Durducha gen. nov. (Coleoptera: Tenebrionidae: Alleculinae: Alleculini) from Indonesia and Papua-New Guinea

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Abstract. A new genus of Comb clawed beetles (Alleculinae) *Durducha* gen. nov. from Indonesia and Papua-New Guinea with type species *Durducha keiica* sp. nov. from Indonesia (Moluccas: Kei Island) is described, illustrated and compared with habitually similar genus *Sulawesica* Novák, 2021. New species are described, illustrated (including male genitalia) and compared together as *Durducha arfakica* sp. nov. from Indonesia (Papua), *Durducha manokwari* sp. nov. from Indonesia (Papua), *Durducha nabireica* sp. nov. and *Durducha papua* sp. nov. both from Indonesia (Papua) and *Durducha zachi* sp. nov. from Papua-New Guinea (New Ireland Island). Species *Durducha biroi* (Pic, 1956) comb. nov. is transferred from the genus *Allecula* Fabricius, 1801.

INTRODUCTION

The fauna of comb clawed beetles (Alleculinae) from Papua-New Guinea and nearby Indonesian Islands is poorly known. In subtribe Alleculina Laporte, 1840 we know only a few species of the genera Allecula Fabricius, 1801, Borboresthes Fairmaire, 1897, Cistelopsis Fairmaire, 1896, Microcistelopsis Pic, 1922, Microsthes Novák, 2011 and Stilbocistela Borchmann, 1932 (Borchmann 1935, 1937, Novák 2009, 2011, 2013, Pic 1922, 1930, 1956).

Species of the new genus *Durducha* gen. nov. clearly differs from species of habitually similar genus *Sulawesica* Novák, 2021 mainly by narrower and longer body, by antennomeres 5-10 longer and narrower, by pronotum approximately semicircular and by space between eyes wider.

The new genus *Durducha* gen. nov. is described with the type species *Durducha keiica* sp. nov. from Papua-New Guinea (Kei Island). Following species are described as new: *Durducha arfakica* sp. nov. from Indonesia (Papua), *Durducha manokwari* sp. nov. from Indonesia (Papua), *Durducha nabireica* sp. nov. and *Durducha papua* sp. nov. both from Indonesia (Papua) and *Durducha zachi* sp. nov. from Papua-New Guinea (New Ireland Island).

Species *Durducha biroi* (Pic, 1956) comb. nov. is transferred from the genus *Allecula* Fabricius, 1801.

The new species are illustrated (including male genitalia) and compared with one another.

MATERIAL AND METHODS

Two important morphometric characteristics used for the descriptions of species of the subfamily Alleculinae, the 'ocular index' dorsally (Campbell & Marshall 1964) and 'pronotal index' (Campbell 1965), are used in this paper as well. The ocular index equals ($100 \times 100 \times 10$

In the list of type material, a slash (/) separates data in separate rows and double slash (//) separates data on separate labels.

The following collection codes are used:

HNHM collection of Hungarian Natural History Museum, Budapest, Hungary;

KMTJ collection of Kimio Masumoto, Tokio, Japan;

NMEG collection of Naturkundemuseum, Erfurt, Germany;

NMTJ collection of National Museum, Tokio, Japan;

VNPC private collection of Vladimír Novák, Praha, Czech Republic.

Measurements of body parts and corresponding abbreviations used in text are as follows: AL-total antennal length, BL-maximum body length, EL-maximum elytral length, EW-maximum elytral width, HL-maximum length of head (visible part), HW-maximum width of head, OI-ocular index dorsally, PI-pronotal index dorsally, PL-maximum pronotal length, PW-pronotal width at base, RLA-ratios of relative lengths of antennomeres 1-11 from base to apex (3=1.00), RL/WA-ratios of length / maximum width of antennomeres 1-11 from base to apex, RLT-ratios of relative lengths of tarsomeres 1-5 respectively 1-4 from base to apex (1=1.00).

Other abbreviations are used: hb - handwritten black, pbl - printed beige label, pr - printed red, rf - red frame, wl - white label.

Measurements were made with an Olympus SZ 40 stereoscopic microscope with continuous magnification and with the Soft Imaging System AnalySIS. Snapshots were taken by using Canon EOS 550 D camera and a Canon Macro Photo Lens MP-E, images were modified with Helicon Focus 7.7.5. software.

TAXONOMY

Durducha gen. nov.

(Figs. 1-29)

Type species: Durducha keiica sp. nov.

Description (male). Habitus as in Figs. 1, 5, 8, 14, 18, 22 and 26 body outline (Fig. 9), medium sized, narrow, elongate, dorsal surface with setae, punctures and microgranulation, widest near middle elytra length. Head (Figs. 2, 6, 10, 15, 19, 23 and 27) distinctly wider than long, through the eyes as wide or wider than anterior margin and distinctly narrower than base of pronotum. Clypeus wide, transverse, rounded. Eyes large, transverse, excised, space between eyes narrower than diameter of one eye. Antenna longer than half body length, antennomeres narrow, antennomere 2 shortest, antennomeres 4-11 longer than antennomere 3. Ultimate maxillary palpomere widely triangular. Pronotum (Figs. 2, 6, 10, 15, 19, 23 and 27) convex, almost semicircular, widest in base, approximately as wide as elytra at humeri. Elytra narrow, elongate, widest near middle. Elytral striae with rows of punctures, elytral intervals with microgranulation and punctures. Elytral epipleura well-developed, narrowing to ventrite 1, then leads parallel in apical part. Legs long and narrow, protibiae with small angle near base. Pro- and mesotarsomeres 3 and 4 and metatarsomere 3 widened and lobed. Protarsal claws with more than 20 visible teeth. Abdomen with punctures, microgranulation and setae. Ultimate ventrite with impression in middle. Aedeagus (Figs. 3, 4, 6, 7, 12, 13, 20, 21 and 28, 29).

Female has body and space between eyes mostly a little wider than in male. Legs are normally shaped, protarsal claws have less visible teeth.

Differential diagnosis. Habitually most similar genus from this area is *Sulawesica* Novák, 2021. Species of the new genus *Durducha* gen. nov. clearly differs from species of the genus *Sulawesica* mainly by narrower body (BL/EW 2.8-3.4; EL/EW 1.9-2.3), by antennomeres 5-10 longer and narrower (3.6-5.0 times longer than wide), by pronotum approximately semicircular,

by space between eyes wider (except male of *Durducha zachi* sp. nov. - OI in range 15-26); while species of *Sulawesica* have body wider (BL/EW 2.6-2.9; EL/EW 1.7-1.8), antennomeres 5-10 are shorter and wider (2.3-3.8 times longer than wide), pronotum is distinctly wider than semicircular, space between eyes is narrower (OI 6-18).

Etymology. Named after the name of ghost of Moravian large pond Velké Dářko - *Durducha*. Gender: feminine.

Distribution. Indonesia, Papua-New Guinea.

Durducha arfakica sp. nov.

(Figs. 1-4)

Type locality. Indonesia, West Papua, Arfak Mountains.

Type material. Holotype (♂): Meni V., 1150m alt. / Mts. Arfak, W. Irian / Jaya, 3-10.II.2011 / Takakuwa, M. leg., (NMTJ). Paratypes: (2 ♀♀): same data as holotype, (KMTJ, VNPC). The types are provided with a printed red label: 'Durducha / arfakica sp. nov. / HOLOTYPUS [or PARATYPUS] / V. Novák det. 2024'.

Description of holotype. Habitus as in Fig. 1, medium sized, narrow, elongate, semi-matte, from pale reddish brown to dark brown, dorsal surface with pale setae, punctures and microgranulation, BL 8.89 mm. Widest near middle elytra length; BL/EW 3.36.

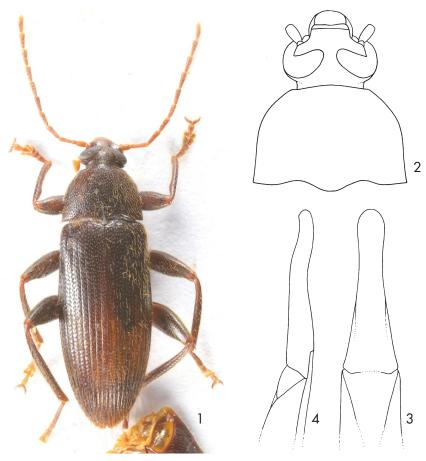
Head (Fig. 2) distinctly wider than long, through the eyes wider than anterior margin and distinctly narrower than base of pronotum. Dorsal surface with long, pale setae, dense punctures and microgranulation. Posterior part with dark setae behind eyes, brown, darker than reddish brown anterior half. Clypeus wide, transverse, rounded, pale reddish brown. Dorsal surface with small, shallow punctures, pale setae and microgranulation, matte. Mandibles dark brown, glabrous, shiny, with pale setae on sides. HW 1.38 mm; HW/PW 0.58; HL (visible part) 1.11 mm. Eyes large, transverse, excised, space between eyes narrow, distinctly narrower than diameter of one eye; approximately as wide as length of antennomere 2; Ol equal to 15.08.

Antenna. Long and narrow, pale reddish brown AL(1-11) 4.68 mm, exceeding half body length - AL(1-11)/BL 0.53). Surface with long, pale setae, microgranulation and punctures. Antennomeres 1-3 semi-matte, antennomeres 4-11 matte. Antennomere 2 shortest, ultimate antennomere longest, antennomeres 4-11 longer than antennomere 3, antennomeres 4-10 slightly widened apically.

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RLA(1-11): 0.88 : 0.42 : 1.00 : 1.44 : 1.15 : 1.33 : 1.16 : 1.16 : 1.22 : 1.36 : 1.52.
RL/WA(1-11): 2.10 : 1.32 : 2.76 : 3.96 : 3.59 : 4.18 : 4.00 : 4.00 : 4.20 : 4.70 : 4.35.
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Maxillary palpus pale reddish brown, matte, with pale setae, small punctures and fine microgranulation. Palpomeres 2 and 3 distinctly narrowest at base and widest at apex, ultimate palpomere widely triangular.

Pronotum (Fig. 2) dark brown, semi-matte, convex, almost semicircular, widest in base, approximately as wide as elytra at humeri. Dorsal surface with long, pale setae, dense punctures and fine microgranulation. PL 1.66 mm; PW 2.38 mm; Pl equal to 69.75. Border lines very narrow, margins conspicuous from dorsal view, only in the middle of anterior and posterior margins not clearly conspicuous. Base finely bisinuate, anterior margin slightly rounded, anterior angles obtuse, posterior angles sharply rectangular. Lateral margins straight in basal part, arcuate in apical part.



Figs. 1-4. Durducha arfakica sp. nov. (male holotype): 1-Habitus; 2-head and pronotum; 3-apical piece of aedeagus, dorsal view; 4-apical piece of aedeagus, lateral view.

Elytra. Dark brown, narrow, elongate, almost parallel, semi-matte, widest near middle. Dorsal surface with long, pale setae. EL 6.12 mm; EW 2.65 mm; EL/EW 2.31. Elytral striae with rows of coarse punctures, smaller than those in pronotum. Elytral intervals with microgranulation and punctures approximately as large as those in striae.

Scutellum. Dark brown, semi-matte, roundly triangular, with fine microgranulation.

Elytral epipleura well-developed, brown, with punctures and pale setae, narrowing to ventrite 1, then relatively wide and parallel in apical part.

Legs. Long and narrow, dark brown, dorsal surface with pale setae, fine microgranulation and shallow punctures. Protibiae with angle near base and slightly excised in inner side. Tarsi pale reddish brown. Pro- and mesotarsomeres 3 and 4 and metatarsomere 3 widened and lobed. RLT: 1.00:0.42:0.68:0.97:2.14 (protarsus), 1.00:0.37:0.37:0.48:0.88 (mesotarsus), 1.00:0.28:0.34:— (metatarsus).

Protarsal claws with 24 and 26 visible teeth.

Venter reddish brown, with punctures and sparse, short, pale setae. Abdomen dark brown,

shiny with fine microgranulation, dense, very small punctures and pale setae. Penultimate ventrite reddish brown, ultimate ventrite pale reddish brown with shallow impression in middle.

Aedeagus (Figs. 3, 4) ochre yellow, shiny. Basal piece rounded laterally and narrowing from dorsal view. Apical piece elongate triangular with rounded tip dorsally, beak-shaped from dorsal and lateral views. Ratio of length of apical piece to length of basal piece from dorsal view 1: 2.90.

Female has body shorter and wider (BL/EW 2.8; EL/EW 1.9), space between eyes is wider (OI approximately 24) than in male. Protibiae are normally shaped, protarsal claws have only 11 visible teeth.

Variability. The type specimens somewhat vary in size; each character is given as its mean value, with full range in parentheses. Females (n= 2). BL 9.05 mm (8.65-9.44 mm); HL 1.18 (1.06-1.29 mm); OI 24.25 (22.41-26.09); PL 1.70 mm (1.62-1.78 mm); PW 1.58 mm (1.56-1.60 mm); PI 66.63 (64.80-68.46); EL 6.17 mm (5.97-6.37 mm); EW 3.20 mm (2.89-3.50 mm).

Differential diagnosis. Male of the new species *Durducha arfakica* sp. nov. distinctly differs from similar species *Durducha keiica* sp. nov. mainly by metatibiae not widened near middle (male of *D. keiica* has metatibiae widened near middle); from *Durducha papua* sp. nov. mainly by pronotum covered by dense and coarse punctures (pronotum of *D. papua* is covered by sparse and shallow punctures); from *Durducha zachi* sp. nov. mainly by wider space between eyes - OI approximately 17 (male of *D. zachi* has OI approximately 6).

D. arfakica clearly differs from similar species of Durducha biroi (Pic, 1956) comb. nov. and Durducha nabireica sp. nov. mainly by posterior angles of pronotum rectangular; while D. biroi and D. nabireica have posterior angles of pronotum sharp.

D. arfakica is distinctly different from similar species Durducha manokwari sp. nov. mainly by posterior angles of pronotum rounded and by protibiae not clearly excised on inner side; while D. manokwari has posterior angles of pronotum rounded and protibiae are distinctly excised on inner side.

Etymology. Toponymic, named after the type locality - Arfak Mountains in West Papua (Indonesia).

Distribution. Indonesia (West Papua).

Durducha biroi (Pic, 1956) comb. nov.

(Figs. 5-7)

Allecula biroi Pic, 1956: 88.

Type locality. N. Guinée: Sattelberg, Huon Golf according to Pic (1956: 88); New Guinea, Biró, Erima, Astrolabe according to locality labels.

Type material. Holotype (1 spec.): wl: N. Guinea / Biró 97 // pbl: Erima / Astrolabe R. // wl with rf: Holotypus (pr) 1956 (hb) / Allecula (hb) / Biroi Pic (hb), (HNHM).

Remarks. Species *Allecula biroi* Pic, 1956 distinctly belongs to new genus *Durducha* gen. nov. as you can see on Fig. 5 (habitus) and Fig. 6 (head and pronotum).

Distribution. Papua-New Guinea.



Figs. 5-7. Durducha biroi (Pic, 1956) comb. nov. (holotype): 5-habitus; 6-head and pronotum; 7-locality labels.

Durducha keiica sp. nov.

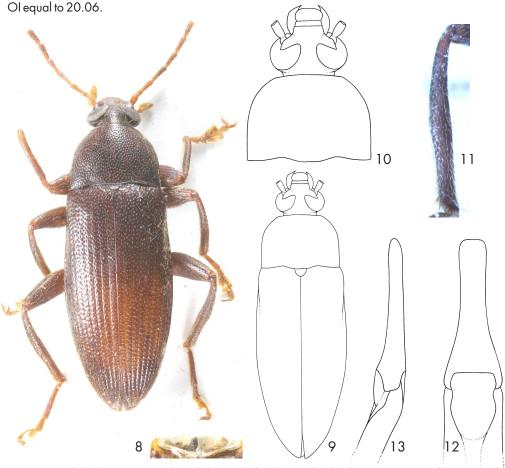
(Figs. 8-13)

Type locality. Indonesia, Moluccas, Kei Island, 10 km west of Tual City, S 5°37′13′′, E 132°39′20′′.

Description of holotype. Habitus as in Fig. 8, body outline (Fig. 9), medium sized, narrow, elongate, shiny, from pale brown to dark brown, dorsal surface with pale setae, punctures and microgranulation, BL 8.95 mm. Widest near middle elytra length; BL/EW 3.11.

Head (Fig. 10) distinctly wider than long, through the eyes wider than anterior margin and distinctly narrower than base of pronotum. Dorsal surface with pale setae, dense punctures and microgranulation. Posterior part with a few dark setae behind eyes, dark brown darker than reddish brown anterior half. Clypeus wide, transverse, rounded, pale reddish brown. Dorsal surface with small punctures, pale setae and microgranulation, shiny. Mandibles pale reddish

brown, glabrous, shiny, with darker sides and apex, with pale setae on sides. HW 1.46 mm; HW/PW 0.60; HL (visible part) 1.27 mm. Eyes large, transverse, excised, space between eyes narrow, distinctly arrower than diameter of one eye; slightly wider than length of antennomere 2;



Figs. 8-13. Durducha keiica sp. nov. (male): 8- habitus; 9- body outline; 10- head and pronotum; 11- metatibia; 12- apical piece of aedeagus, dorsal view; 13- apical piece of aedeagus, lateral view.

Antenna. Long and narrow, surface with long, pale setae, microgranulation and punctures. Antennomeres 1-3 pale reddish brown, semi-matte, antennomeres 4-7 darker - brown, slightly widened apically, matte, longer than antennomere 3.

RLA(1-7): 0.74 : 0.41 : 1.00 : 1.32 : 1.15 : 1.12 : 1.15. RL/WA(1-7): 2.00 : 1.64 : 3.96 : 4.26 : 3.70 : 3.88 : 3.85.

Maxillary palpus pale reddish brown, semi-matte, with pale setae, small, shallow punctures and fine microgranulation. Palpomeres 2 and 3 distinctly narrowest at base and widest at apex, ultimate palpomere widely triangular.

Pronotum (Fig. 10) dark brown, shiny, convex, almost semicircular, widest in base, approximately as wide as elytra at humeri. Dorsal surface with pale setae, dense punctures and

fine microgranulation. PL 1.70 mm; PW 2.43 mm; PI equal to 69.96. Border lines very narrow, margins conspicuous from dorsal view, only in the middle of anterior margin not clearly conspicuous. Base bisinuate, anterior margin almost straight, anterior angles not clearly distinct, posterior angles rectangular. Lateral margins straight in basal part, arcuate in apical half.

Elytra. Brown, narrow, elongate, very slightly oval, shiny, widest near middle. Dorsal surface with pale setae. EL 5.98 mm; EW 2.88 mm; EL/EW 2.08. Elytral striae with rows of coarse punctures, slightly smaller than those in pronotum. Elytral intervals with microgranulation and dense punctures approximately as large as those in striae.

Scutellum. Brown, semi-elliptical, semi-mate, with punctures and microgranulation.

Elytral epipleura well-developed, reddish brown, with punctures and pale setae, narrowing to ventrite 1, then leads parallel in apical part.

Legs. Long and narrow, brown, dorsal surface with pale setae, fine microgranulation and small, shallow punctures. Protibiae with small angle near base and with two indistinct margins in outer side. Metatibiae distinctly widened near middle. Tarsi pale reddish brown or pale brown. Proand mesotarsomeres 3 and 4 and metatarsomere 3 widened and lobed. RLT: 1.00:0.59:0.90:1.03:1.78 (protarsus); 1.00:0.37:0.36:0.50:0.87 (mesotarsus); 1.00:0.30:0.28:0.53 (metatarsus).

Protarsal claws with more than 20 visible teeth.

Venter dark reddish brown, with small punctures and sparse, short, pale setae. Abdomen reddish brown, shiny with fine microgranulation, dense, small punctures and sparse, pale setae. Ultimate ventrite pale reddish brown with impression in middle.

Aedeagus (Figs. 12, 13) ochre yellow, semi-mate. Basal piece slightly rounded laterally and narrowing from dorsal view. Apical piece elongate triangular dorsally, beak-shaped from dorsal view and knife-shaped from lateral view. Ratio of length of apical piece to length of basal piece from dorsal view 1: 3.57.

Female has body slightly shorter and wider (BL/EW 2.9; EL/EW 2.0) than in male. Protibiae are normally shaped, metatibiae are not widened near middle, protarsal claws have only 11 visible teeth.

Variability. The type specimens somewhat vary in size; each character is given as its mean value, with full range in parentheses. Males (n= 3). BL 8.91 mm (8.61-9.18 mm); HL 1.23 mm (1.19-1.27 mm); HW 1.41 mm (1.37-1.46 mm); OI 19.84 (18.67-20.78); PL 1.71 mm (1.69-1.75 mm); PW 2.44 mm (2.40-2.48 mm); PI 70.32 (69.96-70.57); EL 5.97 mm (5.67-6.26 mm); EW 2.84 mm (2.73-2.92 mm). Females (n= 2). BL 8.66 mm (8.42-9.06 mm); HL 1.32 mm (1.31-1.33 mm); HW 1.52 mm (1.50-1.53 mm); OI 23.17 (22.46-23.87); PL 1.87 mm (1.85-1.88 mm); PW 2.83 mm (2.81-2.84 mm); PI 66.37 (65.83-66.90); EL 6.10 mm (6.05-6.15 mm); EW 3.04 mm (2.95-3.13 mm).

Differential diagnosis. Males of the species *Durducha keiica* sp. nov. distinctly differs from all other species of *Durducha* gen. nov. mainly by widened metatibiae near middle; while males of all other species have metatibiae normally shaped.

Etymology. Toponymic, named after the name of island of its origin - Kei (keiica).

Distribution. Indonesia (Moluccas - Kei Island).

Durducha manokwari sp. nov.

(Figs. 14-17)

Type locality. Indonesia, West Papua, Manokwari, 0°48.34′S, 134°, 03.15′E, 160 m.

Type material. Holotype (3): WESTPAPUA, Prov. / Manokwari,6 km N / Manokwari,Desa Pami / 160m,0°48.34´S, 134° / 03.15´E,09.III.2007 leg. / A. Weigel,cut. area/sec.for., (NMEG). The type is provided with a printed red label: 'Durducha / manokwari sp. nov. / HOLOTYPUS / V. Novák det. 2024'.

Description of holotype. Habitus as in Fig. 14, medium sized, narrow, elongate, semi-matte, from pale reddish brown to dark brown, dorsal surface with pale setae, punctures and microgranulation, BL 8.18 mm. Widest near middle elytra length; BL/EW 3.12.

Head (Fig. 15) distinctly wider than long, through the eyes approximately as wide as anterior margin and distinctly narrower than base of pronotum. Dorsal surface with sparse, pale setae, dense punctures and microgranulation. Posterior part with dark setae behind eyes, brown, darker than reddish brown anterior half. Clypeus wide, transverse, rounded, pale reddish brown. Dorsal surface with small, shallow punctures, pale setae and microgranulation, matte. Mandibles brown, glabrous, shiny, with pale setae on sides. HW 1.36 mm; HW/PW 0.59; HL (visible part) 1.06 mm. Eyes large, transverse, excised, space between eyes narrow, distinctly narrower than diameter of one eye; slightly wider than length of antennomere 2; OI equal to 17.01.

Antenna. Long and narrow, pale reddish brown, matte (AL(1-11) 4.83 mm, distinctly exceeding half body length - AL(1-11)/BL 0.59). Surface with pale setae, microgranulation and punctures. Antennomere 2 shortest, ultimate antennomere longest, antennomeres 4-11 longer than antennomere 3.

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RLA(1-11): 0.81: 0.32: 1.00: 1.32: 1.16: 1.20: 1.26: 1.30: 1.28: 1.26: 1.42.
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RL/WA(1-11): 2.44: 1.45: 3.83: 3.96: 3.64: 3.61: 4.14: 4.29: 4.19: 4.10: 4.67.

Maxillary palpus pale reddish brown, matte, with pale setae, small punctures and fine microgranulation. Palpomeres 2 and 3 distinctly narrowest at base and widest at apex, ultimate palpomere widely triangular.

Pronotum (Fig. 15) dark brown, semi-matte, convex, almost semicircular, widest in base, approximately as wide as elytra at humeri. Dorsal surface with sparse, pale setae, dense punctures and fine microgranulation. PL 1.65 mm; PW 2.29 mm; Pl equal to 72.05. Border lines very narrow, margins conspicuous from dorsal view. Base finely bisinuate, anterior margin slightly rounded, anterior angles obtuse, posterior angles roundly rectangular. Lateral margins straight in basal part, arcuate in apical part.

Elytra. Dark brown, narrow, elongate, very slightly oval, semi-matte, widest near middle. Dorsal surface with sparse, pale setae. EL 5.47 mm; EW 2.62 mm; EL/EW 2.09. Elytral striae with rows of coarse punctures, approximately as large as those in pronotum. Elytral intervals with microgranulation and punctures approximately as large as those in striae.

Scutellum. Brown, semicircular, with small punctures and fine microgranulation.

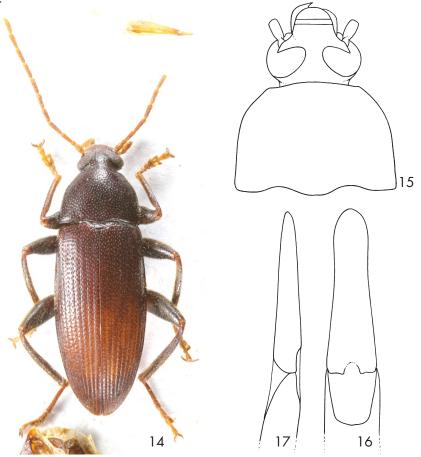
Elytral epipleura well-developed, reddish brown, with punctures and few pale setae, narrowing to ventrite 1, then leads parallel in apical part.

Legs. Long and narrow, brown, dorsal surface with pale setae, fine microgranulation and punctures. Protibiae with small angle near base and slightly excised in inner side. Tarsi and protibiae pale reddish brown. Pro- and mesotarsomeres 3 and 4 and metatarsomere 3 widened and lobed. RLT: 1.00: 0.53: 0.92: 1.17: 2.32 (protarsus); 1.00: 0.32: 0.33: 0.45: 0.80 (mesotarsus); 1.00: 0.29: 0.31: 0.55 (metatarsus).

Protarsal claws with more than 20 visible teeth.

Venter reddish brown, with punctures and sparse, short, pale setae. Abdomen reddish brown, semi-matte, with fine microgranulation, dense, small, shallow punctures and sparse, pale setae. Apical half of ultimate ventrite pale reddish brown with shallow impression in middle.

Aedeagus (Figs. 16, 17) ochre yellow, matte. Basal piece narrowing from dorsal view. Apical piece narrow, elongate with rounded tip dorsally, beak-shaped from dorsal view and knife-shaped from lateral view. Ratio of length of apical piece to length of basal piece from dorsal view 1:4.35.



Figs. 14-17. Durducha manokwari sp. nov. (male holotype): 14- habitus; 15- head and pronotum; 16- apical piece of aedeagus, dorsal view; 17- apical piece of aedeagus, lateral view.

Female unknown.

Differential diagnosis. Male of the new species *Durducha manokwari* sp. nov. distinctly differs from similar species *Durducha keiica* sp. nov. mainly by metatibiae not widened near middle (male of *D. keiica* has metatibiae widened near middle); from *Durducha papua* sp. nov. mainly by pronotum covered by dense and coarse punctures (pronotum of *D. papua* is covered by sparse and shallow punctures); from *Durducha zachi* sp. nov. mainly by wider space between

eyes - OI approximately 17 (male of D. zachi has OI approximately 6).

D. manokwari clearly differs from similar species Durducha biroi (Pic, 1956) comb. nov. and Durducha nabireica sp. nov. mainly by posterior angles of pronotum rectangular; while D. biroi and D. nabireica have posterior angles of pronotum sharp.

D. manokwari is distinctly different from similar species Durducha arfakica sp. nov. mainly by posterior angles of pronotum rounded and by protibiae not clearly excised on inner side; while D. arfakica has posterior angles of pronotum rounded and protibiae are distinctly excised on inner side.

Etymology. Toponymic, named after the type locality Manokwari in West Papua (Indonesia).

Distribution. Indonesia (West Papua).

Durducha nabireica sp. nov.

(Figs. 18-21)

Type locality. Indonesia, Papua, east of Nabire, Kwatisore, 47 km south of Urie - Camp, 3°32′26′′ S, 134°51′69′′ E.

Description of holotype. Habitus as in Fig. 18, medium sized, narrow, elongate, shiny, from pale brown to dark brown, dorsal surface with pale setae, punctures and microgranulation, BL 8.13 mm. Widest near middle elytra length; BL/EW 3.03.

Head (Fig. 19) distinctly wider than long, through the eyes slightly wider than anterior margin and narrower than base of pronotum. Dorsal surface with long, pale setae, punctures and microgranulation. Posterior part with dark setae behind eyes, dark brown, darker than reddish brown anterior half. Clypeus wide, transverse, rounded, pale reddish brown. Dorsal surface with pale setae and microgranulation, semi-matte. Mandibles pale reddish brown, glabrous, shiny, with sides and apex darker and pale setae on sides. HW 1.39 mm; HW/PW 0.60; HL (visible part) 1.23 mm. Eyes large, transverse, excised, space between eyes narrow, distinctly narrower than diameter of one eye; slightly wider than length of antennomere 2; Ol equal to 15.75.

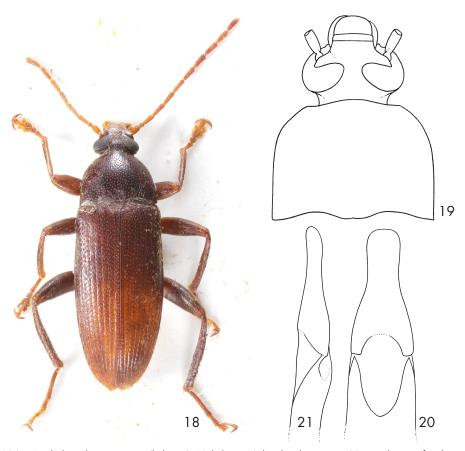
Antenna. Long and narrow, pale brown, matte AL(1-11) 4.82 mm, exceeding half body length - AL(1-11)/BL 0.59). Surface with pale setae, microgranulation and sparse, shallow punctures. Antennomere 2 shortest, antennomeres 4-11 longer than antennomere 3.

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RLA(1-11): 0.84 : 0.34 : 1.00 : 1.25 : 1.10 : 1.21 : 1.18 : 1.25 : 1.27 : 1.25 : 1.29.
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RL/WA(1-11): 2.11: 1.15: 3.24: 4.47: 4.17: 4.56: 4.00: 3.86: 4.10: 4.05: 4.19.

Maxillary palpus pale brown, semi-matte, with pale setae, small punctures and fine microgranulation. Palpomeres 2 and 3 distinctly narrowest at base and widest at apex, ultimate palpomere widely triangular.

Pronotum (Fig. 19) dark brown, shiny, convex, almost semicircular, widest in base, approximately as wide as elytra at humeri. Dorsal surface with sparse, pale setae, dense punctures and fine microgranulation. PL 1.64 mm; PW 2.32 mm; Pl equal to 70.69. Border lines very narrow, margins conspicuous from dorsal view. Base finely bisinuate, anterior margin arcuate, anterior angles distinct, obtuse, posterior angles sharp. Lateral margins parallel in basal part, arcuate in apical half.



Figs. 18-21. Durducha nabireica sp. nov. (holotype): 18- habitus; 19- head and pronotum; 20- apical piece of aedeagus, dorsal view; 21- apical piece of aedeagus, lateral view.

Elytra. Reddish brown, narrow, elongate, almost parallel, semi-matte, widest near middle. Dorsal surface with long, pale setae. EL 5.36 mm; EW 2.67 mm; EL/EW 2.01. Elytral striae with rows of punctures. Elytral intervals with microgranulation and punctures approximately as large as those in striae.

Scutellum. Brown, pentagon, matte, with setae, small punctures and microgranulation.

Elytral epipleura well-developed, reddish brown, with punctures narrowing to ventrite 1, then relatively wide leads in apical part.

Legs. Long and narrow, brown, dorsal surface with pale setae, fine microgranulation and shallow punctures. Protibiae with small angle near base. Pro- and mesotarsomeres 3 and 4 and metatarsomere 3 widened and lobed. RLT: 1.00: 0.55: 0.81: 0.87: 1.49 (protarsus); 1.00: 0.34: 0.37: 0.51: 0.78 (mesotarsus); 1.00: 0.29: 0.27: 0.50 (metatarsus).

Protarsal claws with more than 20 visible teeth.

Venter dark reddish brown, with punctures and sparse, short, pale setae. Abdomen reddish brown, shiny with recumbent, pale setae, fine microgranulation and small, shallow punctures. Ultimate ventrite pale reddish brown, with shallow impression in middle.

Aedeagus (Figs. 20, 21) ochre yellow, semi-matte. Basal piece rounded laterally and narrowing from dorsal view. Apical piece beak-shaped from dorsal and lateral views. Ratio of length of apical piece to length of basal piece from dorsal view 1: 4.52.

Female has space between eyes wider (OI approximately 25) than in male. Protibiae are normally shaped, protarsal claws have only 12 visible teeth.

Variability. The type specimens somewhat vary in size; each character is given as its mean value, with full range in parentheses. Females (n= 5). BL 9.71 mm (7.88-10.51 mm); HL 1.22 mm (1.01-1.37 mm); HW 1.48 mm (1.24-1.69 mm); OI 24.84 (22.54-29.92); PL 1.89 mm (1.51-2.04 mm); PW 2.85 mm (2.30-3.10 mm); PI 66.42 (65.65-67.85); EL 6.67 mm (5.24-7.10 mm); EW 3.28 mm (2.64-3.56 mm).

Differential diagnosis. Male of the new species *Durducha nabireica* sp. nov. distinctly differs from similar species *Durducha keiica* sp. nov. mainly by metatibiae not widened near middle (male of *D. keiica* has metatibiae widened near middle); from *Durducha papua* sp. nov. mainly by pronotum covered by dense and coarse punctures (pronotum of *D. papua* is covered by sparse and shallow punctures); from *Durducha zachi* sp. nov. mainly by wider space between eyes - OI approximately 16 (male of *D. zachi* has OI approximately 6).

D. nabireica is clearly different from similar species Durducha arfakica sp. nov. and Durducha manokwari sp. nov. mainly by sharp posterior angles of pronotum; while D. arfakica and D. manokwari have posterior angles of pronotum rectangular.

D. nabireica distinctly differs from similar species *Durducha biroi* (Pic, 1956) comb. nov. mainly by lateral margins of pronotum parallel in basal half and by antennomere 4 only 1.25 times longer than antennomere 3; while *D. biroi* has lateral margins narrowing in basal half of pronotum and antennomere 4 is 1.5 times longer than antennomere 3.

Etymology. Toponymic, named after the type locality Nabire in Papua (Indonesia).

Distribution. Indonesia, Papua.

Durducha papua sp. nov.

(Figs. 22-25)

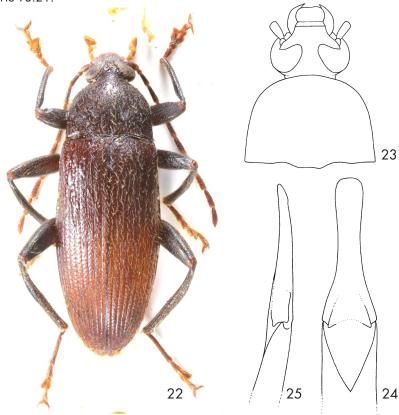
Type locality. Indonesia, Papua, Nabire, 61 km south of Kwatisore, 3°58′50′′S, 134°50′86′′E.

Type material. Holotype (3): INDONESIA Irian Jaya / Nabire E, Kwatisore / \sim 61 km S 03.III.1998 / 3°58′50′′S, 134°50′86′′E / leg. A. Weigel UWP KL, (NMEG). The type is provided with a printed red label: 'Durducha / papua sp. nov. / HOLOTYPUS / V. Novák det. 2024'.

Description of holotype. Habitus as in Fig. 22, medium sized, narrow, elongate, semi-matte, from pale brown to dark brown, dorsal surface with pale setae, punctures and microgranulation, BL 9.94 mm. Widest near middle elytra length; BL/EW 3.13.

Head (Fig. 23) distinctly wider than long, through the eyes narrower than base of pronotum. Dorsal surface with long, pale setae, punctures and microgranulation. Posterior part with dark setae behind eyes, dark brown, darker than reddish brown anterior half. Clypeus wide, transverse, rounded, pale reddish brown. Dorsal surface with pale setae and microgranulation,

matte. Mandibles pale reddish brown, glabrous, shiny, with pale setae on sides. HW 1.37 mm; HW/PW 0.60; HL (visible part) 1.63 mm. Eyes large, transverse, excised, space between eyes narrow, distinctly narrower than diameter of one eye; slightly wider than length of antennomere 2; Ol equal to 18.21.



Figs. 22-25. Durducha papua sp. nov. (holotype): 22- habitus; 23- head and pronotum; 24- apical piece of aedeagus, dorsal view; 25- apical piece of aedeagus, lateral view.

Antenna. Long and narrow, matte AL(1-11) 6.02 mm, exceeding half body length - AL(1-11)/BL 0.61). Surface with shorter, recumbent, pale setae, microgranulation and punctures. Antennomeres 1-7 dark brown with brown apex, antennomeres 8-11 brown. Antennomere 2 shortest, antennomeres 4-11 longer than antennomere 3.

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RLA(1-11): 0.71 : 0.38 : 1.00 : 1.41 : 1.37 : 1.34 : 1.51 : 1.47 : 1.38 : 1.37 : 1.41.
RL/WA(1-11): 1.75 : 1.31 : 3.42 : 4.63 : 3.82 : 3.61 : 4.32 : 3.85 : 3.84 : 4.07 : 3.91.
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Maxillary palpus pale reddish brown, matte, with pale setae and fine microgranulation. Palpomeres 2 and 3 distinctly narrowest at base and widest at apex, ultimate palpomere widely triangular.

Pronotum (Fig. 23) dark brown, matte, convex, almost semicircular, widest in base, approximately as wide as elytra at humeri. Dorsal surface with long, pale setae, small, shallow punctures and fine microgranulation. PL 1.96 mm; PW 2.74 mm; Pl equal to 71.53. Border lines

very narrow, margins conspicuous from dorsal view, only in the middle of anterior and posterior margins not clearly conspicuous. Base finely bisinuate, anterior margin arcuate, anterior angles indistinct, posterior angles sharp. Lateral margins parallel, narrowing in basal part, arcuate in apical part.

Elytra. Reddish brown, narrow, elongate, almost parallel, semi-matte, widest near middle. Dorsal surface with long, pale setae. EL 6.61 mm; EW 3.18 mm; EL/EW 2.08. Elytral striae with rows of punctures, not clearly distinct everywhere. Elytral intervals with microgranulation and shallow punctures.

Scutellum. Brown with sides darker, pentagon, semi-matte, with setae, punctures and microgranulation.

Elytral epipleura well-developed, brown, with punctures narrowing to ventrite 1, then relatively wide and parallel in apical part.

Legs. Long and narrow, dark brown, dorsal surface with pale setae, fine microgranulation and shallow punctures. Protibiae with angle near base and slightly excised in inner side. Tarsi pale brown. Pro- and mesotarsomeres 3 and 4 and metatarsomere 3 widened and lobed. RLT: 1.00: 0.56: 0.72: 0.89: 1.80 (protarsus); 1.00: 0.39: 0.49: 0.54: 0.96 (mesotarsus); 1.00: 0.32: 0.30: 0.57 (metatarsus).

Protarsal claws with more than 20 visible teeth.

Venter reddish brown, with punctures and sparse, short, pale setae. Abdomen brown, shiny with pale setae, fine microgranulation and small punctures. Penultimate and ultimate ventrites dark brown, ultimate with shallow impression in middle.

Aedeagus (Figs. 24, 25) ochre yellow, shiny. Basal piece rounded laterally and narrowing from dorsal view. Apical piece elongate, beak-shaped from dorsal view and knife-shaped from lateral view. Ratio of length of apical piece to length of basal piece from dorsal view 1: 2.85.

Female unknown.

Differential diagnosis. Male of new species *Durducha papua* sp. nov. clearly differs from all other known *Durducha* species mainly by pronotum covered by sparse, shallow punctures and by antennomeres 1-7 bicolor; while all other known *Durducha* species have pronotum covered by dense and coarse punctures and antennomeres 1-7 are unicolored.

Etymology. Toponymic, named after the name of island of its origin Papua.

Distribution. Indonesia, Papua.

Durducha zachi sp. nov.

(Figs. 26-29)

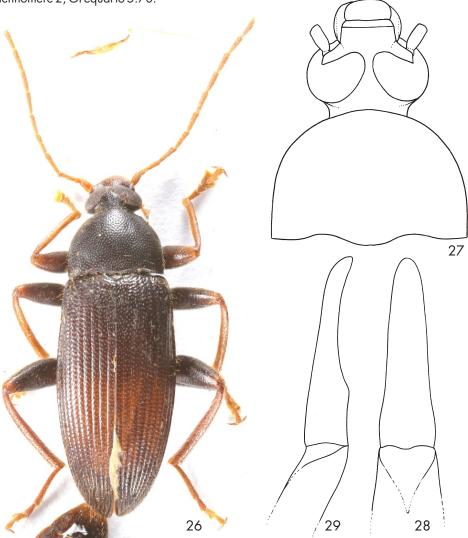
Type locality. Papua-New Guinea, New Ireland Province, New Ireland Island, 5 km southwest of Fangalawa, 02°53′22′′ S, 151°09′46′′ E, 100 m.

Type material. Holotype (3): PAPUA NEUGUINEA New / Ireland prov., New Ireland / bor., 5 km, SW Fangalawa, / Tesin, 100 m, $02^{\circ}53^{\circ}22^{\circ}$ S, / $151^{\circ}09^{\circ}46^{\circ}$ E, Kulturland, 11.III.2000, leg. A. Weigel, (NMEG). The type is provided with a printed red label: 'Durducha / zachi sp. nov. / HOLOTYPUS / V. Novák det. 2024° .

Description of holotype. Habitus as in Fig. 26, medium sized, narrow, elongate, shiny, from pale reddish brown to dark brown, dorsal surface with pale setae, punctures and

microgranulation, BL 9.17 mm. Widest near middle elytra length; BL/EW 3.04.

Head (Fig. 27) distinctly wider than long, through the eyes distinctly narrower than base of pronotum. Dorsal surface with long, pale setae, dense punctures and microgranulation. Posterior part with darker setae behind eyes, dark brown, darker than brown anterior half. Clypeus wide, transverse, rounded, pale brown. Dorsal surface with small, shallow punctures, pale setae and microgranulation, semi-matte. Mandibles pale brown, glabrous, shiny, with pale setae on sides. HW 1.49 mm; HW/PW 0.62; HL (visible part) 1.34 mm. Eyes large, transverse, excised, space between eyes very narrow, distinctly narrower than diameter of one eye; narrower than length of antennomere 2; OI equal to 5.70.



Figs. 26-29. Durducha zachi sp. nov. (holotype): 26-habitus; 27-head and pronotum; 28-apical piece of aedeagus, dorsal view; 29-apical piece of aedeagus, lateral view.

Antenna. Long and narrow, pale reddish brown, matte (AL(1-11) 5.45 mm, distinctly exceeding half body length - AL(1-11)/BL 0.59). Surface with long, pale setae, microgranulation and punctures. Antennomere 2 shortest, antennomeres 4-11 longer than antennomere 3.

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RLA(1-11): 0.60: 0.32: 1.00: 1.21: 1.14: 1.12: 1.28: 1.17: 1.21: 1.14: 1.25.
RL/WA(1-11): 1.96: 1.29: 3.54: 3.82: 4.22: 3.80: 4.36: 4.95: 3.96: 4.41: 4.82.
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Maxillary palpus pale brown, matte, with pale setae and small punctures. Palpomeres 2 and 3 distinctly narrowest at base and widest at apex, ultimate palpomere widely triangular.

Pronotum (Fig. 27) dark brown, semi-matte, convex, almost semicircular, widest in base, approximately as wide as elytra at humeri. Dorsal surface with sparse, pale setae, double punctuation (dense larger punctures and sparse small punctures) and fine microgranulation. PL 1.70 mm; PW 2.39 mm; PI equal to 71.13. Border lines very narrow, margins conspicuous from dorsal view, only in the middle of anterior margin not clearly conspicuous. Base bisinuate, anterior margin arcuate, anterior angles indistinct, posterior angles rectangular. Lateral margins straight in basal part, arcuate in apical part.

Elytra. Dark brown, narrow, elongate, very slightly oval, shiny, widest near middle. Dorsal surface with pale setae. EL 6.13 mm; EW 3.08 mm; EL/EW 2.03. Elytral striae with rows of coarse punctures, approximately as large as those in pronotum. Elytral intervals with microgranulation and punctures approximately as large as those in striae.

Scutellum. Brown, roundly triangular, with small punctures and microgranulation.

Elytral epipleura well-developed, brown, with punctures narrowing to ventrite 1, then leads parallel in apical part.

Legs. Long and narrow, femora brown, tibiae and tarsi pale reddish brown, dorsal surface with dense and long setae, fine microgranulation and shallow punctures. Protibiae without distinct angle near base and not excised in inner side. Pro- and mesotarsomeres 3 and 4 and metatarsomere 3 widened and lobed. RLT: 1.00:0.46:0.77:0.79:1.40 (protarsus).

Protarsal claws with more than 20 visible teeth.

Venter dark brown, with punctures and sparse, pale setae. Abdomen dark brown, shiny, with fine microgranulation, small, shallow punctures and pale setae. Apical half of ultimate ventrite pale reddish brown with impression in middle.

Aedeagus (Figs. 28, 29) ochre yellow, slightly shiny. Basal piece narrowing from dorsal view and rounded laterally. Apical piece elongate triangular with rounded tip dorsally, beak-shaped from dorsal and lateral views. Ratio of length of apical piece to length of basal piece from dorsal view 1:3.09.

Female unknown.

Differential diagnosis. Male of new species *Durducha zachi* sp. nov. clearly differs from all other known *Durducha* species mainly by narrow space between eyes (OI approximately 6) distinctly narrower than length of antennomere 2; while males of all other known *Durducha* species have space between eyes as wide or wider than length of antennomere 2 (OI in range 15-21).

Etymology. Patronymic, named after my childhood friend Vladimír Zach (Prague, Czech Republic).

Distribution. Papua-New Guinea.

KEY TO THE SPECIES OF DURDUCHA GEN. NOV.

1	(2)	Male metatibiae distinctly widened near middle. Habitus as in Fig. 8; body outline (Fig. 9); head and pronotum (Fig. 10); metatibia (Fig. 11); apical piece of aedeagus as in Figs. 12 and 13. Indonesia, Moluccas (Kei Island)
2	(1)	Male metatibiae normally shaped (not widened near middle).
3	(4)	Space between eyes very narrow, narower than length of antennomere 2. Habitus as in Fig. 26; head and pronotum (Fig. 27); apical piece of aedeagus as in Figs. 28 and 29. Papua-New Guinea (New Ireland Island)
4	(3)	Space between eyes as wide or wider than length of antennomere 2
5	(6)	Punctuation of pronotum sparse, punctures small and shallow, antennomeres 1-7 bicolor. Habitus as in Fig. 22; head and pronotum (Fig. 23); apical piece of aedeagus as in Figs. 24 and 25. Indonesia
		(Papua)
		Punctuation of pronotum dense, punctures coarse, antennomeres unicolored.
7		Posterior angles of pronotum sharp angled.
		Posterior angles of pronotum almost rectangular
9	(10)	Posterior angles of pronotum more sharp, more extended backwards, lateral margins distinctly narrowing in basal half, setae erect near lateral margins in apical part of pronotum. Habitus as in Fig. 5; head and pronotum (Fig. 6). Papua-New Guinea Durducha biroi (Pic, 1956) comb. nov.
10	(9)	Posterior angles of pronotum less sharp, lateral margins more parallel in basal half, setae recumbent near lateral margins in apical part of pronotum. Indonesia, Papua. Habitus as in Fig. 18; head and pronotum (Fig. 19); apical piece of aedeagus as in Figs. 20 and 21. Indonesia, Papua
11	(12)	Posterior angles of pronotum not rounded, protibiae distinctly excised on inner side. Habitus as in Fig. 1; head and pronotum (Fig. 2); apical piece of aedeagus as in Figs. 3 and 4. Indonesia, West Papua. Durducha arfakica sp. nov.
12	(11)	Posterior angles of pronotum rounded, protibiae not clearly excised on inner side. Habitus as in Fig. 14; head and pronotum (Fig. 15); apical piece of aedeagus as in Figs. 16 and 17. Indonesia, West Papua

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