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Contribution to the knowledge of the genus *Scaurus* Fabricius, 1775 (Coleoptera: Tenebrionidae: Scaurini) from Turkey

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Abstract. The genus *Scaurus* Fabricius, 1775 in Turkey is briefly reviewed. A new synonymy is proposed: *Scaurus macricollis* Allard, 1882 = *Scaurus puncticollis* var. *syriacus* Reitter, 1914, **syn. n.** *Scaurus julioferreri* **sp. n.** is described from Eastern Turkey (Kars Province); it differs from all Caucasian, Near and Middle East *Scaurus* by granulated (without punctation) space between ribs, all ribs are highly elevated, full dorsal rib reaching base of elytra and deep angulate anterior margin of epistoma with emargination in middle. The following species are registered in Turkey: the new one, *S. macricollis* Allard, 1882 (South Anatolia from Konya to Mardin), *S. dlabolai* Kaszab, 1959 (South Anatolia: Çukurova lowland), *S. araxinus* Richer, 1945 (Eastern Anatolia: Iğdır) and *S. tristis* A.G. Olivier, 1795 (Sinop). The latter species is recorded for Turkey for the first time; a result of anthropogenic introduction. Description of the previously unknown male of *S. dlabolai* and a key to species of *Scaurus* from Turkey are given.

Key words: Tenebrionidae, *Scaurus*, new species, Anatolia.

Вклад в познание рода *Scaurus* Fabricius, 1775 (Coleoptera: Tenebrionidae: Scaurini) Турции

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Резюме. Представлен краткий обзор анатолийских видов рода *Scaurus* Fabricius, 1775. Предлагается новая синонимия: *Scaurus macricollis* Allard, 1882 = *Scaurus puncticollis* var. *syriacus* Reitter, 1914, **syn. n.** *Scaurus julioferreri* **sp. n.** описан из Восточной Турции (провинция Карс) и отличается от всех кавказских и ближневосточных видов рода гранулированным (без пунктировки) пространством между ребрами, одинаково высоко приподнятыми ребрами, полными дорсальными ребрами, достигающими основания надкрылий, а также глубоко угловидно вырезанным передним краем эпистома с выемкой в середине. Кроме нового таксона в Турции зарегистрированы следующие виды: *S. macricollis* Allard, 1882 (Южная Анатолия от Коньи до Мардина), *S. dlabolai* Kaszab, 1959 (Южная Анатолия: низменность Чукурова) и *S. araxinus* Richer, 1945 (Восточная Анатолия: Ыгдыр), *S. tristis* A.G. Olivier, 1795 (Синоп; впервые зарегистрирован для Турции; результат интродукции). Впервые дано описание самца *S. dlabolai*. Составлена определительная таблица видов *Scaurus* Турции.

Ключевые слова: Tenebrionidae, *Scaurus*, новый вид, Анатолия.

Introduction

The genus *Scaurus* Fabricius, 1775 contains 44 species and subspecies (including the new one described herein) [Lillig, 1995; Labrique, 2008; Ferrer et al., 2014] distributed in the arid and semi-arid zones of the West Palaearctic (from the Atlantic coast to West Iran) and Afrotropic biogeographic region. The genus was revised by Reitter [1914], but later many taxonomic and faunistic data were published on Europe [Paulian, 1946; Español, 1968; López-Pérez, 2010] and Africa [Schuster, 1923; Peyerimhoff, 1946, 1948; Antoine, 1953, 1954; Kocher, 1958, 1964; Labrique, 1992, 1995a, b, c, 1999, 2002, 2004, 2005, 2007, 2008, 2009; Lillig, 1995, 2019; Lillig, Bremer, 2002]. Caucasian and partly Middle East species of *Scaurus* were recorded or revised by Bodemeyer [1900], Kaszab [1939, 1940,

1959], Richter [1945], Lillig and Pavlíček [2003], Taravati and Ferrer [2007], Abdurakhmanov and Nabozhenko [2011], Mas-Peinado et al. [2013], Ferrer et al. [2014] and Nabozhenko et al. [2018].

The genus *Scaurus* is represented in Turkey by one introduced species and native taxa, close to *S. puncticollis* Solier, 1838, which were interpreted by Koch [1935] and further authors as subspecies: *S. puncticollis macricollis* Allard, 1882, *S. puncticollis dlabolai* Kaszab, 1959, *S. puncticollis syriacus* Reitter, 1914. All mentioned names were listed for Turkey [Löbl et al., 2008]. Later, Ferrer et al. [2014] revised the *puncticollis* species-group and interpreted mentioned taxa as good species with small ranges. Nabozhenko et al. [2018] additionally recorded *S. araxinus* Richter, 1945 for Anatolia. As a result, five species can be listed from Turkey: *S. dlabolai* Kaszab,



Figs 1–6. *Scaurus dlabolai* and *S. macricollis*, habitus.
 1–3 – *S. dlabolai*; 4–6 – *S. macricollis*; 1–2, 4–5 – male; 3, 6 – female.
 Рис. 1–6. *Scaurus dlabolai* и *S. macricollis*, габитус.
 1–3 – *S. dlabolai*; 4–6 – *S. macricollis*; 1–2, 4–5 – самец; 3, 6 – самка.

1959 from Çukurova lowland [Kaszab, 1959; Ferrer et al., 2014], *S. araxinus* from Iğdır, *S. macricollis* from Southern Turkey, *S. tristis tristis* A.G. Olivier, 1795 from Sinop (anthropogenic introduction) and a new species from Kars Province described below.

The most problematic case is the taxonomy of the *Scaurus puncticollis* species-group. The majority of taxa (species or subspecies in different interpretations) of this group separate by variable structures of pronotal punctuation and male femoral teeth. In this work we interpret taxa of this species-group as separate species, but the final status of these taxa can be established using molecular-genetic analysis.

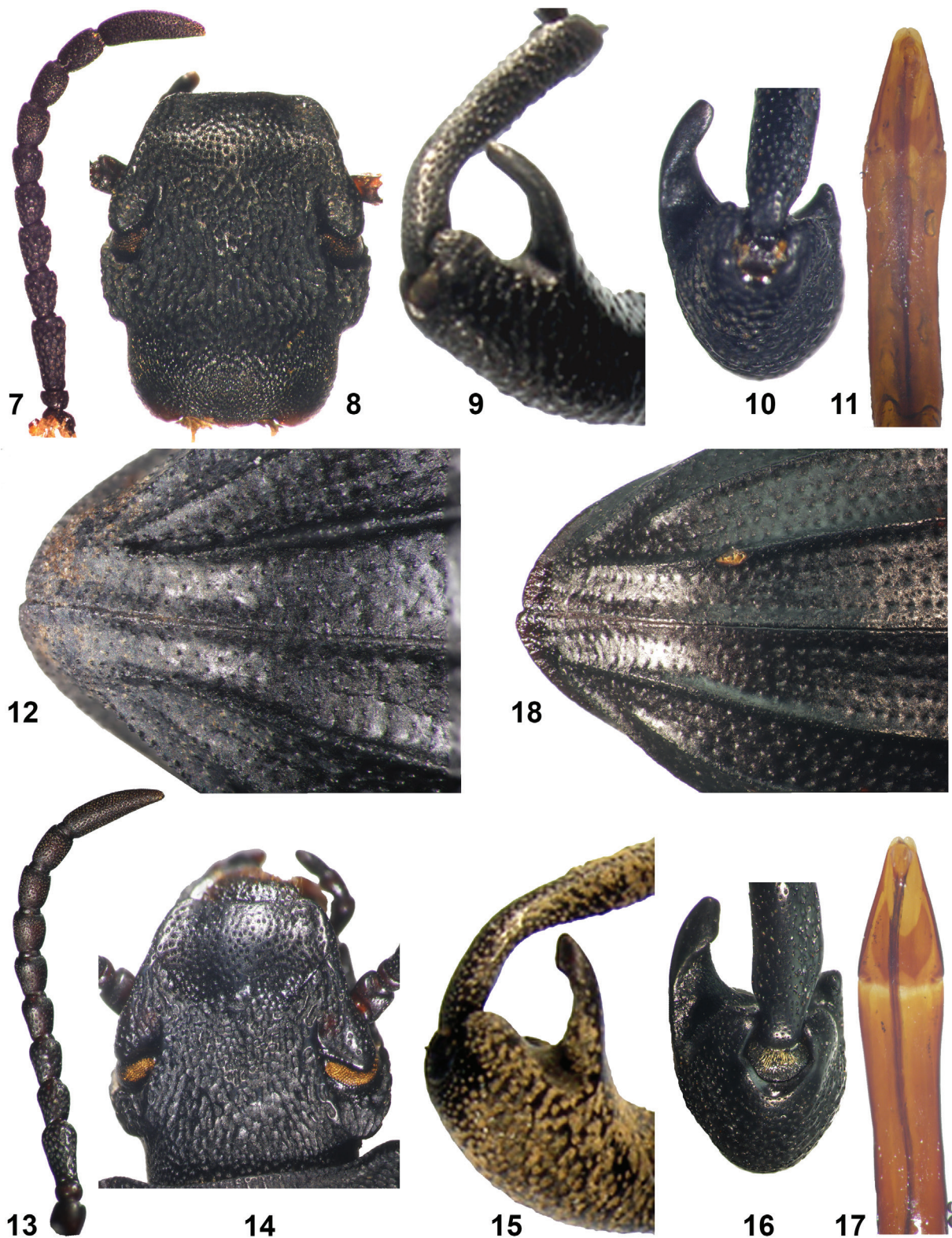
Material and methods

The material is deposited in the collections:

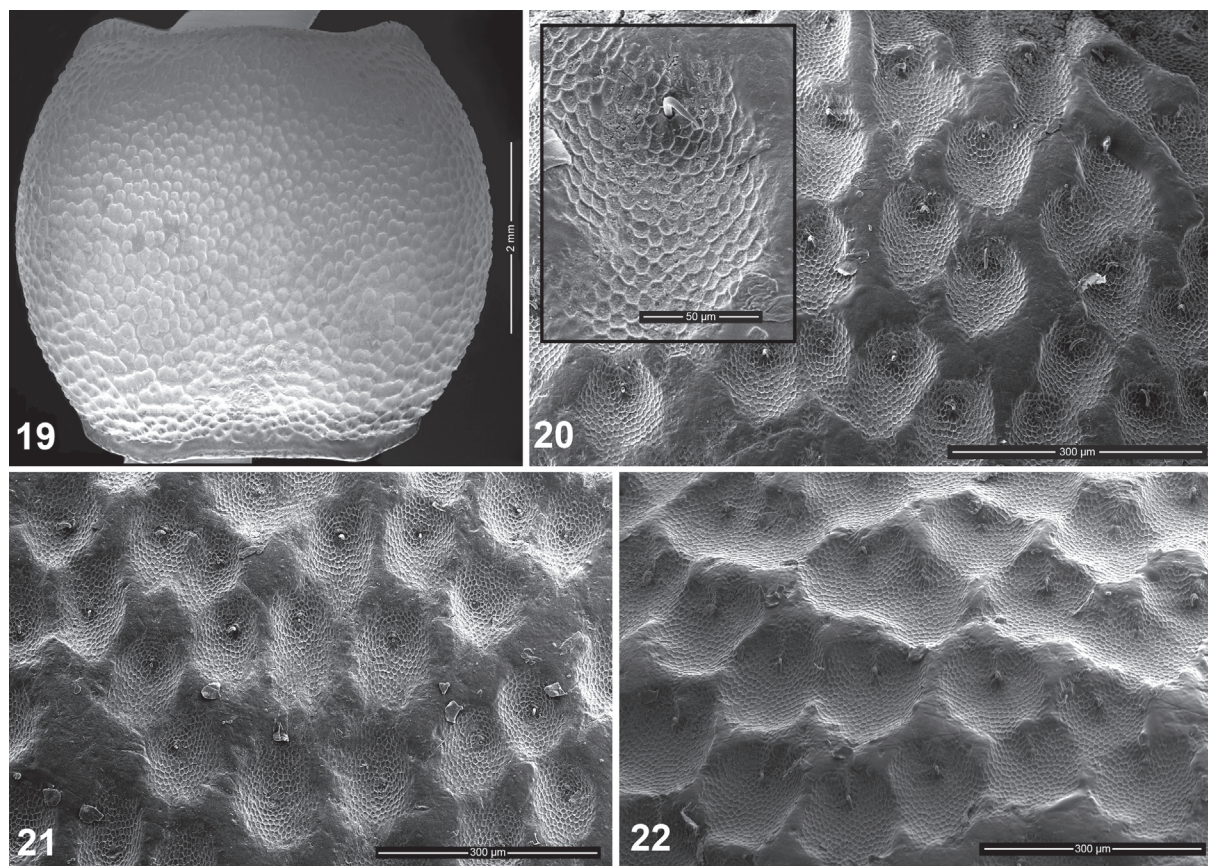
IZArm – Institute of Zoology of the Scientific Center of Zoology and Hydroecology of the National Academy of Sciences of Armenia (Yerevan, Armenia);

ZDEU – Zoological Department of Ege University (Bornova-Izmir, Turkey).

In descriptions we used the ocular index [Campbell, Marshall 1964] which equals $100 \times$ minimum dorsal distance between eyes / maximum width of head across eyes.



Figs 7–18. *Scaurus dlabolai* and *S. macricollis*, details of male structures.
 7–12 – *S. dlabolai*; 13–18 – *S. macricollis*; 7, 13 – antenna; 8, 14 – head; 9, 15 – profemur, dorsally; 10–16 – profemoral teeth, view from apex; 11, 17 – aedeagus; 12, 18 – elytra, apically.
 Рис. 7–18. *Scaurus dlabolai* и *S. macricollis*, самцы, детали строения.
 7–12 – *S. dlabolai*; 13–18 – *S. macricollis*; 7, 13 – антенна; 8, 14 – голова; 9, 15 – переднее бедро, дорсально; 10–16 – зубцы переднего бедра, вид с вершины; 11, 17 – эдеагус; 12, 18 – вершина надкрылий.



Figs 19–22. *Scaurus dlabolai*, structure of pronotum.

19 – pronotum; 20 – punctuation, anterior part of pronotum and single trichoid sensillum (in inset); 21 – the same, middle part; 22 – the same, basal part.

Рис. 19–22. *Scaurus dlabolai*, структуры переднеспинки.

19 – переднеспинка; 20 – пунктировка в передней части переднеспинки и одна трихонидная сенсилла (на вставке); 21 – то же, середина; 22 – то же, базальная часть.

Scaurus dlabolai Kaszab, 1959

(Figs 1–3, 7–12, 19–22)

Material. Turkey: 4♂ (ZDEU), Adana Prov., Adalı, 1.06.2003 (leg. G. Aydın); 2♂, 3♀ (ZDEU), in ethanol, Adana Prov., Karataş, 5.04.2007 (leg. B. Keskin).

Description of male (not presented in previous works). Body black, moderately robust. Length 16 mm, width 7 mm. Head in the middle (dorsally) and elytra matt, pronotum dully shining.

Anterior margin of epistoma widely weakly emarginated. Genae and longitudinal ridges near eyes elevated. Lateral margins of genae almost straight. Head widest at temple level. Temples strongly convex, their lateral margins straight, subparallel and distinctly separated from other surface of head. Surface of epistoma shiny, with comparatively fine and moderately dense round punctuation. Frons and genae dull, frons in anterior half with dense round merged punctuation, in middle with very coarse and dense rugose punctuation. Vertex shiny and convex in middle, with coarse rugose punctuation. Ventral side of head with dense punctuation. Gular surface finely and densely punctated at sides. Maxillary and labial apical palpomeres cylindrical. Mentum trapezoidal, with sharp and deep impressions on sides of midline elevation. Antennae comparatively short, not extending to base of pronotum when directed backward. Apical antennomere cylindrical, strongly elongate and acute, very weakly curved. Ratio of length of antennomeres 2–11: 0.6 : 1.9 : 1.4 : 1.5 : 1.4 : 1.3 : 1.4 : 1.4 : 1.6 : 3.9.

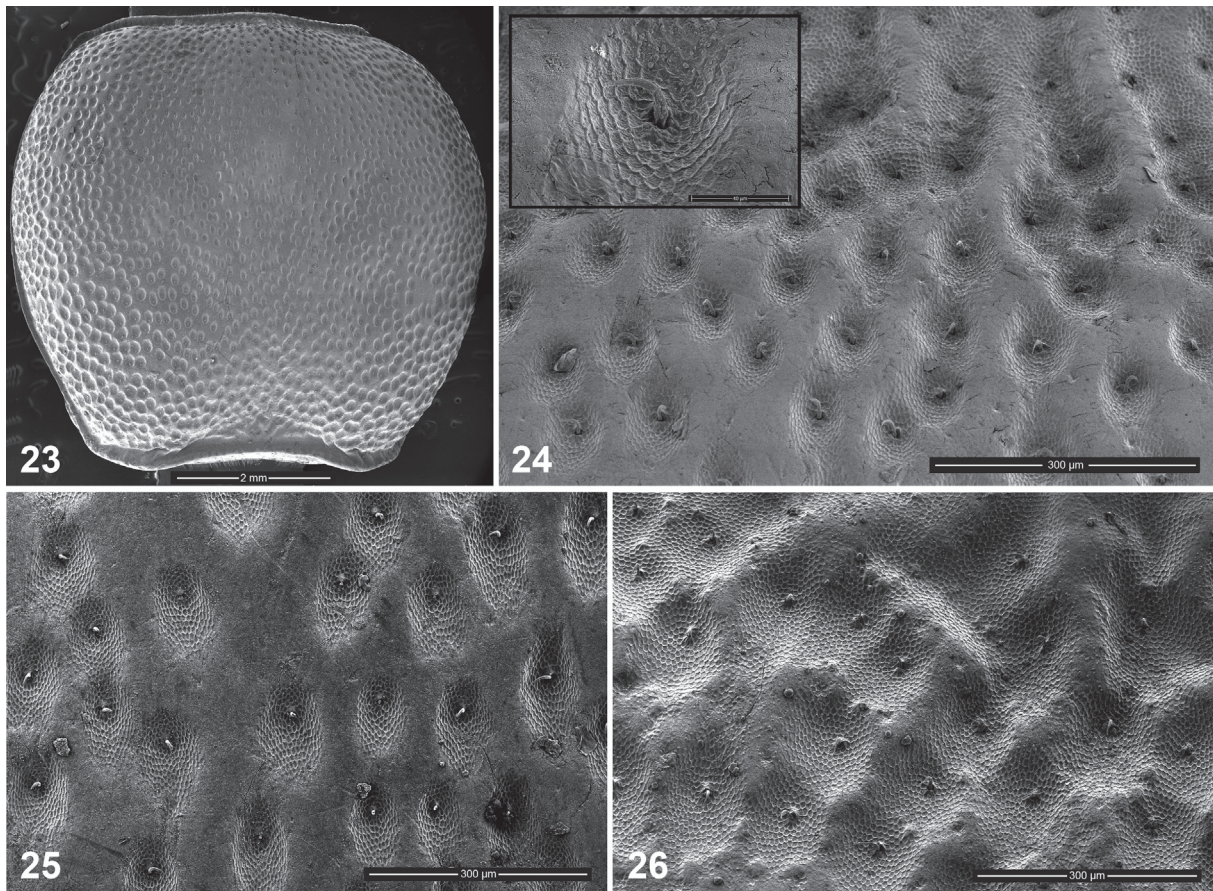
Prothorax. Pronotum nearly round, weakly transverse (1.11 times as wide as long); anterior margin bisinuate, with

weakly projected angles, lateral margins evenly rounded. Posterior angles obtuse, rounded. Disc strongly convex, only anterior and posterior margins flattened. Punctuation of disc very coarse and dense, punctures round and merged over entire surface; anterior punctuation slightly finer, lateral, middle and posterior punctuation coarser. Prothoracic hypomera and prosternum densely granulated. Prosternal process coarsely bordered, slightly widened between coxae, its apex horizontally rounded.

Pterothorax. Elytra elongate-oval (1.25 times as long as wide). Lateral and humeral ribs expressed, high at base, weakly elevated at apex, where they consist of granules on elevation. Dorsal ribs extending to basal third of elytra; more elevated and without granules at apex. Suture elevated along entire length. Surface between ribs distinctly densely granulated and with puncture lines. Pseudoepipleura completely sparsely granulated, with 6 lines of punctures; innermost line consists of deep round foveae. Epipleura narrow and covered with fine and sparse granules. Mesoventrite with very dense and fine granulation. Mesepisterna, mesepimera and metepisterna coarsely and densely punctated. Metaventrite convex and remaining rugose near coxa. Intercoxal process of meso- and metaventrite not bordered apically.

Abdomen. Abdominal ventrite 1 wide and truncate, weakly depressed, surface moderately coarsely punctated, posterior margin weakly impressed in middle. Ventrites 2–4 with moderately dense punctuation, ventrite 4 without punctuation in middle. Ventrite 5 with finer dense punctuation.

Legs. Profemora with subtruncated (almost round) large upper tooth on inner side and small narrowly rounded at apex lower tooth.



Figs 23–26. *Scaurus macricollis*, structure of pronotum.

23 – pronotum; 24 – punctation, anterior part of pronotum and single trichoid sensillum (in inset); 25 – the same, middle part; 26 – the same, basal part.

Рис. 23–26. *Scaurus macricollis*, структуры переднеспинки.

23 – переднеспинка; 24 – пунктировка в передней части переднеспинки и одна трихонидная сенсилла (на вставке); 25 – то же, середина; 26 – то же, базальная часть.

Notes. This taxon was described as a subspecies of *S. puncticollis* [Kaszab, 1959], but was later interpreted as a good species by Ferrer et al. [2014]. Here we present the description of the male to clearly identify this species.

Distribution. Turkey: Çukurova lowland.

Scaurus macricollis Allard, 1882
(Figs 4–6, 13–18, 23–26)

= *Scaurus syriacus* Reitter, 1914, **syn. n.**

Material. Turkey: 1♀ (ZDEU), Şanlıurfa Prov., Tülmen Köyü, 6.03.2001 (leg. S. Rastgeldi); 1♂ (ZDEU), Gaziantep Prov., Barak Ovası, 24.05.2003 (leg. E.A. Yağmur); 1♂ (ZDEU), Gaziantep Prov., Gürçay, 4.10.2003 (leg. E.A. Yağmur); 1♂ (ZDEU), Gaziantep Prov., Zeugma, 11.05.2004 (leg. E.A. Yağmur); 1♂ (ZDEU), Şanlıurfa Prov., Harran, 12.05.2004 (leg. E.A. Yağmur); 2♀ (ZDEU), Şanlıurfa Prov., Birecik, 1.04.2006 (leg. E.A. Yağmur); 1♂ (ZDEU), Kilis Prov., Elbeyli, 1.06.2007 (leg. B. Göçmen); 2♂, 1♀ (ZDEU, in ethanol), Konya Prov., Meke Tuzlası, 30.05.2011, 13.06.2018 (leg. B. Keskin); 1♀ (ZDEU, in ethanol), Mardin Prov., Dara, 9.05.2018 (leg. B. Keskin).

Variability. Female from Mardin has longer antennomere 11 (3.45 times as long as wide), than in other populations (about 3 times as long as wide) and additional small and short rib of granules between lateral and humeral ribs like females of *S. araxinus*.

Notes. Ferrer et al. [2014] studied type material for both *Scaurus macricollis* and *S. syriacus*. Characters of

presence / absence of granules in punctures on pronotum and density of punctation which were given by J. Ferrer for separation of these taxa are erroneous. Scanning electronic microscopy shows that granules are absent in all specimens of *Scaurus* (Figs 19–26, 35, 36). Density of punctation is variable in different populations. Structure of aedeagus is identical in all populations. As a result, a new synonymy is proposed: *Scaurus macricollis* Allard, 1882 = = *Scaurus puncticollis* var. *syriacus* Reitter, 1914 (original status), **syn. n.**

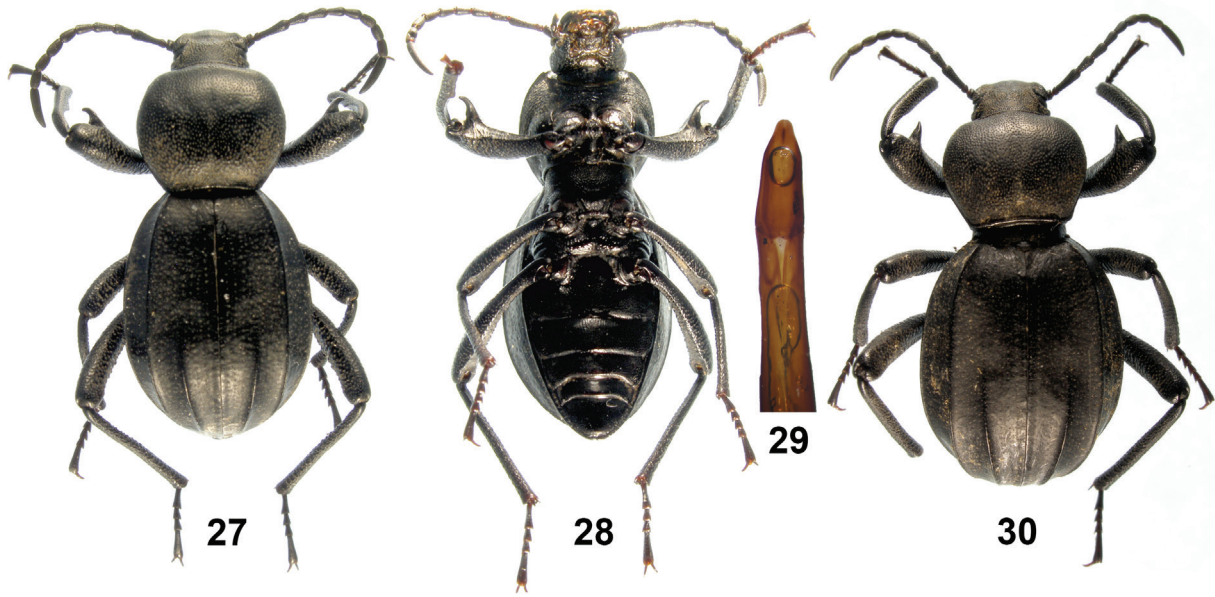
The specimens from Iran which were interpreted as *Scaurus puncticollis* [Taravati, Ferrer, 2007] probably also belong to this species.

Distribution. South Turkey (from Konya to Mardin provinces), Iraq, Syria, Iran (?).

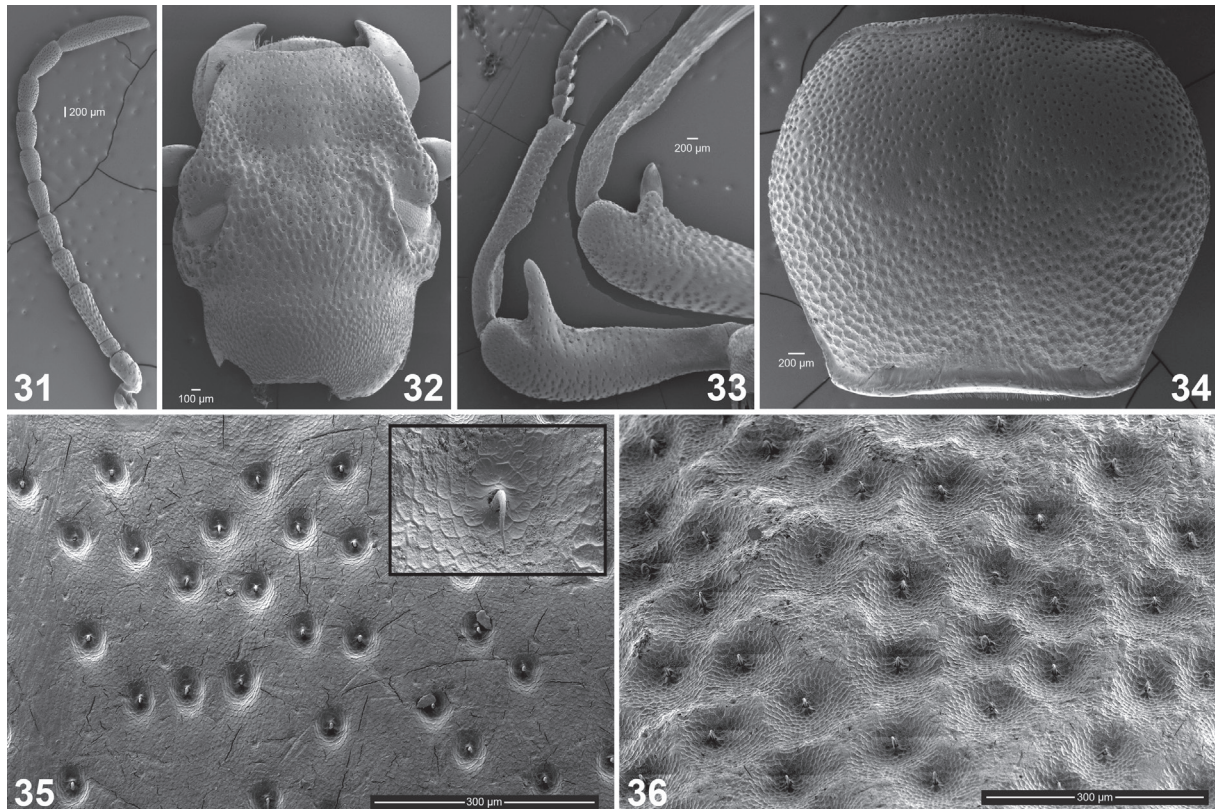
Scaurus tristis tristis A.G. Olivier, 1795
(Figs 27–36)

Material. Turkey: 3♀, 2♂ (ZDEU, in ethanol), Sinop Prov., Sinop Cezaevi, 25.08.2014 (leg. H. Koç); 4♂, 1♀ (ZDEU), Sinop Prov., 11.07.2018 (leg. H. Koç).

Note. This North African subspecies (from Morocco to north of Tunisia) was introduced into some ports in Europe (France: Agde, Sète, Marseille, etc.; Italy: Bari, Naples, some small islands, such as Lampedusa, Linari,



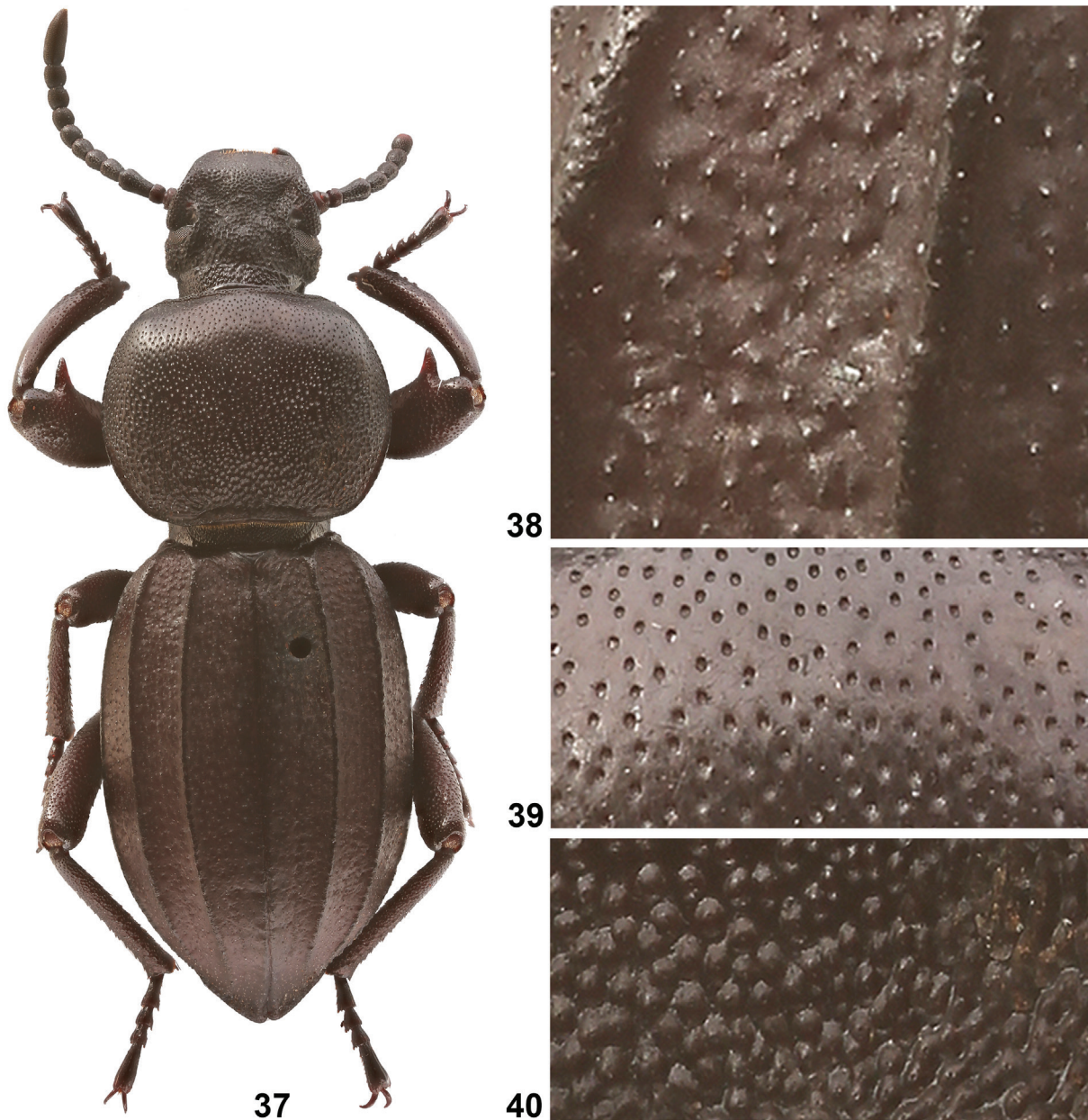
Figs 27–30. *Scaurus tristis tristis*, habitus.
 27 – male, dorsal view; 28 – male, ventral view; 29 – aedeagus; 30 – female, dorsal view.
 Рис. 27–30. *Scaurus tristis tristis*, габитус.
 27 – самец, вид сверху; 28 – самец, вид снизу; 29 – эдеагус; 30 – самка, вид сверху.



Figs 31–36. *Scaurus tristis tristis*, details of structure.
 31 – male antenna; 32 – head; 33 – male fore leg, dorsal (left) and ventral (right) view; 34 – pronotum; 35 – punctation, anterior part of pronotum and single trichoid sensillum (in inset); 36 – the same, basal part.

Рис. 31–36. *Scaurus tristis tristis*, детали строения.

31 – антенна самца; 32 – голова; 33 – передняя нога самца, дорсально (слева) и вентрально (справа); 34 – переднеспинка; 35 – пунктировка в передней части переднеспинки и одна трихоидная сенсилла (на вставке); 36 – то же, базальная часть.



Figs 37–40. *Scaurus julioferreri* sp. n., female, habitus and details of structure.

37 – female, holotype, habitus; 38 – granulation of elytra; 39 – punctation of pronotum in anterior part; 40 – the same, in basal part.

Рис. 37–40. *Scaurus julioferreri* sp. n., самка, габитус, детали строения.

37 – самка, голотип, габитус; 38 – грануляция надкрылий; 39 – пунктировка переднеспинки в передней части; 40 – то же, в базальной части.

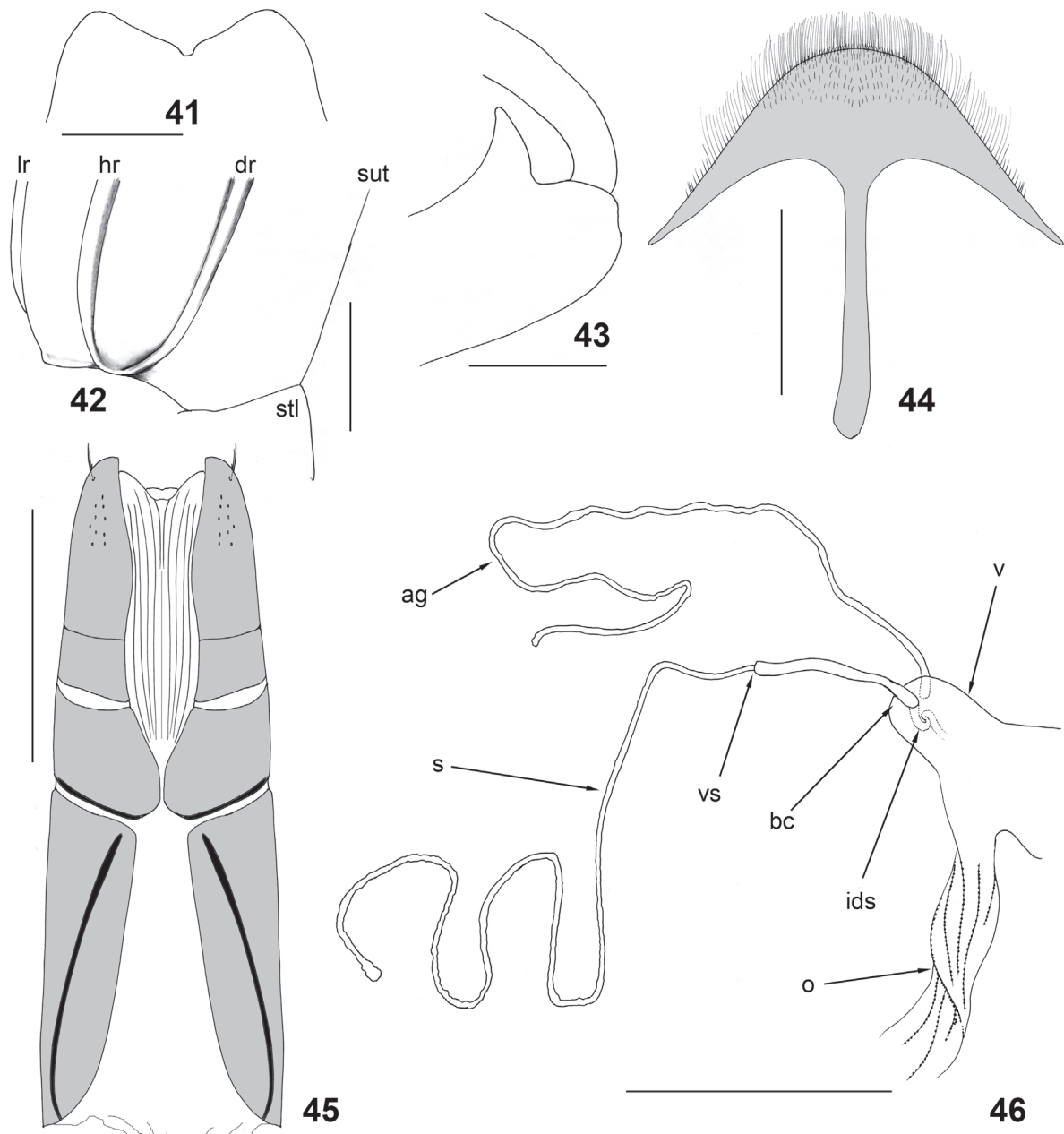
etc.), probably from the Roman period. The subspecies was probably introduced a long time ago in the Sinop region in Turkey. The second subspecies, *S. tristis barbarus* Solier, occurs in south of Tunisia and in Libya. New record for the fauna of Turkey.

Scaurus julioferreri sp. n.
(Figs 37–46)

Material. Holotype, ♀ (IZArm): “Ani Dobrowljanskiy” (now Turkey, Kars Province, Archaeological Site of Ani (UNESCO) near the Ocaklı village, 40°31'17"N / 43°35'15"E).

Description. Body black, moderately robust. Length 15 mm, width 6 mm.

Head in middle (dorsally) and elytra matt, pronotum dully shining. Epistoma angulate, with short rounded emargination in middle. Genae and longitudinal ridges near eyes elevated. Lateral margin of genae widely emarginated. Frons in middle round, convex. Head widest at temple level. Temples strongly convex and distinctly separated from rest of surface of head. Ocular index – 66.6. Surface of epistome shiny, with coarse U-shaped punctation. Frons and genae dull, frons in anterior half with coarse and very dense but not merged punctation; middle convex part of frons with extremely dense punctation (punctures merged). Vertex shiny, with coarse rugose punctation. Ventral side of head with very coarse and dense punctures (as in middle of frons). Head ventrally with coarse and dense punctation of round merged punctures, sharply separated from gular area. Gula and surface on sides of gula finely and densely punctated. Maxillary and labial apical



Figs 41–46. *Scaurus julioferreri* sp. n., female, details of structure.

41 – epistoma; 42 – ribs on elytral base (lr – lateral rib; hr – humeral rib; dr – dorsal rib; sut – suture; scl – scutellar shield); 43 – femur; 44 – sternite VIII with spiculum ventrale; 45 – ovipositor; 46 – genital ducts (ag – accessory gland of spermatheca; s – spermatheca; vs – valve of spermatheca; bc – bursa copulatrix; ids – inner duct of spermatheca; v – vagina; o – oviduct). Scale bars – 1 mm.

Рис. 41–46. *Scaurus julioferreri* sp. n., самка, детали строения.

41 – эпистома; 42 – ребра в основании надкрылий (lr – боковое ребро; hr – плечевое ребро; dr – спинное ребро; sut – шов; scl – щиток); 43 – бедро; 44 – стернит VIII с вентральной спиколой; 45 – яйцеклад; 46 – половые протоки (ag – придаточная железа сперматеки; s – сперматека; vs – клапан сперматеки; bc – копулятивная сумка; ids – внутренний проток сперматеки; v – вагина; o – яйцевода). Масштабные линейки – 1 мм

palpomeres cylindrical. Mentum trapezoidal, with sharp and deep impressions on sides of midline elevation. Antennae comparatively short, not extending to base of pronotum, when directed backward. Apical antennomere cylindrical, strongly elongate and acute, very weakly curved. Ratio of length of antennomeres 2–11: 0.5 : 1.4 : 1 : 0.9 : 0.9 : 0.8 : 0.8 : 0.8 : 0.9 : 2.2.

Prothorax. Pronotum sub-oval, transverse (1.25 times as wide as long), lateral margins evenly rounded, anterior margin widely weakly emarginated, base short, also widely weakly emarginated. Anterior angles directed down, right, distinct; posterior angles

not expressed, lateral margins evenly rounded to base. Lateral and anterior margins coarsely bordered, bordering of base transformed into flattened area. Disc weakly convex at middle and strongly convex on sides. Punctuation of disc irregular: punctures round sparse and fine along anterior margin; elongate sparse and fine punctures on anterior third (Fig. 39); dense and coarse (but elongate punctures not merged) in middle; very dense and coarse (elongate punctures merged in short wrinkles) in basal third (Fig. 40), especially on sides. All punctures with distinct margins (not U-shaped). Prothoracic hypomera and prosternum coarsely

and densely granulated. Prosternal process coarsely bordered, slightly widened between coxae, with horizontally flattened apex.

Pterothorax. Elytra elongate-oval (1.5 times as long as wide), 1.96 times as wide as head, 1.07 times as wide and 2.02 times as long as pronotum. Dorsal and humeral ribs well expressed, high (Fig. 37). Dorsal ribs extending to base of elytra, where connected with humeral ribs. Apical part of lateral ribs not extending to other ribs on left elytron but connected by granulated elevation with dorsal ridge on right elytron. Suture elevated from apex to half of elytra. Humeral ridge does not quite reach base of elytra. Surface between ribs distinctly sparsely granulated, without punctures (Fig. 38). Pseudoepipleura completely sparsely granulated, with unclear ridge of granules from base to apex, with 6 lines of punctures; innermost line consists of deep elongate foveae. Epipleura narrow and smooth. Mesoventrite with very dense and fine granulation. Mesepisterna, mesepimera and metepisterna coarsely and densely punctated; punctation finer on mesepisterna and much coarser, merged on metepisterna. Metaventrite convex, with smooth granulate punctation. Intercostal processes of meso- and metaventrite not bordered apically.

Abdomen. Abdominal ventrite 1: intercoxal process wide and truncate, not bordered along apical margin, weakly depressed; remaining surface moderately coarsely punctated, posterior margin with sharp semicircular impression. Ventrites 2–4 with moderately coarse and dense punctation of round punctures (puncture diameter sub-equal to interpuncture distance) much more sparsely punctated in middle, ventrite 5 with moderately coarse and sparse punctation (interpuncture distance 2 times longer than puncture diameter), not bordered apically.

Legs. Fore femora with acute, slightly bent tooth of dorsal inner side, ventral inner side without tooth. Pro- and mesotibiae weakly curved.

Female genitalia. Ovipositor (Fig. 45): apical lobes of coxite evenly rounded, their outer margin without sinuation near apex; baculi of coxite lobe 1 and paraproct narrow. Sternite VIII with very dense and long pubescence along anterior margin. Genital ducts normal for *Scaurus* [Nabozhenko et al., 2018]; spermatheca unbranched, short, glandular; vagina with very small sclerotized secondary bursa copulatrix at apex. Short basal duct (i.e. duct between vagina and connection of accessory gland and spermatheca) is absent unlike *S. araxinus*. Accessory gland and spermatheca flow to vagina separately; spermatheca has inner duct inside bursa copulatrix. Spermatheca more thickened and sclerotized in basal part and valve (Fig. 46).

Diagnosis. The new species differs from all Caucasian, and Near and Middle East *Scaurus* by the granulated (without any punctation or not fully smooth) space between ribs, all ribs are highly elevated, complete dorsal rib reaching base of elytra, where it is connected with humeral rib, and the deep angulate anterior margin of epistoma with emarginated in middle.

Etymology. The species is named in memory of our late colleague Dr Julio Ferrer, who added a great contribution to the taxonomy of Tenebrionidae of the world.

Discussion

All native Middle and Near East species of the genus belong to the *puncticollis* species-group, which is characterized by the following features: not angulated anterior margin of epistoma, dorsal ribs well expressed only on posterior half of elytra, interrupted in basal half, where they remain as lines of small granules; usually, upper inner femoral tooth in male is well developed, curved outward and truncated at the apex; lower inner femoral tooth in male is not curved, short and acute at the apex, or

directed to the femoral apex and truncated in *S. araxinus*. The introduced *S. tristis* also has dorsal ribs interrupted near middle.

We do not have a male of the new Anatolian species, but the female has at least two important characters which separate *S. julioferreri* sp. n. from the *puncticollis* species-group: fully elevated dorsal ribs and angularly emarginated anterior margin of epistoma with short sinuation at middle. The taxonomic position of a new species within the genus cannot be established without examination of a male.

All Turkish species can be determined using the following key.

Key to species of the genus *Scaurus* of Turkey

1. Antennae long, antennomeres 8, 9 and 10 each about 2 times longer than wide (Fig. 31). Pronotum with deep punctures, but generally with punctation moderately sparse and not coarse (Figs 34–36). Male protibiae strongly dilated on distal 2/3 portion (Fig. 33)
..... *S. tristis*
- Antennae shorter, antennomeres 8, 9 and 10 each not more than 1.5 times longer than wide (Figs 7, 13). Pronotum with punctation dense and coarse (at least on sides and basal half), often merged (Figs 19–26). Male protibiae not dilated on distal 2/3 portion (Figs 9, 15) 2
2. Anterior margin of epistoma strongly angularly emarginated and with round sinuation at middle (Fig. 41). Dorsal ribs complete and elevated, reaching elytral base (Figs 37, 42). Surface between ribs covered only with sparse granules. Abdominal ventrite 1 (at least in female) with wide sharp semicircular impression near posterior margin
..... *S. julioferreri* sp. n.
- Anterior margin of epistoma widely evenly emarginated (Fig. 14). Dorsal ribs interrupted before or after elytral middle, where they remain as lines of small granules (Figs. 1, 3, 4, 6). Surface between ribs with lines of punctures and sparse small granules. Abdominal ventrite 1 without posterior impression 3
3. Temples after eyes straight and subparallel (Fig. 8). Pronotum with extremely coarse and dense punctation over the entire surface of the disc (Figs 19–22); punctures round and merged. Humeral and lateral ribs granulated at apex, dorsal ribs apically more elevated than other ones (Fig. 12) and extending to basal third of elytra
..... *S. dlabolai*
- Temples after eyes rounded (Fig. 14). Pronotum with sparse and fine elongate punctation at anterior and middle parts of disc, but with coarse and dense merged round punctures at lateral sides and basal third (Figs 23–26). Humeral and lateral ribs smooth at apex, dorsal ribs apically not more elevated than other ones and not extending to middle of elytra (Fig. 18)
..... 4
4. Male upper large femoral tooth subtruncated or narrowly rounded at apex (as in Figs 9, 10). Ovipositor with sinuated lateral margins near apex. Female antennomere 11 longer, 4 times as long as wide
..... *S. araxinus*

- Male upper large femoral tooth sharply and widely truncated at apex (Figs 15, 16). Ovipositor with evenly rounded margins near apex. Female antennomere 11 shorter, 3.01–3.45 times as long as wide *S. macricollis*

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