearly vaulted, punctures on clypeus somewhat larger and distincter than on frons. Mentum reversely trapezoidal, with flat, lustrous lateral margins; space in between less lustrous, slightly convex transversely. Underside of neck with small, distinct punctures. Mandibles with a longitudinal sulcus on outer surface, apically bifid.

Pronotum. Short. Relatively wide; distinctly convex transversely, slightly convex longitudinally. Widest at base; anteriorly narrowing and bent. Hind and front corners angular and very obtuse. Anterior margin slightly excavated. Lateral and anterior margins bordered. Lateral borders in dorsal view very narrowly visible in the posterior fourth fifth, invisible in the anterior fifth. Front and hind corners equally obtuse and angular in lateral view. Surface with tiny, widely separated punctures on a slightly microreticulated ground.

Scutellum. Triangular, impunctate.

Elytra. Ovate. Markedly convex transversely, moderately convex longitudinally. Maximum of width and height clearly in front of middle. Shoulders rounded. Apices of elytra mutually rounded. Lateral edges in dorsal view barely visible. Surface with rows of medium-sized punctures which become smaller and evanescent near apex; distances between punctures on disc in row 4 equal to 1 to 2-times the diameter of a puncture; about 32 punctures in row 4. Intervals flat, with tiny, widely separated punctures.

Prosternum. Anterior margin narrowly bent upwards, this border is interrupted in the middle. Apophysis oval, relatively flat, with an inconspicuous “nose” apically in the middle.

Mesosternum. Hind part with a ridge of inconspicuous tubercles on each side, anterior margin deeply excavated.

Metasternum. Anterior margin between mesocoxae rounded, bordered. Median line impressed and incised in the whole length (except anterior apophysis), with small punctures on each side from which tender, recumbent hairs of medium length originate (certainly only in males).

Sternites. Anterior margin between metacoxae ogive, indistinctly bordered. Sternites somewhat dull, impunctate, sternite 5 with a slightly elevated area in front of apex (probably only in males).

Antennae. Reaching over 40 percent of elytra. Length/with ratio of antennomeres 1-11 equals to 16:6 / 6:5 / 12:5 / 9:5 / 10:5 / 9:6 / 14:8 / 16:9 / 16:9 / 16:9 / 21:10.

Legs. Short. Femora towards second thirds markedly broadened; meso- and metafemora possess long, tender, recumbent hairs on the back side (certainly on in males). Protibiae slightly bent, broadened on inner side in apical half (certainly only in males). Mesotibiae markedly bent, and somewhat broadened apically, with an area of semi-erect hairs on inner side in apical half (certainly only in males). Metatibiae as bent as mesotibiae. Protarsomeres 1-3 slightly widened in the male. Lengths of protarsomeres 1-5 as 9:8:6:5:20; lengths of mesotarsomeres 1-5 as 12:11:7:6:20; lengths of metatarsomeres 1-4 as 31:11:6:21.

Etymology. Letho (Greek), ἑβᾶν (poetical Ionian) for εἶναι ἄϋτον = being hidden.

***Amarygmus (Amarygmus) minor* sp. n.**

(Fig. 23A-E)

Holotype, ♀, ZSM: Indonesia, Irian Jaya, Biak NE, 10 km N Bosnik, 10.II.1998, prim. Urwald [primary forest], leg. A. WEIGEL KL.

Diagnosis. Tiny; ovate, markedly convex; elytra with somewhat impressed rows of punctures of medium size which are not linked by lines; surface of elytra uneven because of irregular lines which induces a pictures alike chagreen; frons wide, antennae not very long; legs short. Upper side black, slightly lustrous, elytra with a very faint violet tinge.

There are some similarly small, ovate species on New Guinea. Partly they possess one to four white or yellowish ultimate antennomeres. This group was revised in a previous paper (BREMER 2001). Other *Amarygmus* but with black or brown ultimate antennomeres are: *Amarygmus biroi* KASZAB, 1939, *Amarygmus ludwigi* var. *violaceus* KASZAB, 1939, *A. ullrichi* BREMER, 2011, and *A. pronus* BREMER, 2011. *Amarygmus biroi* shows impressed elytral striae with large, punctures; this is in contrast with *A. minor* sp. n. The frons of *A. biroi* is much narrower than that *A. minor* sp. n.

Amarygmus ludwigi var. *violaceus* has a similar size, body shape and colour of upper side as *A. minor* sp. n. shows. The elytra present superficial striae with small strial punctures; the pronotum displays only inconspicuous punctures; the frons is somewhat narrower than that of *A. minor*. I am not convinced that the var. *violaceus* represents only a variation of *A. ludwigi*. The status of *A. ludwigi* var. *violaceus* has to be resettled; probably it is a separate species from *A. ludwigi* KASZAB.

Amarygmus ullrichi has about the same size and body shape as *A. minor* sp. n., it displays a elytral surface with rows of medium-sized punctures, a distinct punctation on pronotum and a wide frons, but, dislike *A. minor* sp. n., it presents smooth elytra without irregular lines, not impressed elytral rows of punctures, and uniformly brown antennae.

Another similar species is *Amarygmus pronus* BREMER, 2011. This species is somewhat larger than *A. minor* sp. n. (body length 3.7 mm); the elytral rows of punctures are on a smooth ground and not impressed; the antennae are much shorter than those of *A. minor* sp. n., and pronotum and upper side of head are not as distinctly punctured as in *A. minor* sp. n.

Description. Body length: 3.3 mm. Body width: 2.0 mm.

Ratios. Pronotum: width/length 1.98; width hind corners/width front corners 1.80. Elytra: length/width 1.35; length elytra/length pronotum 3.33; maximum width elytra/ maximum width pronotum 1.25.

Colouration. Upper side, see “Diagnosis”; femora, tibiae dark brown, tarsi brown; antennomeres 1-5 brown, 6-11 black. Underside dark brown.

Head. Frons wide, flat, somewhat wider than lengths of antennomeres 3+4+5 jointly (like 17:19), with medium-sized, distinct, relatively closely set punctures; there is an impunctate, lustrous area between genae

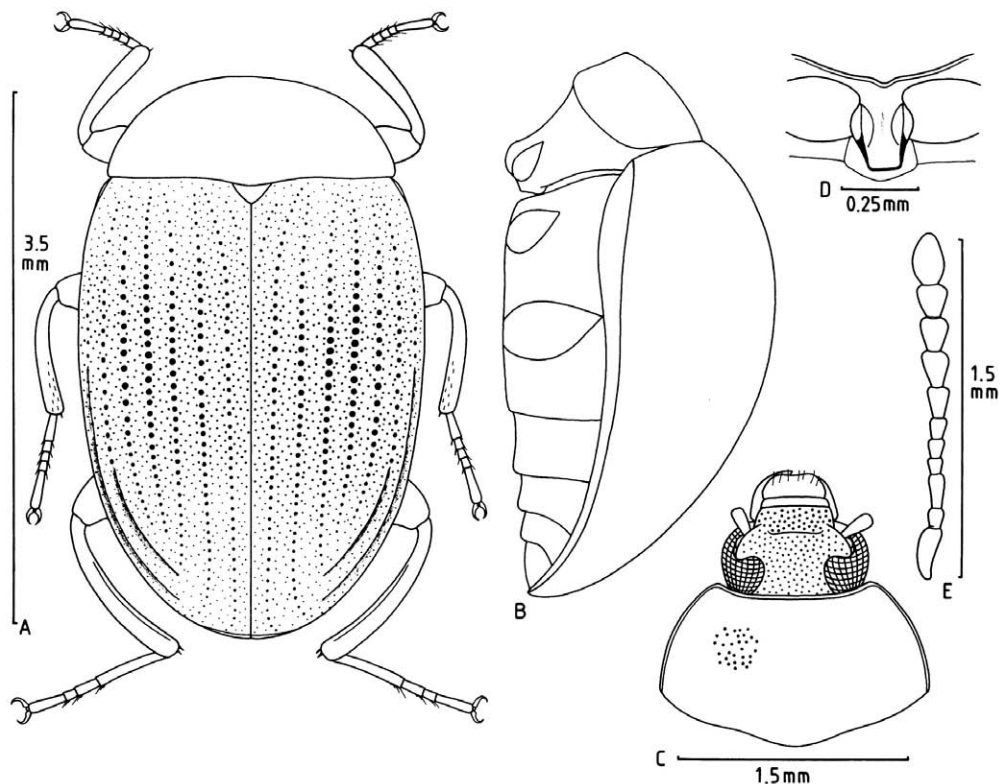


Fig. 23: *Amarygmus (Amarygmus) minor* sp. n.: **A** Habitus, ♀, **B** Body, lateral view; **C** Head and pronotum; **D** Prosternal apophysis; **E** Antenna

and frons just in front of eyes. Genae moderately raised towards lateral margins, anteriorly terminating in front of the level of the medium part of fronto-clypeal suture. Fronto-clypeal suture is visible as a straight, lustrous line. Clypeus relatively short, flat, covered with medium-sized, closely set punctures. Mentum reversely trapezoidal, with lustrous lateral margins; space in between somewhat convex transversely, opaque. Underside of neck with some small punctures. Mandibles with a longitudinal sulcus on outer surface, apically bifid.

Pronotum. Distinctly convex transversely, moderately convex longitudinally. Widest at base. Anteriorly narrowing and bent. Hind corners angular, obtuse; front corners rounded. Anterior margin not excavated. Lateral and anterior margins bordered. Lateral borders in dorsal view narrowly visible in the whole length. Front and hind corners in lateral view angular, equally obtuse. Surface with small, distinct, relatively closely set punctures.

Scutellum. Triangular; with a few tiny punctures.

Elytra. Ovate. Markedly convex transversely, moderately convex longitudinally; maximum of width and height at the end of first third. Shoulders rounded. Apices of elytra mutually rounded. Lateral edges in dorsal view narrowly visible in the posterior third. Surface on disc with slightly impressed rows of punctures, laterally with conspicuously impressed rows; the punctures of these rows are of medium size, closely set, and they are not connected by lines; distances between punctures on disc in row 4 equal to ½- to 1-time the diameter of a puncture; about 40 punctures in row 4. Intervals with a somewhat uneven surface, with irregular, superficial lines which induces the impression alike chagreen-leather; with minute, widely separated, but distinct punctures.

Prosternum. Anterior margin continuously and narrowly bent upwards. Apophysis of medium width, somewhat widened along procoxa where the lateral margins are somewhat lifted ventrad; space in between as a deep and relatively wide median groove; posterior to procoxae the lateral margins are slightly narrowing; apex straight.

Mesosternum. Hind part wide, short, its centre is smooth, laterally the margins are somewhat raised; its anterior margin is widely and deeply excavated.

Metasternum. Anterior margin between mesocoxae rounded, bordered. Anterior part of disc with some medium-sized, widely separated punctures; hind part with a few minute punctures. Median line neither incised nor impressed.

Sternites. Anterior margin between metacoxae ogive, bordered. Anterior part of sternite 1 and lateral parts of sternites 1-3 striolated; disc with small punctures. Sternites 4+5 with minute punctures.

Antennae. Reaching over a quarter of elytra. Length/width ratio of antennomeres 1-11 equals to 9:4 / 5:3 / 8:3 / 4:3 / 5:3½ / 4:3½ / 6:4½ / 6½:5 / 7:5½ / 6:5½ / 11:6.

Legs. Short. Femora towards second thirds club-like broadened. Pro-, meso- and metatibiae moderately bent, on inner side of metatibiae slightly broadened in apical 60 percent. Lengths of protarsomeres 1-5 as 3:3:2½:2:10½; lengths of mesotarsomeres 1-5 as 7:3:3:2½:11; lengths of metatarsomeres 1-4 as 18:7:4:11.

Etymology. Minor (Lat.), *dimin.* of parvus = small.

***Amarygmus (Amarygmus) mirabilis* sp. n.**

(Fig. 24A-H)

Holotype, ♂, CA: Manokwari-Meni (280 m), W-Papua, Indonesia, 9.II.2011, J. AOKI leg. (Beat) (CA).

Paratype: Irian Jaya, Japen Island, W. Serui, Panduamin, 50 m, 18.XII.2000, leg. A. RIEDEL (1 ♀ ZSM) (protibiae and protarsomeres on right side missing).

The female paratype is clearly smaller than the male holotype, but I did not find other separating characters except broader legs in the male holotype which may be gender signs.

Diagnosis. Tiny. Elytra elongate, slightly oval; with rows of punctures and flat intervals; pronotum nearly half-cylindric; frons wide; legs relatively stout and long, protarsomeres somewhat widened in males; antennomere 11 relatively large. Elytra and pronotum blue; femora and tibiae dark brown and antennae brown.

Amarygmus mirabilis sp. n. is very similar to *A. debilis* sp. n. which also occurs in the lowlands of Irian Jaya. Concerning differences see *A. debilis* sp. n.

Description. Body length: 2.9+3.5 mm. Body width: 1.4+1.5 mm.

Ratios. Pronotum: width/length 1.32+1.33; width hind corners/width front corners 1.45+1.62. Elytra: length/width 1.72+1.77; length elytra/length pronotum 3.14+3.22; maximum width elytra/maximum width pronotum 1.31+1.34.

Colouration. Elytra and pronotum dark blue, slightly lustrous and microreticulated; upper side of head black, opaque. Underside brown except sternites 4+5 which are black, lustrous. Femora and tibiae dark brown, tarsi light brown.

Head. Bent markedly downwards. Upper side nearly flat. Frons wide, as wide in both sexes; wider than lengths of antennomeres 3+4 jointly (as 19:15), with tiny, indistinct, widely and irregularly separated punctures. Lateral margins of genae negligibly lifted towards lateral margins; anteriorly terminating in front of the level of the middle part of fronto-clypeal suture. Fronto-clypeal suture narrowly incised in the middle. Clypeus short, flat; only the lateral parts slightly bent downwards; punctures as on frons. Mentum reversely trapezoidal. Mandibles with a longitudinal sulcus on outer surface, apically bifid.

Pronotum. Nearly half-cylindric; markedly convex transversely, slightly convex longitudinally. The sides are very slightly narrowing within the hind 30 percent; anteriorly the sides are somewhat more narrowing towards front corners, but, concerning other species of this genus, the sides are only slightly narrowing anteriorly. Hind corners angular, about 110°; front corners pointed and anteriorly projecting, angle in dorsal view about 75°. Anterior margin excavated. Lateral and anterior margins narrowly bordered, posterior margin without a border. Lateral borders in dorsal view very narrowly visible. Front corners in lateral view acute-angled, hind corners rounded. Surface with small, distinct, relatively closely set punctures.

Scutellum. Triangular; with a few tiny punctures.

Elytra. Elongate, slightly oval; markedly convex transversely, moderately convex longitudinally; maximum of width about in the middle. Apices of elytra mutually rounded. Surface with rows of medium-sized, distinct punctures; their distances on disc in row 4 equal to 1½ to 2-times the diameter of a puncture; about 23 punctures in row 4. Intervals flat, with tiny, widely separated punctures.

Prosternum. Anterior margin narrowly bent upwards, with a keel-like process towards apophysis in the middle. Apophysis of medium width, markedly protruding posteriorly, with a rounded apex; lateral margins along procoxae slightly lifted ventrad, space in between as a shallow median groove.

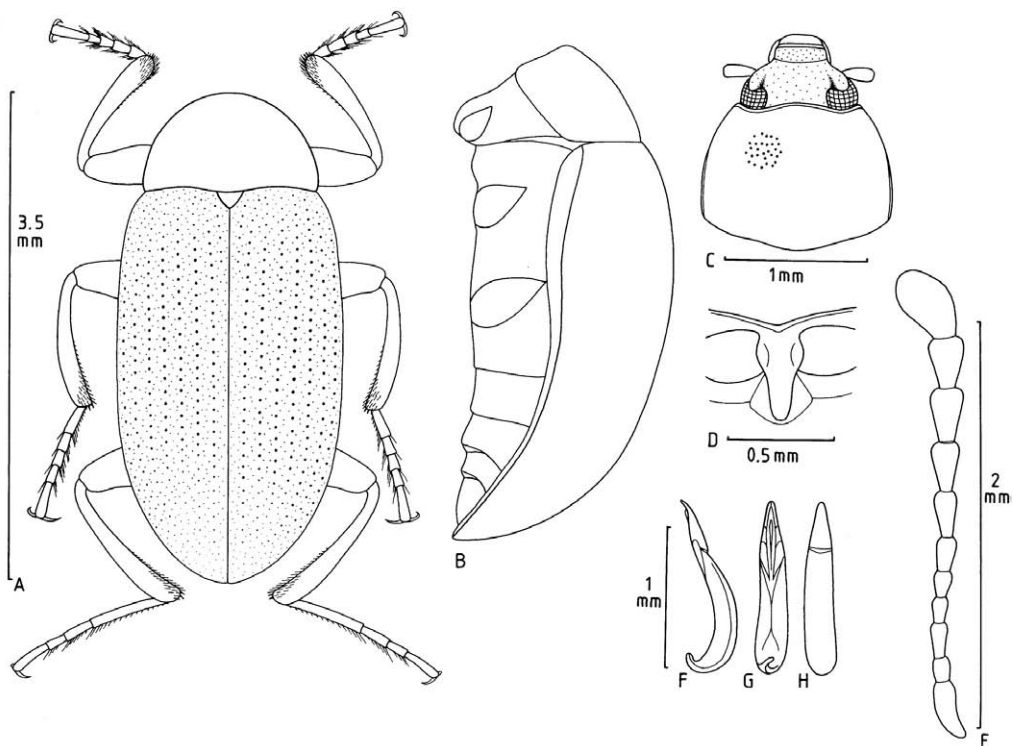


Fig. 24: *Amarygmus (Amarygmus) mirabilis* sp. n.: **A** Habitus, ♂; **B** Body, lateral view; **C** Head and pronotum; **D** Prosternal apophysis; **E** Antenna; **F** Aedeagus, lateral view; **G** Aedeagus, ventral view; **H** Aedeagus, dorsal view.

Mesososternum. Hind part short, narrow, with rough lateral margins; its anterior margin deeply excavated in the middle.

Metasternum. Anterior margin between mesocoxae rounded, bordered. Disc with some tiny, indistinct punctures. Median line incised and somewhat impressed in the hind third.

Sternites. Anterior margin between metacoxae ogive, bordered. Sternites impunctate.

Antennae. Relatively long, reaching over 30 percent of elytra. Length/width ratio of antennomeres 1-11 equals in the male to $9:5\frac{1}{2} / 6:4 / 8:4 / 7:4 / 7:4 / 7:4\frac{1}{2} / 10:5\frac{1}{2} / 9:6 / 10:6\frac{1}{2} / 9\frac{1}{2}:6\frac{1}{2} / 14:7$. The antennomeres of the female are somewhat shorter but, concerning ratios of length/width, they correspond to those of the male.

Legs. Stout. Of medium length. Femora towards second thirds distinctly club-like widened. Tibiae towards apex somewhat broadened; protibiae slightly bent, mesotibiae distinctly bent, metatibiae somewhat less bent than mesotibiae. Protarsomeres 1-3 somewhat widened and with brush-like soles (certainly only in males); mesotarsomeres 1-3 somewhat less widened. Lengths of protarsomeres 1-5 as $5:4:3:2:11$; lengths of mesotarsomeres 1-5 as $9:8:6:4:12$; lengths of metatarsomeres 1-4 as $23:12:4:13$.

Etymology. *Mirabilis* (Lat.) = strange, wonderful.

***Amarygmus (Amarygmus) mokwamensis* sp. n.**

(Fig. 25A-E)

Holotype, ♀, ZSM: W-Papua, Manokwari Prov., Mokwam, 1400-1800 m, $01^{\circ}43'06''\text{S}$ - $133^{\circ}68'68''\text{E}$, 24.-28.II.2007, leg. A. SKALE.

Diagnosis. Of medium size, elongate; elytra oval, but relatively wide. Elytra with rows of small to medium-sized, relatively closely set punctures; intervals flat. Pronotum with rectangular, pointed front corners. Frons of medium width. Antennae relatively long. Upper side dark coppery, not very lustrous; colour of legs, see "Colouration".

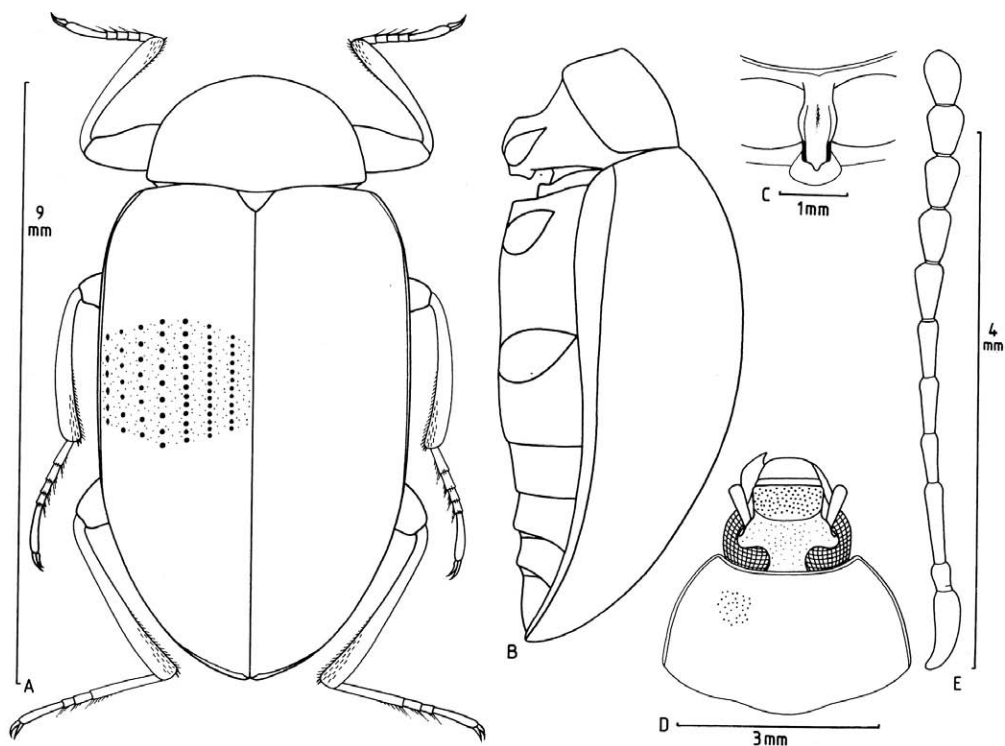


Fig. 25: *Amarygmus (Amarygmus) mokwamensis* sp. n.: **A** Habitus, ♀, **B** Body, lateral view; **C** Prosternal apophysis; **D** Head and pronotum; **E** Antenna.

Very similar to *Amarygmus tapiniensis* BREMER, 2011 from Southeastern Papua New Guinea concerning body shape, size, width of frons, colouration, but the pronotal hind corners of *A. tapiniensis* are more rounded, the mesotibiae of *A. tapiniensis* are less bent, and the elytral punctures of the rows are somewhat larger and more distant.

Description. Body length: 8.4 mm. Body width: 4.6 mm

Ratios. Pronotum: width/length 1.78; width hind corners/width front corners 1.78. Elytra: length/width 1.61; length elytra/length pronotum 4.00; maximum width elytra/maximum width pronotum 1.40.

Colouration. Upper side, see "Diagnosis"; frons coloured as pronotum; genae and clypeus black. Femora within basal 80 percent reddish brown, with a black apical cap, tibiae dark brown, tarsi brown. Antennomeres 1-6 brown, 7-11 black. Underside dark brown.

Head. Frons of medium width, as wide as antennomere 3 long; with minute, distinct punctures. Genae clearly raised towards lateral margins, anteriorly terminating approximately at the level of the middle part of fronto-clypeal suture. Fronto-clypeal suture arched, slightly incised and impressed. Clypeus moderately stretched forwards, slightly convex transversely and longitudinally, punctures more distinct and somewhat larger than on frons. Mentum anteriorly widened, with bent lateral sides; lateral margins flat, space in between somewhat convex, surface microreticulated and somewhat lustrous. Mandibles with a longitudinal sulcus on outer surface, apically bifid.

Pronotum. Distinctly convex transversely and longitudinally. Widest at base; anteriorly narrowing and bent. Hind corners angular, obtuse; front corners pointed and rectangular. Anterior margin conspicuously excavated. Lateral and anterior margins continuously bordered. Lateral borders in dorsal view very narrowly visible. Front and hind corners in lateral view angular, obtuse. Surface with small, distinct, irregularly set punctures.

Scutellum. Triangular; with a few tiny punctures.

Elytra. Oval, elongate, relatively wide. Moderately convex transversely and longitudinally. Maximum of height and width slightly in front of middle. Shoulders nearly rounded, somewhat bossing. Apices of elytra mutually rounded. Lateral edges in dorsal view very slightly visible. Surface with rows of medium-sized punctures which become evanescent near apex; distances between punctures on disc in row 4 equal to $\frac{1}{2}$ -2-times the diameter of a puncture; about 28 punctures in row 4. Intervals nearly flat, with tiny, not very closely set punctures.

Prosternum. Anterior margin continuously and narrowly bent upwards, slightly retracted towards apophysis in the middle, Apophysis relatively narrow, horizontally protruding caudad behind procoxae with slightly narrowing sides and apically terminating in a median cone; space between procoxae as a median groove.

Mesosternum. Hind part relatively long; on each side with a longitudinal sulcus; its anterior margin excavated in the middle; lateral border of this excavation narrowly bent upwards, terminating in a point which is directed ventrad; the anterior part of mesosternum is situated on a lower level, the hind part is descending vertically to the anterior part.

Metasternum. Anterior margin between mesocoxae rounded, bordered. Lateral of median part of disc the anterior half with large, closely set punctures, posterior to it nearly impunctate. Median line moderately incised over the whole length.

Sternites. Anterior margin between metacoxae ogive, bordered. Anterior and lateral parts of sternite 1 with indistinct punctures; posterior part of sternite 1 and also the sternites 2-5 impunctate, but surface somewhat uneven and not lustrous.

Antennae. Relatively long and thin, reaching to the middle of elytra. Length/width ratio of antennomeres 1-11 equals to $11:4\frac{1}{2} / 5:3\frac{1}{2} / 13:3 / 10:3 / 11:3\frac{1}{2} / 10:3\frac{1}{2} / 10:4 / 10:4\frac{1}{4} / 10:4\frac{1}{2} / 10:4\frac{1}{2} / 12:4\frac{3}{4}$.

Legs. Short. Femora towards second thirds broadened. Protibiae allusively bent; mesotibiae moderately bent; metatibiae straight in basal 60 percent, slightly incurved in apical 40 percent. Soles of protarsomeres 1-3 with very closely set hairs (in female!). Lengths of protarsomeres 1-5 as 4:3:3:3:14; lengths of mesotarsomeres 1-5 as 8:6:5:4:15; lengths of metatarsomeres 1-4 as 22:7:6:14.

Etymology. Mokwamensis, from Mokwam, the location where the holotype has been collected.

Amarygmus (Amarygmus) nervosus sp. n.

(Fig. 26A-E)

Holotype, ♂, SMNS: Irian Jaya: Anggi, Tetaho, Kosmena, 1400-1750 m, 26.-28.III.1993, leg. A. RIEDEL.

Paratype: Dito (1 ♀ ZSM).

Diagnosis. Of medium size, elongate. Elytra slightly narrowing posterior to shoulders, markedly convex transversely, moderately convex longitudinally; with rows of medium-sized punctures and flat intervals. Pronotum with a conspicuously transverse convexity in the middle and behind middle, but in the anterior 40 percent the lateral parts are sloping downwards in form of a plain. Frons of medium width, somewhat wider in males than in females. Antennae in males markedly longer than in females. Prosternal apophysis with an unusual shape (see Fig. 26C). Metasternum laterally with coarse punctures. In males protarsomeres 1-3 slightly widened.

Very similar to *Amarygmus zethum* sp. n., for differences see *A. zethum* sp. n. Also similar to *A. asekensis* sp. n. and *A. beccarii* sp. n., concerning differences see these species.

Description. Body length: 7.1+7.2 mm. Body width: 3.4+3.5 mm.

Ratios. Pronotum: width/length 1.75+1.85; width hind corners/width front corners 1.90+1.95. Elytra: length/width 1.66+1.67; length elytra/length pronotum 3.65+3.70; maximum width elytra/maximum width pronotum 1.16+1.18.

Colouration. Upper side coppery, with a slight reddish tinge, somewhat lustrous; femora and tibiae black, tarsi brown; antennomere 1 black, the 2-11 ones brown to dark brown. Underside brown to black

Head. Frons relatively wide and in females somewhat wider than in males, in males slightly narrower than the lengths of antennomeres 3+4 jointly (like 26:28), in females as wide as lengths of antennomeres 2-5 jointly; with tiny, widely separated punctures. Genae only slightly lifted towards lateral margins, anteriorly terminating in front of the level of the middle part of fronto-clypeal suture. Fronto-clypeal suture slightly incised. Clypeus stretched forwards, nearly flat, its punctures are slightly larger than those of frons, but also widely separated. Mentum reversely trapezoidal, with flat, lustrous lateral margins, space in between somewhat convex transversely, opaque. Underside of neck nearly impunctate. Mandibles with a longitudinal sulcus on outer surface, apically bifid.

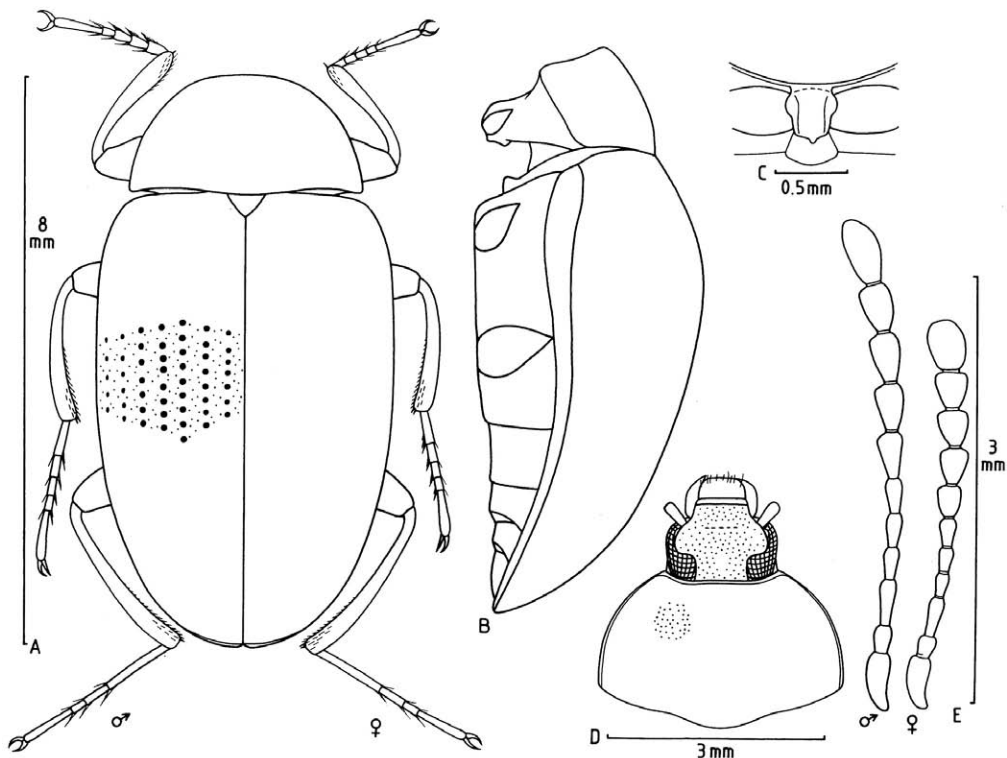


Fig. 26: *Amarygmus (Amarygmus) nervosus* sp. n.: **A** Habitus, ♂; **B** Body, lateral view; **C** Prosternal apophysis; **D** Head and pronotum; **E** Antennae, ♂ and ♀.

Pronotum. Moderately convex transversely in the hind half, in the frontal half more convex transversely than in the hind half. Widest at base. Anteriorly narrowing, in the hind 40 percent with straight lateral margins, in the anterior 50 percent with bent lateral margins. Front corners not essentially wider than width of head. Hind corners angular, angles about 100°, front corners nearly rectangular and somewhat protruding and pointed. Anterior margin somewhat excavated. Lateral and anterior margins bordered. Lateral borders in dorsal view very narrowly visible in the hind half. Front and hind corners in lateral view angular, front ones rectangular, hind ones obtuse. Surface with minute, well separated punctures.

Scutellum. Triangular; with two tiny punctures.

Elytra. Elongate; lateral margins are narrowing posteriorly towards the hind third, and they are slightly bent. Markedly convex transversely, moderately convex longitudinally. Maximum of width and height somewhat behind shoulders. Shoulders slightly bossing. Apices of elytra mutually rounded. Lateral edges in dorsal view very narrowly visible near shoulders and in the hind third. Surface with rows of medium-sized punctures which are well separated from each other, they become evanescent near apex; their distances on disc in row 4 equal to 2 to 3-times the diameter of a puncture; about 28 punctures in row 4. Intervals flat, with a few tiny punctures which just become visible at 50-fold magnification.

Prosternum. Anterior margin laterally narrowly bent upwards; this border is interrupted in front of apophysis. Apophysis is distinctly ascending between anterior margin and the level along procoxae, posterior to procoxae it is conspicuously descending towards apex; the shape of apophysis is oval with a small "nose" apically in the middle; between procoxae there is only a very shallow median groove.

Mesosternum. Surface of hind part smooth; anterior margin shallowly excavated in the middle.

Metasternum. Anterior margin between mesocoxae rounded, bordered. Lateral parts of disc with coarse punctures. Median line broadly but shallowly impressed and with a few minute punctures.

Sternites. Anterior margin between metacoxae ogive, bordered. Lateral rims behind metacoxae punctured. Median area of sternite 1 somewhat impressed in the male. Sternites 2-5 impunctate. Sternite 5 apico-medially with a small impression in the male.

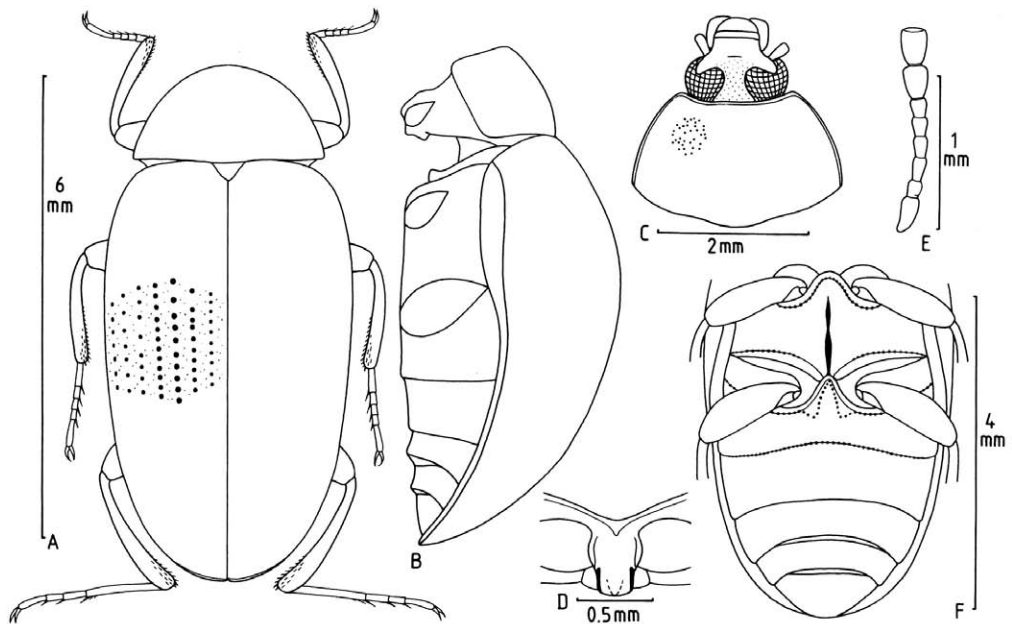


Fig. 27: *Amarygmus (Amarygmus) parargus* sp. n.: **A** Habitus; **B** Body, lateral view; **C** Head and pronotum; **D** Prosternal apophysis; **E** Antenna; **F** Metasternum and sternites.

Antennae. In males distinctly longer than in females: in males reaching over a third of elytra, in females over one tenth of elytra. Length/width ratio of antennomeres 1-11 in a males equals to $17:8\frac{1}{2} / 6:6\frac{1}{2} / 16:6 / 12:6\frac{1}{2} / 13:7 / 13:7 / 19:10 / 19:11 / 19:11 / 19:11 / 28:11$, in a female to $12:8 / 6\frac{1}{2}:6 / 11:5\frac{1}{2} / 8:5\frac{1}{2} / 8:5\frac{1}{2} / 9:6 / 11:8 / 11:10 / 12:10 / 12:10\frac{1}{2} / 17:13$.

Legs. Short. Femora towards second thirds club-like broadened. Protibiae slightly bent; mesotibiae moderately bent; metatibiae nearly straight in apical half, slightly incurved in apical half. Lengths of protarsomeres 1-5 in a male as $13:13:11:10:29$, lengths of mesotarsomeres 1-5 as $22:16:8:7:28$, lengths of metatarsomeres 1-4 as $48:18:12:29$; lengths of protarsomeres 1-5 in a female as $12:10:9:9:29$, lengths of mesotarsomeres 1-5 as $16:11:8:9:26$, lengths of metatarsomeres 1-4 as $38:14:9:29$, respectively.

Etymology. Nervosus (Lat.) = strong.

Amarygmus (Amarygmus) parargus sp. n.

(Fig. 27A-F)

Holotype, sex not determined, ZSM: Irian Jaya, Sorong Prov., Batanta Isl., Waylebet, 500-820 m, 29.X.-1.XI.1996, leg. A. RIEDEL (right antennomeres 3-11 missing).

Diagnosis. Of medium size, elongate, with nearly straight elytral sides, elytra with rows of medium-sized punctures and flat intervals; frons not very wide; antennae short, the last five antennomeres abruptly wider than the preceding ones. Upper side green, very lustrous.

Body wider than body of *Amarygmus cylindricus* (GEBIEN, 1920) (redescription and illustration: BREMER 2003, 20-22, fig. p.51) which has a similar body length; the frons of *A. cylindricus* is somewhat wider than the frons of *A. parargus* sp. n.; its punctuation of the pronotum is closer and distincter. The upper side of *A. cylindricus* is dark blue or dark violet, that of *A. parargus* sp. n. is brilliantly green.

Very similar and of the same body size, length of elytra and colouration of upper side is *Amarygmus phoebus* sp. n., but this species has a more oval shape of elytra and a conspicuously wider frons. Also similar to *A. auricollis* sp. n., concerning differences see *A. auricollis* sp. n.

Description. Body length: 6.1 mm. Body width: 3.0 mm.

Ratios. Pronotum: width/length 1.70; width hind corners/width front corners 1.80. Elytra: length/width 1.63; length elytra/length pronotum 3.30; maximum width elytra/ maximum width pronotum 1.22.

Colouration. Upper side including frons green, lustrous; genae and clypeus brown. Femora and tibiae brown, tarsomeres somewhat lighter brown. Antennomeres 1-5 brown, 6-11 black. Underside brown, metasternum lustrous, sternites less lustrous.

Head. Frons relatively narrow, slightly wider than antennomere 10 (like 13:12); with tiny, widely separated punctures. Genae slightly raised towards lateral margins, anteriorly terminating in front of the level of the middle part of fronto-clypeal suture. Fronto-clypeal suture negligibly incised in the middle. Clypeus moderately stretched forwards, nearly flat, punctured as frons. Mentum anteriorly widened, with clearly bent sides; transition between sides and base rounded; lateral margins flat, lustrous; space in between opaque, somewhat convex transversely. Mandibles sulcated on outer surface, apically bifid.

Pronotum. Narrow, relatively long. Markedly convex transversely, especially marked in the frontal half so that the lateral parts of frontal half are distinctly sloping downwards; moderately convex longitudinally. Widest on base, anteriorly narrowing, with nearly straight margins in the basal half, more bent in the frontal half. Hind corners angular, rectangular in dorsal view; front corners more rounded and more obtuse. Anterior margin slightly excavated. Lateral and anterior margins narrowly bordered. Lateral borders in dorsal view narrowly visible in the basal half, in the frontal half they become more and more invisible. Front corners in lateral view narrowly rounded, obtuse, hind corners angular, as obtuse as front corners. Surface with small, distinct, irregularly set punctures.

Scutellum. Triangular, impunctate.

Elytra. Elongate; shortly in the middle with straight sides, maximum of width somewhat behind shoulders; markedly convex transversely, also distinctly convex longitudinally; maximum of height somewhat in front of middle (e. g. behind the maximum of width). Shoulders rounded and obtuse. Apices of elytra mutually rounded. Lateral edges in dorsal view only visible within the hind third of elytra where they are very narrowly visible. Surface with rows of medium-sized punctures which are still visible in the apical area; their distances on disc in row 4 equal to 1 to 2-times the diameter of a puncture; about 30 punctures in row 4. Intervals flat, with tiny, widely separated punctures (visible at 50-times magnification).

Prosternum. Anterior margin narrowly bent upwards, with a short process towards apophysis in the middle. Apophysis subparallel, only slightly widened along procoxae, there the lateral margins are slightly lifted ventrad; space in between as a shallow median groove; behind procoxae the apophysis is horizontally protruding, with straight side; apex widely rounded, with an outlined "nose" in the middle.

Mesosternum. Anterior margin of hind part deeply excavated in the middle; hind part with subparallel, somewhat lifted lateral margins.

Metasternum. Anterior margin between mesocoxae rounded, bordered; inner rim (also laterally behind mesocoxae) punctured with coarse punctures. Disc impunctate. Median line deeply incised up to anterior apophysis. Suture in front of metacoxae coarsely punctured.

Sternites. Anterior margin between metacoxae ogive; rim behind metacoxae punctured; anterior margin of sternite 2 with a track of punctures. Otherwise sternites impunctate.

Antennae. Reaching over one fifth of elytra. Length/width ratio of antennomeres 1-11 equals to 13:5 / 6:4½ / 8½:4 / 6:4 / 6½:4 / 5½:5½ / 10:8 / 12:8½ / 12:8½ / 12:9 / 20:9.

Legs. Short. Femora towards second thirds club-like broadened. Protibiae slightly bent; mesotibiae conspicuously bent, with semi-erect bristles of short length on inner side within apical half; metatibiae nearly straight in basal 40 percent, markedly incurved and broadened in apical 60 percent. Lengths of protarsomeres 1-5 as 6:5:4:4:17; lengths of mesotarsomeres 1-5 as 12:7:5½:4½:17; lengths of metatarsomeres 1-4 as 42:14:8:17.

Etymology. Parargus, from παρά (Greek) = near-by, and from ἤμιον (Greek) = shining, lustrous, clear.

***Amarygmus (Amarygmus) phoebus* sp. n.**

(Fig. 28A-E)

Holotype. sex not determined, ZSM: W-Papua, Manokwari Prov., Mokwam, 1400-1800 m, 1°43'06''S-133°68'54''E, 28.II.2007, leg. A. SKALE (right antennomeres 6-11 missing).

Diagnosis. Of medium size, elongate; elytra narrow, slightly oval, with rows of medium-sized punctures; intervals flat; frons wide; antennae short, legs short. Upper side green, lustrous. Tibiae dark brown.

Concerning size, the elongate oval form with a markedly transverse convexity, the presence of elytral rows of punctures, the width of frons, the length of antennae, and the colouration related to *Amarygmus virens* BREMER, 2003 (pp.32,33) from Papua New Guinea. However, the punctures of the elytral rows of *A. virens* are much smaller than those of *A. phoebus* sp. n.

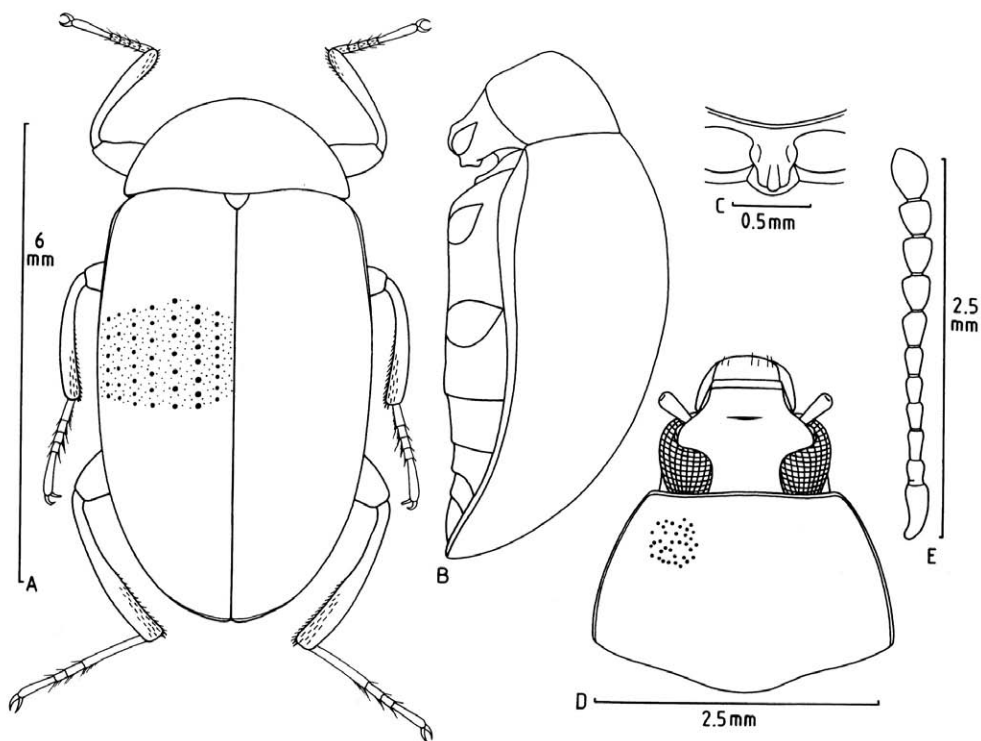


Fig. 28: *Amarygmus (Amarygmus) phoebus* sp. n.: **A** Habitus, ♀; **B** Body, lateral view; **C** Prosternal apophysis; **D** Head and pronotum; **E** Antenna.

Another related species with a similar size, rows of elytral punctures, wide frons, short antennae is *Amarygmus cylindricus* (GEBIEN, 1920) (redescription and illustration: BREMER 2003, 20-22, Fig. p.51), also from Papua New Guinea. This species has a narrower body shape, presents a bluish-violet colour of upper side, the shoulders are the widest part of elytra in this species, posterior to them it is slightly narrowing with straight sides, but the punctures of the elytral rows of *A. cylindricus* are of a similar size and of similar distances as in *A. phoebus* sp. n.

Very similar also to *Amarygmus parargus* sp. n. This species displays a similar size, elongate elytra with rows of medium-sized punctures, an identical colouration, but its frons is markedly narrower than that of *A. phoebus* sp. n., the sides of elytra are more straight and slightly narrowing posteriorly.

Description. Body length: 6.3 mm. Body width: 3.3 mm.

Ratios. Pronotum: width/length 1.86; width hind corners/width front corners 1.74. Elytra: length/width 1.62; length elytra/length pronotum 3.78; maximum width elytra/maximum width pronotum 1.17.

Colouration. Elytra, pronotum and frons are green, lustrous; in view from the front the elytra are dark brownish red, but with brilliantly green shoulders; in view from the front the pronotum is slightly golden. Genae and clypeus dark brown. Metasternum black, lustrous; sternites reddish brown, opaque. Femora reddish brown within basal two-thirds, dark brown within apical thirds; tibiae dark brown; tarsomeres light brown. Antennomeres 1-5 brown, 6-11 black.

Head. Frons relatively wide, nearly as wide as the lengths of antennomeres 3-5 jointly, with tiny, widely separated punctures. Genae slightly raised towards lateral margins and inconspicuously separated from frons; anteriorly terminating in front of the level of the middle part of fronto-clypeal suture. Fronto-clypeal suture incised only in its middle part. Clypeus moderately stretched forwards, punctured as on frons. Mentum widened anteriorly, with somewhat bent sides; lateral margins flat, lustrous, space in between slightly convex transversely, opaque. Underside of neck strongly microreticulated, with a few small punctures. Mandibles with a longitudinal sulcus on outer surface, apically bifid.

Pronotum. Narrow, relatively long. Markedly convex transversely, especially in the frontal half so that the lateral parts of the frontal half are distinctly sloping downwards; moderately convex longitudinally. Widest on base, anteriorly narrowing, slightly bent in the basal half, more bent in the frontal half. Hind corners angular, somewhat obtuse; front corners not really visible in dorsal view, more rounded and more obtuse. Anterior margin not excavated. Lateral and anterior margins narrowly bordered. Lateral borders in dorsal view narrowly visible in the basal half, in the frontal half they become invisible. Front corners in lateral view rounded, obtuse, hind corners angular, obtuse. Surface with small, distinct, irregularly set punctures.

Scutellum. Triangular, with a few tiny punctures.

Elytra. Elongate oval; markedly convex transversely, moderately convex longitudinally; maximum of width and height slightly in front of middle. Shoulders slightly accentuated. Apices of elytra mutually rounded. Lateral edges in strictly dorsal view very narrowly visible in the middle. Surface with rows of medium-sized punctures which become evanescent near apex; their distances on disc in row 4 equal about to twice the diameter of a puncture; about 25 punctures in row 4. Intervals on disc flat, laterally very slightly convex, with very tiny, widely separated punctures.

Prosternum. Anterior margin continuously and narrowly bent upwards, slightly retracted towards apophysis in the middle. Apophysis not very wide, somewhat widened along procoxae and margins there somewhat raised ventrad; space in between as a wide, not very deep, median groove; behind procoxae the apophysis is horizontally protruding posteriorly, with subparallel sides, apically rounded.

Mesosternum. Hind part short, its anterior margin deeply excavated in the middle.

Metasternum. Anterior margin between mesocoxae rounded, bordered. Median line conspicuously incised and impressed over the whole length; along the longitudinally impressed area with distinct, medium-sized punctures.

Sternites. Anterior margin between metacoxae ogive, markedly bordered. Sternites nearly impunctate.

Antennae. Short. Reaching over one fifth of elytra. Length/width ratio of antennomeres 1-11 equals to 10:7 / 6:6½ / 10:5 / 9:5 / 9:5½ / 8:5½ / 11:7 / 11:9 / 11:9½ / 11:9½ / 17:10.

Legs. Short. Femora club-like broadened towards second thirds. Protibiae slightly bent, mesotibiae bent in basal half, nearly straight in apical half, metatibiae moderately bent and broadened apically, with semi-erect bristles of medium length on inner side in apical half. Lengths of protarsomeres 1-5 as 7:7:7:5½:21; lengths of mesotarsomeres 1-5 as 13:9:7:6:22; lengths of metatarsomeres 1-4 as 35:12:9:24.

Etymology. Phoebe (Greek), ὀϊ ὤϊ ò = lustrous, clear.

***Amarygmus (Amarygmus) profectus* sp. n.**

(Fig. 29A-E)

Holotype, sex not determined, probably ♂, ZSM: Irian Jaya, Sorong-Prov., Salawatti Isl., Kalobo, ca. 10-30 m, 19.-22.X.1996, leg. A. RIEDEL.

Paratype: Indonesia, W-Papua, 50 km SE Kaimana, Triton Bay, vic. Kamaka vill., S 3°49'50"/E 134°11'27", 10-50 m, 2.-5.II.2011, A. SKALE (006) (1 ♀, CS).

Diagnosis. Of medium size, narrow, elongate; elytra markedly convex transversely, widest shortly behind shoulders, slightly narrowing posteriorly, with rows of medium-sized punctures and with flat intervals on disc (postero-laterally the intervals are moderately convex); pronotum moderately convex transversely, with small, relatively closely set punctures; frons of medium width; antennae of medium length, reaching over one fifth of elytra. Colouration, see below.

Concerning size and body shape related to *Amarygmus cylindricus* (GEBIEN, 1920) (see also *A. phoebe* sp. n.), *A. docilis* BREMER, 2003 (pp.24-25) and *A. moluccanus* BREMER, 2003 (pp.26-27). But the most similar species is *A. defector* sp. n. from the same location where also *A. profectus* has been collected.

Amarygmus cylindricus from Papua New Guinea is somewhat narrower, body length 6.4-8.6 mm (I cannot exclude that *A. cylindricus* in the present view contains two different, but closely related taxa); the pronotum of *A. cylindricus* is more convex transversely and very closely, nearly scarredly punctured, the frons is somewhat wider than that of *A. profectus*, and the upper side is dark blue (in some specimens with a violet tinge).

Amarygmus docilis from the Western Highlands of Papua New Guinea has a similar size (body length 6.9-8.3 mm), its body shape is also narrower (Fig. 36), the punctures of the elytral rows are more distant than those of *A. profectus*, the frons is wider, the antennae are somewhat longer, the colour of upper side is clearly darker, nearly black.

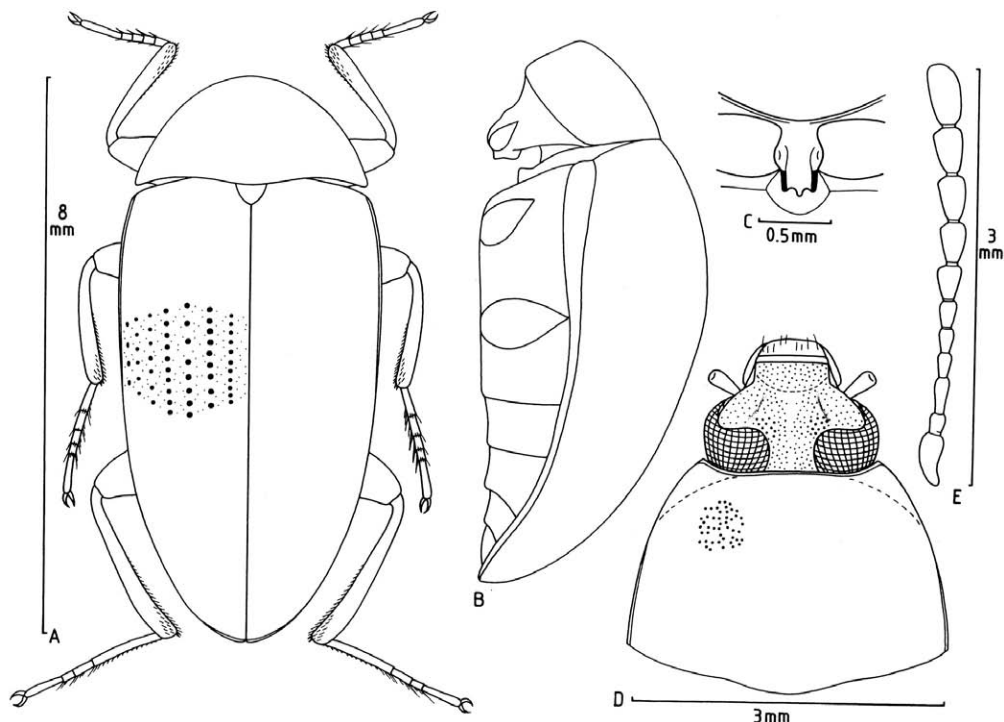


Fig. 29: *Amarygmus (Amarygmus) profectus* sp. n.: **A** Habitus, ♀; **B** Body, lateral view; **C** Prosternal apophysis; **D** Head and pronotum; **E** Antenna.

Amarygmus moluccanus from Ceram shows approximately the same size and width (body length 6.9 mm), but the elytra are not as narrowing posteriorly than those of *A. profectus* sp. n.; the mesotibiae are less bent; the pronotum is more convex transversely; the frons is wider; the antennae are of similar length, and the colouration of upper side is clearly darker than the colouration of *A. profectus* sp. n.

Concerning the differences to *A. defector* sp. n. see this species.

Description. Body length: 7.4+7.6 mm. Body width: 3.3+3.5 mm.

Ratios. Pronotum: width/length 1.69+1.70; width hind corners/width front corners 1.81+1.95. Elytra: length/width 1.76+1.79; length elytra/length pronotum 3.26+3.44; maximum width elytra/maximum width pronotum 1.08+1.16.

Colouration. Elytra coppery, pronotum and frons more golden, lustrous; genae and clypeus dark brown; legs dark brown; antennomeres 1-5 dark brown, 6-11 black. Underside including femora brown to dark brown.

Head. Frons of medium width, width equals twice the length of antennomere 3, the frons is gradually sloping down to fronto-clypeal suture, it is covered by minute, not too closely set punctures. Genae are clearly raised towards their lateral margins; they are terminating anteriorly slightly in front of the level of the middle part of fronto-clypeal suture. Fronto-clypeal suture somewhat impressed and arched. Clypeus is longitudinally shortly ascending from the level of fronto-clypeal suture, its punctures are somewhat larger than those of frons. Mentum widened anteriorly, with somewhat bent lateral sides; lateral margins flat, lustrous, space in between somewhat opaque, convex transversely. Underside of neck strongly microreticulated, impunctate. Mandibles with a longitudinal sulcus on outer side, apically bifid.

Pronotum. Somewhat, but not as clearly convex transversely as in other elongate species, therefore the lateral borders are clearly visible in dorsal view; less convex longitudinally. Widest at base; narrowing anteriorly and bent. Hind corners angular, slightly obtuse in dorsal view; front corners somewhat projecting and rectangular. Anterior margin somewhat excavated. Lateral and anterior margins bordered. Front and hind corners in lateral view angular and moderately obtuse. Surface with small, distinct, relatively closely set punctures.

Scutellum. Triangular, impunctate.

Elytra. Elongate, posteriorly narrowing, markedly convex transversely, moderately convex longitudinally. Maximum of height at the end of first quarter. Shoulders rounded and somewhat accentuated. Apices of elytra mutually rounded. Lateral edges in dorsal view very narrowly visible in the anterior 80 percent. Surface with rows of medium-sized punctures which are well discernable near apex, their distances on disc in row 4 equal to 1 to 2-times the diameter of a puncture; about 34 punctures in row 4. Intervals on disc flat, latero-posteriorly somewhat convex; they are covered with tiny, widely separated punctures.

Prosternum. Anterior margin narrowly bent upwards, interrupted in the middle where the anterior margin is smoothly passing over into apophysis. Apophysis somewhat horizontally prolonged posteriorly, with a median cone at apex and slightly caudad prolonged lateral margins (apex therefore tripartite); lateral margins along procoxae widened and slightly lifted ventrad, space in between as a wide, median groove.

Mesosternum. Hind part with straight, subparallel and slightly lifted lateral margins; its anterior margin excavated in the middle.

Metasternum. Anterior margin between mesocoxae rounded, bordered. Anterior apophysis somewhat striolated. Disc with minute to medium-sized punctures which are relatively widely separated. Median line incised over its whole length.

Sternites. Anterior margin between metacoxae ogive and distinctly bordered. Surface of sternites 1-3 impunctate, sternites 4 and 5 with some minute punctures.

Antennae. Length/width ratio of antennomeres 1-11 equals to 15:8 / 7:6½ / 11:6 / 8½:5½ / 9:5½ / 8:6 / 14:8 / 14:9 / 15:10 / 14:10 / 22:12.

Legs. Short. Femora towards second thirds club-like broadened. Protibiae nearly straight; mesotibiae distinctly bent in the basal half, nearly straight in the apical half; metatibiae moderately bent. Lengths of protarsomeres 1-5 as 8:8:7:7:26; lengths of mesotarsomeres 1-5 as 16:12:10:6:26; lengths of metatarsomeres 1-4 as 41:14:7:24.

Etymology. Proficio, profectum (Lat.) = to progress.

***Amarygmus (Amarygmus) prosper* sp. n.**

(Fig. 30A-E)

Holotype, ♀, ZSM: Irian Jaya, Japen Island, Serui, Mantembu, 100-500 m, 16.XII.2000, leg. A. RIEDEL.

Paratypes: Papua New Guinea, Madang Prov., Wannang Village, Research Center, 5°08'S-145°46'E, lgt. ÈTVETÈCKA & BINATANG (2, sex not determined, NHMP).

Diagnosis. Small; ovate, narrow; very convex transversely; elytra on disc with rows of relatively large, well separated punctures and flat, impunctate intervals; with deeply incised striae laterally from row 5 onwards and apically; frons relatively wide; antennae short, with the five ultimate antennomeres markedly widened and prolonged. Upper side brown, metallic, lustrous, pronotum microreticulated and somewhat opaque, upper side of head is markedly microreticulated; femora, tibiae and antennae brown, tarsi yellowish brown.

Concerning body shape and size related to *Amarygmus biroi* KASZAB, 1939. This species presents striae, also on disc, with large, notching punctures. *A. prosper* does not present striae with large striae punctures on disc.

Description. Body length: 3.9-4.1 mm. Body width: 2.3-2.4 mm.

Ratios. Pronotum: width/length 1.74-1.88; width hind corners/width front corners 1.84-2.04. Elytra: length/width 1.47-1.54; length elytra/length pronotum 3.37-3.82; maximum width elytra/maximum width pronotum 1.26-1.28.

Colouration. Upper side, legs and antennae, see "Diagnosis"; underside brown, metasternum lustrous, sternites microreticulated and less lustrous.

Head. Frons wide, wider than lengths of antennomeres 3-6 jointly (as 20:23), with tiny, widely separated punctures; upper side of head flat; genae towards lateral margins slightly raised; anteriorly terminating in front of the level of the middle part of fronto-clypeal suture; fronto-clypeal suture faintly incised; clypeus moderately stretched forwards, its punctures larger and distincter than on frons. Mentum reversely trapezoidal; with flat, lustrous lateral margins, space in between opaque, convex transversely. Underside of neck markedly microreticulated, scarcely punctured. Mandibles with a longitudinal sulcus on outer surface, apically bifid.

Pronotum. Clearly convex transversely, moderately convex longitudinally; widest at base; anteriorly narrowing and bent; hind corners angular (angle ≈ 100°), front corners angular, markedly obtuse; anterior margin straight; lateral and anterior margins bordered; lateral borders in dorsal view only visible in the hind

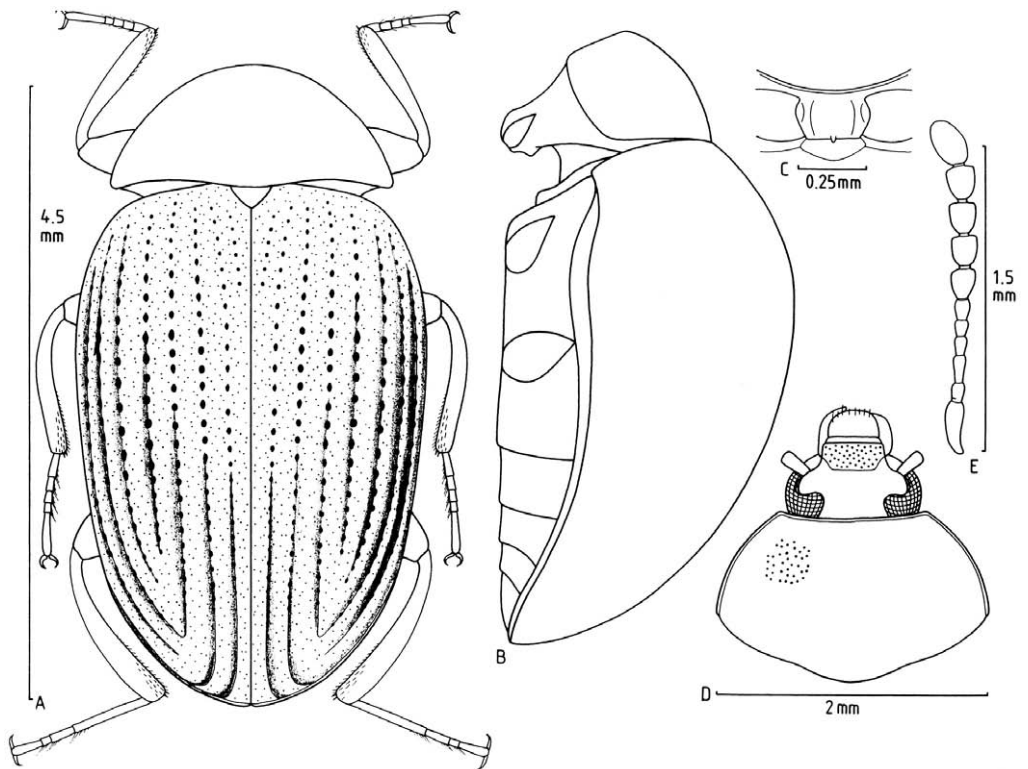


Fig. 30: *Amarygmus (Amarygmus) prosper* sp. n.: **A** Habitus, ♀; **B** Body, lateral view; **C** Prosternal apophysis; **D** Head and pronotum; **E** Antenna.

half; front and hind corners in lateral view angular, very obtuse; surface with small, irregularly and not very closely set punctures.

Scutellum. Triangular; with a few tiny punctures.

Elytra. Ovate; markedly convex transversely, moderately convex longitudinally; maximum of width and height at the end of first quarter; shoulders rounded, somewhat bossing; apices of elytra mutually rounded; lateral edges narrowly visible in hind half; surface with rows of relatively large punctures which apically pass over into somewhat impressed striae, laterally also with impressed striae; distances between punctures on disc in row 4 about $1\frac{1}{2}$ to 2-times the diameter of a puncture; about 24 punctures in row 4; concerning intervals, see "Diagnosis".

Prosternum. Anterior margin continuously and narrowly bent upwards. Apophysis short, as wide as long; slightly ascending between anterior margin and level along procoxae, and slightly descending behind procoxae; lateral margins along procoxae widened and somewhat raised ventrad; space in between as a wide, shallow groove; sides behind procoxae narrowed; apex laterally nearly straight, but with a short, slightly projecting median cone.

Mesosternum. Hind part narrow and short; with rough lateral margins; its anterior margin excavated in the middle.

Metasternum. Anterior margin between mesocoxae rounded, bordered; inner rim of border with coarse punctures; these punctures are extending laterally into the rim behind mesocoxae; suture in front of metacoxae also punctured; disc with a few tiny punctures; median line in the hind part deeply incised; its middle part is narrowly oval and incised like a pit.

Sternites. Anterior margin between metacoxae ogive, broadly bordered; its inner rim is deeply incised, this inner rim is extending laterally behind metacoxae, and they are coarsely punctured. No track of punctures on the anterior margin of sternite 2; otherwise sternites impunctate.

Antennae. Reaching over a quarter of elytra. Length/width ratios of antennomeres 1-11 equals to $9:4\frac{1}{2} / 4:3\frac{1}{2} / 7:3 / 4\frac{1}{2}:3 / 4\frac{1}{2}:3 / 4:3\frac{1}{2} / 6:6 / 8:6\frac{1}{2} / 8:6\frac{1}{2} / 8:7 / 12:7$.

Legs. Short; femora towards their second thirds club-like broadened. Protibiae nearly straight; mesotibiae moderately bent; metatibiae moderately bent in basal half, nearly straight in apical half. Lengths of protarsomeres 1-5 as $4:3:3:2\frac{1}{2}:13$; lengths of mesotarsomeres 1-5 as $9:6:4:4:12$; lengths of metatarsomeres 1-4 as $24:6:5:11$.

Etymology: Prosper (Lat.) = desirable, favourable.

***Amarygmus (Amarygmus) sylvanus* sp. n.**

(Fig. 31A-H)

Holotype, ♂, ZSM: Irian Jaya, Jayawijaya Prov., Wamena, Jiwiki, trail to Wandanku, 1900-2420 m, 28.-29.IX.1996, leg. A. RIEDEL

Diagnosis. Small; elongate ovate. Pronotum and elytra markedly convex transversely. Elytra distinctly convex longitudinally; elytra with striae and, especially laterally and posteriorly, with conspicuously convex intervals. Frons wide. Antennae short. Pro- and mesotibiae straight; protarsomeres 1-3 not widened in the male. Elytra brilliantly green, pronotum opaque and dark violet in view from the front. Aedeagus of *A. sylvanus* sp. n. with a very narrow anterior part.

There are many species with this size, with elongate oval or ovate elytra and with lustrously green elytra, but among them I do not know any other species with elytral striae on disc.

Description. Body length: 5.4 mm. Body width: 3.0 mm.

Ratios. Pronotum: width/length 1.91; width hind corners/width front corners 1.85. Elytra: length/width 1.55; length elytra/length pronotum 3.72; maximum width elytra/maximum width pronotum 1.26.

Colouration. Elytra green, lustrous; pronotum and scutellum in view from the front dark violet, microreticulated, opaque; femora and tibiae black, tarsi brown; antennomeres 1-7 brown, 8-11 dark brown. Underside dark brown, nearly black, lustrous.

Head. Upper side nearly flat. Frons wide; width equals to lengths of antennomeres 3-5 jointly, with tiny, indistinct, widely separated punctures. Genae slightly raised towards their outer margins; anteriorly terminating about at the level of the middle part of fronto-clypeal suture. Fronto-clypeal suture neither impressed nor incised. Clypeus stretched forwards, punctured as frons. Mentum reversely trapezoidal, with flat lateral margins, space in between slightly convex, moderately opaque. Mandibles with a longitudinal sulcus on outer side, apically bifid.

Pronotum. Not very wide. Convex transversely, moderately convex longitudinally. Widest at base; anteriorly somewhat narrowing and bent. Hind and front corners angular, hind ones slightly obtuse, front one slightly protruding, obtuse. Anterior margin faintly excavated. Lateral and anterior margins bordered. Lateral borders very narrowly visible in the hind half in dorsal view. Hind and front corners in lateral view angular, hind ones obtuse, front ones rectangular. Surface with tiny, widely separated, inconspicuous punctures on a microreticulated ground.

Scutellum. Triangular, with a few tiny punctures.

Elytra. Ovate, elongate; very convex transversely, also distinctly convex longitudinally. Maximum of height and width at the end of first quarter. Shoulders rounded, somewhat accentuated. Apices of elytra mutually rounded. Lateral edges in dorsal view invisible. Elytra with incised striae, moderately incised on disc and conspicuously incised laterally, with medium-sized, slightly elongate punctures in the striae; distances between punctures on disc in stria 4 equal to $1\frac{1}{2}$ - 2-times the diameter of a puncture; about 22 punctures in stria 4. Intervals on disc moderately convex, laterally distinctly convex, with tiny, widely separated punctures.

Prosternum. Anterior margin in its lateral parts narrowly bent upwards; this border is interrupted in the middle. Apophysis of medium width, somewhat ascending between anterior margin and level along procoxae, and somewhat descending and protruding caudad posterior to procoxae; sides widened along procoxae and their lateral margins are raised ventrad, space in between as a median groove; posterior to procoxae the sides are subparallel; apex rounded and with a small, lifted "nose" in the middle.

Mesosternum. Hind part on a somewhat higher level than surroundings, with slightly lifted lateral margins; its anterior margin excavated in the middle.

Metasternum. Anterior margin between mesocoxae rounded, bordered. Metasternum with minute, widely separated punctures. Median line broadly impressed over the whole length.

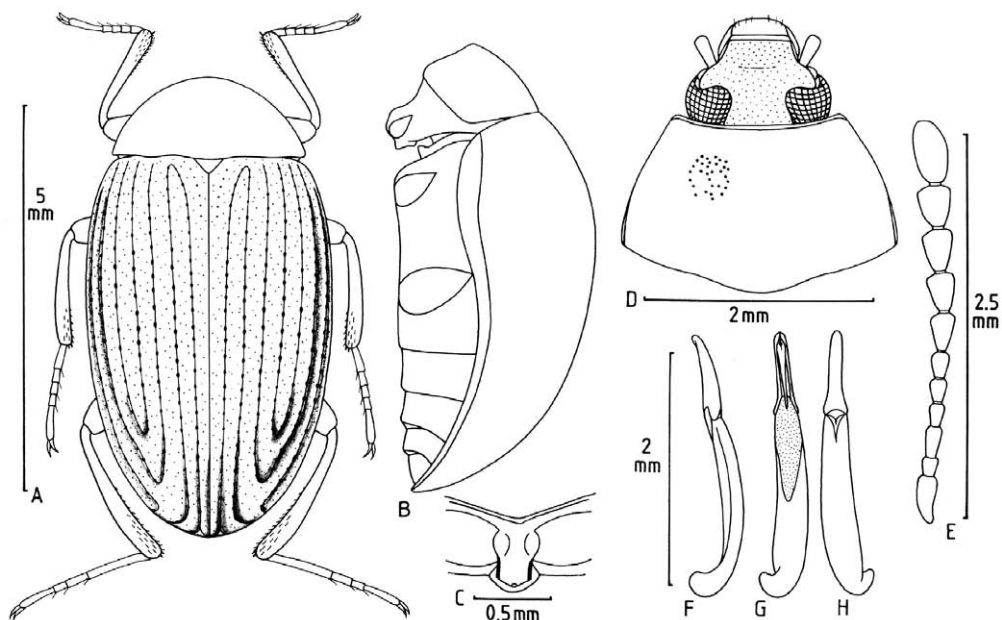


Fig. 31: *Amarygmus (Amarygmus) sylvanus* sp. n.: **A** Habitus, ♂; **B** Body, lateral view; **C** Prosternal apophysis; **D** Head and pronotum; **E** Antenna; **F** Aedeagus, lateral view; **G** Aedeagus, ventral view; **H** Aedeagus, dorsal view.

Sternites. Anterior margin between metacoxae ogive, bordered. The lateral rims of the border behind metacoxae punctured; this lateral rows of the punctures deviate from the rims medially where a punctured line is situated somewhat behind the inner rim of the anterior border. The median area of sternite 1 behind this punctured line is somewhat lifted (certainly only in males). Sternites with tiny, widely separated punctures.

Antennae. Reaching over a quarter of elytra. Length/width ratio of antennomeres 1-11 equals to 11:7 / 7:5 / 9½:4½ / 8:4½ / 8:5 / 8:5½ / 11:7 / 12:8 / 12:8 / 12:9 / 20:9½.

Legs. Short. Tibiae thin. Femora towards second thirds club-like broadened. Pro- and mesotibiae straight; metatibiae straight in the basal half, incurved in the apical half. Lengths of protarsomeres 1-5 as 6:6:6:5:20; lengths of mesotarsomeres 1-5 as 14:8:8:6:20; lengths of metatarsomeres 1-4 as 34:12:8:21.

Aedeagus. Anterior part of parameres conspicuously slender when compared with the posterior part; on ventral side in the middle with a large, flat area which is usually not seen in aedeagi of other species.

Etymology. *Sylvanus* (Lat.) = God of forests.

***Amarygmus (Amarygmus) thesileoides* sp. n.**

(Fig. 32A-E)

Holotype, ♀, ZSM: Papua-New Guinea, Morobe Prov., Umg. [environs] Kaiapit, XII.1979, Dr. W. G. ULLRICH leg.

Diagnosis. Elongate, narrow; of medium size; elytra with long subparallel sides, with rows of medium-sized punctures and with flat intervals; frons of medium width; antennae of medium length and therefore, concerning elongate, narrow *Amarygmus* species, relatively long, with the six ultimate antennomeres widened; legs short; pronotum and frons green, lustrous; elytra dark green, moderately lustrous; femora and tibiae black.

Similar to *Amarygmus torpidus* sp. n., upper side of this species is not green, but elytra are dark coppery and the pronotum is black; its sides are somewhat narrowing posteriorly. The punctures of the elytral rows of *A. torpidus* sp. n. are smaller and narrower set. The pronotum of *A. torpidus* sp. n. is less convex transversely, and its metatibiae are straighter.

Another elongate species of this size is *Amarygmus neophytus* BREMER, 2011. In contrast to *A. thesileoides* sp. n. it has elongate oval elytra; the punctures of the elytral rows of *A. neophytus* are definitely

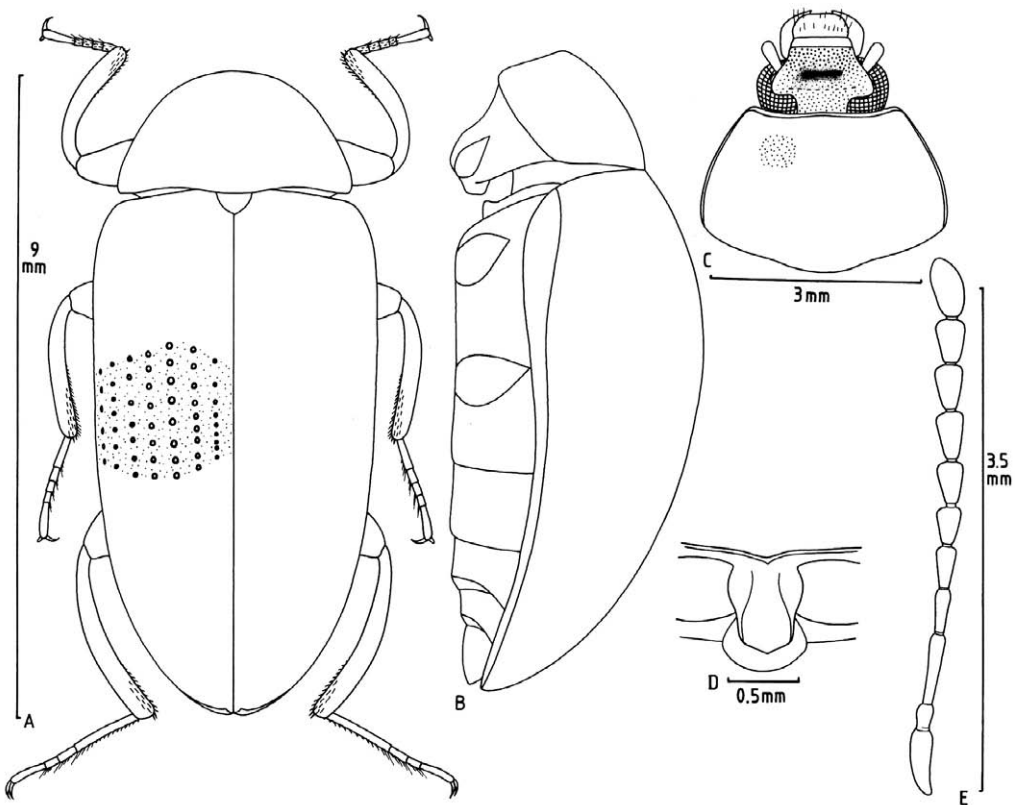


Fig. 32: *Amarygmus (Amarygmus) thesileoides* sp. n.: **A** Habitus, ♀; **B** Body, lateral view; **C** Head and pronotum; **D** Prosternal apophysis; **E** Antenna

larger than those of *A. thesileoides*, and their distances are larger; the upper side of *A. neophytes* is opaque, and the legs are brown, both is in contrast to *A. thesileoides* sp. n. Also similar to *A. asekiensis* sp. n.: concerning differences see *A. asekiensis* sp. n.

Amarygmus tapiniensis BREMER, 2011 (pp.53, 54, 79) and *A. wisseli* sp. n. have approximately the same size as *A. thesileoides* sp. n., but they have broader elytra, *A. tapiniensis* additionally possesses larger punctures of the elytral rows. *A. wisseli* sp. n. has a coppery colour of upper side, longer antennae and a very different shape of legs (see *A. wisseli* sp. n.).

Description. Body length: 8.4 mm. Body width: 3.9 mm.

Ratios. Pronotum: width/length 1.56; width hind corners/width front corners 1.66. Elytra: length/width 1.83; length elytra/length pronotum 3.48; maximum width elytra/maximum width pronotum 1.25.

Colouration. Upper side, see "Diagnosis"; genae and clypeus dark brown; femora and tibiae black, tarsi brown; antennomeres 1+2 brown, 3-11 black (antennomere 11 apically brightened); underside black.

Head. Frons of medium width, width equals to length of antennomeres 2+3 jointly; frons descending to the middle part of fronto-clypeal suture; disc behind fronto-clypeal suture with only a few small punctures; hind part of frons and lateral parts towards genae with small, closely set punctures. Genae are raised towards lateral margins; anteriorly terminating in front of the level of the middle part of fronto-clypeal suture. Fronto-clypeal suture impressed, in the middle moderately incised. Clypeus moderately stretched forwards, convex longitudinally, its small punctures are much more closely set than those on the disc of frons behind fronto-clypeal suture. Mentum reversely trapezoidal, with flat, lustrous lateral margins, space in between somewhat convex transversely. Underside of neck strongly microreticulated, with only a few small punctures on its frontal margin. Mandibles with a longitudinal sulcus on outer surface, apically bifid.

Pronotum. Narrow; markedly convex transversely, slightly convex longitudinally; widest at base; narrowing towards front corners, bent within hind 60 percent, nearly straightly narrowing within frontal 40 percent; hind corners angular, obtuse, front corners in dorsal view nearly rectangular; anterior margin slightly excavated; lateral and anterior margins bordered; lateral borders in dorsal view narrowly visible within basal half, scarcely visible in frontal half. Hind and front corners in lateral view angular, front ones with a right angle, hind ones obtuse. Surface with minute, relatively closely and irregularly set punctures.

Scutellum. Triangular, impunctate.

Elytra. Narrow, long; with subparallel sides; distinctly convex transversely, moderately convex longitudinally. Maximum of height at the end of first third. Shoulders rounded, slightly accentuated. Apices of elytra mutually rounded. Lateral edges in dorsal view very narrowly visible between first and second third. Surface with rows of medium sized punctures; distances between punctures on disc in row 4 equal to 1½- to 2-times the diameter of a puncture; about 26 punctures in row 4. Intervals flat, impunctate.

Prosternum. Anterior margin continuously and narrowly bent upwards, somewhat retracted towards apophysis in its middle. Apophysis of medium width, somewhat protruding caudad behind procoxae; along procoxae a little widened, and lateral margins raised ventrad, space in between as a wide median groove; posteriorly to procoxae the lateral margins are slightly narrowing; apically rounded.

Mesosternum. Hind part with a smooth, wide centre and slightly lifted lateral margins; its anterior margin excavated in the middle.

Metasternum. Anterior margin between mesocoxae rounded, bordered. Lateral parts of disc with large punctures, centre of disc in its posterior part with a few minute punctures from which tiny hairs originate.

Sternites. Anterior margin between metacoxae ogive, faintly bordered. Sternite 1 in its frontal half and in its lateral parts with small, shallow punctures. Sternites 2-5 with only a few tiny punctures, but the surface is not really smooth.

Antennae. Reaching over one third of elytra. Length/width ratio of antennomeres 1-11 equals to 19:8 / 7:7 / 23:6 / 15:6 / 15:7 / 13:8 / 15:9 / 15:9 / 15:9 / 14:9 / 20:9.

Legs. Short. Femora towards second thirds markedly club-like broadened. Pro- and mesotibiae moderately bent basally, nearly straight in apical half. Metatibiae clearly bent. Lengths of protarsomeres 1-5 as 7:7:7:6:21; lengths of mesotarsomeres 1-5 as 20:9:9:6:20; lengths of metatarsomeres 1-4 as 41:16:8:22.

Etymology. *Thesileoides*, because of some resemblance with species of the genus *Thesilea* HAAG-RUTENBERG, 1878.

***Amarygmus (Amarygmus) torpidus* sp. n.**

(Fig. 33A-H)

Holotype, ♂, CA: Damaisi, Mt. Arfak [1°09'S-133°59'E] (2000 m), W-Papua, Indonesia, 4.II.2011, J. AOKI leg. (Spray).

Paratypes: dito (1 ♀ ZSM) - New Guinea (NW), Wisselmeren [= Lake Wissel: 3°55'S-136°15'E], Enarotadi, 1800-1850 m, 16.VII.1962, J. SEDLACEK Collector BISHOP (1 ♂ ZSM) - New Guinea (NW), Wisselmeren, Enarotadi, 1800-1900 m, 1.-9.VIII.'62, J. SEDLACEK Collector BISHOP (2 ♀ BMH).

Diagnosis. Of medium size; elongate. Elytra long and markedly convex transversely, with nearly straight to slightly oval elytral sides, and with rows of medium-sized punctures and flat intervals. Transversely the pronotum is less convex than the elytra. Frons wide. Antennae short, in females much shorter than in males.

Concerning size and shape similar to *Amarygmus docilis* BREMER, 2003 from Papua New Guinea (Fig. 36). The body shape of *A. docilis* is narrower than that of *A. torpidus* sp. n., the punctures of the elytral rows are more distant in *A. docilis*; the convexity of the pronotum of *A. docilis* is stronger, especially in the frontal part, but the width of frons is similar in both species. The antennae of *A. docilis* are longer than those of *A. torpidus* sp. n. Also similar to *A. torpidus* sp. n. is *A. thesileoides* sp. n., concerning differences, see this species.

Description. Body length: 7.4-8.0 mm. Body width: 3.6-3.9 mm.

Ratios. Pronotum: width/length 1.70-1.90; width hind corners/width front corners 1.81-1.95. Elytra: length/width 1.67-1.70; length elytra/length pronotum 3.59-3.89; maximum width elytra/maximum width pronotum 1.16-1.24.

Colouration. Pronotum black, metallic, lustrous; elytra dark coppery, somewhat shining. Underside dark brown, the femora are much lighter brown than underside; tibiae and tarsomeres dark brown. Antennomeres brown to dark brown.

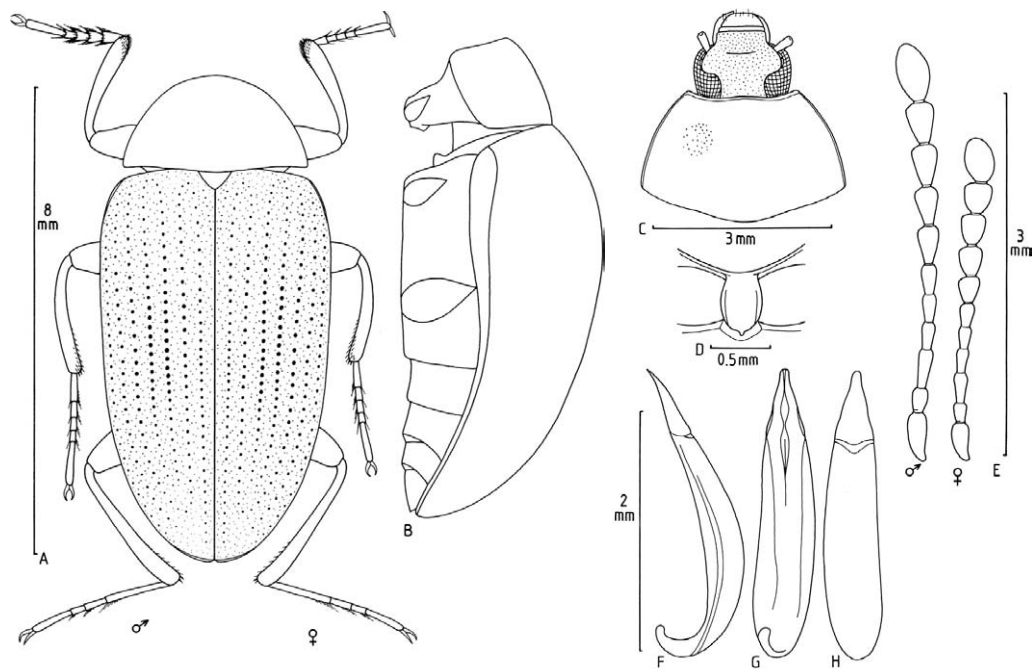


Fig. 33: *Amarygmus (Amarygmus) torpidus* sp. n.: **A** Habitus, left side legs of a ♂, right side legs of a ♀; **B** Body, lateral view; **C** Head and pronotum; **D** Prosternal apophysis; **E** Antennae, ♂ and ♀; **F** Aedeagus, lateral view; **G** Aedeagus, ventral view; **H** Aedeagus, dorsal view.

Head. Frons relatively wide, as wide in both sexes: slightly wider than length of antennomere 3 in males (as 17:15), clearly wider than length of antennomere 3 in females (as 17:12); with minute, not very closely set punctures. Genae only slightly raised towards their lateral margins; anteriorly terminating in front of the level of the middle part of fronto-clypeal suture. Fronto-clypeal suture slightly impressed, scarcely incised. Clypeus short, slightly convex longitudinally, punctured as on frons. Mentum reversely trapezoidal, with flat, lustrous lateral margins, space in between moderately opaque, slightly convex transversely. Mandibles with a longitudinal sulcus on outer surface, apically bifid.

Pronotum. Markedly convex transversely, slightly convex longitudinally. Widest at base; anteriorly narrowing, in the hind half with straight sides, in the frontal half somewhat bent. Hind corners angular, somewhat obtuse; front corners rounded. Anterior margin nearly straight. Lateral and anterior margins continuously bordered. Lateral borders in dorsal view narrowly visible. Front corners in lateral view rounded, angle about 105°, hind corners angular, angle also about 105°. Surface with small, irregularly, but not very closely set punctures.

Scutellum. Triangular; impunctate.

Elytra. Elongate, narrow; markedly convex transversely, moderately convex longitudinally; in the holotype the maximum of elytral height and width is situated shortly behind shoulders, in other specimens somewhat behind that of the holotype; in the holotype the side are subparallel, in other specimens slightly bent. Shoulders rounded, slightly accentuated. Apices of elytra mutually rounded. Lateral edges in dorsal view scarcely visible. Surface with rows of medium-sized punctures which become evanescent new apex; their distances on disc in row 4 equal to 1½- to 3-times the diameter of a puncture; about 23 punctures in row 4. Intervals flat, with tiny, distinct, well separated punctures.

Prosternum. Anterior margin narrowly bent upwards laterally, this border is widely interrupted in the middle. Apophysis very short and terminates at the posterior end of procoxae with a small “nose” in the middle, the apophysis is ascending between anterior margin and level along procoxae, and is markedly descending posteriorly towards the apex; its lateral margins along procoxae are somewhat lifted ventrad, the space in between as a shallow median groove.

Mesosternum. Upper side of hind part smooth, its anterior margin scarcely excavated in the middle.

Metasternum. Anterior margin between mesocoxae rounded, bordered only in its lateral parts. Anterior apophysis impunctate; anterior part of disc with very large, relatively closely set punctures, posterior half of disc impunctate. Median line incised in its hind part, widely impressed in the anterior half.

Sternites. Anterior margin between metacoxae ogive, not bordered. Anterior part of sternite 1 impressed in the middle (in males); sternite 1 otherwise with a few minute punctures; sternite 2 with small, inconspicuous punctures; sternites 3+4 nearly impunctate; sternite 5 with many minute punctures at its apical margin. Postero-medially with a small transverse impression (certainly only in males).

Antennae. Length/width ratio of antennomeres 1-11 in a male equals to 16:8 / 9½: 6½ / 15:6 / 12:6 / 12:6½ / 11:6½ / 15:8 / 17:10 / 18:11 / 17:11 / 24:13, in a female to 14:7½ / 8:6 / 12:6 / 9:6 / 9:6½ / 8:7 / 11:9 / 12:10 / 12:11 / 12:12 / 18:13.

Legs. Short. Femora towards second thirds club-like broadened. Protibiae moderately bent and thickened anteriorly; mesotibiae more bent than protibiae; metatibiae nearly straight in basal half, slightly incurved in apical half. In the males protarsomeres 1-3 prolonged and slightly widened, mesotarsomeres 1-3 in males only slightly prolonged. Lengths of protarsomeres 1-5 in a male as 13:11:10:8:33, lengths of mesotarsomeres 1-5 as 21:14:10:9:31, lengths of metatarsomeres 1-4 as 43:18:10:38; in a female lengths of protarsomeres 1-5 as 11:8:8:7:27, lengths of mesotarsomeres 1-5 as 18:11:11:7:27, lengths of metatarsomeres 1-4 as 40:14:10:28, respectively.

Etymology. Torpidus (Lat.) = torpid; paralyzed (by the spray).

Amarygmus (Amarygmus) wisseli sp. n.

(Fig.34A-H)

Holotype, ♂, BMH: New Guinea (NW), Wisselmeren, Moanemani, Kamo V., 1500 m, 13.VIII.'62, J. SEDLACEK Collector, BISHOP.

Paratypes: dito (2 ♂, 1 ♀ ZSM, 3 ♀ BMH) - dito, but 14.VIII.'62 (2 ♂, 2 ♀ BMH, 1 ♂ ZSM) - dito, but 19.VIII.'62 (1 ♂, 2 ♀ BMH).

Diagnosis. Of medium size; elongate oval; elytra with rows of small to medium-sized punctures which are not connected by lines; intervals flat, impunctate; frons not very wide; antennae long (in males slightly longer than in females); legs of medium length and tibiae relatively thin; in males on inner side of tibiae with characteristic peculiarities (see "Legs"); protarsomeres 1-3 not widened in males. Underside with some very short hairs on metasternum in males. Colouration, see below.

This species displays an extraordinary sexual dimorphism on protibiae and metatibiae. This sexual form of metatibiae in males is also found in *Amarygmus hydrophiloides* FAIRMAIRE, 1849, in *A. mayri* BREMER, 2004 (BREMER 2004b, 129-133), and in *A. metatibialis* BREMER, 2002 (BREMER 2002b: 164-166, Fig. p.176), but these species do not present a broadening on inner sides of protibiae as *A. wisseli* sp. n. does; on the other hand *A. wisseli* sp. n. does not possess a broadening on mesotibiae as *A. hydrophiloides* and *A. metatibialis* do. A broadening of the apical part of the inner sides of pro- and mesotibiae is found in males of *A. inflatipes* BREMER, 2004 (2004a, 51-53), a broadening of the inner side of protibiae alone in males is present in *A. ceroprioides* GEBIEN, 1920 (annotations on and figure in BREMER 2004a, 46-47).

Concerning size, body shape, presence of elytral rows of punctures, length of antennae also similar to *Amarygmus mokwamensis* sp. n.; this species lacks the sericeous shine of elytra; the punctures of the rows are somewhat larger; the frons is wider, and the front corners of pronotum are not rounded. Because the singular type of *A. mokwamensis* sp. n. is a female no statement on alterations of pro- and mesotibiae in males can be made.

Description.

Body length: 8.3-9.4 mm. Body width: 4.1-4.5 mm.

Ratios. Pronotum: width/length 1.65-1.74; width hind corners/width front corners 1.74-1.80. Elytra: length/width 1.53-1.62; length elytra/length pronotum 3.50-3.64; maximum width elytra/maximum width pronotum 1.31-1.33.

Colouration. Elytra coppery, with a sericeous shine and slight iridescence, pronotum and scutellum dark brown, slightly lustrous; head dark brown; femora and tibiae dark brown, tarsi brown; antennomeres 1-4 dark brown, 5-11 black; underside auburn, femora somewhat darker brown than underside.

Head. Frons relatively narrow, narrower than lengths of antennomere 4 (like 17:23 in a male), with minute punctures. Genae short and small, anteriorly terminating behind the level of the middle part of fronto-

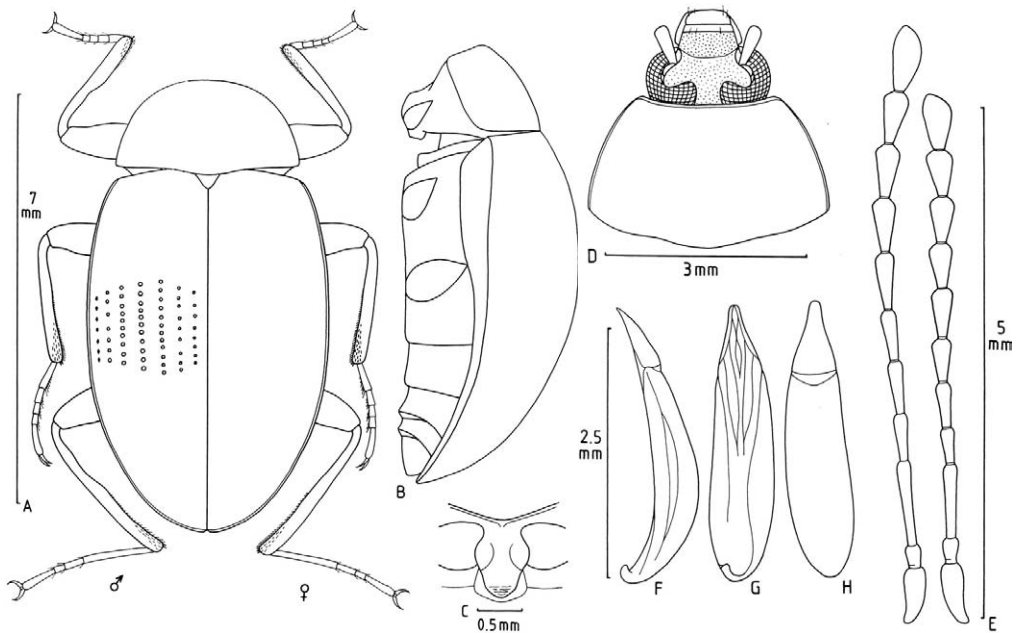


Fig. 34: *Amarygmus (Amarygmus) wisseli* sp. n.: **A** Habitus, left side legs of a ♂, right side legs of a ♀; **B** Body, lateral view; **C** Prosternal apophysis; **D** Head and pronotum; **E** Antennae, ♂ (left) and ♀ (right); **F** Aedeagus, lateral view; **G** Aedeagus, ventral view; **H** Aedeagus, dorsal view.

clypeal suture. Fronto-clypeal suture scarcely impressed or incised. Clypeus moderately stretched forwards, slightly convex transversely; with minute, closely set punctures. Mentum reversely trapezoidal; with flat, lustrous lateral margins; space in between convex across, with some lustre. Underside of neck with small, very closely set punctures which partially fuse. Mandibles longitudinally sulcated on outer surface, apically bifid.

Pronotum. Convex across, slightly convex along. Widest at base, anteriorly narrowing and bent. Hind corners in dorsal and lateral view angular, very obtuse; front corners in dorsal and lateral view rounded. Anterior margin inconspicuously excavated. Lateral and anterior margins continuously bordered. Lateral borders in dorsal view very narrowly visible. Surface with tiny, widely separated punctures which just become visible at 25-fold magnification.

Scutellum. Triangular; impunctate.

Elytra. Elongate, oval; convex transversely, moderately convex longitudinally; maximum of width and height somewhat in front of middle. Shoulders rounded, slightly accentuated. Apices of elytra mutually rounded. Lateral edges in dorsal view narrowly visible in their whole length. Surface with rows of small to medium-sized punctures which are situated in somewhat irregular distances from each other, they become evanescent near apex; distances on disc in row 4 equal to 1- to 3-times the diameter of a puncture; about 32 punctures in row 4. Intervals flat, impunctate.

Prosternum. Anterior margin narrowly bent upwards, with a minute triangular process towards apophysis in the middle. Apophysis distinctly widened along procoxae, there with broadened and lifted lateral margins; space in between as a median groove; behind procoxae the apophysis is somewhat protruding caudad, with narrowing sides but without broad and raised lateral margins; apex rounded and with some irregular transverse ridges.

Mesosternum. Surface of hind part nearly smooth; its anterior margin moderately excavated in the middle.

Metasternum. Anterior margin between mesocoxae rounded, bordered. Anterior apophysis smooth, slightly raised; the median line is broadly impressed; the disc is covered with tiny, widely separated punctures which are the origin of tiny hairs.

Sternites. Anterior margin between metacoxae ogive, bordered. Discs of sternites with tiny, indistinct, widely separated punctures. Sternite 5 shallowly impressed near apex in males.

Antennae. Reaching over the middle of elytra in males, to the middle of elytra in females. Length/width ratio of antennomeres 1-11 equals in a male to 31:11 / 10:7 / 35:7 / 23:7 / 21:7 / 23:8 / 25:10 / 24:11 / 25:11 / 30:13; in a female to 30:10 / 9:7 / 32:7 / 18:7 / 20:7 / 21:8 / 23:10 / 22:11 / 22:11 / 19:11 / 27:13.

Legs. Of medium length, relatively tender. Femora towards second thirds moderately broadened. With sexual dimorphisms on tibiae of moderate expression: protibiae in females straight, in males on outer side straight or slightly concave, on inner side between middle and apex with a slight broadening and with short, semi-erect hairs; mesotibiae slightly bent to straight, in males with an area of closely set, nearly recumbent bristles on inner side near apex; metatibiae nearly straight on outer side, on inner side with a faint swelling near middle and between middle and apex with closely set short, semi-erect bristles, in females without this swelling on inner side of metatibiae and with less closely set bristles. Protarsomeres 1-3 not widened in males but on protarsomeres 1-4 with a brush-like pilosity on soles. Lengths of protarsomeres 1-5 as 12:11:8:6:30; lengths of mesotarsomeres 1-5 as 19:12:8:6:29; lengths of metatarsomeres 1-4 as 53:17:8:30.

Etymology. Wisseli, from Wisselmeren (Lake Wissel), where the specimens of the type series had been collected.

***Amarygmus (Amarygmus) zethum* sp. n.**

(Fig. 35A-H)

Holotype, ♂, SMNS: Irian Jaya: Jayawijaya, Anguruk, Tanggeam, 29.X.1991, 1500-1800 m, leg. A. RIEDEL.

Diagnosis. Of medium size, elongate; elytra slightly narrowing posterior to shoulders, markedly convex transversely, moderately convex longitudinally; with rows of medium-sized punctures and flat intervals; frons of medium width; antennae of medium length; prosternal apophysis apically with a protruding median cone; metasternum laterally with small punctures; in males protarsomeres 1-3 moderately widened. Upper side brightly coppery with a slight reddish tinge.

Very similar to *A. nervosus* sp. n.: *A. nervosus* sp. n. is somewhat smaller than *A. zethum* sp. n., the elytra are slightly shorter, the punctures of pronotum are smaller, the frons is slightly wider, the penultimate antennomeres are slightly longer, the shape of prosternal apophysis is different (Figs. 26 and 35), the punctures on metasternum are smaller in *A. zethum* sp. n. than in *A. nervosus* sp. n.. Males of *A. nervosus* sp. n. possess a slight depression in the median part of sternites 1+2 with a sharp border which males of *A. zethum* sp. n. do not possess.

Description. Body length: 8.1 mm. Body width: 3.7 mm.

Ratios. Pronotum: width/length 1.81; width hind corners/width front corners 1.95. Elytra: length/width 1.76; length elytra/length pronotum 3.77; maximum width elytra/maximum width pronotum 1.18.

Colouration. Upper side, see "Diagnosis"; head black, lustrous; underside dark brown, somewhat lustrous; basal half of femora reddish brown, apical half of femora and tibiae dark brown; tarsomeres light brown; antennae brown.

Head. Frons of medium width, somewhat narrower than lengths of antennomeres 2+3 jointly (as 25:27), with small, relatively closely set punctures; genae clearly lifted towards lateral margins, anteriorly terminating in front of the level of the middle part of fronto-clypeal suture; fronto-clypeal suture slightly impressed, only negligibly incised in the middle; clypeus stretched forwards, slightly convex longitudinally; punctured as on frons; mentum reversely trapezoidal, with flat, lustrous lateral margins; space in between somewhat dull, convex transversely; underside of neck opaque, impunctate; mandibles with a longitudinal sulcus on outer surface, apically bifid.

Pronotum. Relatively narrow; in the hind 60 percent regularly convex transversely, in the anterior 40 percent the lateral parts of pronotum are descending laterad nearly as an inclined plane; pronotum slightly convex longitudinally; widest at base, anteriorly narrowing and bent; hind corners sharply angular, slightly obtuse; front corners approximately rectangular; anterior margin excavated; lateral and anterior margins continuously bordered; lateral borders in dorsal view very narrowly visible; front corners in lateral view rectangular, hind corners angular and somewhat obtuse; surface with small, distinct, somewhat irregularly and closely set punctures.

Scutellum. Triangular, with a few tiny punctures.

Elytra. Elongate, widest slightly behind shoulders, posteriorly slightly narrowing towards hind third and slightly bent; markedly convex transversely, moderately convex longitudinally; maximum of height at the end

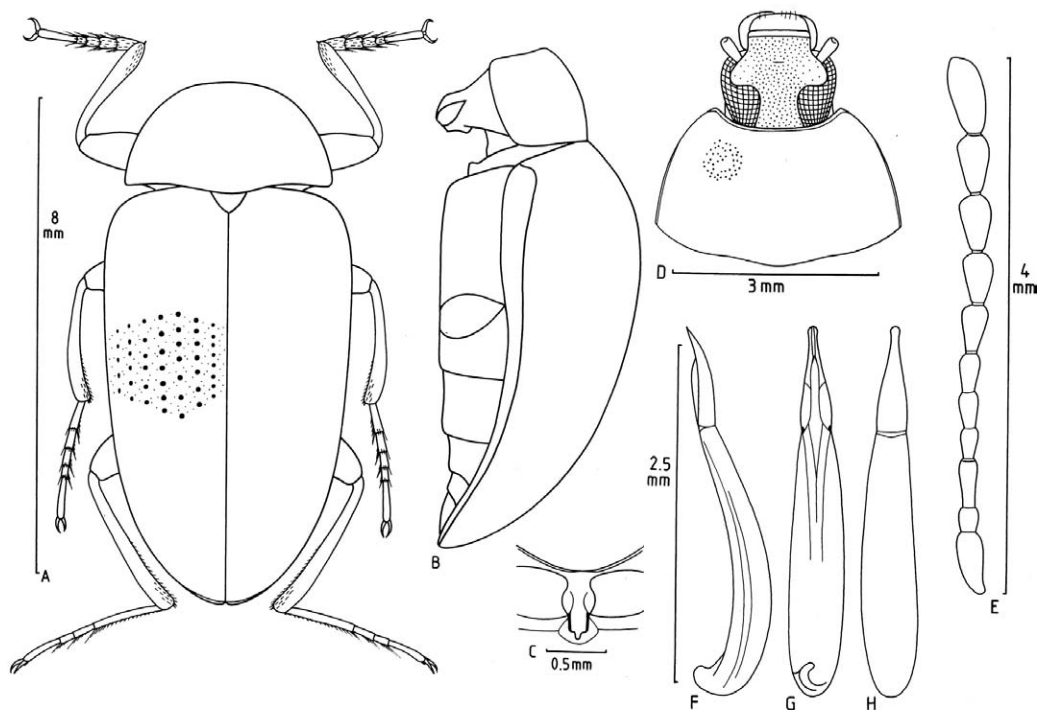


Fig. 35: *Amarygmus zethum* sp. n.: **A** Habitus, ♂; **B** Body, lateral view; **C** Prosternal apophysis; **D** Head and pronotum; **E** Antenna; **F** Aedeagus, lateral view; **G** Aedeagus, ventral view; **H** Aedeagus, dorsal view.

of first third; shoulders indistinctly angular, obtuse, slightly bossing; apices of elytra mutually rounded; lateral edges in dorsal view shortly visible at the beginning of hind third; surface with medium-sized punctures which become evanescent near apex; distances between punctures on disc in row 4 about 2 to 3-times the diameter of a puncture; approximately 27 punctures in row 4; intervals flat, impunctate.

Prosternum. Anterior margin laterally narrowly bent upwards; this border is interrupted in front of apophysis. Apophysis slightly protruding backwards of prosternal coxae, with a protruding median cone apically; along procoxae somewhat widened, space in between as a shallow median groove.

Mesosternum. Hind part with subparallel and raised lateral margins which bear small tubercles; its anterior margin is excavated in the middle.

Metasternum. Anterior margin between mesocoxae rounded, bordered. Anterior part of disc with small, widely separated punctures; rest of metasternum with tiny, widely separated punctures. Median line incised over the whole length.

Sternites. Anterior margin between metacoxae ogive, clearly bordered, borders somewhat lifted. Median part of sternite 1 without an impression in the male. Sternites 1-3 with minute, inconspicuous punctures; sternites 4-5 nearly impunctate; sternite 5 without a postero-median impression in the male.

Antennae. Of medium length, reaching over 30 percent of elytra. Length/width ratio of antennomeres 1-11 equals to 16:9 / 9:7 / 18:7 / 12:7 / 13:7 / 12:7 / 19:8 / 19:10 / 20:11 / 19:11 / 28:11.

Legs. Femora towards second thirds club-like broadened. Protibiae nearly straight on outer side, strongly broadened apically on inner side; mesotibiae moderately bent, metatibiae less bent than mesotibiae. Protarsomeres 1-3 are slightly enlarged in males. Lengths of protarsomeres 1-5 as 7:5:4½:4:14; lengths of mesotarsomeres 1-5 as 11:8:5:4½:16; lengths of metatarsomeres 1-4 as 23:9:5:24.

Etymology. It is the last *Amarygmus* described in this paper, therefore, as species name I add to the genus name the last letter of the alphabet, *zethum* (Lat.) = z.

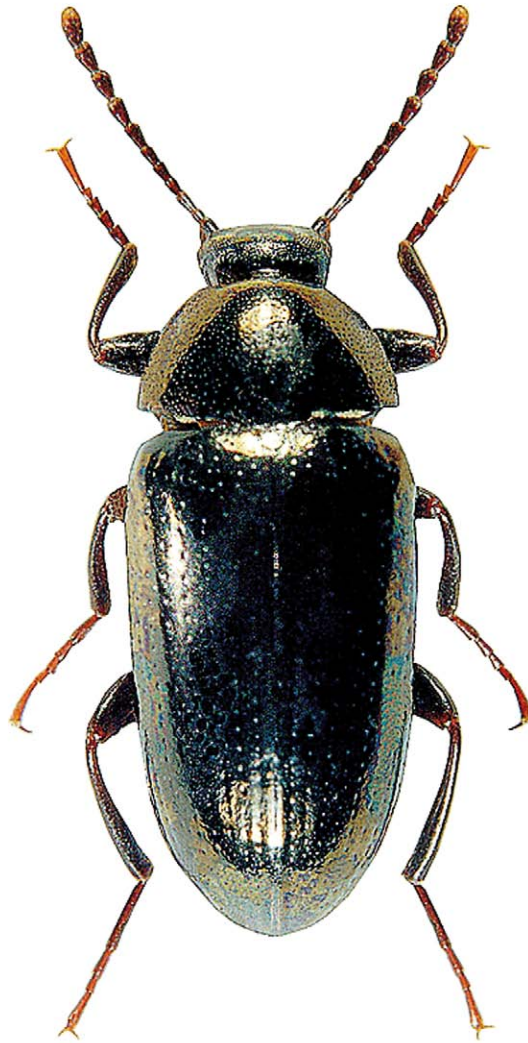


Fig. 36: Photo of *Amarygmus (Amarygmus) docilis* BREMER, 2003.

Zusammenfassung

Folgende neue Arten und Unterarten der Gattung *Amarygmus* DALMAN, 1823 aus Neu Guinea werden beschrieben und abgebildet: *A. (A.) abdominalis* sp. n., *A. (A.) akteae* sp. n., *A. (A.) allocerus* sp. n., *A. (A.) alloeus* sp. n., *A. (A.) anonymus* sp. n., *A. (A.) arboreus* sp. n., *A. (A.) arfakensis* sp. n., *A. (A.) asekiensis* sp. n., *A. (A.) auricollis* sp. n., *A. (A.) beatulus* sp. n., *A. (A.) beccarii* sp. n., *A. (A.) caeruleus* sp. n., *A. (A.) chimbuensis* sp. n., *A. (A.) debilis* sp. n., *A. (A.) defector* sp. n., *A. (A.) epistomaticus* sp. n., *A. (A.) fabricii* sp. n., *A. (A.) incessus* sp. n., *A. (A.) ixalus* sp. n., *A. (A.) kauensis* sp. n., *A. (A.) laniger* ssp. *lullula* ssp. n., *A. (A.) lethaeus* sp. n., *A. (A.) letho* sp. n., *A. (A.) minor* sp. n., *A. (A.) mirabilis* sp. n., *A. (A.) mokwamensis* sp. n., *A. (A.) nervosus* sp. n., *A. (A.) parargus* sp. n., *A. (A.) phoebus* sp. n., *A. (A.) profectus* sp. n., *A. (A.) prosper* sp. n., *A. (A.) sylvanus* sp. n., *A. (A.) thesileoides* sp. n., *A. (A.) torpidus* sp. n., *A. (A.) wisseli* sp. n. und *A. (A.) zethum* sp. n.

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Author's address:

Prof. (em.) Dr. H. J. BREMER
Diakonie-Wohnstift am Westerberg
Bergstr. 35B
49076 Osnabrück
Germany

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