

## Species of the tribe Dyschiriini (Coleoptera: Carabidae: Scaritinae) from Turkey, Syria and Cyprus

Petr BULIRSCH<sup>1)</sup> & Dmitri FEDORENKO<sup>2)</sup>

<sup>1)</sup>Milánská 461, CZ-109 00 Praha 111, Czech Republic;  
e-mail: Petr.bulirsch@danone.com

<sup>2)</sup>A. N. Severtsov Institute of Ecology & Evolution, Russian Academy of Sciences,  
Leninsky pr. 33, 119071 Moscow, Russia

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**Abstract.** *Reicheiodes kulzeri* sp. n. from Turkey and *Dyschiriodes dostali* sp. n. from Syria and Turkey are described, illustrated and compared with the related taxa. *Dyschiriodes jedlickai* (Kult, 1940) from Turkey is redescribed, lectotype and paralectotype are established. The taxonomic value of the latter species as well as *D. smyrnensis* Fedorenko, 1996, *D. importunoides* (Jeanne, 1996), *D. beydagensis* (Jeanne, 1996) and *D. buglanensis* (Bulirsch, 1996), four closely allied taxa of the *D. fulvipes* subgroup (sensu Fedorenko, 1996), is discussed. Data from the literature are compiled and new records of Dyschiriini species from Turkey, Syria and Cyprus are given.

### INTRODUCTION

Dyschiriini from Turkey, Syria, Cyprus, especially from two latter countries, are poorly known. Many findings (often only general) were listed in Fedorenko (1996); several exact data (mostly from Turkey) in Bulirsch (1996); general data about Turkish species and especially voluminous literary data in Casale & V. Taglianti (1999). Jeanne (1986) quoted species from Cyprus and Balkenohl (2003) listed compiled data from all three countries. We have based our article on material determined by both of us and on data from above quoted articles; only some specific quotations were extracted from Korge (1971) and Sahlbeg (1913); especially the second author has been cited only exceptionally because his article was published before the first recent revision of Dyschiriini: Müller (1922) so that some quotation are either doubtful or unclear. Fedorenko (1996), Jeanne (1996) and Bulirsch (1996) described 4 new, sibling species from the *D. (Eudyschirius) fulvipes* subgroup (s. Fedorenko, 1996) almost at the same time. The status of these forms was discussed and/or diverse synonymy established in Casale & V. Taglianti (1999), Fedorenko (2001) and Balkenohl (2003).

The main purpose of the article presented here is to give an overview of Dyschiriini from Turkey, Syria and Cyprus, to describe 2 new taxa, *Reicheiodes kulzeri* sp. n. from Bulgar Dag, Turkey, and *D. (Eudyschirius) dostali* sp. n. from Syria and S Turkey and to redescribe *Dyschiriodes jedlickai* (Kult, 1940). We also have compared basic data from the literature concerning Dyschiriini from quoted countries and added new findings. The list of Dyschiriini from Turkey, Syria and Cyprus has been put together and commented.

## MATERIAL AND METHODS

We have studied very voluminous material, especially from Turkey. All quoted specimens have been determined by the first author, some of them also by the second author.

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. We have measured all specimens of the new species. Label data of all specimens are quoted verbatim. Male genitalia (aedeagi) were embedded in Canada Balsam, euparal or were fixed with watersoluble glue.

List of used collections:

- AD collection of A. Dostal, Wien, Austria (incl. coll. K. Kult)  
DF collection of D. Fedorenko  
MHNG Muséum d'Histoire Naturelle, Geneve, Switzerland, (G. Cuccodoro)  
NHMB Naturhistorisches Museum, Basel, Switzerland, (M. Brancucci),  
NMP National Museum, Prague, Czech Republic, (J. Hájek)  
NKME Naturkundemuseum, Erfurt, Germany, (M. Hartmann)  
PB collection of P. Bulirsch (by some species additional specimens in collections of collectors)  
PV collection of P. Vonička, Liberec  
VS collection of V. Skoupý, Kamenné Žehrovice

Abbreviations:

dB: determined by P. Bulirsch; dF: determined by D. Fedorenko

CY: Cyprus; SY: Syria ; TR: Turkey

ASP: apical setiferous puncture(s); BSP: basal (prescutellar) setiferous puncture(s); DSP: dorsal setiferous puncture(s); PASP: preapical setiferous puncture(s); PHSP: posthumeral setiferous puncture(s)

HT: holotype; PT: paratype ; LT: lectotype; PLT: paralectotype

## RESULTS

### *Reicheiodes (Reicheiodes) kulzeri* sp. n. (Figs 1, 1a,b,c)

**Type material.** Holotype (♂) labelled: „(Turkey), Bulgar-Dagh, Kulzer (leg.), 1914”; printed „Museum Frey Tutzing” and „Reicheia frondicola det. Ing. Jedlička” (NHMB). Paratypes. 1 (♀): the same data as HT (NMP); 1 (♂): „(Turkey), Bulgar-Dagh, Kulzer (leg.), 1914” (PB).

**Description.** As in Fig. 1; length 2.10-2.35 mm (HT 2.15 mm). Monochromous reddish-yellow.

Head. Anterior margin of clypeus between laberal lobes slightly truncate, transverse clypeofrontal suture deep, broad and straight. Surface strongly vaulted, even, smooth. Eyes slightly reduced, slightly flattened, genae well developed, one third of eyes length. Facial

furrows deep, distinctly converged apically. Antennae moniliform. Mentum with large ringed pores (labial pits).

Pronotum. Barely attenuating anteriorly, slightly, subequally rounded on sides, moderately rounded between peduncle and posterolateral setiferous punctures; 1.02-1.05 (HT 1.02) times as wide as long, front margin straight. Front transverse impression impunctate, very superficial laterally, just traceable on disc, obliterated at middle. Median line starting at about middle between front margin and visional apex of front transverse impression, thin but very distinct, slightly deeper on very basal inclination. Reflexed lateral margin fine, extended to or slightly beyond posterior setiferous punctures.

Elytra. Regularly oblong-oval, 1.72-1.81 (HT 1.72) times as long as wide, 1.18-1.23 (HT 1.22) times as wide as pronotum; base without BSP and tubercle, strongly oblique from peduncle to humeri; outline slightly rounded laterally, broadest at about middle, subequally attenuating anteriorly and posteriorly, with moderately rounded apex and finely bordered base. Humeri hardly marked, without humeral denticle. Suture slightly depressed on very basal slope. Striae very fine and very finely punctured; first striae distinct in basal part but obsolete apically, lateral striae composed from rows of punctures; punctuation disappearing before posterior DSP; striae 6-7 composed from minute and separate punctures in basal half of elytra, stria 8 obliterated. PHSP 3, PASP 3, DSP 3 (in middle of interval 3), ASP 2, just adjoining with fine apical stria.

Legs. Apical spine of protibia not elongated, about as long as straight apical spur, curved backwards. Distal marginal tooth large and wide, proximal one small but distinct. Hind procoxae slightly separated, not contiguous.

Aedeagus. As in Figs 1a-c. Same structure and shape as in remaining members of subgenus, except for its much smaller lamella (Fig. 1b). Distal part of penial internal sac (Fig. 1c) ventrally with structure similar to triangular plate characteristic of members of *Dyschiriodes (Eudyschirius) lafertei* group (sensu Fedorenko, 1996), especially to *D. fulvipes* (Dejean, 1825), but covered by very long, spicula-like microtrichia instead of microscopic teeth.

**Differential diagnosis.** *R. kulzeri* sp. n. can be easily distinguished from remaining species of the subgenus *Reicheiodes* s. str. (s. Dostal, 1993) by much longer elytra (elytral index 1.7-1.8 versus about 1.5 by all other species), by bigger eyes and by much smaller penial lamella. All of these particulars seem plesiomorphous for the subgenus. When combined with the peculiar endophallic structure, they drive the present species closer to a form ancestral for the genus and stress the similarity or affinity between this form and some of *Dyschiriodes (Eudyschirius)* species.

**Name derivation.** Named after collector of type specimens.

***Dyschiriodes (Eudyschirius) dostali* sp. n.**  
(Figs 2, 2a,b)

**Type material.** Holotype (♂) labelled: „S/25, W-Syrien, ca 5 km W of Homs, 480 m, N 34°42', E 36°37', 9.v.2002, leg. Barries, Dostal, Preiss” (AD). Paratypes: 1 (♂), 5 (♀♀)

the same data as HT (AD, PB); 1 (♀), labelled: „Turkey, Kömürler, 21.v.1993, M. Šárovec” (PB).

**Description.** As in Fig. 2; length 4.10-4.50 mm (HT 4.10, mean 4.21 mm). Dark brown, with slight bronze lustre, legs, mouthparts and base of antennae red, antennae from antennomere 3 slightly infuscate.

Head. Anterior margin of clypeus between lateral lobes indistinctly bisinuate, transverse clypeofrontal suture deep, broad and straight. Surface strongly vaulted, even, smooth. Eyes moderately big, convex.

Pronotum. Even and smooth, rather strongly convex, 1.00-1.09 (HT 1.04, mean 1.05) times as wide as long, slightly attenuating anteriorly, broadest in third fourth; outline in anterior part only slightly rounded; posterior angles very broadly rounded. Front transverse impression rather deep, very finely punctate; median line moderately impressed; reflexed lateral margin extended to or almost to posterior setiferous puncture.

Elytra. Ovate, 1.59-1.64 (HT 1.60, mean 1.61) times as long as wide, 1.20-1.29 (HT 1.26, mean 1.25) times as wide as pronotum; base slightly sloping, humeri broadly rounded, moderately protruding; outline rather strongly convex, broadest before middle; suture almost not depressed at base. Base slightly bordered, without tubercles, with distinct BSP. Elytral striae 1-7 very fine, only very slightly weakening apically and extremely fine punctured up to apex; stria 1 at base not deepened; stria 8 in basal half slightly finer, almost dissapearing apically; elytral intervals flat, each about 3-4 times broader than striae. PHSP: 3, ASP: 2, DSP: 3 (in interval 3).



Figs 1-2. Habitus of HT (real length in parentheses behind the name). 1- *R. kulzeri* sp. n. (2.15 mm), 2- *D. dostali* sp. n. (4.10 mm).

Legs. Apical spine on protibia rather long, almost not curved backwards and moderately curved inwards, longer than apical spur; distal marginal tooth moderately big, proximal one very small and blunt.

Aedeagus. As in Figs 2a,b; characteristic to *D. fulvipes* subgroup (sensu Fedorenko, 1996); very similar to their Turkish, recently described species (*D. smyrnensis*, *D. beydagensis*, *D. importunoides* and *D. buglanensis*), only apical lamella of median lobe from ventral view (Fig. 2b) broader than by these species.

**Differential diagnosis.** *D. dostali* sp. n. belongs to the *D. fulvipes* subgroup (sensu Fedorenko, 1996). It can be distinguished from both nearest species, *D. buglanensis* and *D. beydagensis* and from *D. smyrnensis* and *D. importunoides*, next closely allied species, by distinctly larger body (4.1-4.5 mm versus 3.2-3.8 mm); by much finer, very finely punctate elytral striae; by absolutely flat elytral intervals and by slightly broader apical lamella of median lobe of aedeagus. Moreover it differs from *D. buglanensis* by lighter legs and antennae; from *D. beydagensis* and especially from *D. smyrnensis* and *D. importunoides* by much longer lateral margin of pronotum.

**Name derivation.** Named after our friend Alexander Dostal, specialist in Scaritinae, collector of type specimens.

#### *Dyschiriodes (Dyschiriodes) jedlickai* (Kult, 1940)

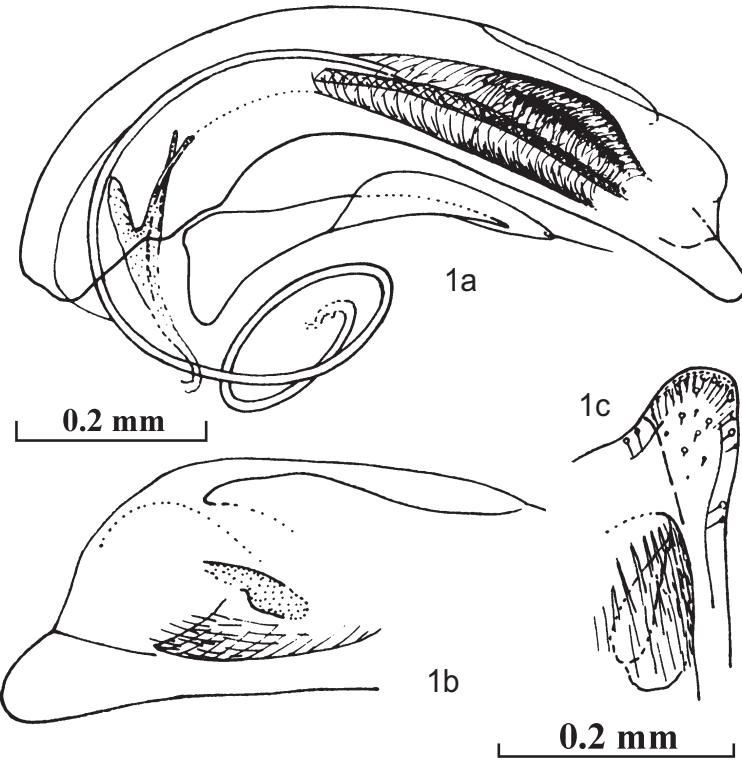
**Type material.** Lectotype (♂) labeled: „Asia min., Adana-06”; red printed label „Type”; handwritten „Jedličkai m. det. K. Kult” and „Lectotype, Dyschirius jedlickai Kult, 1940, P. Bulirsch & D. Fedorenko des. 2007” (AD). Paralectotype. 1 (♀) with the same data as Lectotype except last label „Paralectotype, Dyschirius jedlickai Kult, 1940, P. Bulirsch & D. Fedorenko des. 2007” (AD).

**Other material studied:** 6 spec. labelled: „TR or., Tunçeli env., 1000 m, 20.v.2000, Skoupý leg.” (dB, dF, PB, VS); 1 spec. labelled: „Türkiye, Kurdistan, Bingöl S, Genç, Murat Nehri (river), Flussufer (Sand, Schotter), 996 m üNN, N 38°44.933', E 40°31.744', 19.viii.2002, leg.: Schnitter/Staven” (dB, PB).

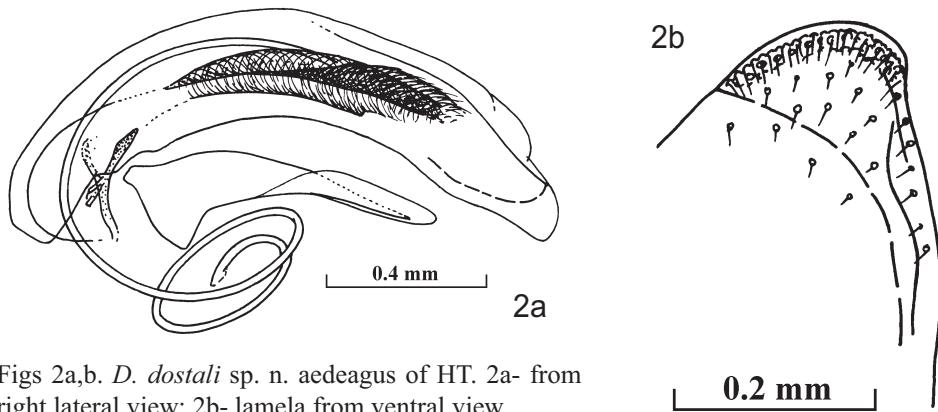
**Redescription.** Length 3.95-4.30 mm (LT 3.95 mm, PLT 4.05, mean 4.15 mm); dark brown, with slight bronze lustre; legs, mouthparts and base of antennae red brown, antennae with apical antennomeres not to slightly infuscated.

Head. Anterior margin of clypeus between lateral lobes very slightly convex, clypeofrontal suture transversely straight, next 1-2 irregular furrows just behind it. Surface vaulted, smooth, with fine wrinkles by posterior margin of eyes. Eyes moderately big, convex.

Pronotum. Even and smooth, rather strongly convex, 1.02-1.11 (LT 1.11, PLT 1.07, mean 1.06) times as long as wide, slightly (PLT) to moderately (LT) attenuating anteriorly, broadest in third fourth; outline in anterior part slightly (LT) to moderately (PLT) convex; posterior angles very broadly rounded. Front transverse impression rather deep, finely



Figs 1a,b,c. *R. kulzeri* sp. n. aedeagus of PT. 1a- from right lateral view; 1b- lamela from ventral view; 1c- apex from left lateral view.



Figs 2a,b. *D. dostali* sp. n. aedeagus of HT. 2a- from right lateral view; 2b- lamela from ventral view.

punctate; median line moderately impressed; reflexed lateral margin extended slightly beyond posterior setiferous punctures.

Elytra. Oblong-oval, 1.79-1.83 (LT 1.83, PLT 1.83, mean 1.81) times as long as wide, 1.16-1.27 (LT 1.24, PLT 1.16, mean 1.25) times as wide as pronotum; base moderately sloping; humeri slightly rounded, rather protruding; outline slightly broadening, broadest at about middle; suture slightly depressed at base. Base not bordered, with small tubercles, with distinct BSP. Elytral striae 1-7 very deep throughout, very roughly punctured, stria 8 much finer; stria 1 at base deepened, distinctly connected with BSP; stria 7-8 in apical fourth very deep; elytral intervals rather narrow, vaulted. PHSP: 1, ASP: 2, DSP: 3 (touching stria 3).

Legs. Apical spur as long as apical spine, strongly curved apically; distal marginal teeth very small and blunt, proximal one indistinct.

**Differential diagnosis.** *D. jedlickai* sp. n. belongs to the *D. nitidus* group (sensu Fedorenko, 1996). It can be distinguished from the nearest species, *D. agnatus* (Motschulsky, 1844), by number of DSP (3 versus 2); by narrower pronotum and elytra (ratios length/width : pronotum 1.06 versus 1.01; elytra 1.81 versus 1.76); by in average smaller body and by in average coarser elytral striae punctures. *D. jedlickai* sp. n. differs from *D. nitidus* (Dejean, 1825) by distinctly curved apical spur, by smaller body and by narrower pronotum and elytra.

**Remark.** Lectotype have been established to fix this taxon, elevated here from synonymy.

#### List of Dyschiriini species from Cyprus, Syria and Turkey

Species in parentheses have already been quoted but its occurrence is doubtful. We have exactly quoted new findings only by very rare species and/or by species new for each region. Total number of determined specimens (including specimens quoted in Bulirsch, 1996) is listed by each species and country in behind the abbreviation of each country.

#### 1. Genus *Dyschirius* Bonelli, 1810

##### (1.1. *D. thoracicus* (Rossi, 1790))

Sahlberg (1913): SY „in litore arenoso ad Berytum, IV.” (as *D. thoracicus* var. *numidicus* Putzeys; quoted specimens probably belong to following species); Balkenohl (2003): SY (as *D. arenosus* Stephens, 1827).

Distribution and comment: (SY); possible (not probable) in Turkey. Citation SY in Balkenohl (2003) is probably based on Sahlberg (1913); occurrence in SY is not probable.

##### 1.2. *D. beludscha ganglbaueri* Tschitscherine, 1904

Sahlberg (1913): see comment by previous species; Balkenohl (2003): SY.

New examined material: TR: „TR, vill. Trabzon, Maçka env., Sidiran, 8.vi.1998, VI. Kubík lgt.” (dB, dF, PB).

Distribution and comment: SY (44), TR (1); new species for TR.

(1.3. *D. humeratus* Chaudoir, 1850)

Casale & V. Taglianti (1999); Balkenohl (2003): TR.

Distribution and comment: TR; it is necessary to confirm occurrence in TR.

1.4. *D. humiolcus* Chaudoir, 1850

Korge (1971): „Ufer eines Wildbaches bei Ilıca im Tal von Ardeşen, 3.vi.1968, 1000 m”.

Fedorenko (1996); Bulirsch (1996); Casale & V. Taglianti (1999); Balkenohl (2003): TR.

Distribution and comment: NE of TR (8).

1.5. *D. latipennis* Seidlitz, 1867

Sahlberg (1913): TR: „ad ripam fluminis Hermi (pr. Izmir) V. 11 legit filius Unio”; Fedorenko

(1996); Bulirsch (1996); Casale & V. Taglianti (1999); Balkenohl (2003): TR.

Distribution and comment: TR (50).

1.6. *D. numidicus ponticus* Lutshnik, 1921

Korge (1971): TR: „Ünye, zahlreich an der Mündung eines Baches ins Schwarze Meer im Ufersand, 27.v.1964” (under name *D. caspius* Putzeys, 1866); Casale & V. Taglianti (1999): as *D. caspius* Putzeys, 1966.

New examined material: TR: „Turkey N, Prov. Samsun, Kizilirmak Deltasi, E of Bafra, Balık Gölü env., 17.vi.1998, P. Vonička lgt.” (dB, PV, PB); „Europ. Türkei Silivri, 21.ix.1965, lg. W. Heinz” (AD, PB).

Distribution and comment: TR (20); not quoted in Balkenohl (2003). Fedorenko (2001) solved status of some taxa of the *D. numidicus* subgroup. Specimens from Black Sea area belong to *D. n. ponticus* whereas *D. n. caspius* Putzeys, 1866, is known from Caspian lake area only.

(1.7. *D. zimini* Znojko, 1928)

Fedorenko (1996); Bulirsch (1996); Casale & V. Taglianti (1999); Balkenohl (2003): TR.

Distribution and comment: (TR); all quotations are based on one, strongly damaged specimen, collected in S TR (Uluçinar). It is necessary to verify its occurrence in TR.

2. Genus *Dyschiriodes* Jeannel, 1946

2.1. *D. (Chyridysus) euxinus* (Znojko, 1927)

Fedorenko (1996); Bulirsch (1996); Casale & V. Taglianti (1999); Balkenohl (2003): TR.

Distribution and comment: TR (26); rare species known only from Ukraine and TR.

2.2. *D. (Chyridysus) strumosus* (Dejean, 1825)

Fedorenko (1996); Bulirsch (1996); Casale & V. Taglianti (1999); Balkenohl (2003): TR.

New examined material: CY: „Cyprus, Phasouri, reedbeds and beach, 22.vi.2007, K. Austin & E. Small lgt.”

Distribution and comment: CY (2), TR (over 50), new for CY.

### **2.3. *D. (Dyschiriodes) aeneus aeneus* (Dejean, 1825)**

Korge (1971): „Flussufer bei Of, 1.8.1964 (Tranzon); Hafik öst. Sivas, 8.vi.1968”; Bulirsch (1996); Casale & V. Taglianti (1999); Balkenohl (2003): TR.

Distribution and comment: TR (18). BSP is missing on both elytra by one of two specimens from Gölbasi.

### **2.4. *D. (Dyschiriodes) agnatus* (Motschulsky, 1844)**

Fedorenko (1996); Bulirsch (1996); Casale & V. Taglianti (1999); Balkenohl (2003): TR.

Distribution and comment: TR (over 150); widely distributed, common; possible in NW Syria.

### **2.5. *D. (Dyschiriodes) apicalis* (Putzeys, 1846)**

Fedorenko (1996); Bulirsch (1996); Casale & V. Taglianti (1999); Balkenohl (2003): TR.

Distribution and comment: TR (20).

### **2.6. *D. (Dyschiriodes) auriculatus auriculatus* (Wollaston, 1867)**

Jeanne (1986): CY (under name *D. tensicollis* Marseul, 1880); Fedorenko (1996); Balkenohl (2003): CY, TR; Bulirsch (1996); Casale & V. Taglianti (1999): TR.

New examined material: SY: „S/18, W-Syrien, distr. Aleppo, salt lake, Sabkhat al Jabboul, Hakla, N 35°59'23,5'', E 39°33'48,5'', 330 m, 5.-6.v.2002, lg. Barries, Dostal, Preiss” (AD, PB); „Syria occ. b., distr. Halab, Sabkhat al Jabbul lake env., 30 km SE of Halab, 400 m, 26.iv.2000, S. Benedikt leg.” (PB); „Syria bor., Halabiyyeh, 35°41'19''N, 39°49'31''E, 160 m, 17.-18.vi.1998, P. Kabátek leg.” (PB).

Distribution and comment: CY (1), SY (6), TR (3); new for SY.

### **2.7. *D. (Dyschiriodes) bacillus bacillus* Schaum, 1857**

Fedorenko (1996); Bulirsch (1996); Casale & V. Taglianti (1999); Balkenohl (2003): TR.

New examined material: TR (over 150).

Distribution and comment: W and S TR; coastal.

### **2.8. *D. (Dyschiriodes) cariniceps* (Baudi di Selve, 1864)**

Jeanne (1986): CY; Fedorenko (1996): CY, TR; Bulirsch (1996): TR; Casale & V. Taglianti (1999): TR; Balkenohl (2003): CY, TR.

New examined material: SY: „Syria Al Hasakah env., Tell Brak, 5.vi.1998, J. Mertlík lgt.” (PB); „Syria Dura Europos (Deir ez-Zur), 34°45'N, 40°44'E, 235 m, 19.vi.1998, Šobotník lgt.” (PB); „Syria occ. b., distr. Halab, Sabkhat al Jabbul lake env., 30 km SE of Halab, 400 m, 26.iv.2000, S. Benedikt leg.” (PB); „Syria c., distr. Dayr az Zawr, Al Tibni env., Eufrat riv. env., 24.iv.2000, S. Benedikt leg.” (PB); „Syria occ. b., distr. Halab, Dibsi Faraj env., 400 m (80 km E of Halab), salt marsh, 25.iv.2000, S. Benedikt leg.” (PB); „S/18, W-Syrien, distr. Aleppo, salt lake, Sabkhat al Jabboul, Hakla, N 35°59'23,5'', E 39°33'48,5'', 330 m, 5.-6.v.2002, lg. Barries, Dostal, Preiss” (AD, PB).

Distribution and comment: CY (13), SY (15), TR (over 150); new for SY. According to Fedorenko (1996) and Balkenohl (2003) this species has been found only in the east mediterranean area. Authors recently determined large series from the more western localities

- Italy: e. g. „Sardegna, 10 km W of Cagliari, Maddalena Spiaggia env., 23.iv.1996, T. Kopecký lgt.” (dB, dF, PB); „Sicilie mer., Etang Cuba, m. 40, Pachino, 20.iv.2000, Besuchet lgt.” (dB, dF, PB); Greece: „Grl., Tristomon, Carpathos, 16.iv.1982, leg Schmallfuss” (dB, PB); Tunisia: e.g. „Tunisia mer. or., Sembat oase, 3 km W of Hamma, 3.-4.iv.1997, T. Kopecký lgt.” (dB, dF, PB); Algeria: „Biskra, Fin. Avril 1895, Dr A. Chobaut (lgt.)” (dB, PB); Libya: „Libya, Tripoli” (dB, PB). Specimens of this species often have been determined erroneously as *D. minutus* (Dejean, 1825).

### **2.9. *D. (Dyschiriodes) chalceus* (Erichson, 1837)**

Bulirsch (1996): TR (Eur); Casale & V. Taglianti (1999): ?TR; Balkenohl (2003): TR (Eur). New examined material: TR: „Turkey N, Prov. Samsun, Kizilirmak Deltasi, E of Bafra, Balik Gölü env., 17.vi.1998, P. Vonička lgt.” (PV, PB); „Türkische, Kurdistan, Van Gölü, N Ufer b. Celebiaga, Ercis WSW, Salzschlammflur/Rud., 1670 m NN, N 38°44.249', E 43°18.927', 26.viii.2002, leg.: Schnitter/Staven” (PB).

Distribution and comment: TR (6); new for Asian part of TR.

### **2.10a. *D. (Dyschiriodes) chalybeus gibbifrons* (Apfelbeck, 1899)**

Bulirsch (1996); Casale & V. Taglianti (1999); Balkenohl (2003): TR.

Distribution and comment: TR (over 150); except SE coastal part; citation Israel in Balkenohl (2003) belongs to the following subspecies.

### **2.10b. *D. (Dyschiriodes) chalybeus resli* (Bulirsch, 1996)**

Bulirsch (1996): TR, (Israel); Casale & V. Taglianti (1999); Balkenohl (2003): TR.

New examined material: CY: „TR. Zypern-N., Gönyeli, 9.iv.1992, leg. Winkelmann-Klöck” (dB, PB).

SY: „Syria occ., distr. Homs, Buhayrat Qattinah lake env., (20 km SW of Homs), 2.v.2000, S. Benedikt leg.” (dB, PB); „Syria occ., Al Ghab area, Sqalbia env., 200 m, Macek leg.” (dB, PB); „S/25, W-Syrien, ca 5 km W of Homs, 480 m, N 34°42', E 36°37', 09.v.2002, leg. Barries, Dostal, Preiss” (dB, AD, PB).

Distribution and comment: CY (1), SY (15), SE coastal part of TR (HT, 50 PT, 7); new for CY, SY.

### **2.11. *D. (Dyschiriodes) clypeatus* (Putzeys, 1866)**

Balkenohl (2003): SY.

New examined material: TR: „Turkey c., Tuz Gölü, 30 km SE of Sereflikoçhisar, 22.vi.1992 and 30.vi.1993, lgt. P. Bulirsch” (dF, dB, PB).

Distribution and comment: SY (15), TR (5); new for TR; specimens from Tuz Gölü were quoted in Bulirsch (1996) and Fedorenko (1996) errorously under *D. pusillus* (Dejean, 1825). The latter species is probably widespread only in E and NE parts of TR. *D. clypeatus* and *D. pusillus* are closely allied or even conspecific; it is very difficult to determine specimens from bordering areas in TR.

### **2.12. *Dyschiriodes (Dyschiriodes) cylindricus hauseri* (Fleischer, 1898)**

Fedorenko (1996); Bulirsch (1996); Casale & V. Taglianti (1999); Balkenohl (2003): TR.

Distribution and comment: TR (11).

### **2.13. *D. (Dyschiriodes) euphraticus* (Putzeys, 1846)**

Fedorenko (1996); Bulirsch (1996); Casale & V. Taglianti (1999); Balkenohl (2003): TR.  
New examined material: SY: „S/21 W-Syrien, Idlib, Salma env., Alkabir Jamaly riv., N  
35°41'19.3'', E 36°03'24.9'', 125 m, 7.v.2002, lg. Barries, Dostal, Preiss” (AD, PB).  
Distribution and comment: SY (6), TR (50); new for SY.

### **2.14. *D. (Dyschiriodes) jedlickai* (Kult, 1940)**

Fedorenko (1996): TR (as ?syn. to *D. agnatus* (Motschulsky, 1844)); Bulirsch (1996): TR  
(described from Adana, status unclear); Casale & V. Taglianti (1999); Balkenohl (2003): TR,  
syn. to *D. agnatus*.

Distribution and comment: TR (LT, PLT, 7 specimens); listed here as a valid species (see  
Redescription).

### **2.15. *D. (Dyschiriodes) jordanicus* Fedorenko 1996**

Fedorenko (1996); Casale & V. Taglianti (1999); Balkenohl (2003): TR.  
New examined material: SY: „Syria litt., Jable, 12.x.1988, J. Macek leg.” (dB, PB); „S/21  
W-Syrien, Idlib, Salma env., Alkabir Jamaly riv., N 35°41'19.3'', E 36°03'24.9'', 125 m,  
07.v.2002, lg. Barries, Dostal, Preiss” (dB, AD).

Distribution and comment: SY (2), TR; new for SY; very rare species.

### **2.16. *D. (Dyschiriodes) laeviusculus* (Putzeys, 1846)**

Fedorenko (1996); Bulirsch (1996); Casale & V. Taglianti (1999); Balkenohl (2003): TR.  
Distribution and comment: N of TR (2).

### **2.17. *D. (Dyschiriodes) luticola luticola* (Chaudoir, 1850)**

Fedorenko (1996); Bulirsch (1996); Casale & V. Taglianti (1999); Balkenohl (2003): TR.  
Distribution and comment: TR (23).

### **2.18. *D. (Dyschiriodes) macroderus macroderus* (Chaudoir, 1850)**

Jeanne (1986): CY; Fedorenko (1996); Bulirsch (1996); Balkenohl (2003): CY, TR; Casale  
& V. Taglianti (1999): TR.  
Distribution and comment: CY (1), TR (7); its occurrence in NW of SY is very probable.

### **2.19. *D. (Dyschiriodes) mesopotamicus* (Müller, 1922)**

Fedorenko (1996); Bulirsch (1996): TR (specimens quoted from Artvin, Bingöl and Golbasi  
belong to *D. m. albanicus*); Casale & V. Taglianti (1999); Balkenohl (2003): TR.  
Distribution and comment: TR (11).

### **2.20. *D. (Dyschiriodes) microthorax* (Motschulsky, 1844)**

Fedorenko (1996); Bulirsch (1996); Casale & V. Taglianti (1999); Balkenohl (2003): TR.  
Distribution and comment: TR (8).

### **2.21. *D. (Dyschiriodes) minutus albanicus* (Müller, 1922)**

Fedorenko (2001): TR; Casale & V. Taglianti (1999): TR; Balkenohl (2003): CY, TR (under  
name *D. minutus* Dejean, 1825).

Distribution and comment: (CY), TR (17). Quotation from CY probably belongs to *D. cariniceps*.

### **2.22. *D. (Dyschiriodes) morio* (Putzeys, 1866)**

Fedorenko (1996); Bulirsch (1996); Casale & V. Taglianti (1999); Balkenohl (2003): TR.  
Distribution and comment: TR (over 150); possible in N SY.

### **2.23. *D. (Dyschiriodes) nitidus nitidus* (Dejean, 1825)**

Fedorenko (1996); Bulirsch (1996); Casale & V. Taglianti (1999); Balkenohl (2003): TR.  
New examined material: SY: „Syr. 30 km E of Latakia, Idleb env., 31.v.2002, Skoupý leg.”  
(dB, dF, PB, VS); „S/21 W-Syrien, Idlib, Salma env., Alkabir Jamaly riv., N 35°41'19.3'', E  
36°03'24.9'', 125 m, 07.v.2002, lg. Barries, Dostal, Preiss” (dB, AD, PB).

Distribution and comment: SY (11), TR (2); findings in SY were rather unexpected.

### **2.24. *D. (Dyschiriodes) pauxillus* (Wollaston, 1864).**

New examined material: TR (1 female): „Turkey m. (Hatay), Çevlik, 5 km N of Samandag,  
P. Bulirsch lgt.” (dF, dB, PB).

Distribution and comment: TR (1 female), (Israel); west mediterranean species, new for Asia;  
very surprising findings; only after study of a single male from Israel („Israele, Galilea, L.  
di Tiberiade, IV.1996, Sciaky lgt.”) was evident that both specimens are conspecific with *D. pauxillus*.

### **2.25. *D. (Dyschiriodes) persicus* Fedorenko, 1994**

Fedorenko (1996); Casale & V. Taglianti (1999); Balkenohl (2003): TR.

Distribution and comment: E TR; all quotation based on this single specimen from  
Muradyie.

### **2.26. *D. (Dyschiriodes) pusillus pusillus* (Dejean, 1825)**

Fedorenko (1996); Bulirsch (1996); Casale & V. Taglianti (1999): TR.

New examined material: TR: „Türkiye, Kurdistan, Bitlis, Van, Van Gölü, zw. Tatvan & Gevaş,  
Uferzone (Salz), 1660 m üNN, N 38°19.613', E 42°55.942', 21.viii.2002, leg.: Schnitter/  
Staven” (dB, PB); „Türkiye, vil. Kars, Tuzluca S, Cinceral Deresi, Flussufer (sandig-  
schlammig, z.T. versalzt) HF, 1013 m üNN, N 40°02'53.4'', E 43°44' 07.9'', 18.vii.2005,  
leg.: Schnitter” (dB, PB); „SE Turkey, Van Golu, 10 km E of Tatvan, 38 28 N, 42 32 E, 1650  
m, 25.vi.(20)02, E. & P. Hajdaj lgt.” (dF, dB, PB).

Distribution and comment: TR (8), mostly in its NE part; specimens quoted in Bulirsch  
(1996) from Tuz Gölü belong to *D. clypeatus*; not quoted in Balkenohl (2003).

### **2.27. *D. (Dyschiriodes) salinus striatopunctatus* (Putzeys, 1846)**

Jeanne (1986): CY; Bulirsch (1996); Casale & V. Taglianti (1999): TR; Balkenohl (2003):  
SY, TR.

Distribution and comment: CY (40); SY (1); TR (over 250); CY not quoted in Balkenohl  
(2003).



### **2.28. *D. (Eudyschirius) beydagensis* (Jeanne, 1996)**

Jeanne (1996); Casale & V. Taglianti (1999); Balkenohl (2003): TR ; Fedorenko (2001): TR (as syn. to *D. smyrnensis importunoides* (Jeanne, 1996)).

Distribution and comment: TR (1 PT, 12): Bey Daglari; listed here as a valid species (see Discussion below).

### **2.29. *D. (Eudyschirius) buglanensis* (Bulirsch, 1996)**

Bulirsch (1996); Fedorenko (2001); Balkenohl (2003): TR; Casale & V. Taglianti (1999): TR (as ?syn. to *D. beydagensis*).

Distribution and comment: NE part of TR (HT, 25 PT, 10 specimens); see Discussion below.

### **2.30. *D. (Eudyschirius) dostali* sp. n.**

Fedorenko (2001): TR (Kömürler as *D. smyrnensis importunoides*).

Distribution and comment: SY (HT, 6 PT), SE TR (1 PT).

### **2.31. *D. (Eudyschirius) dimidiatus dimidiatus* Chaudoir, 1846**

Casale and Taglianti (1999): TR (as *D. d. iranus* Kult, 1946).

New examined material: TR: „TR bor. or., Erzurum-Aşkale, 6.vii.1998, Skoupý leg.” (dF, dB, PB); „Turquie: Kars, sous Karakurt, fleuve Aras, 1400 m, 17.vi.1986, Besuchet, Loebl, Burckhardt leg.” (dB, MHNG, PB)

Distribution and comment: TR (4); not quoted in Balkenohl (2003).

### **(2.32. *D. (Eudyschirius) globosus* (Herbst, 1784))**

Fedorenko (1996): (Greece and Caucasus); Balkenohl (2003): TR (Eur).

New examined material: TR: „Asm. Adana” (dB, AD).

Distribution and comment: TR; only literary data from TR (Eur) and a single known, old specimen, with general label. It is necessary to confirm occurrence of this, more northern, species in TR.

### **2.33. *D. (Eudyschirius) importunoides* (Jeanne, 1996)**

Jeanne (1996) ; Casale & V. Taglianti (1999); Balkenohl (2003): TR; Fedorenko (2001): TR (as *D. smyrnensis importunoides* (Jeanne, 1996)).

New examined material: TR: „Türkei, distr. Alanya, 12 km W Payallar, 100 m NN, 04.iv.1996, leg. M. Hartmann” (dB, dF, NKME, PB); „(TR), Akseki/Pamphylien, 14.iii.(20)00, leg. Esser” (dB, PB).

Distribution and comment: S part of TR (2 PT, 4); listed here as a valid species (see Discussion below).

### **2.34. *D. (Eudyschirius) importunus importunus* Schaum, 1857**

Fedorenko (1996); Balkenohl (2003): CY, SY, TR; Bulirsch (1996); Casale & V. Taglianti (1999): TR.

Distribution and comment: CY (6); SY (7); TR (28).

### **2.35. *D. (Eudyschirius) smyrnensis* Fedorenko, 1996**

Fedorenko (1996); Fedorenko (2001); Casale & V. Taglianti (1999); Balkenohl (2003): TR.  
Distribution and comment: TR; known in a single HT from neighbourhood of Izmir.

### **2.36. *Dyschiriodes (Eudyschirius) syriacus* (Putzeys, 1866)**

Fedorenko (1996); Balkenohl (2003): SY.  
Distribution and comment: SY (1).

### **2.37. *D. (Paradyschirius) parallelus parallelus* (Motschulsky, 1844)**

Fedorenko (1996); Bulirsch (1996); Casale & V. Taglianti (1999); Balkenohl (2003): TR.  
Distribution and comment: TR (32); as published in Fedorenko (1996) one specimen from „TR b. - Afrin, Musabeyli, 20.viii.1947” (Exp. NMP) seems to be intermediate between *D. p. parallelus* and *D. p. ruficornis* (Putzeys, 1846).

### **2.38. *D. (Paradyschirius) substriatus priscus* (J. Müller, 1922)**

Korge (1971): TR: „Ünye, 1 Ex., an der Mündung eines Baches ins Schwarze Meer im Ufersand, 27.v.1964”  
Fedorenko (1996); Bulirsch (1996); Casale & V. Taglianti (1999); Balkenohl (2003): TR.  
Distribution and comment: TR (22); in the Caucasus Mts. there is widely distributed *D. s. caucasicus* Fedorenko, 1996 and its occurrence in very NE part of TR is not excluded. Both subspecies can be distinguished mainly by male genitalia so that a single female from „TR or. dep. Erzurum, Aras riv., Cobandede, 14.-15.7.1997, lgt. T. Kopecký” (dF, dB, PB) could only be determined as *D. substriatus* s. l.

## **3. Genus *Reicheiodes* Ganglbauer, 1891**

### **3.1. *Reicheiodes kulzeri* sp. n.**

Distribution and comment: TR (HT, 2 PT): Bulgar Dag.

## **SUMMARY AND DISCUSSION**

We have examined over 1900 specimens of 46 Dyschiriini species (47 taxa) from explored areas: 44 (45 taxa) of them from Turkey, 14 from Syria and 6 from Cyprus. The number of species, especially from Syria, is rather small and there is possibility to find next species namely there. *D. beludscha ganglbaueri* and *D. clypeatus* were quoted as new to Turkey; *D. auriculatus auriculatus*, *D. chalybeus resli*, *D. nitidus nitidus*, *D. jordanicus*, *D. euphraticus* and *D. cariniceps* as new for Syria and *D. chalybeus resli* and *D. strumosus* as new for Cyprus. *D. dostali* sp. n. and *R. kulzeri* sp. n. were described, *D. jedlickai* was redescribed, upgraded to species status, its LT and PLT were established. *D. smyrnensis*, *D. importunoides*, *D. beydagensis*, *D. buglanensis* and *D. dostali* sp. n., group of closely allied (sibling) species, maybe partially subspecies or even only forms, have been quoted as distinct species. Differences among them are rather small but constant; they are known only in small series and its areas are more or less geographically isolated. Casale & V. Taglianti (1999)

and Fedorenko (2001) proposed to synonymy some species within this group but we have decided to keep its species status for temporary time until larger material from intermediate zones is available.

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