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DESCRIPTION OF THREE NEW *ANDRENA* SPECIES (HYMENOPTERA: APOIDEA: ANDRENIDAE) FROM TURKEY

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Abstract

Three new bee species, *Andrena (Melandrena) nitidemula* **sp. nov.**, *Andrena (Truncandrena) urfanella* **sp. nov.** and *Andrena (Poecilandrena) efeana* **sp. nov.** from Turkey are described. Important diagnostic characters are illustrated.

Key Words: *Andrena*, Andrenidae, pollinator bees, Turkey

Resumen

Se describen tres nuevas especies de abejas, *Andrena (Melandrena) nitidemula* **sp. nov**., *Andrena (Truncandrena) urfanella* **sp. nov**. y *Andrena (Poecilandrena) efeana* **sp. nov**. de Turquía. Se ilustran las caracteristicas diagnósticas más importantes.

Two of the 3 species described in this paper (*Andrena nitidemula* and *Andrena urfanella*) have originally been recognized as new by Klaus Warncke, who collected intensively in Turkey during the sixties and seventies of the last century (see Scheuchl & Hazır 2008). He named them *A. nitidema* resp. *A. urfana*, and labelled holotype and numerous paratypes. He donated a considerable number of these paratypes to other collectors, but, unfortunately, he died in an automobile accident in Egypt in 1993, before he could publish the descriptions of these species. Consequently there are many samples in a number of collections, which are incorrectly labelled as types. To avoid mixing up "true" and "false" types, we have chosen names, which are close, but not identical, to Warncke's names.

Andrena (Melandrena) nitidemula **sp. nov.**
= *Andrena nitidema* Warncke (unpublished name)
(Fig. 1)

Diagnosis

This species is close to *Andrena nitida* (Müller 1776) and matches with this species in size and appearance. The female differs from *A. nitida* in having a more or less single-colored rusty yellow scopa (black and white in *A. nitida*), the metatarsi of the hind legs are light-haired (black-haired in *A. nitida*), the disc of the scutum is smooth and polished (shagreened and dull in *A. nitida*), and the punctures of the tergites are almost 1.5 as large (Fig. 1.1) as in *A. nitida* (Fig. 1.2). The latter distinctive character is also present in the male; furthermore the male differs from that of *A. nitida* in having the dorsal lobes of the genitalia more protruding and in having the penis valves with a lamellar dorsolateral extension on each side near the base (Fig. 1.3); which are lacking in *A. nitida* (Fig. 1.4).

Female

Body length: 12-13 mm. Color: body black; flagellum completely dark; tarsal claws rufescent. Pubescence: generally rust yellow to rust brown (greyish yellow in worn specimens), only on head extensively black, normally brownish only on apical half of clypeus. Tergite 1 with moderately sparse, long, erect hairs, tergites 2-4 with shorter and denser yellowish-brown hairs, being depressed by the apical margin of the preceding tergite; apical depressions ± glabrous. Caudal fimbria black. Scopa rust yellow, just below basitibial plate blackish to a low extent.

Head. Clypeus with punctures very dense (distance between punctures equal to or less than 0.5 puncture diameters), except along midline at the apical half with (here punctures separated by almost 1 puncture diameter); roughly shagreened in basal half, more or less shiny in apical half.

Mesosoma. Surface of mesoscutum distinctly shagreened peripherally, smooth and polished posteromedially; punctatorugose except the small

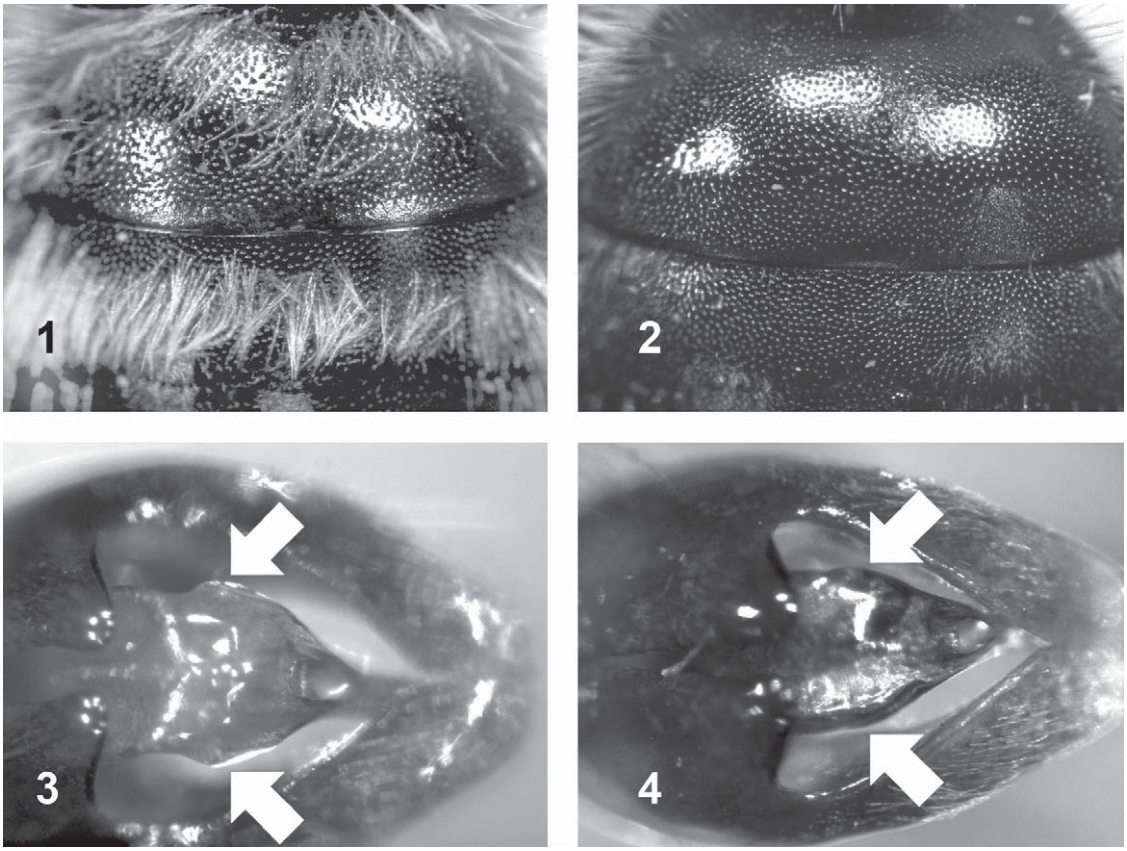

Fig. 1. 1. *Andrena nitidemula* female: tergites I and II; 2. *A. nitida* female: tergites I and II; 3. *A. nitidemula* male: penis valves (arrows: lamellar dorsolateral extensions present); 4. *A. nitida* male: (arrows: lamellar dorsolateral extensions absent).

shiny posteromedian area, here punctures separated by 1 to 2 puncture diameters.

Metasoma. Tergite 1 more or less smooth, very shiny, with scattered, laterally with moderately scattered punctures; tergites 2–4 with basal parts shiny and unshagreened, depressed apical parts with superficial reticular shagreening; punctures distinct and dense, only a narrow zone in front of the depressions with punctures more scattered; depressed apical parts with fine and scattered punctures medially, moderately scattered to moderately dense laterally, with narrow impunctate apical margin.

Male

Body length: 10.5–12 mm. Color: body black; flagellum completely dark. Pubescence: mainly rusty yellow to rust brown (greyish yellow in worn specimens), clypeus and lower parts of the body whitish, lateral parts of the face and frons black. Tergites 1–2 with moderately short, following tergites with short, sparse and erect light-coloured hairs, depressions 2–4 with sparse whitish lateral fringes. Anal fimbria black.

Head. Mandibles moderately elongated. Clypeus with very dense punctuation (distance between punctures equal to or less than 0.5 puncture diam.).

Mesosoma. Scutum roughly shagreened, densely punctate, only disc more superficially shagreened, with scattered punctuation.

Metasoma. Tergites smooth and shiny, with fine and scattered, tergite 1 with very scattered punctuation; depressions 2-4 more scattered, punctuation finer and weaker than on discs of tergites.

Floral Association

Obviously polylectic; most specimens collected on *Ferula* spp. (Apiales: Apiaceae).

Etymology

Warncke called this species *Andrena nitidema*, because it resembles *Andrena nitida* very much. For reasons given in the introduction, we emendated this name to *Andrena nitidemula*.

Type Material

Holotype female, "Türkei Hakkari: 30 Km SW Hakkari, 1. 6. 1980 1150 m, leg. Max. Schwarz", deposited in the collection of the Oberösterreichisches Landesmuseum, Biologiezentrum, Linz, Austria.

Paratypes

Oberösterreichisches Landesmuseum, Biologiezentrum, Linz/Austria*:* "TÜRKEI – Hakkari, Suvari Halil-Paß, 2300m 14-VI-1981, leg. Kl. Warncke"—9 females, 8 males; "TÜRKEI – Hakkari, Suvari Halil-Paß, 2600m 15-VI-1981, leg. Kl. Warncke"—1 male; "TÜRKEI – Hakkari, Suvari Halil-Paß, 2300m 14-VI-1981, leg. Manfr. Kraus"—6 males; "TK – Zaptal, 1700m 40kmN Yüksekova, 9-VI-81, Warncke"—2 females; „TK – Hakkari, 2500m Tanin-Tanin-Paß 2-VI-80, Warncke"—1 male; "TK – Hakkari, 2500m Paß Suvari Halil 2-VI-80, Warncke"—6 females, 1 male; "TK 1800m Hakkari, 18kmNW Yüksekova, 13-VI-81, Warncke"—8 females; "TÜRKEI 1-VI-80, 30kmNW Hakkari, 1150m Warncke"—3 females; "TÜRKEI – Karakurt, Arastal 22-V-75, leg. Kl. Warncke"—1 female; "TK – 20kmE Karakurt /Arastal 12-VI-77, leg. Klaus Warncke"—1 female; "TK-60 km westl. Hakkari, 6-VI-77, leg. Kl. Warncke"—1 female; "Türkei Hakkari: 25 Km NO Hakkari, 30. 5. 1980 2200 m, leg. Max. Schwarz"—4 females; "Türkei Kars: 20 Km W Karakurt, 27. 5. 1980 1800 m, leg. Max. Schwarz"—2 females; "Türkei Hakkari: 30 Km SW Hakkari, 1. 6. 1980 1150 m, leg. Max. Schwarz"—6 females; "Türkei Hakkari: Suvari-Halil-Paß, 2. 6. 1980 2500 m, leg. Max. Schwarz"—7 females; "Türkei, Konya: Konya, 20Km W 12. 6. 1978, leg. Max. Schwarz"—1 female; "MUT Sertavul 1600m, 22. 5. 1970 TÜRKEI, leg. J. Gusenleitner"—1 female. All specimens bear a red label "Paratype" and a white label "Andrena nitidema War. det. Dr. Warncke".

Adnan Menderes University Aydın/Turkey: "Turkey, Mersin, Limonlu, 36° 33.521' N 34° 13.020' E, 140 m, 23. 05. 2005, leg. S. Hazır"—7 females; "Turkey, Konya, Toros mountains, around Görmeli, 34° 31.479' N 33° 59.629' E, 1400m, 24. 05. 2005, leg. S. Hazır"—1 female; "Turkey, Sivas, between Koyulhisar – Mesudiye, 40°23'15N 37°46' 36 E, 1542 m, 12. 08. 2005, leg. S. Hazır & B. Gülcü"—1 female.

Zoologische Staatssammlung München/Germany: "TK 1800 m Hakkari 18kmNW Yüksekova 13-VI-81 Warncke" \ "ex coll. WARNCKE 1989"—1 female; "TÜRKEI – Hakkari Suvari Halil-Paß 2300m 14-VI-1981 leg. Kl. Warncke" \ "Andrena nitidema War. det. Dr. Warncke"—1 female; "TÜRKEI - Hakkari, Suvari Halil-Paß, 2300m 14-VI-1981 leg. Kl. Warncke"—2 females. All specimens bear a red label "Paratype" and a white label "Andrena nitidema War. det. Dr. Warncke".

Coll. M. Kraus, Nürnberg/Germany: "TÜRKEI – Hakkari, Suvari Halil-Paß, 2300m 14-VI-1981, leg. Manfr. Kraus"—20 females, 7 males; "TK 1800m Hakkari, 18kmNW Yüksekova, 13-VI-81, M. Kraus"—7 females; "TK – Zaptal, 1700m 40kmN Yüksekova, 9-VI-81, M. Kraus"—1 female; "TK 1400m Hakkari, 5kmN Oramar, 11-VI-81, M. Kraus"—1 female. All specimens bear a red label „Paratype" and a white label „Andrena nitidema War. det. Dr. Warncke".

Coll. A. W. Ebmer, Puchenau/Austria: "18.05.2000, GR, Samos, Nordküste, Umg. Ormos Makro Seitani, 0-50m, N37.46 E26.38, leg. A. W. Ebmer"—2 females; "20.05.2000, GR, Samos, 3kmS Pyrgos, 560m, Felssteppe/Phlomis, N 37° 41' 26' E 26° 47' 57', leg. A. W. Ebmer"—1 female; "17.05.2000, GR, Samos, Kerkis oberh. Prophetis Elias, 1150-1200m, N37.43.27 E26.38.03, leg. A. W. Ebmer"—1 male; „23.04.1999, GR, Samos, NE Spatharei, Pinus-Zone, 500-700m, N37.41 E26.48, leg. A. W. Ebmer"—2 males.

Coll. E. Scheuchl, Ergolding/Germany: "leg. E. Scheuchl, 23.05.2005, Mersin, Limonlu, 36° 33.521' N 34° 13.020' E, 140m"—2 females; "leg. E. Scheuchl, 24.05.2005, Mersin, between Gülnar+Ermenek, 36° 21.380' N 33° 18.841' E, 1075m"—1 female; „leg. E. Scheuchl, 06.06.2006, Burdur, between Gölhisar and Altınyayla, 37° 02' 31" N, 29° 32' 15" E, 1330m"—1 female; "leg. E. Scheuchl, 17.06.2006, Ankara, around Çamlıdere, 40° 27› 10" N, 32°28› 33' E, 1150m"—1 female; "leg. E. Scheuchl, 17.06.2006, Ankara, around Çamlıdere, 40° 25' 51" N, 32° 28' 01"E, 1278m"—1 female; "leg. E. Scheuchl, 17.06.2006, Ankara, between Yeşilköy and Kızılcahamam, 40° 24› 15" N, 32° 33› 38" E, 1328m"—1 male; "TÜRKEI - Hakkari, Suvari Halil-Paß, 2300m 14-VI-1981 leg. Kl. Warncke"—1 female, 1 male; "TÜRKEI - Hakkari, Suvari Halil-Paß, 2300m 14-VI-1981 leg. Manfr. Kraus"—1 male; "TK – Zaptal, 1700 m 40 km N Yüksekova, 9-VI-81, Warncke"—1 male; "Türkei Hakkari: Suvari-Halil-Paß, 2. 6. 1980 2500 m, leg. Max. Schwarz"—1 female.

Material Other Than Types

Two female and 7 male specimens from different locations on Samos in coll. Ebmer.

Andrena (Truncandrena) urfanella **sp. nov.**
= *Andrena urfana* Warncke (unpublished name)
(Figs. 2 and 3)

Diagnosis

This species is very close to *Andrena truncatilabris* Morawitz, 1878 and matches with this species in size and appearance. The female differs from *A. truncatilabris* in having the foveae narrower below (taking about 0.33 of the distance between eye and midline of the face; in *A. truncatilabris* about 0.5);

the distance between lateral ocelli and posterior margin of the head is taking only 1 ocellus diam (Fig. 2.1) (1.5 in *A. truncatilabris* [Fig. 2.2]); clypeus with extremely fine shagrination, apical part with distinct longitudinal grooves (Fig. 2.3) (clypeus of *A. truncatilabris* with rough shagrination, without or with very weak longitudinal grooves (Fig. 2.4); the punctures on tergite 2 more or less distinct (absent or indistinct in *A. truncatilabris*); all legs blackish brown (normally all tarsi, parts of metatarsi of middle legs, metatarsi of hind legs completely, and parts of hind tibiae reddish in *A. truncatilabris*; in darkened specimens at least inner side of hind tibiae partly reddish). The male

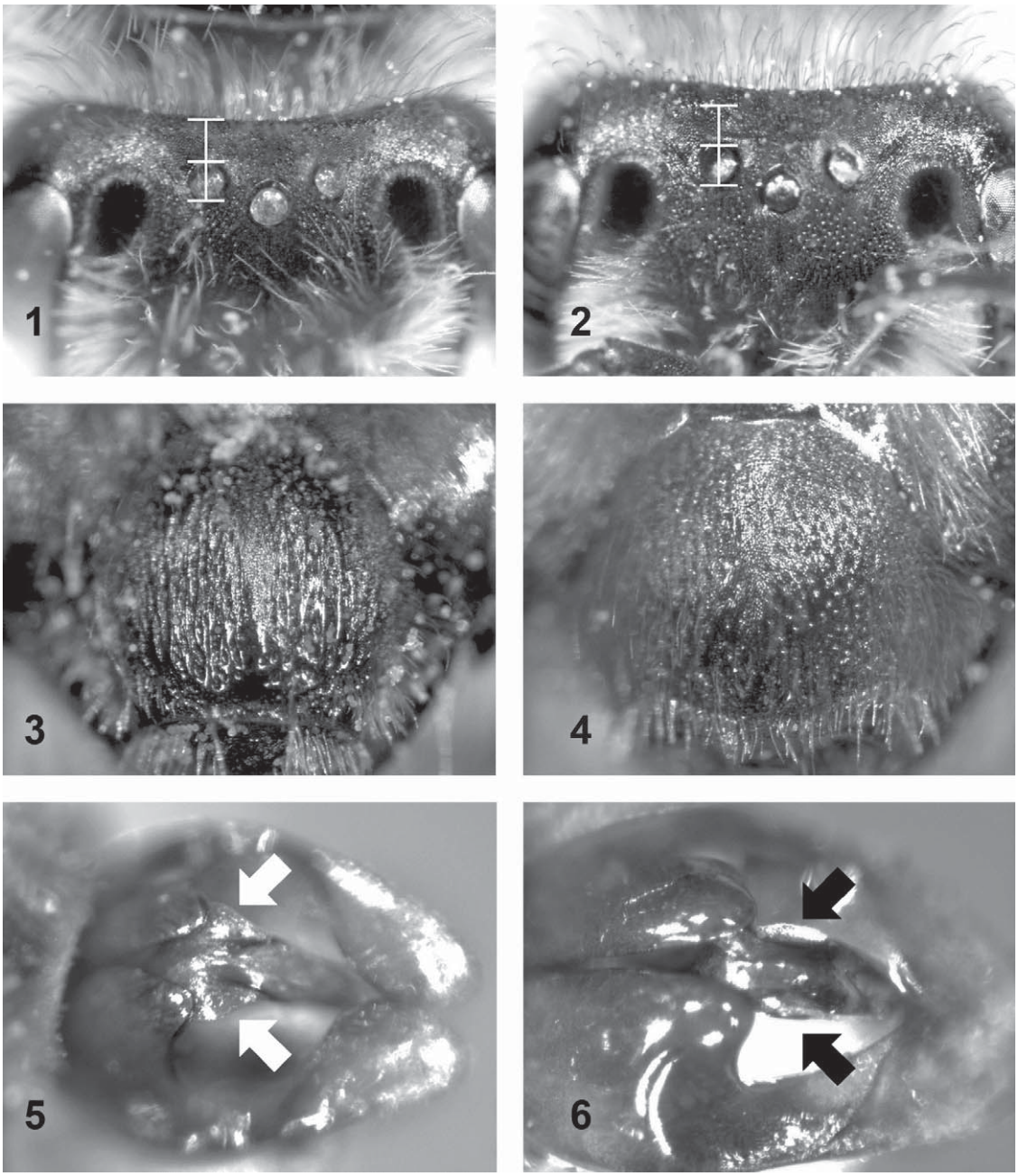

Fig. 2. 1. *Andrena urfanella* female: vertex (distance lateral ocellus-vertex = 1 ocellus diam); 2. *A. truncatilabris* female: vertex (distance lateral ocellus-vertex = 1.5 ocellus diam); 3. *A. urfanella* female: clypeus; 4. *A. truncatilabris* female: clypeus; 5. *A. urfanella* male: penis valves (arrows: lamellar dorsolateral extensions broad); and 6. *A. seitzi* male: penis valves (arrows: lamellar dorsolateral extensions narrow).

differs from *A. truncatilabris* in having broad and short penis valves (Fig. 3.1), like *A. schmiedeknechti* Magretti, 1883, which differs in having a dark anal fimbria and a black haired frons, whereas *A. urfanella* has got a light coloured anal fimbria and frontal hairs like *A. seitzi* Alfken, 1935. *A. seitzi* differs from *A. urfanella* in having the penis valves with a very narrow lamellar dorsolateral extension

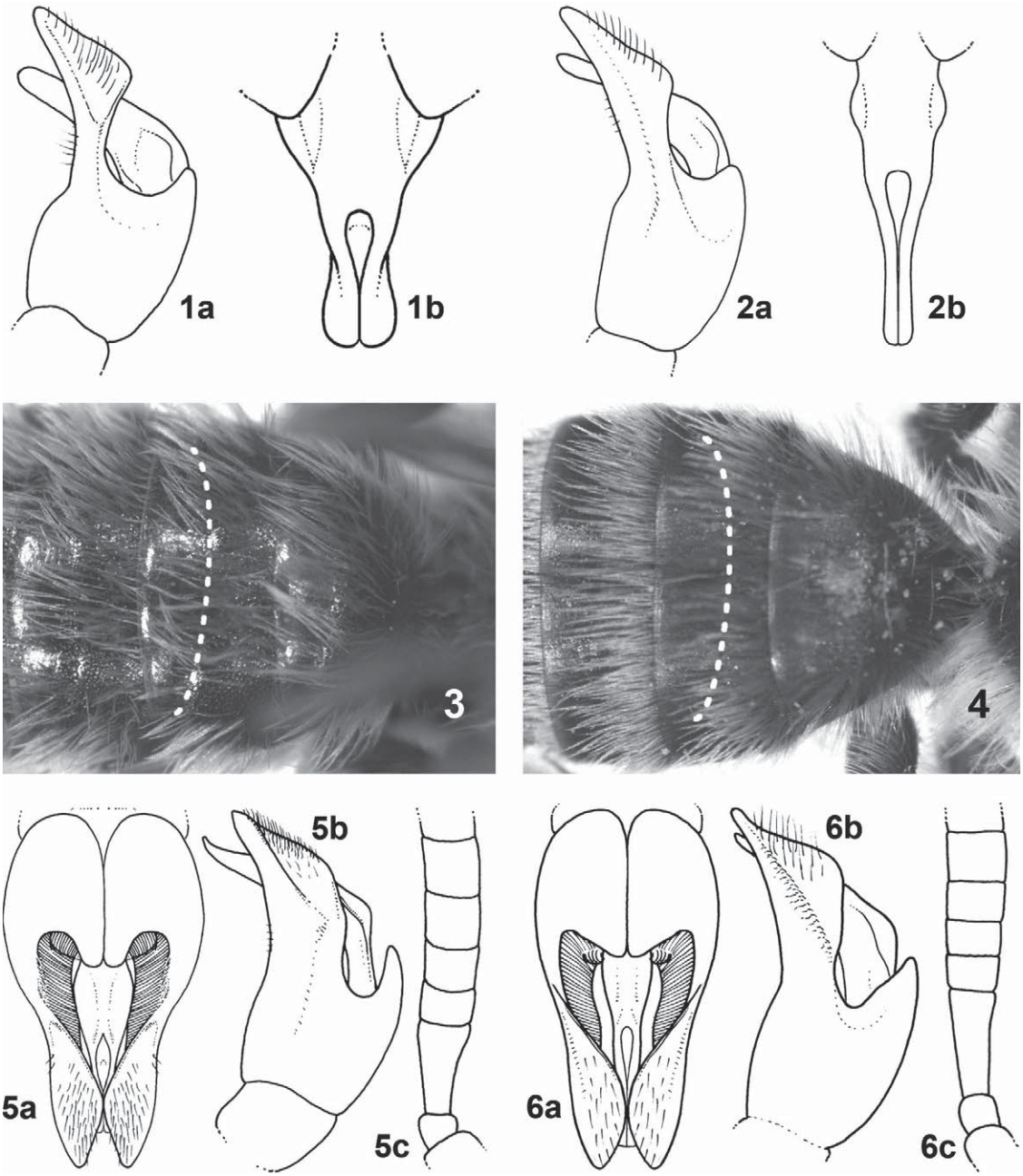

Fig. 3. 1a. *Andrena urfanella* male: penis valves (lateral); 1b. *A. urfanella* male: penis valves (dorsal); 2a. *A. truncatilabris* male: penis valves (lateral); 2b. *A. truncatilabris* male: penis valves (dorsal); 3. *A. efeana* female: depression of tergite II (breadth = 0.5 tergite length); 4. *A. seminuda* female: depression of tergite II (breadth > 0.5 tergite length); 5a. *A. efeana* male: genitalia (lateral); 5b. *A. efeana* male: genitalia (dorsal); 5c. *A. efeana* male: basal segments of flagellum; 6a. *A. seminuda* male: genitalia (lateral); 6b. *A. seminuda* male: genitalia (dorsal); and 6c. *A. seminuda* male: basal segments of flagellum.

on each side near the base (Fig. 2.6) (broad in *A. urfanella* [Fig. 2.5]), and in having narrow penis valves like *A. truncatilabris* (Fig. 3.2).

Female

Body length: 11-12 mm. Color: body black; flagellar segments 4-11 dark brownish below. Pubescence: mainly rusty yellow to rusty brown (greyish yellow to whitish in worn specimens), paraocular region, ventral side of head, pleurae, femora and flocculus white, clypeus with very fine and short whitish hairs, vertex with intermixed black hairs, hairs of scutum, scutellum, postscutellum and propodeum bright rusty yellow in fresh specimens. Tergite 1 basally and laterally rusty yellow, apart from that bald, tergites 2-4 with appressed, short, bristle-like, white hairs, without any hairbands or fringes. Anal fimbria yellowish brown. Scopa white, basally rusty yellow.

Head. Clypeus with extremely fine shagrination, apical part polished medially, apical part with longitudinal grooves on both sides of the unpunctate mid-line, with dense to moderately dense and partly elongated punctures.

Mesosoma. Scutum shagreened completely, dull, with dense punctuation.

Metasoma. Tergite 1 with very fine shagrination, ± unpunctate, only basal and lateral parts with punctures, following tergites shagreened, with moderately dense and shallow punctures, depressions unpunctate, shagreened, dull.

Male

Body length: 9.5–11 mm. Color: Body black; clypeus and sometimes small spots on the paraocular area whitish yellow; flagellar segments 4–11 dark brownish below. Pubescence: mainly rusty yellow to rusty brown (greyish yellow to whitish in worn specimens), clypeus, ventral side of head and thorax, and femora white. Hairs of tergite 1 moderately long, of the following tergites shorter on each tergite, rusty yellow, without any hairbands or fringes.

Head. Clypeus with very superficial shagrination, apical part medially polished, with dense punctures and an unpunctate midline.

Mesosoma. Scutum shagreened completely, dull, with moderately dense punctuation.

Metasoma. Tergites with coarse shagrination, with moderately dense to moderately sparse punctuation.

Floral Association

Probably polylectic, but mostly collected on yellow flowering Brassicaceae.

Etymology

Warncke called this species *Andrena urfana*, because he collected many of his samples near Urfa. For reasons given in the introduction, we emendated this name to *Andrena urfanella*.

Type Material

Holotype female, "TK–20 km W Kilis/Gaziantep 27. 4. 76 leg. Klaus Warncke", deposited in the collection of the Oberösterreichisches Landesmuseum, Biologiezentrum, Linz (Austria).

Paratypes

Oberösterreichisches Landesmuseum, Biologiezentrum, Linz/Austria: "TK–Urfa 25-4-1976 10kmN Ceylanpınar leg. Klaus Warncke"—13 females, 4 males; "TÜRKEI–Harran/Urfa 26-IV-76 leg. Kl. Warncke"—1 female; "TK–Ceylanpınar/Urfa 25-IV-76 leg. Kl. Warncke"—2 females; "TÜRK.–Mardin: Derik 15-V-1975 leg. K. Warncke"—1 female; "TK–20 km W Kilis/Gaziantep 27. 4. 76 leg. Klaus Warncke"—26 females, 7 males. All specimens bear a white label "Andrena urfana War. det. Dr. Warncke", and a red label "Paratype"; partially they bear an additional white label "ex coll. WARNCKE 1989".

Adnan Menderes University Aydın/Turkey: "Şanlıurfa, between Siverek—Viranşehir, 37° 44.382' N 39° 18.6436' E, 835 m, 14. 05. 2005, leg. Gülcü & Yasan"—10 females; "Turkey, Diyarbakır, between Şanlıurfa – Karacadağ, 37° 49.318' N 39° 38.063' E, 14. 05. 2005, leg. Gülcü & Yasan"—2 females; "Turkey, Diyarbakır, Urfa/Karacadağ, 14. 05. 2005, leg. Gülcü & Yasan"—1 female; "Turkey, Konya, Beyşehir, 37° 51.357' N, 31° 36.192' E, 1140m, 25. 05. 2005, leg. S. Hazır"—3 females; "Turkey, Antep, between Antep – Urfa, 13. 05. 2005, leg. Gülcü & Yasan"—1 female; "Turkey, Mersin, between Gülnar – Ermenek, 36°21.380N 33°18.841E, 1075m, 24. 05. 2005, leg. S. Hazır"—2 females; "Turkey, Hatay, Altinozu, 36°06.57N 36°16.27E, 204 m, 17. 05. 2006, leg. S. Hazır & C. Çobanoğlu"—2 males; "Turkey, around K. Maras, 37° 20.93' N 37° 08.98' E, 601 m, 18. 05. 2006, leg. S. Hazır & C. Çobanoğlu"—1 female; "Turkey, Aksaray, 38° 38.22' N 33° 44.30' E, 929 m, 05. 06. 2005, leg. S. Hazır & B. Gülcü"—1 female; "leg. E. Scheuchl, 05. 06. 2005, TR - Aksaray, 38° 38.224' N 33° 44.309' E, 930m"—1 female.

Zoologische Staatssammlung München/Germany: "TK–Urfa 25-4-1976 10kmN Ceylanpınar leg. Klaus Warncke"—2 females, 1 male; "TK–20 km W Kilis/Gaziantep 27. 4. 76 leg. Klaus Warncke"—2 males. Both specimens bear a white label "Andrena urfana War. det. Dr. Warncke", and a red label "Paratype".

Steinhardt National Collections of Natural History at Tel Aviv University, Tel Aviv/Israel: "23-Mar-2010, Judean Foothills, Gal'on, UTM 36R: 673420 3503860, leg. G. Pisanty"—1 female, 1 male; "28-Mar-2010, Judean Foothills, Beit Nir, UTM 36R: 678810 3501760"—3 females, 1 male.

Coll. E. Scheuchl, Ergolding/Germany: "TK–Urfa 25-4-1976 10kmN Ceylanpınar leg. Klaus Warncke"—1 female, 1 male; "TK–20 km W Kilis/Gaziantep 27. 4. 76 leg. Klaus Warncke"—1 female, 1 male; "leg. Barış Gülcü, 13.05.2005, TR - Diyarbakır, around Karacadağ mountain"—1 male; "leg. E. Scheuchl, 18.05.2005, Ankara, Hacettepe University, Beytepe Campus"—1 female, 1 male; "leg. E. Scheuchl, 25.05.2005, Konya, Beyşehir, 37° 51.357' N 31° 36.192' E, 1140m"——2 females; "leg. E. Scheuchl, 11.05.2005, Turkey, Ankara, Beytepe"—1 male; "leg. E. Scheuchl, 15.05.2005, Ankara, Hacettepe University, Beytepe Campus"—1 male; "leg. E. Scheuchl, 03.06.2005, Ankara, Hacettepe University, Beytepe Campus"—1 male.

Material Other Than Types

Sixty eight female and 9 male specimens from the Judean foothills/Israel (coll. Tel Aviv), and 3 females from the environment of Gürün/Turkey (coll. Linz).

Remarks on Subgeneric Position

Lanham (1949) described the subgenera *Scaphandrena* and *Elandrena,* containing only Nearctic species. Among others they are characterized by having narrow foveae and unusually short hairs of the scopa. LaBerge (1964) supposed, that *Elandrena* has to be synonymized with *Scaphandrena*. Warncke (1968) described the subgenus *Truncandrena*, which contains only Palearctic species. Ribble (1974) merged *Elandrena* with *Scaphandrena*, and he also synonymized *Truncandrena* with *Scaphandrena*, based upon observation of a single pair of *Andrena ferrugineicrus* and by concluding from Warncke's descriptions and keys. Lanham & Weissmann (1988) discussed the merging of *Scaphandrena* and *Elandrena*, and they suppose Warncke's *Truncandrena* to be a member of the species group formerly called *Elandrena*, which now belongs to the subgenus *Scaphandrena*.

Warncke united several species groups in his *Truncandrena*, which obviously are not closely related, but all these species neither have unusually narrow foveae nor unusually short hairs of the scopa. In addition to that none of the male genitalia shown in Ribble (1974) have a close resemblance to the genitalia of *Truncandrena* species. Thus, it seems very doubtful to us, that *Truncandrena* is a synonym of *Scaphandrena*. Even considering a splitting of *Truncandrena* sensu Warncke into 3 or 4 different subgenera, the positioning of *A. urfanella* in *Truncandrena* will remain correct, because it is a very close relative of *Andrena truncatilabris*, the type species of *Truncandrena*.

Andrena (Poecilandrena) efeana **sp. nov.** (Fig. 3)

Diagnosis

This species is very close to *Andrena seminuda* Friese, 1896. The female of *A. efeana* is differing from the female of *A. seminuda* as follows: Depressed apical parts of tergites 2-4 as broad as 0.5 of tergite length (Fig. 3.3), surface smooth and shiny (*A. seminuda:* distinctly broader than one half of tergite length (Fig. 3.4), surface completely dulled); face with black hairs along inner margins of compound eyes, frons with intermixed black hairs (*A. seminuda:* face without any black hairs). The male of *A. efeana* is differing from the male of *A. seminuda* as follows: Clypeus black (*A. seminuda:* yellow); antennal segment 3 shorter than segment 4 (Fig. 3.5c) (*A. seminuda:* as long as [Fig. 3.6c]); gonocoxites in dorsal view and gonoforceps in lateral view somewhat robust (Fig. 3.5a-b) (*A. seminuda:* gonocoxites and gonoforceps more slender [fig. 3.6a-b]), penis valves with dorsal lamellae rather broad (*A. seminuda:* narrow).

Female

Body length: 9-10 mm. Color: body black; antennal segments 5-12 completely dark brownish. Apical depressions of the tergites yellowish hyaline. Pubescence: hairs of foveae blackish brown. Pubescence of the body generally whitish, dorsal side of head and thorax with a brownish tinge, paraocular region with black hairs, vertex with intermixed black hairs; anal fimbria brown; tibial scopa with anterior margin white, posterior margin brownish, hairs distinctly plumose. Hairs of propodeal fimbria as well as the hairs of the propodeal corbicula distinctly plumose.

Head. Clypeus with surface completely shagreened, shagreening finely granular laterally, more superficial and transverse centrally; punctures unequal in size and moderately dense to moderately scattered, dense and moderately coarse on the anterior margin. Fovea short, extends down below the level of the antennal base. Antennal segment 3 almost as long as the following 3 segments together.

Mesosoma. Scutum with surface completely shagreened, shiny posteromedially, with dense punctures.

Metasoma. Tergites shagreened very superficially, shiny, in front of the depressions ± smooth, punctures of tergite 1 moderately dense, of tergites 2–3 moderately dense and moderately fine centrally, getting denser and finer towards the lateral parts. Depressed apical parts without punctures, shagreened very superficially, distinctly shiny, except on tergite 1, which is shagreened more distinctly. Depressed apical parts of tergites 2-4 about as broad as 0.5 of tergite length.

Male:

Body length: 8.5-10 mm. Color: body black; antennal segments 5-13 dark brownish below; apical depressions of the tergites yellowish hyaline. Pubescence relatively long and shaggy, whitish, dorsal side of head and mesosoma with rusty tinge, facial sides with black hairs, frons with scattered black hairs. Pubescence of tergite 1 long, of the following tergites moderately long and ± dense, erect, respectively. depressed basally by the preceeding tergite, rusty brown to yellowish brown; depressions completely glabrous.

Head. Clypeus shagreened very superficially, punctures moderately dense, indistinct. Antennal segment 2 longer than 3 and 4 together, the latter subquadratic.

Mesosoma. Scutum shagreened completely, dull, punctures medium to fine, partially weakly crater-like. Nervulus antefurcal.

Metasoma. Tergite 1 shagreened extremely superficial, following tergites ± smooth, distinctly shiny. Punctures of tergite 1 moderately dense, medium to moderately fine, of tergite 2 dense to moderately dense, very dense and somewhat finer laterally, each of the following tergites a little bit denser. Basal part of tergites 2-3 depressed. Depression very wide, without punctures, smooth.

Floral Association

All specimens have been collected on *Holosteum umbellatum* L. (Caryophyllales: Caryophyllaceae).

Etymology

"Efe" was the predicate of a group of resistance warriors, who supported Atatürk's troops in recapturing the province of Aydın during the Turkish War of Independence. Because we collected the samples on the mountains around Aydın, we dedicate the species to these freedom fighters.

Type Materials

Holotype female, "Turkey, Aydın, between Malgaçmustafa – Ovacık, 38° 01' 17' N 28° 09' 57' E, 1084 m, 21. 04. 2007, leg. S. Hazır & B. Gülcü", deposited in the collection of the Adnan Menderes University Aydın.

Paratypes

Adnan Menderes University Aydın/Turkey: "Turkey, Aydın, between Malgaçmustafa – Ovacık, 38° 01' 17' N 28° 09' 57' E, 1084 m, 21. 04. 2007, leg. S. Hazır & B. Gülcü"—3 females.

Coll. E. Scheuchl, Ergolding/Germany: "Turkey, Aydın, between Malgaçmustafa – Ovacık, 38° 01' 17' N 28° 09' 57' E, 1084 m, 21. 04. 2007, leg. S. Hazır & B. Gülcü"—3 females, 1 male.

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