

Three new species of the genus *Dyschiriodes* (Coleoptera: Carabidae: Scaritinae: Dyschiriini) from the Eastern Asia

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Abstract. The species of the *Dyschiriodes* (*Paradyschirius*) *substriatus*-group, *verticalis*-subgroup are overviewed, the Oriental species are keyed and their distribution is listed. *Dyschiriodes* (*Paradyschirius*) *puchneri* sp. nov. from Indonesia (Sulawesi Island), *D. (P.) horaki* sp. nov. from Thailand and *D. (P.) wrasei* sp. nov. from China (Yunnan Province) are described, illustrated and compared to the related taxa.

INTRODUCTION

The genus *Dyschiriodes* Jeannel, 1941, comprises about 300 taxa and is almost world-wide in distribution. Fedorenko (1996) erected it as a separate genus and split it to five subgenera. The subgenus *Paradyschirius* Fedorenko, 1996, with almost 30 taxa was divided by the same author into two species groups: the monotypic Afrotropical *D. dispar*-group and the *D. substriatus*-group; latter with three subgroups: *analisis*, *substriatus* and *verticalis*. Later Fedorenko (1997) revised Palearctic and Paleotropical species of the *D. substriatus* group and from that time another five species were described by Bulirsch (2009) and Bulirsch & Fedorenko (2013).

The target of this article is an overview of the Asian species of the *D. verticalis* subgroup with the description of its three new species.

MATERIAL AND METHODS

The specimens were dry-mounted and studied, including measurements and examination of the microsculpture, under a magnification of 56×. All specimens of each new species were measured. Standard measurements follow Fedorenko (1996). Length of body is given with 0.05 mm accuracy; other measurements including ratios and means are rounded off to two decimal places. Label locality data of all specimens are quoted verbatim except standardized dates. The male genitalia (aedeagi) were fixed with water-soluble glue.

For comparison all to date known taxa from this subgroup were studied: diverse specimens including most of the type material from diverse museums, very extensive material from the author's collection, and finally, next material from several other collections.

The following abbreviations are used to indicate the depository of specimens:

- ADVA Alexander Dostal collection (incl. coll. K. Kult), Vienna, Austria;
BMNH Natural History Museum, London, Great Britain;
DWBG David Wrase collection, Berlin, Germany;
ISRN Institute Royal des Sciences Naturelles de Belgique, Brussels, Belgium;
NKME Naturkunde Museum, Erfurt, Germany;
NMPC National Museum, Praha, Czech Republic;
PBPC Petr Bulirsch collection, Praha, Czech Republic;
USNM National Museum of Natural History, Washington D.C., U.S.A;
TMSA Ditsong [=Transvaal] Museum, Pretoria, South Africa;
ZMUC Zoologisk Museum København, Copenhagen, Denmark.

Other abbreviations:

ASP: apical setiferous puncture(s); BSP: basal (prescutellar) setiferous puncture(s); DSP: dorsal setiferous puncture(s); PHSP: posthumeral setiferous puncture(s); ASP: (pre)apical setiferous punctures; L: length of body; HT: holotype(s); PT: paratype(s).

RESULTS

Dyschiriodes (Paradyschirius) substriatus-group, *verticalis*-subgroup

Fedorenko (1996, 1997) established and precisely defined this group to include the following four species: Afrotropical *D. devroeyanus* (Burgeon, 1935) and three Oriental species: *Dyschiriodes verticalis* (Putzeys, 1878), *D. hingstoni* (Andrewes, 1929), *D. tenuescens* (Andrewes, 1929). Fedorenko (1996) preliminary also mentioned *D. lacustris* (Andrewes, 1929) in this subgroup with unclear status but this species is correctly omitted in Fedorenko (1997). Later Bulirsch (2009) described next two species of this subgroup: Afrotropical *D. ruthmuelleriae* and Oriental *D. sabahensis*, and finally, Bulirsch & Fedorenko (2013) established another two Oriental species: *D. safraneki* and *D. tonkinensis*.

Species of this subgroup can be defined by the combination of the following characters:

- head with characteristic T-shaped keel, often rugose along its longitudinal part, in one species with broadly Y-shaped keel
- pronotum with not shortened lateral channel
- elytra long ovate, with striae 2-3 weakened to shortened basally, 4-5 strongly (in one species less strongly) broadened and deepened below base; with BSP, three DSP, 1-3 PHSP, 1-2 ASP
- fore tibia with moderately strongly to strongly uncinately apical spur
- median lobe of aedeagus with flagellum long, convolute to mostly more coils; larger paramere without seta

ORIENTAL SPECIES

Dyschiriodes verticalis (Putzeys, 1878)

Dyschirius verticalis: Andrewes, 1929: 402.

Dyschiriodes verticalis: Fedorenko, 1997: 145.

Material examined. (1 spec.): [India], Haldwani / U.P., Champion // Compared with / Type / K. Kult, 1947 // *Dyschiriodes* / (*Paradyschirius*) / *verticalis* (Putz.) / det. D. Fedorenko, 2002, (ADVA); (1 spec.): NE India, Assam / Umrongso env., 700 m / 25°27'N 92°43'E, 3-8.vi.2002, M. Trýzna & P. Benda lgt., (PBPC); (1 spec.): Chabua / Assam, India / 2.x.1943 / D.E. Hardy, (USNM); (1♂, 1 spec.): C Nepal, 21-27.vii.2000 / Chitwan (Roy. Nat. Park) / Sauraha vill. env. / 27.35N 84.30 E, 166 m / David Král lgt., at light // *Dyschiriodes* / (*Paradyschirius*) / *verticalis* (Putz.) / det. D. Fedorenko, 2002, (PBPC); (9 spec.): Nepal, P. Narayani / Sauraha, Rapti Ufer / LF 150 m NN, 16-18.vi. / 2007, leg. M. Hartmann, J. Weipert or A. Skale / 27°34'29''N / 84°29'55''E, (NKME, PBPC); (1 spec.): Nepal / Pokhara / O. Mehl leg. // Zoological Museum / Copenhagen, (ZMUC).

Distribution. India, Nepal and according to Andrewes (1929) also Myanmar.

Dyschiriodes hingstoni (Andrewes, 1929)

Dyschirius hingstoni Andrewes, 1929: 400.

Dyschiriodes hingstoni: Fedorenko, 1997: 146.

Type material. Holotype: [red circle with white centre] Type. // [pr] Fyzabad / Unit. Prov., India / R.W.G. Hingston / B.M.1923-293. // [hw] *Dyschirius* / *hingstoni* Andr., Type / [printed] H.E. Andrewes det., (BMNH).

Other material examined: (12 spec.): Burma, Mandalay region / Bagan env.; 21°9'N 94°53'E / 10-14.+22-24.x.2014 / alt. 80 m, René Fouquè lgt., (PBPC); (1 spec.) Myanmar (Yangon) / Pegu / 60 km NNE Yangoon / 17°19'N 96°28'E, lux, 22.xi.2003, M. Hornburg, (DWBG); N Laos / 10 km N Luang Prabang / Mekong riv. (240 km N / Vientiane), xi.1992 / Insomsay Somsy leg., (PBPC); (1 spec.): Laos, S Udomxai Prov. / Pak Beng, 450 m / N 19°53'47'', E 101°7'51'' / 18-27.v.2001 / J. Kolibáč leg., (NMHB); (1 ♂, 5 spec.): [Bangladesh] East Pakistan / Dinajpur / x.1969, / Barbe, (USNM, PBPC); (2 spec.): India, Agra / Uttar Phradesh / 28.ix.1997 / Pucholt leg., (PBPC); (1 spec.): Pakistan / Lahore / vii-vii.1957 / J. Maldonado // sweeping, (USNM); (1 ♂, 1 spec.): N India, Uttaranchal State / ca 13 km NW of Nainital / Khairna Bridge, at light / near river, 900 m / 13-17.vii.2003, Z. Kejval & M. Trýzna lgt., (PBPC); (1 spec.): NE India, xi.1997 / Assam, Pan Bari / res. forest, 1000 m // 27.08 N 94.00E / Kaziranga Wilde / Life, lg. Murzin, (PBPC); (26 spec.): India / New Delhi // [diverse data between 15.vii.1967 and 28.x.1968 / KE Gibson / light trap, (USNM, PBPC); (1 ♂, 1 spec.): India / Punjab / Murree Hills / Thobba // Compared with / Type / K. Kult, 1947 // one of them also: *Dyschiriodes* / (*Paradyschirius*) / *hingstoni* (Andr.), det. D. Fedorenko, 2002 (ADVA); (2 spec.): West Pakistan / Rawalpindi Umg. / Dhok Pathan, Sohan R. / b. Pindi Gheb, 31.i.1956 / Chr. Lindemann leg., (ADVA, PBPC); (1 spec.): Nepal, P. Narayani / Sauraha, Rapti Ufer / LF 150 m NN, 16-18.vi. / 2007, leg. M. Hartmann / 27°34'29''N, 84°29'55''E; (1 spec.): Nepal, P. Narayani / Sauraha, Rapti Ufer / LF 150 m NN, 16-18.vi. / 2007, leg. J. Weipert / 27°34'29''N, 84°29'55''E; (1 spec.): Nepal, P. Narayani D: / Chitwan Sauraha, Hotel / Riverside, 190 m NN / 27.vi-2.vii 2011, LF / leg. M. Hartmann / 27°34'55''N 84°29'58''E / M. Hartmann, (all NKME).

Distribution. India, Nepal, Myanmar, Bangladesh, Laos.

***Dyschiriodes tenuescens* (Andrewes, 1929)**

Dyschirius tenuescens Andrewes, 1929: 403.

Dyschiriodes tenuescens: Fedorenko, 1997: 146.

Material examined. (2 spec.): Nepal, P. Narayani / Sauraha, Rapti Ufer / LF 150 m NN, 16-18.vi. / 2007, leg. M. Hartmann or J. Weipert / 27°34'29" N / 84°29'55" E, (NKME, PBPC); (6 spec.): Nepal, Narayani Prov. / Sauraha SW, Rapti Ufer / 27°34' 80" N 84°29'49" E / 18.iv.2000, leg A.Weigel, A. Skale or F. Wolf, (NKME, PBPC).

Distribution. India, Nepal.

***Dyschiriodes sabahensis* Bulirsch, 2009**

Dyschiriodes sabahensis Bulirsch, 2009: 561.

Type material examined. Holotype: Malaysia: Sabah / 25 km E Telupid / 17.viii.1983 / at blacklight / G.F. Hevel & W.E. Steiner [leg.], (USNM). Paratypes: (15 spec.): with the same data as HT, (USNM, PBPC); (2 spec): Malaysia: Sabah: / 20 km E Telupid / 14.viii.1983 / at blacklight / G.F. Hevel & W.E. Steiner, (USNM, PBPC).

Other material examined. (2 spec.): Indonesia, E Kalimantan / ca. 55 km W of Balikpapan / PT Fajar Surya Swadaya / 01°18.3'S 116°21.0'E, 100 m, 24-25.+29.xi.2011 / J. Hájek, J. Schneider & P. Votruba leg., (NMPC, PBPC).

Distribution. Borneo Island, its Malaysian and Indonesian part.

***Dyschiriodes safraneki* Bulirsch et Fedorenko, 2013**

Dyschiriodes safraneki Bulirsch et Fedorenko, 2013: 26.

Type material examined. Holotype (♂): Laos, Oudom Xay prov. / Muang Pakbong env / 4-8.v.2003 / O. Šafránek leg., (PBPC). Paratypes: (3 ♀♀): with the same label data as HT, (PBPC); all specimens more or less immature.

Distribution. To date known only from the type locality in Laos.

***Dyschiriodes tonkinensis* Bulirsch et Fedorenko, 2013**

Dyschiriodes tonkinensis Bulirsch et Fedorenko, 2013: 27.

Type material examined. Holotype (♂): [Vietnam], Tonkin / Thai-nien, Banks / of Fleuve Rouge, (PBPC). Paratypes: (3 spec.): with the same label data as HT, (PBPC); (1 spec.): 'Vietnam, N (Na Hang) / 160 km NNW Hanoi / NE env. of Na Hang / 28.v-10.vi.1996, LF / 150-200 m NN, leg. A. / Napolov & I. Roma, (NKME).

Distribution. To date known only from two type localities in North Vietnam.

***Dyschiriodes (Paradyschirius) puchneri* sp. nov.**

(Fig. 1)

Type material. Holotype (♀): 2-Indonesien, S-Sulawesi / Enrekang, Sadang River, 46 m / S 03°34'58.4'' E 119°45'56.5'' / 27.vii.2015; leg. A. Puchner, (ADVA).

Description. Habitus as in Fig. 1. Body length 3.50 mm. Colour fuliginous, anterior part of head and elytral apex brownish translucent, surface with slight bronze metallic lustre; legs rusty red, anterior femora darker, mouth-parts and antennal base yellowish, antennae very slightly infuscate apically.

Head. Anterior margin of clypeus with distinctly protruding, rounded lateral lobes, between them almost direct, without tooth; clypeofrontal field with fine, irregular ridges on each side of long longitudinal carina adjoining transverse one anteriorly, thus forming T-shaped figure; facial sulci moderately deep, in its anterior half very broad, irregularly rugose, in posterior half narrow and moderately strongly divergent posteriorly, distance between them exceeding eye length. Vertex even and smooth, minutely micropunctate. Eyes rather large, strongly convex. Antennomeres 5-10 moniliform.

Pronotum. Strongly convex, outline regularly and strongly rounded; strongly attenuated anteriorly; 1.05 times as wide as long, 1.45 times as wide as head, broadest in second third, with blunt anterior angles. Anterior transverse impression deep, sparsely short cross-striate, especially medially; median line moderately deep, slightly shallower at middle, deeper and broader just before anterior transverse impression, lateral channel moderately broad, reflexed lateral margin distinctly surpassing postero-lateral SP. Surface glossy, minutely micropunctate.

Elytra. Long-ovate, 1.74 times as long as wide, 1.13 times as wide as pronotum, moderately broadened below humeri, broadest less than one third length from base, more strongly attenuated backwards than forwards, indistinctly concave in anterior fifth in lateral view. Base slightly oblique towards strongly prominent humeri without humeral teeth, with suture barely depressed, without basal border and tubercles. Striae 1-7 moderately deep, distinctly punctate in basal half to two thirds, punctures much smaller than width of intervals, stria 8 very fine, just traceable in middle third, striae 2 and 6-7 shallower basally, stria 3 abruptly diminish above anterior DSP, 4-5 deeper and broader below base, stria 1 entire, moderately deeply adjoining BSP, striae 2-3 almost obliterated behind posterior DSP, striae 4-7 gently longer; intervals medio-basally moderately convex, flattened apically. Three PHSP, three DSP in stria 3, two large ASP in deep apical stria.

Protibia. Apical spine broad and blunt at tip, strongly curved backwards, shorter than moderately uncinuate apical spur; distal marginal tooth large, proximal one small and blunt (teeth partially abraded).

Differential diagnosis. *D. puchneri* sp. nov. is distinguishable from all species of this subgroups by its elytra having the striae relatively fine, diminishing latero-apically, with dense and rough punctuation combined with the presence of three PHSP and two ASP. Next differences are quoted in the key below.

Name derivation. Patronymic, in honour of Alfred Puchner (Grafenbach, Austria), collector of the holotype, specialist in Cerambycidae.

Dyschiriodes (Paradyschirius) horaki sp. nov.

(Fig. 2)

Type material. Holotype (♀): S Thailand / Pattani distr., San Buri / 23-28.iv.1993, J. Horák leg., (PBPC). Paratype (1 ♀): Thai, Trang province / Hat Chao Mai National Park / 7°19'N 99°27'E / 25-27.x.1991, O. Martin leg. / Zoologisk Museum København, (ZMUC).

Description. Habitus as in Fig. 2. Body length 3.10 mm, in HT 3.35 mm in PT. Colour fuliginous, surface with bronze metallic lustre, head anteriorly and elytra at base and latero-apically brownish translucent, legs, mouth-parts and antennae rusty red, anterior femora indistinctly darker, antennae indistinctly infusate apically.

Head. Anterior margin of clypeus with blunt, moderately protruding lateral lobes, between them almost direct; clypeofrontal field with fine, irregular rugosity on each side of irregular, long longitudinal carina adjoining irregular v-shaped one anteriorly, thus forming very broadly Y-shaped figure with another transverse carina on its bottom; facial sulci moderately deep, in its anterior half moderately broad, irregularly rugose, in posterior half narrow and strongly divergent posteriorly, distance between them not exceeding length of eye. Vertex vaulted, smooth, with few fine punctures below posterior margin of each eye, these very large and strongly convex. Antennomeres 5-10 moniliform.

Pronotum. Moderately strongly convex, outline regularly and rather poorly rounded; rather slightly attenuated anteriorly; in HT 1.09, in PT 1.07 times as wide as long, in HT 1.41, in PT 1.38 times as wide as head, widest in third fourth, with narrowly rounded anterior angles. Anterior transverse impression moderately deep, sparsely, very finely punctate; median superficial, reflexed lateral margin slightly surpassing postero-lateral SP. Surface glossy, minutely micropunctate.

Elytra. Long-ovate, in HT 1.75, in PT 1.72 times as long as wide, in HT 1.16, in PT 1.18 times as wide as pronotum, moderately broadened on sides, broadest below one third of length from base, more strongly attenuated backwards than forwards, not depressed in anterior fifth in lateral view. Base slightly oblique towards prominent humeri with large and sharp humeral teeth, with suture barely depressed, without basal border and tubercles. Striae 1-7 moderately deep, stria 1 complete, rather deeply connected with BSP, 2-7 strongly weakened latero-apically, diminishing in apical sixth to third; densely and coarsely punctate, stria 8 very fine, just traceable in middle third, striae 2-3 slightly weakened basally, 6 and especially 7 shortened basally, 4 slightly, 5 moderately deeper basally. Punctures in intervals 5-7 distinctly smaller than width of moderately strongly convex intervals, latter flattened latero-apically. Three PHSP, three DSP in interval 3, one ASP in very deep apical stria.

Protibia. Apical spine broad and moderately sharp at tip, strongly curved backwards, as long as strongly uncinat apical spur; distal marginal tooth large, rather sharp, proximal one small and rather blunt.

Differential diagnosis. *D. horaki* sp. nov. is distinguishable from all species of this subgroup by the elytra having the striae relatively fine, diminishing latero-apically, with dense and rough punctuation and having the striae 4-5 only rather slightly deepened basally combined with the presence of three PHSP and one ASP. Next differences are quoted in the key below.

Name derivation. Patronymic, in honour of my friend Jan Horák (Praha, Czech Republic), collector of the holotype, well known specialist in Mordellidae.

Dyschiriodes (Paradyschirius) wrasei sp. nov.

(Fig. 3)

Type material. Holotype (♀): China (Yunnan), Lincang Pref., / 27 km N Lincang / Nanding He river bank, 1108 m / 24°07'44.2'' N 100°04'32.0'' E / (washed from gravel-sand, / from roots of vegetation / 7.ix.2009, M. Schülke [34], (PBPC).

Description. Habitus as in Fig. 3. Body length 3.45 mm. Colour fuliginous, surface with bronze metallic lustre, elytra at base and latero-apically narrowly, indistinctly brownish translucent, legs, mouth-parts and 3-4 basal antennomeres rusty red, anterior femora indistinctly darker, antennae barely infusate apically.

Head. Anterior margin of clypeus with blunt, slightly protruding lateral lobes, between them gently emarginated; clypeofrontal field with fine, irregular rugosity on each side of irregular, blunt longitudinal carina adjoining transverse one anteriorly, thus forming T-shaped figure; facial sulci moderately deep, in its anterior half moderately broad, irregularly rugose, in posterior half narrow and gently divergent posteriorly, distance between them about as length of eye. Vertex vaulted, with very dense micropunctures and irregular rests of fine reticulation; eyes large and strongly convex. Antennomeres 5-10 moniliform.

Pronotum. Moderately strongly convex, outline regularly and poorly rounded; strongly attenuated anteriorly; 0.99 times as wide as long, 1.44 times as wide as head, widest in third fourth, with narrowly rounded anterior angles. Anterior transverse impression moderately deep, sparsely, broadly and superficially cross-striate; median line rather fine, reflexed lateral margins distinctly surpassing postero-lateral SP. Surface in antero-lateral half with fine, irregular reticulation, posteriorly glossy, minutely micropunctate.

Elytra. Long-ovate, 1.78 times as long as wide, 1.17 times as wide as pronotum, gently broadened on sides, broadest distinctly above third of length from base, more strongly attenuated backwards than forwards, indistinctly depressed in anterior fifth in lateral view. Base rather slightly oblique towards prominent humeri without humeral teeth, with suture barely depressed, without basal border and tubercles. Striae 1-7 moderately deep, stria 1 complete, deeply adjoining BSP, striae 2-3, 6 and especially 7 shortened basally, 4-5 distinctly deeper basally; stria 8 almost diminish, composed from few very fine punctures; striae 2-4 weakened apically. Striae punctures sparse, rather fine, longitudinal, latero-apically finer. Punctures in intervals 5-7 much smaller than width of moderately strongly convex intervals, latter flattened medio-apically Three PHSP, three DSP in interval 3, two ASP in very deep apical stria.

Protibia. Apical spine broad and blunt at tip, moderately curved backwards, as long as slightly? uncinat (abraded) apical spur; distal marginal tooth moderately large, rather blunt, proximal one small and blunt (lateral teeth partially abraded).

Differential diagnosis. *D. wrasei* sp. nov. is unique within this subgroup by the head and the pronotum being distinctly reticulated as described above. It could be distinguished from the



Figs. 1-3. Habitus dorsal aspect (actual length in parentheses behind the name). 1- *D. puchneri* sp. nov., HT (3.50 mm); 2- *D. horaki* sp. nov., HT (3.10 mm); 3- *D. wrasei* sp. nov., HT (3.45 mm).

most similar species, *D. verticalis*, moreover by the elytra having the striae 2-4 weakened apically, having three PHSP and two ASP (*D. verticalis* has one PHSP and one ASP). Next differences are quoted in the key below.

Name derivation. Patronymic, in honour of my friend David W. Wrase (Berlin, Germany), well known specialist in Carabidae.

AFROTROPICAL SPECIES

Dyschiriodes devroeyianus (Burgeon, 1935)

Dyschirius Devroeyianus Burgeon, 1935: 157.

Dyschirius Devroeyianus: Kult, 1954: 331: Congo, DR Congo.

Dyschiriodes devroeyianus: Fedorenko, 1997: 147.

Next material examined. (11 spec.): [DR Congo] Kinchassa /Waelbroeck /18.i.1900 or 1899 // *Dyschirius Devroeyianus* Burg. / K. Kult det. 1946, 1947 or 1950, one of them with: Compared / with Type / K. Kult det. 1947, (ADVA, IRSN, PBPC).

Distrubution. DR Congo and according to Kult (1954) also Congo.

Dyschiriodes ruthmuellerae Bulirsch, 2009

Dyschiriodes ruthmuellerae Bulirsch, 2009: 565.

Type material. Holotype (♂): Namibia; Caprivi, 1000 m / 20 km SE Divundu / 18.06 S - 21.40 E // 17.iii.2006; E-Y: 3726 / light trap / leg. R. Müller, (TMSA).

Other material examined. (1 spec.): Zambia, Southern / Kafue NP, NW Nanzhila Plains / S 16°12'35 E 25°47'40 / 18.i.2010, P. Schüle leg., (PBPC).

Distrubution. Namibia, Zambia; to date known in two specimens.

KEY TO ORIENTAL SPECIES OF *D. VERTICALIS*-SUBGROUP

- 1(8) Elytra with one ASP.
- 2(3) Three PHSP; elytral striae obliterated latero-apically; striae 4-5 gently deepened below base. L 3.1-3.4 mm. Thailand. *D. horaki* sp. nov.
- 3(2) 1-2 PHSP; elytral striae not obliterated latero-apically; striae 4-5 strongly deepened basally.
- 4(5) Smaller species, L 2.1-2.5 mm. One PHSP. *D. tenuescens* (Andrewes, 1929)
- 5(4) Larger species, L 2.8-4.5 mm. 1-2 PHSP.
- 6(7) Larger, L 3.8-4.5 mm; eyes very large, pronotal anterior transverse impression mostly roughly cross-striate, elytra with finer, distinctly punctate striae; (1)-2 PHSP. *D. hingstoni* (Andrewes, 1929)
- 7(6) Smaller, L 2.8-3.7 mm; eyes moderately large, anterior transverse impression not to finely cross-striate, elytra with deeper, finely punctate striae; one PHSP. *D. verticalis* (Putzeys, 1878)
- 8(1) Elytra with two ASP.
- 9(12) Elytral striae obliterated latero-apically.
- 10(11) One PHSP; pronotum slightly narrowed anteriorly; eyes moderately large. Laos.
..... *D. safraneki* Bulirsch et Fedorenko, 2013
- 11(10) Three PHSP; pronotum strongly narrowed anteriorly; eyes large. Sulawesi Isl. *D. puchneri* sp. nov.
- 12(9) Elytral striae distinct latero-apically; if slightly weakened then head and pronotum partially reticulate; 2-3 PHSP.
- 13(14) Vertex and anterior half of pronotum distinctly reticulate. Eyes large; pronotal outline slightly convex, strongly narrowed anteriorly; three PHSP. China (Yunnan). *D. wrasei* sp. nov.
- 14(13) Vertex and anterior half of pronotum not reticulate. Eyes moderately large; pronotal outline more convex.
- 15(16) Pronotum narrower, strongly attenuated anteriorly, elytral stria 3 less shortened basally, distinctly prolonged above anterior DSP. *D. tonkinensis* Bulirsch et Fedorenko, 2013
- 16(15) Pronotum wider, less strongly attenuated anteriorly, elytral stria 3 shortened basally, not prolonged above anterior DSP. *D. sabahensis* Bulirsch, 2009

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