

**New genera of Alleculinae (Coleoptera: Tenebrionidae: Alleculinae: Alleculini)
from the Oriental Region. Part IX - *Dorota* gen. nov.**

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**Taxonomy, new genus, new species, descriptions, Coleoptera, Tenebrionidae, Alleculinae, Alleculini, *Dorota*,
Oriental Region**

Abstract. A new genus of Alleculinae *Dorota* gen. nov. with the type species *Dorota rufoposticalis* (Pic, 1944) comb. nov. is described to include the following four new species: *Dorota chiangdaoica* sp. nov., *Dorota similis* sp. nov. and *Dorota thailandica* sp. nov., all from Thailand and *Dorota malayica* sp. nov. from Malaysia. The new genus is compared with a similar genera, *Allecula* Fabricius, 1801, *Borbochara* Novák, 2009 and *Borboresthes* Fairmaire, 1897. A redescription of the species *Dorota rufoposticalis* (Pic, 1944) comb. nov. is added. All species are illustrated and keyed together.

INTRODUCTION

The ninth part of descriptions of new Alleculinae genera from the Oriental Region follows previous works by the present author (Novák 2008, 2009, 2010, 2011, 2016a, b, 2017, 2018a, b).

The new genus *Dorota* gen. nov. is described to include the following three new species from Thailand - *Dorota chiangdaoica* sp. nov., *Dorota similis* sp. nov. and *Dorota thailandica* sp. nov., and one from Malaysia - *Dorota malayica* sp. nov. The type species *Dorota rufoposticalis* (Pic, 1944) comb. nov. is transferred from the genus *Allecula* Fabricius, 1801. New species are illustrated and keyed. A redescription of the species *Dorota rufoposticalis* (Pic, 1944) comb. nov. is added.

The new genus is compared with similar genera *Allecula* Fabricius, 1801, *Borbochara* Novák, 2009 and *Borboresthes* Fairmaire, 1897. The differentiating characters are mainly a small (4-6 mm) elongate, slightly oval body, large, transverse eyes, very narrow space between eyes (OI less than 20), antennomeres 4-10 slightly serrate, stronger femora, protarsomeres 3 and 4 lobed and widened, anterior tarsal claws of male with 9-20 longer teeth, shape of pronotum widest near middle.

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 the present paper as well. The ocular index equals $(100 \times \text{minimum dorsal distance between eyes}) / (\text{maximum width of head across eyes})$. The

pronotal index is calculated as $(100 \times \text{length of pronotum along midline}) / (\text{width across basal angles of pronotum})$.

In the list of type or examined material, a slash (/) separates data in separate lines, a double slash (//) separates different labels.

The following collection codens are used:

KMTJ private collection of Kimio Masumoto, Tokio, Japan;

MNHN Muséum National d'Histoire naturelle, Paris, France;

NMTJ 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 antennae 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 used in text are as follows: hb - handwritten black, pb - printed black, wl - white label.

Measurements were made with Olympus SZ 40 stereoscopic microscope with continuous magnification and with Soft Imaging System AnalySIS. Snapshots were taken by using camera Canon EOS 550 D and Canon Macro Photo Lens MP-E and software Helicon Focus 5.2.

TAXONOMY

Dorota gen. nov.

Type species: *Dorota rufoposticalis* (Pic, 1944) comb. nov.

Description. Habitus of male as in Figs. 1, 6, 10, 15 and 20, body small, elongate, slightly oval, relatively flat, dorsal surface setose, with punctuation and microgranulation, slightly shiny. BL from 4.6 - 5.9 mm. Widest near half elytra length; BL/EW near 3. Head (Figs. 2, 7, 11, 16 and 21) wide and short, approximately as wide as long. Dorsal surface with pale setation and punctuation. Posterior part with coarser and larger punctures than those in anterior part. Anterior part distinctly paler, with smaller and shallower punctures. Punctuation of clypeus not clearly distinct, surface of clypeus with long pale setae. Eyes very large, transverse, excised, space between eyes very narrow; narrower than diameter of one eye; OI of males lower than 20. Antennae (Figs. 3 and 12) relatively long, distinctly exceeding half body length, with microgranulation, punctuation and setation. Antennomeres 4-10 distinctly widest in apex, slightly serrate. Antennomere 2 shortest, antennomere 11 longest. Ultimate palpomere widely triangular, slightly shoe-shaped. Pronotum (Figs. 2, 7, 11, 16 and 21) transverse, wide, widest near half of lateral margins, with pale setation, dense punctuation

and fine microgranulation. Punctures large, interspaces between punctures narrow, narrower than diameter of punctures. PI from 65 to 74. Border lines almost complete, lateral margins arcuate or slightly arcuate, base finely bisinuate, slightly narrower than base of elytra. Anterior margin straight or slightly rounded. Posterior angles slightly obtuse, anterior angles almost indistinct, widely obtuse. Elytron relatively short and wide, slightly oval, widest in base or in half elytral length, dorsal surface with pale setation. Rows of small punctures in elytral striae distinct, elytral intervals slightly convex, with microgranulation and/or small punctures, smaller than those in striae. EL/EW from 1.85 to 2.04. Scutellum triangular. Elytral epipleura well developed, with one row of punctures, regularly narrowing to ventrite 1. Legs with pale setation, microgranulation and punctuation, punctures small. Femora stronger. Protarsomeres 3 and 4 and penultimate meso- and metatarsomeres widened and lobed. Anterior tarsal claws of male with 9-20 long, visible teeth. Aedeagus (Figs. 4, 5, 9, 10, 13, 14, 18, 19, 22 and 23) ochre yellow, shiny. Basal piece rounded laterally and parallel or narrowing dorsally. Apical piece short, elongate, narrowly triangular dorsally, beak shaped dorsally and laterally.

Female. Without distinct differences, only space between eyes slightly wider, body more robust, anterior tarsal claws with less teeth than in male.

Differential diagnosis. Species of new genus *Dorota* gen. nov. are similar to those of the genus *Allecula* Fabricius, 1801, *Borbochara* Novák, 2009 and *Borboresthes* Fairmaire, 1897.

Species of *Dorota* differ from similar species of the genus *Allecula* mainly by their small bodies (4-6 mm), by eyes very large, transverse and space between eyes in males very narrow (OI less than 20), by antennomeres 4-10 slightly serrate, by stronger femora, by protarsomeres 3 and 4 lobed and widened, by anterior tarsal claws of male with more (9-20) longer teeth; while *Allecula* species have larger body, eyes smaller, space between eyes wider, antenna is almost filiform, femora narrower, lobed and widened are penultimate protarsomeres and anterior tarsal claws have only a few short teeth.

Species of *Dorota* is clearly different from the species of the genus *Borbochara* Novák, 2009 mainly by body more elongate, only slightly oval, by shape of pronotum which is the widest near middle of lateral margins, posterior angles roundly obtuse and base of pronotum slightly narrower than base of elytra, by protibiae of male not curved; while species of *Borbochara* have body distinctly elongate oval, pronotum semicircular, widest at base, posterior angles sharply extended backwards and male protibiae are often curved.

Species of *Dorota* differ from similar species of the genus *Borboresthes* mainly by body more elongate, only very slightly oval, by shape of pronotum, which is widest near middle, by antennomeres 4-10 slightly serrate and by space between eyes very narrow; while *Borboresthes* species have oval egg-shaped body, pronotum widest at base, semicircular, antenna is filiform and space between eyes is almost wider.

Etymology. Named after my first granddaughter home nickname - *Dorota*. Gender feminine.

Distribution. Malaysia, Thailand.

KEY TO THE SPECIES OF THE *DOROTA* GEN. NOV.

- 1(2) Setation of dorsal surface and legs erect, elytra narrower and longer EL/EW more than 2.0. 3
2(1) Setation of dorsal surface more recumbent, elytra wider and shorter EL/EW 1.8-1.9. 5
3(4) Dorsal surface and antennomeres 4-11 blackish brown, antennomeres 4-11 1.4-1.8 times longer than antennomere 3 long. Space between eyes very narrow, distinctly narrower than length of antennomere 2. Habitus as in Fig. 20, head and pronotum (Fig. 21), aedeagus as in Figs. 22 and 23. Thailand.
..... *Dorota thailandica* sp. nov.
4(3) Dorsal surface and antennomeres 4-11 from pale brown to reddish brown, antennomeres 4-11 only 1.2-1.4 times longer than antennomere 3 long. Space between eyes narrow, but approximately as wide as length of antennomere 2. Habitus as in Fig. 6, head and pronotum (Fig. 7), aedeagus as in Figs. 8 and 9. Malaysia.
..... *Dorota malayica* sp. nov.
5(6) Elytra bicolour, basal half blackish brown, apical half reddish brown. Habitus as in Fig. 10, head and pronotum (Fig. 11), antenna (Fig. 12), aedeagus as in Figs. 13 and 14. Malaysia.
..... *Dorota rufoposticalis* (Pic, 1944) comb. nov.
6(5) Elytron unicolored blackish brown. 7
7(8) Antennomeres 1-3 reddish brown, antennomeres 4-11 black, legs reddish brown. Habitus as in Fig. 15, head and pronotum (Fig. 16), antenna (Fig. 17), aedeagus as in Figs. 18 and 19. Thailand. .. *Dorota similis* sp. nov.
8(7) Antenna and legs ochre yellow or pale brown. Habitus as in Fig. 1, head and pronotum (Fig. 2), antenna (Fig. 3), aedeagus as in Figs. 4 and 5. Thailand. *Dorota chiangdaoica* sp. nov.

SPECIES

Dorota chiangdaoica sp. nov.

(Figs. 1-5)

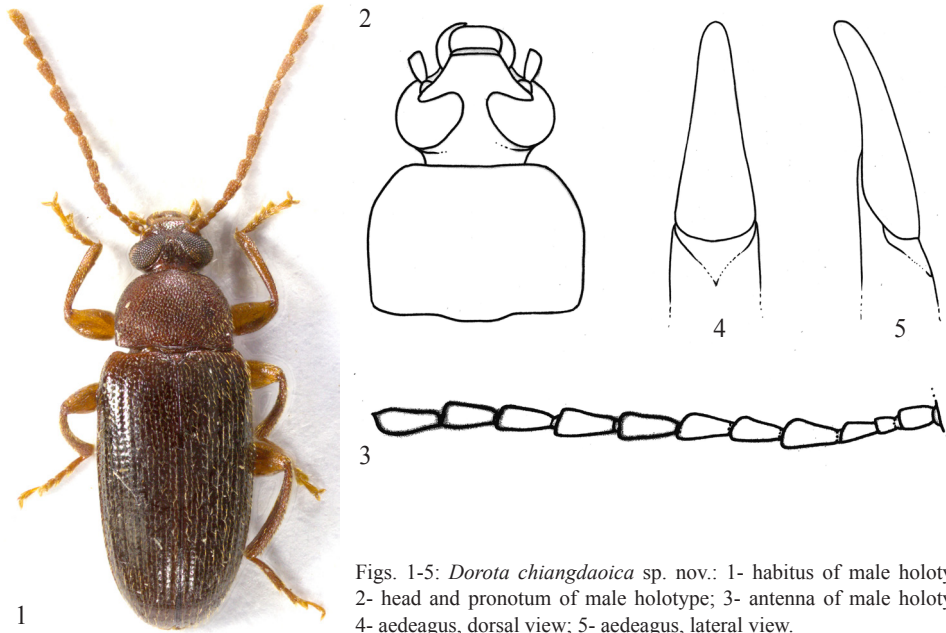
Type locality. Thailand, district Chiang Dao, Thanon Thong Chai, 19°25'N, 98°52'E, 1000 m.

Type material. Holotype: (♂): wl: THAI, 17.-24.V.1991 / CHIANG DAO 1000m / 19°25'N, 98°52'E / Vít Kubáň leg. // Thailand 91 / "Thanon Thong Chai" / D. Král & V. Kubáň [pb], (VNPC). Paratypes: (2 ♂♂): same data as holotype, (VNPC). The types are provided with a printed red label: 'Dorota / chiangdaoica sp. nov. / HOLOTYPUS [or PARATYPUS] / V. Novák det. 2018'.

Description of holotype. Habitus as in Fig. 1, body small, elongate, slightly oval, relatively flat, from pale reddish brown to dark brown, dorsal surface setose, with punctuation and microgranulation, slightly shiny. BL 5.12 mm. Widest near half elytra length; BL/EW 2.89.

Head (Fig. 2) relatively wide and short, approximately as wide as long, approximately as wide as anterior margin of pronotum, dorsal surface with relatively long, pale setation. HL (visible part) 0.93 mm; HW 0.99 mm; HW/PW 0.74. Posterior part reddish brown with coarser medium sized punctures, distinctly darker than paler anterior part and pale brown clypeus. Anterior part with smaller and shallower punctures, punctuation of clypeus not clearly distinct, surface with microrugosities. Mandibles pale reddish brown, shiny. Eyes very large, transverse, strongly excised, space between eyes very narrow; distinctly narrower than diameter of one eye, slightly wider than length of antennomere 2 and slightly narrower than length of antennomere 1; OI equal to 14.52.

Antennae (Fig. 3). Relatively long, distinctly exceeding half body length, pale brown, with punctuation and microgranulation, AL 2.97 mm; AL/BL 0.58. Antennomeres 1 and



Figs. 1-5: *Dorota chiangdaoica* sp. nov.: 1- habitus of male holotype; 2- head and pronotum of male holotype; 3- antenna of male holotype; 4- aedeagus, dorsal view; 5- aedeagus, lateral view.

2 with sparse, pale setation, shiny. Antennomeres 3-11 matte, with dense, pale setation, each of antennomeres 4-10 slightly serrate, distinctly widest in apex. Antennomere 2 shortest, antennomere 11 longest. Antennomere 1 approximately as long as antennomere 3, antennomeres 4-8 1.6-2.0 times longer than antennomere 3.

RLA: 1.04 : 0.65 : 1.00 : 1.64 : 1.76 : 1.66 : 1.83 : 2.00 : 2.05 : 2.00 : 2.30.

RL/WA: 1.59 : 1.29 : 1.66 : 2.19 : 2.92 : 2.38 : 2.30 : 2.37 : 2.43 : 2.59 : 3.17.

Maxillary palpus. Pale reddish brown, with pale setation, slightly shiny. Palpomeres 2, 3 distinctly narrowest at base and widest at apex, with a long pale setae. Ultimate palpomere widely triangular, slightly shoe-shaped.

Pronotum (Fig. 2). Reddish brown, transverse, wide, widest near half of lateral margins, with pale setation, dense medium sized punctuation and fine microgranulation. Interspaces between punctures narrower than diameter of punctures. PL 0.90 mm; PW 1.34 mm; PI equal to 67.16. Border lines complete, lateral margins slightly arcuate, base finely bisinuate, slightly narrower than base of elytra. Anterior margin straight. Posterior angles roundly obtuse, anterior angles indistinct, roundly obtuse.

Ventral side of body reddish brown, with short and sparse pale setation and punctuation, shiny. Abdomen pale reddish brown with pale setation, small sized punctuation, shiny. Ultimate ventrite in middle with large and shallow impression.

Elytron. Relatively short and wide, slightly oval, dark brown, in base narrowly reddish brown, widest near half elytra length, dorsal surface with dense and long pale setation. Rows of small punctures in elytral striae not clearly distinct, elytral intervals with microgranulation and sparse, small punctures, diameter of punctures approximately same as in striae. EL 3.29 mm; EW 1.77 mm. EL/EW 1.86.

Scutellum. Triangular, reddish brown with sides darker, slightly shiny, with fine microgranulation and punctures.

Elytral epipleura. Well developed, reddish brown, wide, with pale setae and punctures, widest near base, regularly narrowing to ventrite 1, then relatively wide leads parallel.

Legs. Pale brown, slightly shiny, with microgranulation and punctuation, punctures small. Pale setation of tibiae and tarsi denser than those in stronger femora. Protarsomere 3 and 4, penultimate meso- and metatarsomere distinctly widened and lobed. RLT: 1.00 : 0.56 : 0.56 : 0.71 : 1.56 (protarsus); 1.00 : 0.52 : 0.48 : 0.72 : 0.93 (mesotarsus); 1.00 : 0.44 : 0.29 : 0.47 (metatarsus).

Anterior tarsal claws long with 20 visible teeth.

Aedeagus (Figs. 4 and 5). Ochre yellow, shiny. Basal piece rounded laterally and narrowing dorsally. Apical piece elongate, narrowly triangular dorsally, beak shaped dorsally and laterally. Ratio of length of apical piece to length of basal piece from dorsal view 1 : 3.49.

Female. Unknown.

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 5.10 mm (4.82-5.27 mm); HL 0.96 mm (0.93-0.98 mm); HW 0.98 mm (0.95-1.01 mm); OI 16.28 (13.83-19.75); PL 0.91 mm (0.85- 0.96 mm); PW 1.36 mm (1.29-1.42 mm); PI 66.95 (65.89-67.61); EL 3.23 mm (3.00-3.36 mm); EW 1.77 mm (1.61-1.88 mm).

Differential diagnosis. *Dorota chiangdaoica* sp. nov. clearly differs from the species *Dorota malayica* sp. nov. and *Dorota thailandica* sp. nov. mainly by recumbent setation of dorsal surface of body and legs and by elytra shorter and wider (EL/EW 1.86); while *D. malayica* and *D. thailandica* have dorsal surface of body and legs with long and erect setation and elytra longer and narrower (EL/EW 2.01 respectively 2.00).

D. chiangdaoica is clearly different from the species *Dorota rufoposticalis* (Pic, 1944) comb. nov. mainly by unicolored elytra; while *D. rufoposticalis* has elytra bicolour.

D. chiangdaoica clearly differs from the species *D. similis* sp. nov. mainly by unicolored pale brown antenna and legs; while *D. similis* has antenna bicolour, antennomeres 1-3 are reddish brown and antennomeres 4-11 are black and legs are reddish brown.

Etymology. Named after the type locality - district Chiang Dao in Thailand.

Distribution. Thailand.

***Dorota malayica* sp. nov.**

(Figs. 6-9)

Type locality. West Malaysia, district Pahang, Cameron Highlands, Tanah Rata, 1200-1500 m.

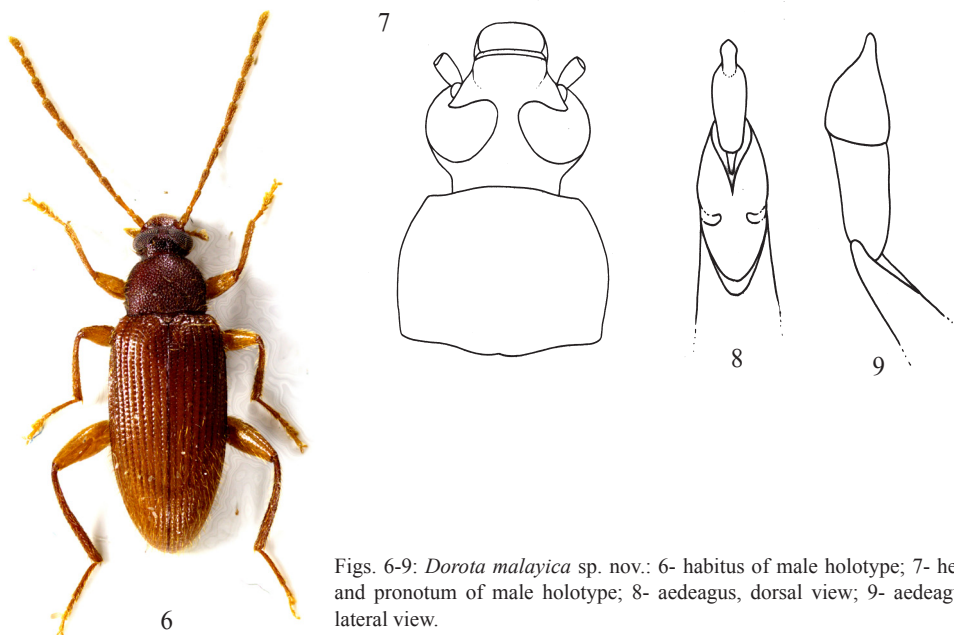
Type material. Holotype: (♂): wl: MALAYSIA West, PAHANG / Cameron Highlands, / TANAH RATA, 3.-19. ii.2005 / P. Čechovský lgt. 1200-1500 m [pb], (VNPC). Paratypes: (3 ♂♂): same data as holotype, (VNPC); (1 ♂

1 ♀): wl: MALAYSIA, KELANTAN / road between Kampong Raja / and Gua Musang, 1400-1700 m, / (Ladang Pandrak), 1.-28. / iv.2006; 4°63-88'N; 101°45-95'E, / Čechovský Petr lgt. [pb], (VNPC); (1 ♀): wl: MALAYSIA W., KELANTAN / 90 km N of Gua Musang, / Gunung Basor, 1700 m. / Kampong Kubur Dau / 10.iv.-5.v.2016 / Petr Cechovsky lgt. [pb], (VNPC). The types are provided with a printed red label: 'Dorota / malayica sp. nov. / HOLOTYPE [or PARATYPE] / V. Novák det. 2018'.

Description of male holotype. Habitus as in Fig. 6, body small, elongate, slightly oval, relatively flat, from pale brown to reddish brown, dorsal surface setose, with punctuation and microgranulation, shiny. BL 5.39 mm. Widest near half elytra length; BL/EW 3.01.

Head (Fig. 7) relatively wide and short, approximately as wide as long and as wide as anterior margin of pronotum, dorsal surface with sparse, pale setation and microrugosities. Posterior part reddish brown, distinctly darker than pale reddish brown anterior part and pale brown clypeus, with coarse large punctures and very long setae behind eyes. Anterior part with smaller and shallower punctures, punctuation of clypeus not clearly distinct, surface of clypeus with denser and longer pale setation. HL (visible part) 0.93 mm; HW 0.90 mm; HW/PW 0.78. Eyes very large, transverse, strongly excised, space between eyes very narrow; narrower than diameter of one eye, approximately as wide as antennomere 2 long; OI equal to 17.11.

Antennae. Relatively long, distinctly exceeding half body length, pale brown, with punctuation, long pale setation and microgranulation. AL 3.42 mm; AL/BL 0.64. Antennomeres 1-3 with a few pale setae, slightly shiny. Antennomeres 4-11 rather matte, antennomeres 4-10 slightly widest in apex. Antennomere 2 shortest, antennomere 11 longest. RLA: 0.71 : 0.51 : 1.00 : 1.34 : 1.17 : 1.19 : 1.27 : 1.34 : 1.21 : 1.19 : 1.40. RL/WA: 1.79 : 1.64 : 3.04 : 3.24 : 3.57 : 2.96 : 2.97 : 3.24 : 3.54 : 3.61 : 3.50.



Figs. 6-9: *Dorota malayica* sp. nov.: 6- habitus of male holotype; 7- head and pronotum of male holotype; 8- aedeagus, dorsal view; 9- aedeagus, lateral view.

Maxillary palpus. Pale brown, with pale setation, slightly shiny. Palpomeres 2, 3 distinctly narrowest at base and widest at apex, with a long pale setae in apex. Ultimate palpomere widely triangular, shoe-shaped.

Pronotum (Fig. 7). Reddish brown, slightly transverse, widest near half of lateral margins, with sparse, erect, pale setation, dense large sized punctuation and fine microgranulation. Interspaces between punctures narrower than diameter of punctures. PL 0.85 mm; PW 1.16 mm; PI equal to 73.28. Border lines clear only in base, lateral margins slightly arcuate, base finely bisinuate, slightly narrower than base of elytra. Anterior margin straight. Posterior angles roundly obtuse, anterior angles indistinct, roundly obtuse.

Ventral side of body reddish brown, with short and sparse pale setation and punctuation. Abdomen pale reddish brown with small, shallow and sparse punctuation, shiny. Ventrites 1-3 with fine microrugosities, penultimate and ultimate with transverse rugosities, rather matte.

Elytron. Relatively short and wide, slightly oval, pale reddish brown, widest near half elytra length, dorsal surface with dense and long, erect pale setation. Rows of small punctures in elytral striae not clearly distinct, elytral intervals with microgranulation and sparse, very small punctures. Suture distinctly darker. EL 3.61 mm; EW 1.79 mm. EL/EW 2.01.

Scutellum. Roundly triangular, reddish brown with sides darker, slightly shiny, with fine microgranulation and punctures.

Elytral epipleura. Well developed, pale reddish brown, relatively wide in basal part, with sparse and long, pale setae and row of punctures, widest near base, regularly narrowing to ventrite 1, then relatively wide leads parallel.

Legs. Pale brown, shiny, with microgranulation, long pale, erect setation and punctuation, punctures small. Pale setation of tibiae and tarsi denser than those in stronger femora. Pro- and mesotarsomere 3, 4 and penultimate metatarsomere distinctly widened and lobed. RLT: 1.00 : 0.54 : 0.44 : 0.67 : 1.28 (protarsus); 1.00 : 0.36 : 0.34 : 0.26 : 0.68 (mesotarsus); 1.00 : 0.41 : 0.47 : 0.72 (metatarsus).

Anterior tarsal claws long with 9 visible teeth.

Aedeagus (Figs. 8 and 9). Ochre yellow, shiny. Basal piece strongly rounded laterally and wide dorsally. Apical piece very short, triangular and beak shaped dorsally and laterally. Ratio of length of apical piece to length of basal piece from dorsal view 1: 9.26.

Female. Body slightly robust, space between eyes slightly wider (OI 18), anterior tarsal claws with 8 teeth.

Measurement of female body. AL 3.72 mm; AL/BL 0.66; BL/EW 3.02; EL/EW 2.03; HW/PW 0.77.

RLA: 0.76 : 0.38 : 1.00 : 1.18 : 1.18 : 1.28 : 1.34 : 1.47 : 1.34 : 1.32 : 1.46.

RL/WA: 1.87 : 1.17 : 2.96 : 3.35 : 3.96 : 3.52 : 3.54 : 3.41 : 3.30 : 3.38 : 3.88.

RLT: 1.00 : 0.54 : 0.46 : 0.62 : 1.29 (protarsus); 1.00 : 0.39 : 0.29 : 0.31 : 0.73 (mesotarsus); 1.00 : 0.28 : 0.21 : 0.40 (metatarsus).

Variability. The type specimens somewhat vary in size; each character is given as its mean value, with full range in parentheses. Males (n=5). BL 5.45 mm (5.30-5.61 mm); HL 0.91 mm (0.89-0.93 mm); HW 0.91 mm (0.88-0.96 mm); OI 16.11 (14.35-17.30); PL 0.89 mm (0.84-0.92 mm); PW 1.19 mm (1.15-1.25 mm); PI 73.49 (72.80-74.33); EL 3.65 mm (3.48-3.76 mm); EW 1.79 mm (1.72-1.86 mm). Females (n=2). BL 5.54 mm (5.46-5.61 mm); HL

0.91 mm (0.89-0.93 mm); HW 0.91 mm (0.88-0.94 mm); OI 18.13 (17.36-18.89); PL 0.89 mm (0.88-0.90 mm); PW 1.19 mm (1.16-1.22 mm); PI 74.79 (73.77-75.81); EL 3.74 mm (3.69-3.78 mm); EW 1.79 mm (1.72-1.86 mm).

Differential diagnosis. *Dorota malayica* sp. nov. clearly differs from the species *Dorota chiangdaoica* sp. nov., *Dorota rufoposticalis* (Pic, 1944) comb. nov. and *Dorota similis* sp. nov. mainly by dorsal surface of body and legs with long and erect setation and elytra longer and narrower (EL/EW 2.01); while *D. chiangdaoica*, *D. rufoposticalis* and *D. similis* have recumbent setation of dorsal surface of body and legs and elytra are shorter and wider (EL/EW 1.86).

D. malayica is clearly different from the species *Dorota thailandica* sp. nov. mainly antennomeres 4-11 from pale brown to reddish brown and 1.2-1.4 times longer than antennomere 3 long and by space between eyes approximately as wide as length of antennomere 2; while *D. thailandica* has antennomeres 4-11 blackish brown and 1.4-1.8 times longer than antennomere 3 long and space between eyes is distinctly narrower than length of antennomere 2.

Etymology. Named after the type locality - country of origin Malaysia.

Distribution. Malaysia.

***Dorota rufoposticalis* (Pic, 1944) comb. nov.**

(Figs. 10-14)

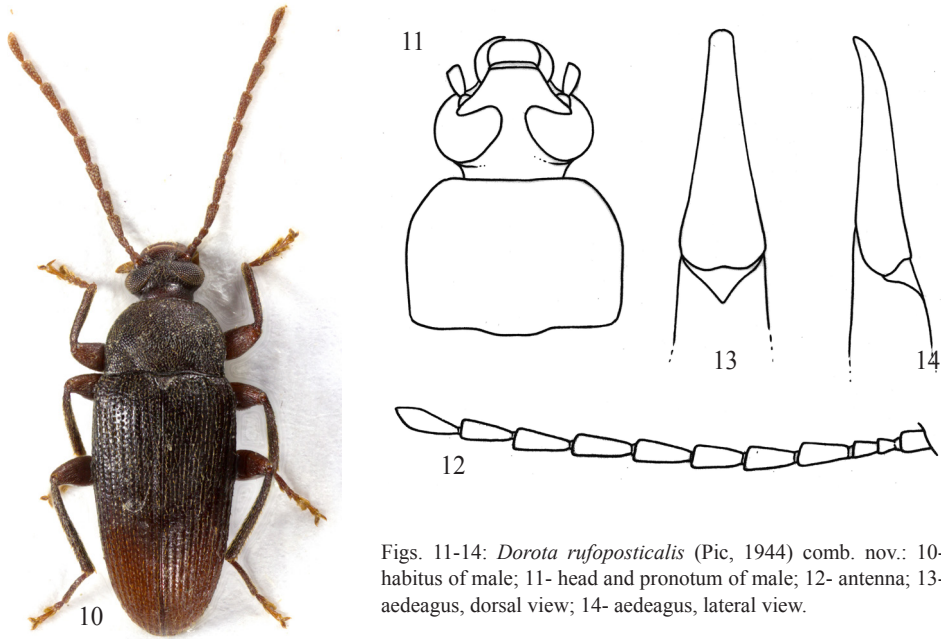
Allecula rufoposticalis Pic, 1944: 12.

Type locality. Malacca.

Type material. HT by monotypy: wl: Malacca [HB] // wl: rufoposticalis / n sp [HB], (MNHN).

Material examined. (3 ♂♂, 3 ♀♀): wl: MALAYSIA W. KELANTAN / 30 km NW of Gua Musang / Ulu Lalat Mt. 800-1000m / KAMPONG SUNGAI OM; 27. / v. - 19.vi.2011, Petr Cechovsky lgt. [pb], (VNPC); (1 ♂, 1 ♀): same data as holotype, but 22.v. - 14.vi. 2012, (VNPC); (1 ♂, 1 ♀): wl: MALAYSIA W. KELANTAN / 70km NW of Gua Musang / Mt. Chamah, 1900m / Kampong Perias / 17.iv.-9.v.2014 / Petr Cechovsky lgt. [pb], (VNPC); (2 ♀♀): wl: MALAYSIA West, PAHANG / Cameron Highlands, / TANAH RATA, 3.-19.ii.2005 / P. Čechovský lgt. 1200-1500 m [pb], (VNPC).

Redescription of male. Habitus as in Fig. 10, body small, elongate, slightly oval, relatively flat, from pale brown to black, dorsal surface setose, with punctuation and microgranulation, slightly shiny. BL 5.90 mm. Widest near half elytra length; BL/EW 2.91. Head (Fig. 11) relatively wide and short, distinctly wider than anterior margin of pronotum. Posterior part black, with coarser and larger medium sized punctures than those in anterior part. Anterior part partly reddish brown, distinctly paler than posterior part. Anterior part with smaller and shallower punctures. Punctuation of pale brown clypeus not clearly distinct, surface of clypeus with microrugosities and long pale setae. Mandibles pale reddish brown, shiny, with



Figs. 11-14: *Dorota rufoposticalis* (Pic, 1944) comb. nov.: 10- habitus of male; 11- head and pronotum of male; 12- antenna; 13- aedeagus, dorsal view; 14- aedeagus, lateral view.

rugosities and black margins. HL (visible part) 1.05 mm; HW 1.06 mm; HW/PW 0.65. Eyes very large, transverse, strongly excised, space between eyes narrow; narrower than diameter of one eye, distinctly wider than length of antennomere 2 and slightly wider than length of antennomere 3; OI equal to 17.58. Antennae (Fig. 12) relatively long, distinctly exceeding half body length, with microgranulation, AL 3.87 mm; AL/BL 0.66. Antennomeres 1-3 reddish brown, with sparse, pale setation, shiny. Antennomeres 4-11 matte, brown, with denser, pale setation, each of antennomeres 4-10 distinctly widest in apex, slightly serrate. Antennomere 2 shortest, antennomere 11 longest. RLA: 1.11 : 0.73 : 1.00 : 2.37 : 2.29 : 2.51 : 2.76 : 2.85 : 2.63 : 2.73 : 3.00. RL/WA: 1.49 : 1.09 : 1.55 : 2.62 : 2.54 : 2.78 : 3.23 : 3.34 : 2.77 : 2.11 : 3.32. Maxillary palpus pale reddish brown, with pale setation, rather matte. Palpomeres 2, 3 distinctly narrowest at base and widest at apex, with a long pale setae. Ultimate palpomere widely triangular, slightly shoe-shaped. Pronotum (Fig. 11) black, transverse, wide, widest near half of lateral margins, with pale setation, dense small sized punctuation and fine microgranulation. Interspaces between punctures narrower than diameter of punctures. PL 1.10 mm; PW 1.63 mm; PI equal to 67.49. Border lines complete, lateral margins arcuate, base finely bisinuate, slightly narrower than base of elytra. Anterior margin straight. Posterior angles slightly obtuse, anterior angles indistinct, roundly obtuse. Ventral side of body reddish brown, with short and sparse pale setation and punctuation, shiny. Abdomen with pale setation, small sized punctuation and very fine microgranulation, shiny. Ventrites 1 and 2 dark brown, ventrites 3-5 reddish brown. Ultimate ventrite in middle with large and shallow impression. Elytron relatively short and wide, slightly oval, posterior part black, anterior part reddish brown, widest in base, dorsal surface with pale setation. Rows of small punctures in

elytral striae distinct, elytral intervals slightly convex, with microgranulation and punctures slightly smaller than those in striae. EL 3.75 mm; EW 2.03 mm. EL/EW 1.85. Scutellum triangular, black, with microgranulation and punctures. Elytral epipleura well developed, basal part black, very wide, with one row of large punctures, regularly narrowing to ventrite 1, then reddish brown leads parallel. Legs dark brown, with pale setation, microgranulation and punctuation, punctures small. Femora strong. Penultimate and ultimate pro-, meso- and metatarsomere distinctly paler than other tarsomeres. Protarsomeres 3 and 4 and penultimate meso- and metatarsomeres widened and lobed. RLT: 1.00 : 0.83 : 0.56 : 1.19 : 1.75 (protarsus); 1.00 : 0.50 : 0.31 : 0.65 : 0.97 (mesotarsus); 1.00 : 0.28 : 0.30 : 0.43 (metatarsus). Anterior tarsal claws long with 16 visible teeth. Aedeagus (Figs. 13 and 14) ochre yellow, shiny. Basal piece rounded laterally and narrowing dorsally. Apical piece elongate, narrowly triangular dorsally, beak shaped dorsally and laterally. Ratio of length of apical piece to length of basal piece from dorsal view 1: 2.63.

Female. Body slightly wider and robust than in male, space between eyes wider, antennomere 3 longer than in male. Anterior tarsal claws with 9 visible teeth.

Measurements of female body. BL 6.08 mm; HL 0.71 mm; HW 1.12 mm; OI 30.63; PL 1.13 mm; PW 1.87 mm; PI 60.93; EL 4.24 mm; EW 2.28; AL 3.32; AL/BL 0.55; EL/EW 1.86; HW/PW 0.60; BL/EW 2.67.

RLA: 1.12 : 0.61 : 1.00 : 1.61 : 1.53 : 1.92 : 1.80 : 1.90 : 1.84 : 1.78 : 2.08.

RL/WA: 1.62 : 1.11 : 1.89 : 2.39 : 2.50 : 2.69 : 2.75 : 2.91 : 2.37 : 2.35 : 3.00.

RLT: 1.00 : 0.80 : 0.77 : 1.32 : 2.14 (protarsus); 1.00 : 0.54 : 0.57 : 0.51 : 0.93 (mesotarsus); 1.00 : 0.25 : 0.30 : 0.59 (metatarsus).

Distribution. Malaysia.

***Dorota similis* sp. nov.**

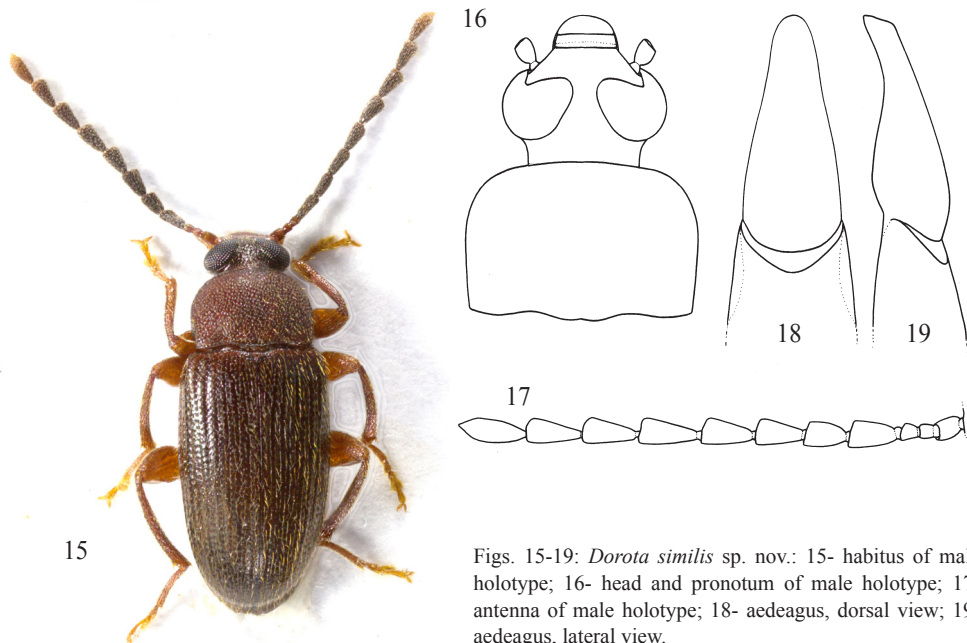
(Figs. 15-19)

Type locality. Central Thailand, Nakhon Ratchasima, Pak Chong.

Type material. Holotype: (♂): wl: Pak Chong / Nakhon Ratchasima-P. / C-THAILAND / 13 V 2008 / Shigeo TSUYUKI leg. [pb], (NMTJ). The types are provided with a printed red label: 'Dorota / similis sp. nov. / HOLOTYPE [or PARATYPE] / V. Novák det. 2018'.

Description of holotype. Habitus as in Fig. 15, body small, elongate, very slightly oval, from pale reddish brown to blackish brown, dorsal surface setose, with punctuation and microgranulation. BL 4.77 mm. Widest near half elytra length; BL/EW 2.98.

Head (Fig. 16) wide, approximately as wide as long, slightly wider than anterior margin of pronotum, dorsal surface with sparse, long, pale setae. HL (visible part) 0.93 mm; HW 0.94 mm; HW/PW 0.73. Base of posterior part brown with a few small and larger punctures and surface behind eyes partly impunctate, between eyes with dense, coarse and large punctuation, interspaces between punctures narrow. Reddish brown anterior part with smaller punctures than those between eyes, longer and denser, pale setation, microgranulation and



Figs. 15-19: *Dorota similis* sp. nov.: 15- habitus of male holotype; 16- head and pronotum of male holotype; 17- antenna of male holotype; 18- aedeagus, dorsal view; 19- aedeagus, lateral view.

microrugosities near sides, shiny. Clypeus slightly paler than anterior part, shiny with long pale setae. Eyes large, transverse, distinctly excised, space between eyes very narrow; narrower than diameter of one eye, approximately as wide as length of antennomere 1, distinctly wider than length of antennomere 2 or 3; OI equal to 19.73.

Antenna (Fig. 17). Long, narrow, exceeding half body length, with punctuation, microgranulation and pale setation, AL 3.03 mm; AL/BL 0.64. Antennomeres 1-3 reddish brown, slightly shiny. Antennomeres 4-11, black, matte, apex of antennomere 11 paler. Antennomeres 4-10 distinctly widest at apex, slightly serrate. Antennomere 2 shortest, only slightly shorter than antennomere 3, antennomeres 8, 9 and 11 longest, antennomeres 4-8 2.3-3.3 times longer than antennomere 3. Antennomere 1 distinctly longer than antennomere 3. RLA: 1.63 : 0.85 : 1.00 : 2.59 : 2.33 : 2.74 : 2.70 : 3.26 : 3.22 : 3.11 : 3.26.

RL/WA: 1.69 : 1.15 : 1.29 : 2.50 : 1.70 : 1.76 : 1.83 : 2.32 : 2.35 : 2.55 : 3.26.

Maxillary palpus. Pale reddish brown, with longer, pale setation, slightly shiny. Palpomeres 2, 3 distinctly narrowest at base and widest at apex. Ultimate palpomere broadly triangular, slightly shoe-shaped.

Pronotum (Fig. 16). Dark reddish brown, widest near half of lateral margins, with long, pale setation, dense punctuation and fine microgranulation. Punctures large-sized, interspaces between punctures very narrow. PL 0.85 mm; PW 1.29 mm; PI equal to 65.69. Border lines complete, lateral margins arcuate, base finely bisinuate, distinctly narrower than base of elytra. Anterior margin straight. Posterior angles slightly roundly obtuse, anterior angles indistinct, arcuate.

Ventral side of body dark reddish brown, with sparse, pale setation and punctuation.

Abdomen with long, pale setation, shallow punctuation, fine microgranulation, shiny, punctures small. Ventrites 1-4 reddish brown, ultimate ventrite distinctly darker, brown, with large, shallow impression in middle.

Elytron. Dark brown, widest near half elytra length, dorsal surface with long, pale setation. Elytral striae with not clearly distinct rows of small-sized punctures, elytral intervals with sparse punctures, diameter of punctures is approximately same as in striae. EL 2.99 mm; EW 1.60 mm. EL/EW 1.87.

Scutellum. Roundly triangular, dark brown as elytron itself, slightly shiny, with distinct microgranulation.

Elytral epipleura. Well developed, dark reddish brown, regularly narrowing to ventrite 1 with long, pale setae and row of punctures in basal half. In apical half relatively wide, parallel.

Legs. Long and narrow, reddish brown, slightly shiny, with long, pale setation, microgranulation and punctuation, punctures very small and shallow. Femora stronger, protarsi, ultimate and penultimate meso- and metatarsomeres pale brown. Pro- and mesotarsomeres 3 and 4 and penultimate metatarsomeres distinctly widened and lobed. RLT: 1.00 : 0.75 : 0.64 : 1.19 : 2.15 (protarsus); 1.00 : 0.42 : 0.39 : 0.51 : 0.90 (mesotarsus); 1.00 : 0.36 : 0.32 : 0.54 (metatarsus).

Anterior tarsal claws with 17 visible teeth.

Aedeagus (Figs. 23 and 24). Ochre yellow, slightly shiny. Basal piece slightly rounded laterally and parallel dorsally, slightly narrowing before apex. Apical piece short, triangular with rounded top dorsally, beak-shaped dorsally and laterally. Ratio of length of apical piece to length of basal piece from dorsal view 1: 3.69.

Female. Unknown.

Differential diagnosis. *Dorota similis* sp. nov. clearly differs from the species *Dorota malayica* sp. nov. and *Dorota thailandica* sp. nov. mainly by recumbent setation of dorsal surface of body and legs and by elytra shorter and wider (EL/EW 1.87); while *D. malayica* and *D. thailandica* have dorsal surface of body and legs with long and erect setation and elytra longer and narrower (EL/EW 2.01 respectively 2.00).

D. similis clearly differs from the species *D. chiangdaoica* sp. nov. mainly by antenna bicolor, antennomeres 1-3 reddish brown and antennomeres 4-11 black, by legs reddish brown and by antennomere 3 distinctly longer than antennomere 2 (1.00 : 0.65); while *D. chiangdaoica* has antenna and legs unicolored pale brown and antennomere 3 is slightly longer than antennomere 2 (1.00 : 0.85).

D. similis clearly differs from the species *Dorota rufoposticalis* (Pic, 1944) comb. nov. mainly by unicolored elytra; while *D. rufoposticalis* has elytra bicolor.

Etymology. From Latin *similis* (similar) - marking its similarity to the species *Dorota chiangdaoica*.

Distribution. Thailand.

***Dorota thailandica* sp. nov.**
(Figs. 20-23)

Type locality. North Thailand, district Chiang Mai, Samoeng.

Type material. Holotype: (♂): wl: 2001. 5. 17 / Samoeng, Chiang / Mai, N-Thailand / K.Takahashi leg. [pb], (NMTJ). Paratypes: (1 ♀): wl: N THAILAND / Wiang Pa Pao env. / 7.-22.V.2010 / P. Viktora lgt. [pb], (VNPC); (1 ♀): wl: Thailand, Chiang Mai, / Ban Mae / 2.V.2013 / K. Masumoto leg. [pb], (VNPC); (1 ♀): wl: Khao Kho(800-900m) / Petchabun-Prov. / N-THAILAND / 24-27 V 2009 / Shigeo TSUYUKY leg. [pb], (KMTJ). The types are provided with a printed red label: 'Dorota / thailandica sp. nov. / HOLOTYPUS [or PARATYPUS] / V. Novák det. 2018'.

Description of holotype. Habitus as in Fig. 20, body small, elongate, slightly oval, from pale reddish brown to black, dorsal surface setose, with punctuation and microgranulation. BL 5.54 mm. Widest near half elytra length; BL/EW 2.98.

Head (Fig. 21) relatively narrow, slightly wider than anterior margin of pronotum, dorsal surface with very long, pale setae. Posterior part black with dense punctuation and fine microgranulation, punctures relatively coarse with different diameter, interspaces between punctures narrow. Reddish brown anterior part with smaller and shallower punctures and microrugosities, shiny. Clypeus pale reddish brown with microrugosities. HL (visible part) 0.92 mm; HW 1.03 mm; HW/PW 0.81. Eyes large, transverse, distinctly excised, space between eyes narrow; narrower than diameter of one eye, distinctly narrower than length of antennomere 2; OI equal to 12.89.

Antenna. Long, narrow, exceeding half body length, with punctuation, fine microgranulation and pale setation. AL 3.28 mm; AL/BL 0.59. Antennomeres 1-3 and base of antennomere 4 pale reddish brown, shiny. Antennomeres 4-11 dark brown, matte. Antennomeres 4-10 distinctly widest at apex. Antennomere 2 shortest, antennomere 11 longest. Antennomeres 4-11 1.4-1.8 times longer than antennomere 3.

RLA: 0.94 : 0.48 : 1.00 : 1.44 : 1.44 : 1.59 : 1.70 : 1.70 : 1.67 : 1.57 : 1.80.

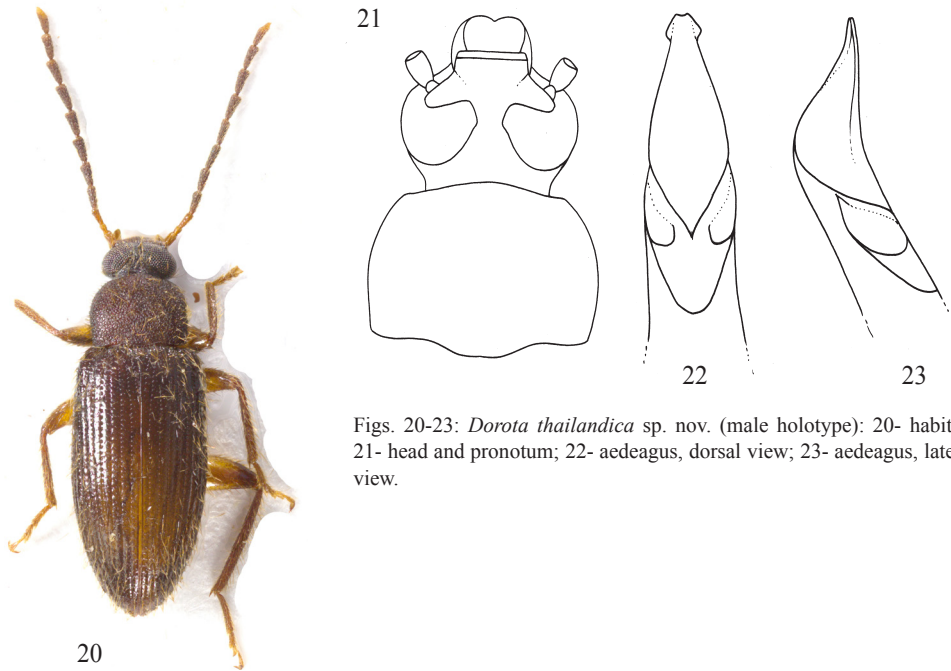
RL/WA: 1.89 : 1.37 : 3.00 : 2.89 : 2.57 : 2.39 : 2.56 : 2.79 : 3.10 : 3.04 : 3.46.

Maxillary palpus. Pale reddish brown, with longer, pale setation, slightly shiny. Palpomeres 2, 3 distinctly narrowest at base and widest at apex. Ultimate palpomere broadly triangular, slightly shoe-shaped.

Pronotum (Fig. 21). Dark reddish brown, widest near half of lateral margins, with very long, pale setation, dense punctuation and fine microgranulation. Punctures large-sized, interspaces between punctures very narrow. PL 0.96 mm; PW 1.28 mm; PI equal to 75.00. Border lines complete, lateral margins arcuate, base finely bisinuate, distinctly narrower than base of elytra. Anterior margin straight. Posterior angles slightly roundly obtuse, anterior angles indistinct, arcuate.

Ventral side of body dark reddish brown, with very short and very sparse, pale setation and small punctures. Abdomen pale reddish brown with long and sparse, pale setation, sparse punctuation, shiny. Punctures small.

Elytron. Dark brown, widest near half elytra length, dorsal surface with long, pale setation. Setation near base and apex denser. Elytral striae with distinct rows of medium-sized punctures, elytral intervals with sparse, very small punctures. EL 3.72 mm; EW 1.86 mm. EL/EW 2.00.



Figs. 20-23: *Dorota thailandica* sp. nov. (male holotype): 20- habitus; 21- head and pronotum; 22- aedeagus, dorsal view; 23- aedeagus, lateral view.

Scutellum. Roundly triangular, dark brown, slightly shiny, with distinct microgranulation.
 Elytral epipleura. Well developed, regularly narrowing to ventrite 1 with long, pale setae and row of punctures in basal half. Apical half distinctly paler.

Legs. Pale reddish brown, slightly shiny, with long, pale setation, microgranulation and sparse punctuation, punctures very small. Tibiae and tarsi relatively narrow, femora stronger. Pro- and mesotarsomeres 3 and 4 and penultimate metatarsomeres distinctly widened and lobed. RLT: 1.00 : 0.51 : 0.78 : --- : --- (protarsus); 1.00 : 0.39 : 0.28 : 0.37 : 0.77 (mesotarsus); 1.00 : 0.37 : 0.26 : 0.50 (metatarsus).

Aedeagus (Figs. 22 and 23). Ochre yellow, slightly shiny. Basal piece very long, rounded laterally and narrowing dorsally. Apical piece short, triangular and beak-shaped dorsally and laterally. Ratio of length of apical piece to length of basal piece from dorsal view 1: 8.70.

Female. Without distinct differences, only space between eyes slightly wider. Anterior tarsal claws with 7 teeth.

Measurements of female body. RLA: 0.60 : 0.42 : 1.00 : 1.32 : 1.28 : 1.40 : 1.33 : 1.45 : 1.28 : 1.33 : 1.53.

RL/WA: 1.13 : 1.14 : 2.31 : 2.55 : 2.75 : 2.71 : 2.86 : 3.11 : 2.96 : 2.67 : 3.29.

RLT: 1.00 : 0.37 : 0.53 : 0.63 : 1.16 (protarsus); 1.00 : 0.44 : 0.30 : 0.32 : 0.59 (mesotarsus); 1.00 : 0.31 : 0.26 : 0.49 (metatarsus).

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 5.77 mm (5.62-5.91 mm); HL 0.96

mm (0.93-0.98 mm); HW 0.97 mm (0.96-0.98 mm); OI 14.45 (12.76-16.13); PL 1.01 mm (1.00-1.02 mm); PW 1.35 mm (1.29-1.41 mm); PI 74.93 (72.34-77.52); EL 3.80 mm (3.69-3.91 mm); EW 2.01 mm (1.87-2.14 mm).

Differential diagnosis. *Dorota thailandica* sp. nov. clearly differs from the species *Dorota chiangdaoica* sp. nov., *Dorota rufoposticalis* (Pic, 1944) comb. nov. and *Dorota similis* sp. nov. mainly by dorsal surface of body and legs with long and erect setation and elytra longer and narrower (EL/EW 2.0); while *D. chiangdaoica*, *D. rufoposticalis* and *D. similis* have recumbent setation of dorsal surface of body and legs and elytra shorter and wider (EL/EW 1.85-1.87).

D. thailandica is clearly different from the species *Dorota malayica* sp. nov. mainly by antennomeres 4-11 blackish brown and 1.4-1.8 times longer than antennomere 3 long and by space between eyes distinctly narrower than length of antennomere 2; while *D. malayica* has antennomeres 4-11 from pale brown to reddish brown and 1.2-1.4 times longer than antennomere 3 long and space between eyes is approximately as wide as length of antennomere 2.

Etymology. Named after the type locality - country of origin Thailand.

Distribution. Thailand.

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