

**Two new species of the genus *Dyschiriodes*
(Coleoptera: Carabidae: Scaritinae: Dyschiriini)
from South America and notes about next species from the same region. Part 3**

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Abstract. *Dyschiriodes (Eudyschirius) kirschenhoferi* sp. nov. from Paraguay and *D. (E.) magrinii* sp. nov. from Argentina are described, illustrated and compared to related taxa. New faunistic data on the next Neotropical species are given; basic literary data, placement of the holotypes and distribution of all the known species are listed and the key of the *Dyschiriodes (Eudyschirius) pampicola* species group, published by Bulirsch (2006), is supplemented and refined.

INTRODUCTION

The Neotropical species of the genus *Dyschiriodes* were recently overviewed by Fedorenko (1999) and Bulirsch (2006); later Bulirsch (2009) described another two species. Most of the Neotropical species (18 from 19 known taxa) belong to the *D. (Eudyschirius) pampicola* group with 3 subgroups established by Fedorenko (1999). These species were described by Putzeys (1866), Kult (1950), Fedorenko (1991a,b, 1999) and Bulirsch (2006, 2009). The last known species, *D. weyrauchi* (Kult, 1950), described from Peru based on the holotype only, belongs to a very different Holarctic *D. (Dyschiriodes) nitidus* group and Bulirsch (2009) considered it as a junior synonym to *D. erythrocerus* (Leconte, 1857) and its occurrence in Peru or even in South America being doubtful.

MATERIAL AND METHODS

The study of dry-mounted specimens, including measurements and examination of microsculpture, was done at a magnification of 56×. All the types and up to 30 specimens of each species were measured. Standard measurements follow Fedorenko (1996). Length of body is given with accuracy 0.05 mm, other measurements, ratios and means are down to two decimal places. Label data of all the specimens are quoted verbatim except unified data of findings. Male genitalia (aedeagi) were embedded in Canada Balsam (male holotype) or fixed with water-soluble glue.

The following abbreviations are used to indicate the depository of specimens:
ADWA collection of A. Dostal (incl. coll. K. Kult), Wien, Austria;
BMNH The Natural History Museum, M. Barclay, R. Booth, London, U.K.;

CMNH Carnegie Museum of Natural History, R. Davidson, Pittsburgh, U.S.A;
CNMC Canadian Museum of Nature, Ottawa, Canada;
DFMR collection of D. Fedorenko, Moscow, Russia;
ERCC Eastern Cereal and Oilseed Research Centre, Y. Bousquet, Ottawa, Canada;
ISNB Institute Royal des Sciences Naturelles de Belgique, Bruxelles, Belgium;
NMWA Naturhistorisches Museum, Wien, Austria;
OHPC collection of O. Hovorka, Prague, Czech Republic;
PBPC collection of P. Bulirsch, Prague, Czech Republic;
ZIPR Zoological Institute, Russian Academy of Sciences, St. Petersburg, Russia;
ZMBG Museum für Naturkunde der Humboldt-Universität zu Berlin, Germany;
ZSMG Zoologische Staatssammlung, Munich, Germany.

Other abbreviations:

ASP: apical setiferous puncture(s); BSP: basal (prescutellar) setiferous puncture(s); DSP: dorsal setiferous puncture(s); PHSP: posthumeral setiferous puncture(s); HT: holotype(s); PT: paratype(s).

RESULTS

Dyschiriodes (Eudyschirius) kirschenhoferi sp. nov.

(Figs 1, 1a,b)

Type material. Holotype (♂): 'Paraguay: 27.vii.1995 / Dep. Alto Paraguay / 40 km S Cerro Chovoreka / leg. Drechsel', (NMWA). Paratypes: 2 spec. with the same data as HT (NMWA, PBPC); 6 spec. 'Paraguay: 30.vii.1995 / Dep. Alto Paraguay / 90 km NW Bahia Negra / leg. Drechsel', (NMWA, PBPC).

Description. Habitus as in Fig. 1; length 3.05-3.40 mm (mean 3.20 mm, HT 3.15 mm, n=9). Dark brown, surface with slight bronze metallic lustre; elytral base and latero-apical part slightly lighter; legs rusty red, two basal antennomeres and mouth-parts paler, antennomeres 3-11 distinctly infuscated.

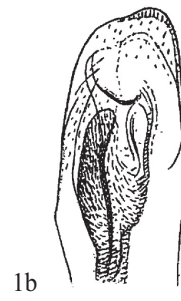
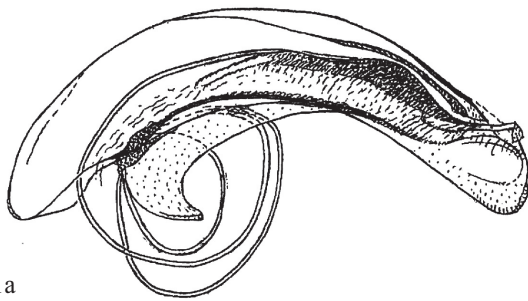
Head. Anterior margin of clypeus between distinctly protruded lateral lobes very faintly to moderately convex, not forming central tooth; clypeofrontal area with rather deep, transverse furrow; facial furrows deep and long, slightly divergent posteriorly, turned around posterior margin of eyes; distance between them slightly shorter than eyes length. Vertex and posterior part of clypeus roughly, rather sparsely punctate. Eyes large, rather slightly convex. Antennae submoniliform.

Pronotum. Strongly convex, outline regularly rounded; slightly attenuated anteriorly; 1.03-1.07 (mean 1.05, HT 1.05) times as wide as long, 1.39-1.46 (mean 1.42, HT 1.41) times as wide as head, widest at about second third. Anterior angles blunt, slightly rounded, posterior ones broadly rounded. Anterior transverse impression deep, sparsely and rather deeply cross striate; median line fine, especially at middle; lateral channel moderately broad, reflexed lateral margin extended slightly beyond posterior setiferous puncture. Surface mirror-like shiny, with very fine micropunctures.

Elytra. Short-ovate, rather deeply and broadly concave in basal fourth in lateral view; 1.54-1.59 (mean 1.56, HT 1.58) times as long as wide, 1.27-1.33 (mean 1.30, HT 1.28) times



Figs 1-2. Habitus of HT (actual length in parentheses behind the name). 1- *D. kirschenhoferi* sp. nov. (3.15 mm); 2- *D. magrinii* sp. nov. (4.95 mm).



Figs 1a,b. *D. kirschenhoferi* sp. nov.: 1a- Apex of aedeagus of HT from ventral view. 1b- Aedeagus from right lateral view.

as wide as pronotum; base very slightly sloping; outline rather slightly broadened on sides, broadest just before middle, more strongly attenuated towards apex than towards distinctly protruded humeri; each elytron with small humeral tooth; suture slightly depressed at base. Base with distinct basal border, connecting 2-3 blunt basal tubercles; BSP small, moderately to distinctly connected with striae 1-2. Striae deep; moderately punctate, punctures finer apically, in basal half narrower than width of intervals; striae 2-5 abruptly and strongly weakened in apical fifth, striae 1 and 6-8 very deep in apical fourth; intervals distinctly vaulted in basal half and intervals 1 and 6-8 strongly vaulted in apical fourth. Three PHSP, 0 DSP and two large ASP (in very deep apical stria).

Protibia. Apical spine moderately curved backwards not inwards, as long as apical spur; latter almost straight apically; distal marginal tooth large, sharp, proximal one small, blunt.

Mesothorax. Peduncle with shallow vertical slot.

Aedeagus. Shape as in (Figs 1a,b). Median lobe in lateral view as in (Fig. 1a), in HT 0.54 mm long, regularly, moderately bent down; flagellum within species group rather short, spiral, with three coils. Apical lamella in ventral view (Fig. 1b), medium sized, broadly rounded, slightly asymmetric.

Differential diagnosis. *D. kirschenhoferi* sp. nov. belongs to the *D. bryanti* subgroup of the *D. pampicola* group. It has no closely allied species and can be distinguished from all the known species of this subgroup by the roughly punctate vertex (it is impunctate in the remaining species) and by the shape of the median lobe of the aedeagus. Moreover *D. kirschenhoferi* sp. nov. differs from *D. bryanti* (Kult, 1950) and the remaining species of the *D. bryanti* subgroup by shorter elytra (1.54-1.59 times as long as broad in *D. kirschenhoferi* sp. nov., 1.76-1.81 times in *D. bryanti* and over 1.70 times in the remaining species).

Name derivation. Patronymic, in honour of Erich Kirschenhofer, world known specialist in Chlaenini.

Dyschiriodes (Eudyschirius) magrinii sp. nov.

(Fig. 2)

Type material. Holotype (♀): 'Argentina NW / S of Santa Maria / Ruta 40, 2200 m / (W of Tucuman)/ 10.ii.2010, Snížek', (PBPC).

Description. Habitus as in Fig. 2; length 4.95 mm. Rusty brown, surface without metallic lustre; elytra with lighter latero-apical part; legs rusty red, antennae and mouth-parts yellowish-red.

Head. Anterior margin of clypeus between distinctly protruded lateral lobes straight; clypeofrontal area with 2-3 very fine, incomplete, transverse furrows; facial furrows deep and short, very slightly divergent posteriorly; distance between them slightly shorter than eyes length. Surface even, smooth, with very fine and sparse micropunctures. Eyes moderately large, convex. Antennae relatively long, antennomeres subelongate.

Pronotum. Strongly convex, outline regularly rounded; slightly attenuated anteriorly; 1.04 times as wide as long, 1.54 times as wide as head, widest in second third. Anterior angles blunt, slightly rounded, posterior ones broadly rounded. Font transverse impression deep,

distinctly punctate; median line rather fine, especially in middle; lateral channel moderately broad, reflexed lateral margin extended slightly beyond posterior setiferous puncture. Surface mirror-like shiny, with very fine micropunctures.

Elytra. Short-ovate; very slightly and broadly concave in basal fourth in lateral view; 1.55 times as long as wide, 1.30 times as wide as pronotum; base moderately sloping; outline moderately broadened on sides, broadest at about middle, more strongly attenuated towards apex than towards moderately protruding humeri, each elytron with small and blunt humeral tooth; suture indistinctly depressed at base. Base with fine basal border, without tubercles; BSP large, not connected with first stria. Striae 1-3 deep, striae 4-7 gradually weaker, roughly to moderately punctate, punctures disappearing in third fourth, narrower than width of intervals in basal part; stria 1 complete, striae 2-6 rather abruptly and strongly weakened on apex, striae 7 indistinct in apical fourth; stria 8 consisting of 2-3 rough punctures before midlength; intervals distinctly vaulted in basal part, flattened latero-apically. Three PHSP, one DSP (in anterior third of interval 3), two ASP (in moderately deep apical stria).

Protibia. Apical spine moderately curved backwards not inwards, shorter than apical spur; latter long, moderately curved apically; distal marginal tooth large, rather sharp, proximal one small, blunt.

Mesothorax. Peduncle with shallow vertical slot.

Differential diagnosis. *D. magrinii* sp. nov. belongs to the *D. minarum* subgroup of the *D. pampicola* group. From the most similar species, *D. erwini* Bulirsch, 2009, it can be distinguished by a larger body (4.95 mm in *D. magrinii* sp. nov. and 3.80-4.50 mm in *D. erwini*), lighter colour; by the head with not protruding anterior margin of the clypeus and by the elytra with the base more sloping to the humeri, with striae 7-8 not deepened apically and with one DSP on each elytron. It differs from *D. darwini* (Kult, 1950), by colour of the elytra; by the head with less protruding anterior margin of the clypeus and with indistinct transverse clypeofrontal furrow, and by the elytra with missing basal tubercles and with striae disappeared apically, and finally from *D. ogloblini* (Kult, 1950) by a larger body; the head with less protruding anterior margin of the clypeus and with indistinct transverse clypeofrontal furrow (it is obtusely v-shaped in *D. ogloblini*) and by the elytra without basal tubercles.

Name derivation. Patronymic, in honour of my friend Paolo Magrini, Firenze, Italy; well known specialist in Carabidae.

KEY TO SPECIES OF THE *DYSCHIRIODES PAMPICOLA* GROUP

I have adapted keys published by Fedorenko (1999) and Bulirsch (2006), added four recently described species and refined characters of *D. peruanus* (Fedorenko, 1991), *D. amazonicus* (Fedorenko, 1991) and *D. baehri* Bulirsch, 2006.

- 1(2) Elytra with three DSP and large, yellow apical macula. Reflexed lateral margin of pronotum abbreviated, at most extended to midlength between lateral setiferous punctures. Length 3.4-4.6 mm 1. *D. pampicola* (Putzeys, 1866)
- 2(1) Elytra with 0-1 DSP
- 3(14) Elytra with one (anterior) DSP
- 4(13) Clypeofrontal furrow straight and transverse or indistinct

- 5(6) Larger, length 5.1-5.7 mm. Anterior margin of clypeus very strongly protruded and distinct, blunt tooth 3. *D. bruchi* (Kult, 1950)
- 6(5) Smaller, length 3.1-4.9 mm. Anterior margin of clypeus without distinct tooth, not or faintly protruding
- 7(8) Elytral striae 1-7 deep apically, stria 8 weakened in third fourth. Elytra with large, yellow apical macula. Anterior margin of clypeus slightly protruding. Length 4.6 mm 2. *D. darwini* (Kult, 1950)
- 8(7) At least striae 2-6 weakened or obliterated apically
- 9(10) Smaller, length 3.1-3.5 mm. Anterior margin of clypeus straight. One DSP on both elytra. Each elytron with three blunt basal tubercles; stria 7 very deep apically 5. *D. neoteutonus* (Fedorenko, 1991)
- 10(9) Larger, length 3.8-5.0 mm, elytra without basal tubercles
- 11(12) Anterior margin of clypeus slightly to moderately protruding. One DSP on each elytron. Elytral stria 7 deep apically. Length 3.8-4.5 mm 16. *D. erwini* Bulirsch, 2009 (part.)
- 12 (11) Anterior margin of clypeus straight, not protruding. One DSP on each elytron. Elytral stria 7 vanishing apically. Length 5.0 mm 20. *D. magrinii* sp. nov.
- 13(4) Clypeofrontal suture broadly v-shaped; anterior margin of clypeus moderately convex. Each elytron with three basal tubercles; elytral striae obliterated in apical fourth. Length 4.7 mm 4. *D. ogloblini* (Kult, 1950)
- 14(3) Elytra without DSP
- 15(18) Reflexed lateral margin of pronotum abbreviated, not extended to posterior setiferous puncture. Basal border of elytra very fine, vestigial. Stria 8 wanting
- 16(17) Median line of pronotum indistinct. Length 3.1 mm 10. *D. brazilienis* Fedorenko, 1999
- 17(16) Median line of pronotum rather deep. Length 4.2 mm 14. *D. bousqueti* Bulirsch, 2006
- 18(15) Reflexed lateral margin of pronotum extended at least to posterior setiferous puncture
- 19(38) Elytra with distinct basal border and distinct basal tubercles
- 20(21) Clypeofrontal suture broadly V-shaped. Elytra short, about 1.5 times as long as wide, striae very deep throughout. Apical spur of protibia almost straight. Length 4.0 mm 6. *D. minarum* (Putzeys, 1866)
- 21(20) Clypeofrontal suture either transversely straight or indistinct
- 22(37) Elytra longer, more than 1.7 times as long as wide; vertex not punctured
- 23(24) Clypeofrontal suture indistinct, clypeus and frons finely rugose, with fine micropunctures; posterior part of head with distinct isodiametric microsculpture. Elytral striae deep throughout, very coarsely punctate in basal half. Apical spur of protibia slightly curved apically. Length 3.5 mm . 12. *D. selvas* Fedorenko, 1999
- 24(23) Clypeofrontal suture straight, transverse; frons and posterior part of head smooth, not rugose
- 25(28) Elytral striae finely punctate, intervals flattened. Apical spur of protibia almost straight; 2-3 PHSP
- 26(27) Eyes very large (as in Fedorenko, 1999: Fig. 2). Elytral striae moderately deep throughout. two PHSP. Length 3.5 mm 11. *D. macrophthalmus* Fedorenko, 1999
- 27(26) Eyes moderately large. Elytral striae weakened apically; three PHSP. Length 3.1-3.6 mm. 13. *D. ecuadorensis* Bulirsch, 2006
- 28(25) Elytral striae coarsely to very coarsely punctate. Three PHSP
- 29(36) Anterior transverse impression of pronotum superficial, median line very thin
- 30(31) Striae 1-6 coarsely punctate, strongly impressed in second fourth, then abruptly disappearing, striae 7-8 very deep throughout, eyes moderately large 8. *D. peruanus* (Fedorenko, 1991) (part.)
- 31(30) Striae moderately deep, slightly weakened to disappeared latero-apically; eyes very large
- 32(33) Smaller, length 2.85 mm, head with rather deep transverse furrow, facial furrows long, slightly divergent anteriorly; elytral striae 2-5 slightly weakened apically 16. *D. fedorenkoi* Bulirsch, 2006
- 33(32) Larger, length 3.05-3.50 mm, head with finer transverse furrow; facial furrows more strongly divergent posteriorly; elytral striae 2-5 distinctly weakened apically
- 34(35) Larger, length 3.35-3.50 mm, head with less distinct transverse furrow and broader interval between facial furrows, elytra less vaulted laterally, more emarginated in lateral view 15. *D. baehri*, Bulirsch, 2006
- 35(34) Smaller, length 3.05 mm; head with more distinct transverse furrow and narrower interval between facial furrows, elytra more vaulted laterally, less emarginated in lateral view 9. *D. amazonicus* (Fedorenko, 1991)
- 36(29) Anterior transverse impression of pronotum distinct, median line moderately deep, lateral striae rather deep apically. Eyes moderately large. Length 3.2-3.9 mm 7. *D. bryanti* (Kult, 1950)
- 37(22) Elytra shorter, 1.5-1.6 times as long as wide; vertex roughly punctured; clypeofrontal suture straight; anterior transverse impression of pronotum distinct; striae deep, striae 2-5 vanishing in apical sixth, striae 1, 6-8 very deep apically. Length 3.0-3.4 mm 19. *D. kirschenhoferi* sp. nov.

- 38(19) Elytral base with vestigial basal border and without basal tubercles. Reflexed lateral margin of pronotum distinct
- 39(40) Large species, length 3.8-4.5 mm; elytra short ovate 17. *D. erwini* Bulirsch, 2009 (part.)
- 40(39) Smaller species, length 2.3-3.0 mm; elytra elongate to subparallel
- 41(42) Larger, length 2.8-3.0 mm; dark species with metallic tinge, elytra shorter, 1.7-1.8 times as long as wide. Elytral striae 1-6 coarsely punctate, strongly impressed in second fourth, then abruptly disappeared, striae 7-8 very deep throughout. Three PHSP. 8. *D. peruanus* (Fedorenko, 1991) (part.)
- 42(41) Smaller, length 2.35 mm; yellowish species, elytra very long, 2.1 times as long as wide. Elytral striae strongly weakened apically, stria 8 created from few punctures before midlength. Two PHSP.
..... 18. *D. clorinda* Bulirsch, 2009

CATALOGUE OF SPECIES OF THE *DYSCHIRIODES PAMPICOLA* GROUP

In the text below, all the known species are listed; basic literary data are quoted, geographical distribution is presented, all holotypes are overviewed and new findings are added. Findings quoted in Bulirsch (2006, 2009) and Fedorenko (1999) are not repeated.

1. *Dyschiriodes (Eudyschirius) pampicola* (Putzeys, 1866)

Dyschirius pampicola Putzeys, 1866: 99.

Dyschiriodes (Eudyschirius) pampicola: Fedorenko (1999): revised generic placement.

Holotype: not studied, described from 'Pampas, (coll. de Chaudoir)' in HT only.

New material examined: 'Uruguay N, 90 km SW of / Artigas, Pampa del / Lavalleja, 27-30.ix.2001 / 100 m, R. Linek lg.', 1 spec., (PBPC); 'Argentina NC / N of Córdoba / N of Salinas Grandes / La Guardia / 21.ii.2010, leg. Snížek', 3 spec., (PBPC); 'Argentina NC / J.V. Gonzales, 18.i.2010 / S of Macapilo, Salado / Riv., M. Snížek leg.', 3 spec., (PBPC); 'Argentina NC / J.V. Gonzales, 15.ii.2010 / S of Macapilo / M. Snížek leg.', 5 spec., (PBPC); '13-Argentinien, Prov. Cordoba / Salinas Grandes, km 895.5 rt / 60; 12-13.iii.2008, S 29°51'01.7'' / W 64°40'10.4''; Berger-Dostal', 2 spec., (ADWA, PBPC).

Distribution: Argentina, Paraguay, Uruguay. New to Uruguay.

2. *Dyschiriodes (Eudyschirius) darwini* (Kult, 1950)

Akeporus darwini Kult, 1950: 132.

Dyschiriodes (Eudyschirius) darwini: Fedorenko (1999): revised generic placement.

Holotype: 'Santa Fe / Argentina / C. Darwin // Darwin Coll. / 1885-119 // Type // *Dyschirius* / *Darwini* Kt. / det. K. Kult, 1948', (BMNH).

Distribution: Argentina, Paraguay.

3. *Dyschiriodes (Eudyschirius) bruchi* (Kult, 1950)

Akeporus bruchi Kult, 1950: 131.

Dyschiriodes (Eudyschirius) bruchi: Fedorenko (1999): revised generic placement.

Holotype: 'Argentina / Prov. Cordoba / C. Bruch // Type // *Akeporus* / *bruchi* Kt. / det. K. Kult, 1947 // Collectio Karel Kult / Coll. A. Dostal, 1999 // Holotypus / Coll. K. Kult / Dostal fecit 1999', (ADWA).

Distribution: Argentina.

4. *Dyschiriodes (Eudyschirius) ogloblini* (Kult, 1950)

Akeporus ogloblini Kult, 1950: 135.

Dyschiriodes (Eudyschirius) ogloblini: Fedorenko 1999: revised generic placement.

Holotype: 'Argent[ina], Famabalastro / 10.iii.1922 / Weiser // Type // *Akeporus ogloblini* Kt. / det. K. Kult, 48', (ADWA).

Distribution: Argentina.

5. *Dyschiriodes (Eudyschirius) neoteutonus* (Fedorenko, 1991)

Dyschirius neoteutonus Fedorenko, 1991b: 146.

Dyschiriodes (Eudyschirius) neoteutonus: Fedorenko (1999): revised generic placement.

Holotype: 'S. Catharina / Nova Teutonia / 27.Br. 52-53.L / Plaumann // fur Best. iii.1937 / von Plaumann // F. Van Emden / Bequest. / B.M. 1960-129', (BMNH).

New material examined: 'Paraguay: 10.ix.1995 / Dep. Central / Asuncion / leg. Drechsel', 2 spec. (NMWA, PBPC); the same data but '1.xi. 1991', 2 spec. (NMWA, PBPC); the same data but '20.xii. 1990 / Botanic Garden', 1 spec. (NMWA).

Distribution: Brazil, Paraguay.

6. *Dyschiriodes (Eudyschirius) minarum* (Putzeys, 1866)

Dyschirius minarum Putzeys, 1866: 98.

Dyschiriodes (Eudyschirius) minarum: Fedorenko (1999): revised generic placement.

Holotype: 'D. minarum / Min. Geraes, C. Chd. // Soc. Ent. Belg. // Coll. Putzeys // Type', (ISNB).

Distribution: Brazil.

7. *Dyschiriodes (Eudyschirius) bryanti* (Kult, 1950)

Akeporus bryanti Kult, 1950: 133.

Dyschiriodes (Eudyschirius) bryanti: Fedorenko (1999): revised generic placement.

Holotype: 'Type // Santos / Brazil. / G. E. Bryant. / 6.iii.1912 // G. Bryant Coll. / 1919-147 // Type // *Akeporus* / *Bryanti* Kt. / det. K. Kult, 1948', (BMNH).

New material examined: 'Argentina NE, S of / Corrientes, River Parana / 16.i.2009, leg. M. Snížek', 4 spec. (ADWA, PBPC).

Distribution: Brazil, Paraguay, Bolivia, Argentina.

8. *Dyschiriodes (Eudyschirius) peruanus* (Fedorenko, 1991)

Dyschirius peruanus Fedorenko, 1991a: 138.

Dyschiriodes (Eudyschirius) peruanus: Fedorenko (1999): revised generic placement.

Holotype: not studied; described from 'Peru, dept. Ukayali, 60 km W of Pukalpa, Ivita station, 8.vii.1986 A. A. Zakharov', (ZIPR).

Distribution: Peru, Bolivia.

9. *Dyschiriodes (Eudyschirius) amazonicus* (Fedorenko, 1991)

Dyschirius amazonicus Fedorenko, 1991a: 140.

Dyschiriodes (Eudyschirius) amazonicus: Fedorenko 1999: revised generic placement.

Holotype: '121. Amazonie / Santarem (F.A.O.) / Mission de Diamantina / 15.xii.1963 / G. Marlier // R. I. Sc. N. B. / I. G. 23.156 // Holotypus *Dyschirius / amazonicus* sp. n. / Fedorenko design.', (ISNB).

Distribution: Brazil.

10. *Dyschiriodes (Eudyschirius) braziliensis* Fedorenko, 1999

Dyschiriodes (Eudyschirius) braziliensis Fedorenko 1999: 150.

Holotype: 'Brasilien / St. Catharina / Theresopolis / Fruhstorfer S. // Zool. Mus. / Berlin // Holotypus 1998 / *Dyschiriodes braziliensis* sp. n. / Fedorenko design. 156', (ZMBG).

Distribution: Brazil.

11. *Dyschiriodes (Eudyschirius) macrophthalmus* Fedorenko, 1999

Dyschiriodes (Eudyschirius) macrophthalmus: Fedorenko 1999: 151.

Holotype: not studied; described from 'Peru, Marañon riv., 30 km NW of Nauta, Buen Fin, 7-9.ii.1997, leg. A. Petrov', (DFMR).

Distribution: Peru.

12. *Dyschiriodes (Eudyschirius) selvas* Fedorenko, 1999

Dyschiriodes (Eudyschirius) macrophthalmus: Fedorenko 1999: 151.

Holotype: 'Brasil / Amazonas, Óbidos / 17-18.viii.1992 / leg. J. Marek // Holotypus / *Dyschiriodes / selvas* sp. n. / Fedorenko design. 1998', (OHPC).

New material examined: 'Peru, Panguana / Rio Pachitea, 260m / 9°37'S;74°56'W // Rio Yuyapichis / 14.vii.1986 / leg. Listabarth', 1 spec., (ADWA).

Distribution: Brazil, Bolivia, Peru.

13. *Dyschiriodes (Eudyschirius) ecuadorensis* Bulirsch, 2006

Dyschiriodes (Eudyschirius) ecuadorensis Bulirsch, 2006: 2.

Holotype: 'Ecuador: Manabi / Puerto Lopez, 10 m, 20.ii.1993 / Giovanni Onore, Luca Bartolozzi // Holotypus / *Dyschiriodes / ecuadorensis* sp. n. / P. Bulirsch des. 2001', (CMNH).

Distribution: Ecuador.

14. *Dyschiriodes (Eudyschirius) bousqueti* Bulirsch, 2006

Dyschiriodes (Eudyschirius) bousqueti Bulirsch, 2006: 3.

Holotype: 'Brazil, PR / Riberao, 900 m. / 15.xi.1970, JM / & BA Campbell // Holotypus / *Dyschiriodes / bousqueti* sp. n. / P. Bulirsch des. 2006', (ERCC).

Distribution: Brazil.

15. *Dyschiriodes (Eudyschirius) baehri* Bulirsch, 2006

Dyschiriodes (Eudyschirius) baehri Bulirsch, 2006: 6.

Holotype: 'Brasilien, Tapurucuara am Rio Negro / Amazonas, 7.ii.1963, C. Lindemann // Holotypus / *Dyschiriodes / bousqueti* sp. n. / P. Bulirsch des. 2006', (ZSMG).

Distribution: Brazil.

16. *Dyschiriodes (Eudyschirius) fedorenkoi* Bulirsch, 2006

Dyschiriodes (Eudyschirius) fedorenkoi Bulirsch, 2006: 8.

Holotype: 'Brasilien A 244, Rio Tonantina / Villa Nova, 29.viii.1964, leg. Frittkau // Holotypus / *Dyschiriodes / fedorenkoi* sp. n. / P. Bulirsch des. 2002', (ZSMG).

Distribution: Brazil.

17. *Dyschiriodes (Eudyschirius) erwini* Bulirsch, 2009

Dyschiriodes (Eudyschirius) erwini Bulirsch, 2009: 19.

Holotype: 'S[antia]go del Estero / Anatuya / iv.1963 Kohler // Argentina / 1968 Colln / J Daguerre // Holotypus / *Dyschiriodes / erwini* sp. nov. / P. Bulirsch des. 2009', (USNM).

Distribution: Argentina.

18. *Dyschiriodes (Eudyschirius) clorinda* Bulirsch, 2009

Dyschiriodes (Eudyschirius) clorinda Bulirsch, 2009: 22.

Holotype: 'ARGENTINA: Formosa / 50 km NW Clorinda / P.N. Rio Pilcomayo / 19.xii.1990, S. & J. Peck / march edge u.v.90-122 // Holotypus / *Dyschiriodes / clorinda* sp. nov. / P. Bulirsch des. 2009', (CNMC).

Distribution: Argentina.

19. *Dyschiriodes (Eudyschirius) kirschenhoferi* sp. nov.

Holotype: 'Paraguay: 30.vii.1995 / Dep. Alto Paraguay / 90 km NW Bahia Negra / Leg. Drechsel // Holotypus / *Dyschiriodes / kirschenhoferi* sp. nov. / P. Bulirsch des. 2011', (NMWA).

Distribution: Paraguay.

20. *Dyschiriodes (Eudyschirius) magrinii* sp. nov.

Holotype: 'Argentina NW / S of Santa Maria / Ruta 40, 2200 m / (W of Tucuman) / 10.ii.2010, leg. Snížek // Holotypus / *Dyschiriodes / magrinii* sp. nov. / P. Bulirsch des. 2011', (PBPC).

Distribution: Argentina.

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REFERENCES

- BULIRSCH P. 2006: Four new species of the genus *Dyschiriodes* from South America and notes about next species from the same region (Coleoptera: Carabidae: Scaritinae). *Studies and Reports of District Museum Prague-East. Taxonomical Series* 2: 1-14.
- BULIRSCH P. 2009: Two new species of the genus *Dyschiriodes* (Coleoptera: Carabidae: Scaritinae: Dyschiriini) from South America and notes about next species from the same region. Part 2. *Studies and Reports of District Museum Prague-East. Taxonomical Series* 5: 17-26.
- FEDORENKO D. N. 1991a: [New species of the genus *Dyschirius* Bon. (Coleoptera, Carabidae) from South America]. *Zoologicheskij Zhurnal* 70 (7): 138-140 [in Russian].
- FEDORENKO D. N. 1991b: [Two new species of Dyschiriini (Coleoptera, Carabidae) from Africa and South America]. *Zoologicheskij Zhurnal* 70 (10): 144-147 [in Russian].
- FEDORENKO D. N. 1996: *Reclassification of world Dyschiriini, with a revision of the Palearctic fauna (Coleoptera, Carabidae)*. Sofia-Moscow-St. Petersburg: Pensoft publishers, 224 pp.
- FEDORENKO D. N. 1999: Description of three new species of the genus *Dyschiriodes* Jeannel, 1941, from South America, with a review of the *pampicola*-group (Coleoptera, Carabidae, Dyschiriini), pp.139-152. In: ZAMOTAILOV A. & SCIAKY R.: *Advances in Carabidology (Papers Dedicated to the Memory of Prof. Dr. Oleg L. Kryzhanovskij)*. Krasnodar: MUIISO Publishers, 473 pp.
- KULT K. 1950: New Neotropical species of group Clivinina. *Časopis Československé Společnosti Entomologické* 47: 129-149.
- PUTZEYS J. A. A. H. 1866: Révision générale des clivinides. *Annales de la Société Entomologique de Belgique* 10: 1-242.

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