



# *Entomofauna*

ZEITSCHRIFT FÜR ENTOMOLOGIE

---

Band 37, Heft 33: 505-520

ISSN 0250-4413

Ansfelden, 4. Januar 2016

---

**Species of *Microdontomerus* (CRAWFORD, 1907) and  
*Eridontomerus* (CRAWFORD, 1907) (Hymenoptera:  
Torymidae: Microdontomerini) from Turkey,  
with descriptions of new species**

**Mikdat DOĞANLAR<sup>1</sup>**

**Abstract**

Species of *Microdontomerus* (CRAWFORD, 1907) and *Eridontomerus* (CRAWFORD, 1907) (Hymenoptera:Torymidae: Microdontomerini) from Turkey were studied. Four species of *Microdontomerus*, *M. annulata* (SPINOLA), *M. gurcukoyensis* nov.sp., *M. altinekinesis* nov.sp., *M. direklinensis* nov.sp., 3 species of *Eridontomerus*, *E. rufipes* ERDÖS, *E. laticornis* (FÖRSTER), *E. fulviventris* ERDÖS were from several parts of Turkey. The genus *Eridontomerus* and its species were newly recorded from Turkey. The new species were described, diagnostic characters were illustrated, and the identification keys for the Turkish species of both genera was provided.

Key words: *Microdontomerus*, *Eridontomerus* species, Torymidae, Turkey.

## Zusammenfassung

Arten *Microdontomerus* CRAWFORD (1907) und *Eridontomerus* CRAWFORD (1907) (Hymenoptera: Torymidae: Microdontomerini) aus der Türkei untersucht. Vier Arten von *Microdontomerus*, *M. annulata* (SPINOLA), *M. gurcukoyensis* nov.sp., *M. altinekinesis* nov.sp., *M. direklinensis* nov.sp., 3 Arten von *Eridontomerus*, *E. rufipes* ERDÖS, *E. laticornis* (FÖRSTER), *E. fulviventris* ERDÖS, waren aus verschiedenen Teilen der Türkei. Die Gattung *Eridontomerus* und seine Arten wurden neu aus der Türkei aufgenommen. Die neuen Arten wurden beschrieben, diagnostischen Charaktere wurden dargestellt, als auch die Identifikationstasten für die türkischen Arten sowohl Gattungen Verfügung gestellt wurde.

## Introduction

Up to now, only one species of *Microdontomerus* CRAWFORD, *M. annulata* (SPINOLA) was recorded as *Paraholaspis cothurnata* MASI (DOĞANLAR 1984). On the other hand some species of *Eridontomerus* CRAWFORD have been recorded from some countries of Europe, but not any species from Turkey. By this work the Turkish species of the genera of *Microdontomerus* and *Eridontomerus* (Hymenoptera: Torymidae: Microdontomerini) were revised, morphological characters of species of both genera were given, and new species from Turkey were described. The identification keys for Turkish species of the each genus were provided.

## Material and methods

This study is based upon examination and identification of the specimens collected from some parts of Turkey. The examined specimens and types of the new species were deposited in Insect Museum of Biological Control Station, Yüreğir, Adana, Turkey (IMBC). Specimens were collected by sweeping net and putting the whole contents of the swept materials directly in 96 % ethanol. After sorting the material, individuals were mounted on cards for further morphological studies. The species were identified by following the keys of GRISSEL (1995; 2005) and ZEROVA & SEREGINA (1991, 1999). Wings and antennae of holotypes of the new species were slide-mounted in Canada balsam. Photographs of diagnostic characters of the genera were taken by using of Leica DM 500 microscopes with a digital Leica ICC 50 camera attached to it.

## Terminology and abbreviations

Morphological terminology follows GIBSON (1997), and terminology of hypopygia was taken from DOĞANLAR (2016). Abbreviations used in the key and descriptions are: OOL= shorter distance between ocello-ocular line, POL= distance between posterior ocelli, F1-6 = funicular segments.

## Results and discussion

### *Microdontomerus* CRAWFORD, 1907

The genus *Microdontomerus* was described by CRAWFORD (1907) having type species *Torymus anthonomi* CRAWFORD (orig. desig. and monotypic). GRISSEL (1995) gave the synonyms of genus, and recorded 8 species all over the world, 4 of them as Nearctic, 2 as Palearctic, and 2 are Afrotropical species. Later, GRISSEL (2005) revised the Nearctic species, and described 15 new species.

Host records have been given for some species as parasitoid of several families of Hymenoptera, Diptera, Coleoptera and Lepidoptera (GRISSEL 1995; 2005; NOYES 2015).

The distributions of the known species were given by GRISSEL (1995, 2005) and NOYES (2015).

**Diagnostic characters:** Hind femur simple; occipital carina absent; marginal vein 3.5-4.5x the length of the stigmal vein; hind tibia with 2 apical spur; female antenna with one anellus, and male anteanna with 2 anelli (GRISSEL 1995). Hypogium (Fig. 9 i of DOĞANLAR 2016)) with width of hypopygium/median length of hypopygium = 3.5; width of hypopygium/lateral length of hypopygium = 1.86; width of hypopygium/distance between anterior margin of median lobe and posterior edge of median sclerotized area = 3.2. Length of posterior median incision 5.0x as long as length of anterior median incision; median sclerotized area 3.0x as long as posterior median incision; median length of hypopygium 3.3x length of anterior lobe; median sclerotized area 5.75x as long as its own minimum width (DOĞANLAR 2016).

### Key to the Turkish species of *Microdontomerus*

- 1 Ovipositor sheaths (Fig. 1 a) very long, almost twice as long as metasoma, ovipositor index 0.26- 0.38; fore wing (Fig. 1 e) with costal cell 2.66x marginal vein; marginal vein about 4.0x stigmal vein, 2.14x postmarginal vein; stigmal vein (Fig 1 e) short, almost fused with stigma; scutellum (Fig. 1 c) finely reticulated, without punctures; antenna (Fig. 1 d) attached distinctly above level of ventral edge of eyes; pedicel plus flagellum 2.8x length of scape; F1 equal size to F2; hind femora (Fig. 1 f) 3.75x as long as width..... *M. annulata* SPINOLA
- Ovipositor sheaths (Figs 2 a, 3a, 4a) short at most 1.12x as long as metasoma ..... 2
- 2 Ovipositor sheaths (Fig. 2 a) about 1.12x length of metasoma, ovipositor index 0.53.; fore wing (Fig. 2 e) with costal cell 2.43x marginal vein; marginal vein about 2.33x stigmal vein, 1.25x postmarginal vein; stigmal vein (Fig. 2 e) very long, stigma small; scutellum (Fig. 2 d) finely reticulated, without punctures; antenna (Fig. 2 c) attached distinctly above level of ventral edge of eyes; pedicel plus flagellum 2.66x length of scape; F1 distinctly shorter than F2, 1.75x as wide as long; funicular segments transverse, about twice as wide as long; hind femora (Fig. 2 f) 3.0x as long as width, and as long as hind tibia; Head and mesosoma black with greenish reflexion; antenna yellow; coxae concolorous with body, femora yellow, except dorsally brown with greenish reflexion; tibiae and tarsi yellow; metasoma brown, except basally testaceous; fore wing veins yellow .....*M. gurcukoyensis* nov.sp.

- Ovipositor sheaths (Figs 3a, 4a) distinctly shorter than metasoma, at most 0.8x length of metasoma ..... 3
- 3 Ovipositor sheaths (Fig. 3a) 0.8x as long as metasoma, ovipositor index 0.68; fore wing (Fig. 3e) with costal cell 1.66x marginal vein; marginal vein about 5.0x stigmal vein, 3.6x postmarginal vein; stigmal vein (Fig. 3e) distinct about half length of width of marginal vein, stigma distinctly developed, about 2.5x as long as stigmal vein; scutellum (Fig. 3d) with dense deeply punctured; antenna (Fig. 3b,c) attached distinctly above level of ventral edge of eyes; pedicel plus flagellum 2.5x length of scape; F1 equal size to F2; hind femora (Fig. 3f) 2.7x as long as width .....  
 ..... *M. altinekinesis* nov.sp.
- Ovipositor sheaths (Fig. 4a) 0.42x as long as metasoma, ovipositor index 1.3; fore wing (Fig. 4f) with costal cell 1.8x marginal vein; marginal vein about 3x stigmal vein, 1.44x postmarginal vein; stigmal vein (Fig 4 f) almost fused with stigma; scutellum (Fig. 4d) finely reticulated, with sparse punctures; antenna (Fig. 4b,c) attached at level of ventral edge of eyes; pedicel plus flagellum 2.95x length of scape; F1 equal size to F2; hind femora (Fig. 4e) 3.0x as long as width .....  
 ..... *M. direklinensis* nov.sp.

***Microdokterus annulata* (SPINOLA, 1808) (Figs 1a-f)**

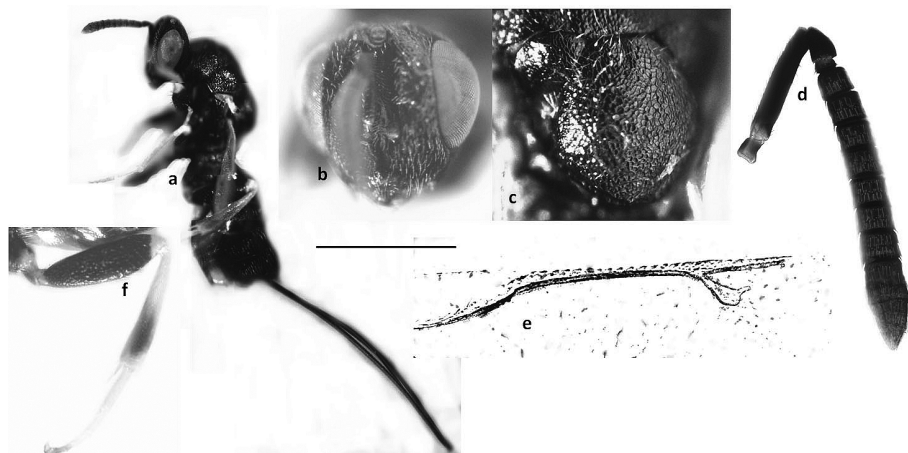
*Diptolepis annulata* SPINOLA, 1808: 215. Neotype female, designated by GRAHAM (1994: 99), Lago di Bolsena, Italy, (BMNH).

Synonyms, hosts and distribution: given by NOYES (2015).

Taxonomy: The generic placement of this species was discussed by GRISSELL (1995), and GRAHAM (1994) discussed its taxonomy and synonyms. ZEROVA & SEREGINA (1999) redescribed and figured the species from several parts of Ukraine and Russia.

Diagnostic characters from the Turkish specimens: Ovipositor sheaths (Fig. 1a) very long, almost twice as long as metasoma, ovipositor index 0.26- 0.38; fore wing (Fig. 1e) with costal cell 2.66x marginal vein; marginal vein about 4.0x stigmal vein, 2.14x postmarginal vein; stigmal vein (Fig. 1e) short, almost fused with stigma; scutellum (Fig. 1c) finely reticulated, without punctures; antenna (Fig. 1b,d) attached distinctly above level of ventral edge of eyes; pedicel plus flagellum 2.8x length of scape; F1 equal size to F2; hind femora (Fig. 1f) 3.75x as long as width. Body including ovipositor 6.5 mm. (ovi. 3.1 mm).

Distribution in Turkey: 1 female, Erzurum, 25.ix.1979, swept from *Charthamus* sp. field, (DOĞANLAR 1984; ÖNCÜER 1991). By this work: 1 female, Sekili, Oğuzeli, Gaziantep, swept from pasture, M. Doğanlar.



**Fig. 1:** *Microdontomerus annulata* (SPINOLA), female. (a) body; (b) head, in frontal view; (c) scutellum; (d) antenna; (e) fore wing veins; (f) hind legs. (Scale bar for a= 1.62 mm; for b,d,f= 0.66 mm; for c= 0.45 mm; for e= 0.6 mm).

***Microdontomerus gürçükoyensis* DOĞANLAR nov.sp. (Figs 2a-f)**

**E t y m o l o g y .** The name is derived from the name of Gürçüköy, Tokat, from where the Holotype was collected.

**D i a g n o s i s .** Ovipositor sheaths about 1.12x length of metasoma, ovipositor index 0.53; costal cell 2.43x marginal vein; marginal vein about 2.33x stigmal vein, 1.25x postmarginal vein; stigmal vein (Fig 2 e) very long, stigma small; scutellum finely reticulated, without punctures; antenna attached distinctly above level of ventral edge of eyes; pedicel plus flagellum 2.66x length of scape; F1 distinctly shorter than F2, 1.75x as wide as long; funicular segments transverse, about twice as wide as long; hind femora 3.0x as long as width, and as long as hind tibia;

**D e s c r i p t i o n :**

Female. Body (Fig. 2 a) with head and mesosoma black with greenish reflexion; antenna yellow; coxae concolorous with body, femora yellow, except dorsally brown with greenish reflexion; tibiae and tarsi yellow; metasoma brown, except basally testaceous; fore wing veins yellow. Body including ovipositor 3.2 mm. (ovi. 1.1 mm).

Head in dorsal view almost as wide as mesoscutum, width to length 74:32; POL 2.77x OOL; OOL 1.3x diameter of lateral ocellus. Head (Fig. 2 b) in frontal view 1.1x as wide as high in ratio 45:40; dorsal margin of torulus distinctly above level of lower edge of eyes; malar space consists 0.31x high of eye; face with fine sculpture; antenna (Fig. 2 c) with pedicel plus flagellum 2.66x length of scape; F1 distinctly shorter than F2, 1.75x as wide as long; funicular segments transverse, about twice as wide as long.

Mesosoma (Fig. 2 a,d) moderately bulged in profile, propodeum declined, distinctly visible from above; sculpture of pronotum, mesoscutum and scutellum with distinct reticulation; pronotum 0.66x as long as mesoscutum; propodeum almost smooth. All

coxae with fine reticulation. Forewing (Fig. 2 e) with costal cell 2.43x marginal vein; marginal vein about 2.33x stigmal vein, 1.25x postmarginal vein; stigmal vein (Fig 2 e) very long, stigma small; Hind femora (Fig. 2 f) 3.0x as long as width.

Metasoma (Fig. 2 a) twice as long as rest of body; excluding ovipositor as long as rest of body; tip of hypopygium about 4/5 length metasoma; Ovipositor sheaths about 1.12x length of metasoma, ovipositor index 0.53.

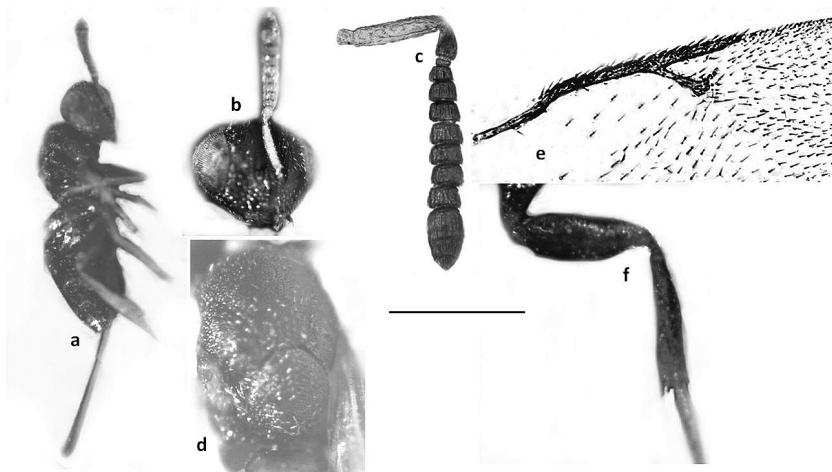
Male: unknown

**Material examined:** Holotype, female, Turkey: Tokat, Gürcüköy, 07.v. 1989, H. Çam, swept from wheat field, on card, left antenna slide mounted in Canada balsam, deposited in the Insect collection of Research Station of Biological Control, Adana.

**Distribution:** Turkey: Tokat, Gürcüköy,

**Host:** unknown.

**Comments:** *Microdontomerus gurcukoyensis* nov.sp. is similar to *Microdontomerus albipes* (GIRAUD) and *M. gallicolus* ZEROVA & SEREGINA in having ovipositor sheaths almost as long as metasoma or slightly longer than metasoma and body black with greenish reflexion, but the new species differs from *M. albipes* in having ovipositor sheaths distinctly shorter than head plus metasoma, about 1.12x length of metasoma; fore wing veins yellow (in *M. albipes* ovipositor as long as the length of head plus metasoma, almost 1.3x length of metasoma; fore wings with veins very pale-ribbed or discolored; stigma black-brown). the new species differs from *M. gallicolus* in having ovipositor index 0.53; stigmal vein (Fig. 2e) very long, stigma small; antenna (Fig. 2f) with F1 distinctly shorter than F2, 1.75x as wide as long; funicular segments distinctly transverse, about twice as wide as long (in *M. gallicolus* ovipositor index 0.75: stigmal vein (Fig. 1, 2, and 5 of ZEROVA & SEREGINA 1999) very long, 1.3x as long as stigma; pedicel plus flagellum 2.6x length of scape; F1 distinctly shorter than F2, twice as wide as long; F2-F7 slightly transverse, 1.42x as wide as long).



**Fig. 2:** *Microdontomerus gurcukoyensis* nov.sp. female. (a) body; (b) head, in frontal view; (c) antenna; (d) scutellum; (e) fore wing veins; (f) hind legs. (Scale bar for a= 1.22 mm; for b,c= 0.75 mm; for d,e= 0.42 mm; for f= 0.6 mm).

***Microdontomerus altinekinensis* DOĞANLAR nov.sp. (Figs 3a-f)**

**E t y m o l o g y .** The name is derived from the name of Altinekin, Konya, from where the Holotype was collected.

**D i a g n o s i s .** Ovipositor sheaths 0.8x as long as metasoma, ovipositor index 0.68; costal cell 1.66x marginal vein; marginal vein about 5.0x stigmal vein, 3.6x postmarginal vein; stigmal vein distinct about half length of width of marginal vein, stigma distinctly developed, about 2.5x as long as stigmal vein; scutellum with dense deeply punctured; antenna attached about level of ventral edge of eyes; pedicel plus flagellum 2.5x length of scape; F1 equal size to F2; hind femora 2.7x as long as width.

**D e s c r i p t i o n :**

Female. Body (Fig. 3a) black with coppery-green reflexion; antenna yellow; coxae concolorous with body, femora and tibiae black except both tips, and fore femora and tibia yellow, tarsi yellow, except pretarsi brown; fore wing veins yellow. Body including ovipositor 2.7 mm. (ovi. 0.8 mm).

Head (Fig. 3a) in dorsal view slightly narrower than width of mesoscutum, width to length 75:30; POL 4.2x OOL; OOL equal diameter of lateral ocellus. Head (Fig. 3c) in frontal view as wide as high in ratio 40:40; dorsal margin of torulus about level of lower edge of eyes; malar space consists 0.42x height of eye; face with fine sculpture; antenna (Fig. 3b) with pedicel plus flagellum 2.5x length of scape; F1 equal size to F2.

Mesosoma (Fig. 3a) slightly bulged in profile, propodeum declined, distinctly visible from above; sculpture of pronotum and mesoscutum with distinct reticulation, scutellum (Fig. 3d) with dense deeply punctured pronotum short, about 0.35x as long as mesoscutum; propodeum almost smooth. All coxae with fine reticulation. Forewing (Fig. 3e) with costal cell 1.66x marginal vein; marginal vein about 5.0x stigmal vein, 3.6x postmarginal vein; stigmal vein (Fig. 3e) distinct about half length of width of marginal vein, stigma distinctly developed, about 2.5x as long as stigmal vein. hind femora (Fig. 3f) 2.7x as long as width.

Metasoma (Fig. 3a) 1.84x as long as rest of body; excluding ovipositor as long as rest of body; tip of hypopygium about 4/5 length metasoma; Ovipositor sheaths 0.8x as long as metasoma, ovipositor index 0.68.

**M a l e :** unknown.

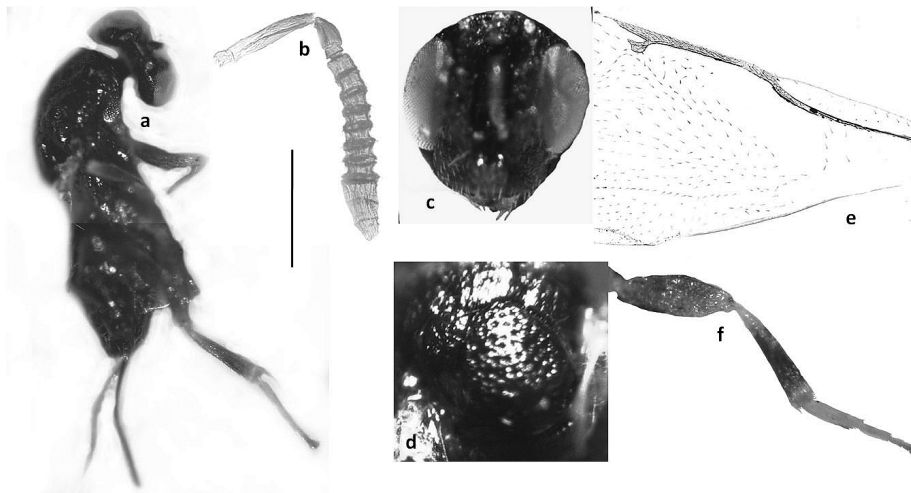
**M a t e r i a l e x a m i n e d :** Holotype, female, Turkey: Konya, Altinekin, 20.vi. 2011, M. Doğanlar, swept from pasture, on card, left antenna slide mounted in Canada balsam, deposited in the Insect collection of Research Station of Biological Control, Adana.

**D i s t r i b u t i o n :** Turkey: Konya, Altinekin.

**H o s t :** unknown.

**C o m m e n t s :** *Microdontomerus altinekinensis* nov.sp. is similar to *Microdontomerus direklinensis* nov.sp. in having ovipositor sheaths distinctly shorter than metasoma, but the new species differs from *M. direklinensis* in having ovipositor sheaths 0.8x as long as metasoma, ovipositor index 0.68; costal cell 1.66x marginal vein; marginal vein about 5.0x stigmal vein, 3.6x postmarginal vein; stigmal vein (Fig. 3e) distinct about half length of width of marginal vein, stigma distinctly developed, about 2.5x as long as

stigmal vein; scutellum with dense deeply punctured; pedicel plus flagellum 2.5x length of scape (in *M. direklinensis* ovipositor sheaths 0.42x as long as metasoma, ovipositor index 1.3; costal cell 1.8x marginal vein; marginal vein about 3x stigmal vein, 1.44x postmarginal vein; stigmal vein (Fig. 4f) almost fused with stigma; scutellum finely reticulated, with sparse punctures; pedicel plus flagellum 2.95x length of scape).



**Fig. 3:** *Microdontomerus gurcukoyensis* nov.sp. female. (a) body; (b) antenna; (c) head, in frontal view; (d) scutellum; (e) fore wing veins; (f) hind legs. (Scale bar for a= 0.72 mm; for b, c, d = 0.4 mm; for e,f= 0.56 mm).

***Microdontomerus direklinensis* DOĞANLAR nov.sp. (Figs 4a-f)**

**E t y m o l o g y .** The name is derived from the name of Direkli, Oğuzeli, Gaziantep, from where the Holotype was collected.

**D i a g n o s i s .** Ovipositor sheaths 0.42x as long as metasoma, ovipositor index 1.3; costal cell 1.8x marginal vein; marginal vein about 3x stigmal vein, 1.44x postmarginal vein; stigmal vein almost fused with stigma; scutellum finely reticulated, with sparse punctures; antenna attached at level of ventral edge of eyes; pedicel plus flagellum 2.95x length of scape; funicular segments slightly widening towards tip, F7 1.3x wider than F1; the latter equal size to F2; F1-F7 about 1.27x as wide as long; club twice as long as width. Hind femora 3.0x as long as width

**D e s c r i p t i o n :**

Female. Body (Fig. 4a) black with coppery-green reflexion; antenna black, except scape in basal 2/3 yellow; coxae concolorous with body, femora and tibiae yellow, except base of femora and pretarsi brown; fore wing veins yellow. Body including ovipositor 2.6 mm. (ovi. 0.5 mm).

Head (Fig. 4a) in dorsal view slightly broader than width of mesoscutum, width to length 60:28; POL 2.57x OOL; OOL 1.4x diameter of lateral ocellus. Head (Fig. 4b) in frontal view as wide as high in ratio 40:40; dorsal margin of torulus slightly above level of lower edge of eyes; malar space consists 0.44x height of eye; face with fine sculpture; antenna



(Fig. 4c) with pedicel plus flagellum 2.95x length of scape; funicular segments slightly widening towards tip, F7 1.3x wider than F1; the latter equal size to F2; F1-F7 about 1.27x as wide as long; club twice as long as width.

Mesosoma (Fig. 4a) slightly bulged in profile, propodeum declined, distinctly visible from above; sculpture of pronotum and mesoscutum with distinct reticulation, scutellum (Fig. 4d) reticulated with sparse deep punctures; pronotum short, about 0.4x as long as mesoscutum; propodeum smooth. All coxae with fine reticulation. Forewing (Fig. 4f) with costal cell 1.8x marginal vein; marginal vein about 3x stigmal vein, 1.44x postmarginal vein; stigmal vein (Fig. 4f) almost fused with stigma. Hind femora (Fig. 4e) 3.0x as long as width

Metasoma (Fig. 4a) 1.15x as long as rest of body; excluding ovipositor 0.75x as long as rest of body; tip of hypopygium about 4/5 length metasoma; Ovipositor sheaths 0.42x as long as metasoma, ovipositor index 1.3.

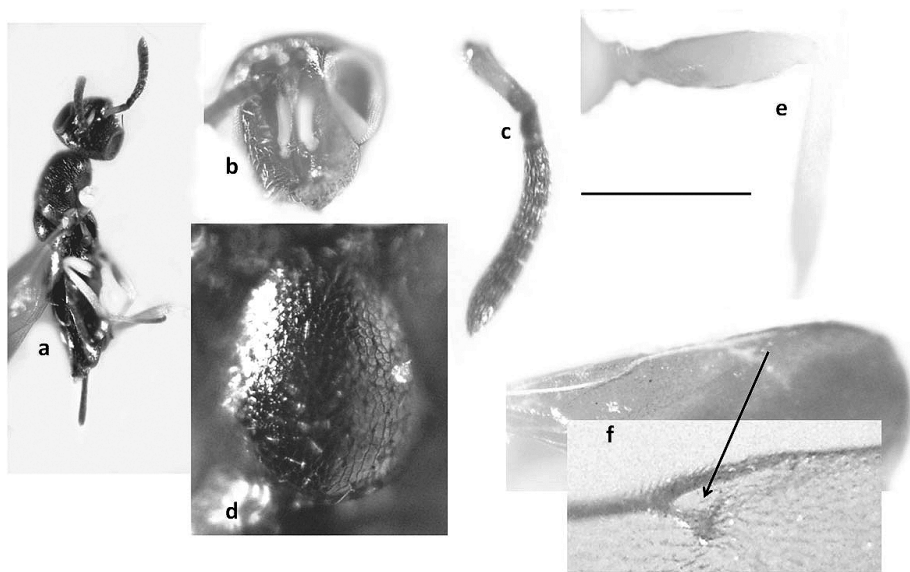
**M a l e :** unknown.

**M a t e r i a l e x a m i n e d :** Holotype, female, Turkey: Gaziantep, Oğuzeli, Direkli, 02.v. 2010, M. Doğanlar, swept from pasture, on card, left antenna slide mounted in Canada balsam, deposited in the Insect collection of Research Station of Biological Control, Adana.

**D i s t r i b u t i o n :** Turkey: Gaziantep, Oğuzeli.

**H o s t :** unknown.

**C o m m e n t s :** *Microdontomerus direklinensis* nov.sp. is similar to *Microdontomerus altinekinensis* nov.sp. The discussion was given before.



**Fig. 4:** *Microdontomerus direklinensis* nov.sp. female. (a) body; (b) head, in frontal view; (c) antenna; (d) scutellum; (e) hind legs; (f) fore wing veins. (Scale bar for a= 1.44 mm; for b, c, d = 0.59 mm; for c,d=0.43 mm; for e= 0.51 mm; for f= 0.62 mm).

***Eridontomerus* CRAWFORD, 1907**

The genus *Eridontomerus* was described by CRAWFORD (1907) having type species *Eridontomerus primus* CRAWFORD (= *isosomatis* RILEY) (orig. desig. and monotypic, USNM). GRISSEL (1995) and NOYES (2015) gave the synonyms of genus, and recorded 12 species all over the world, all of them as Palearctic, only *Eridontomerus isosomatis* (RILEY, 1882) Holarctic (NOYES 2015).

**H o s t :** reared from Eurytomidae (Hymenoptera) and Cecidomyiidae (Diptera) in grass stems (Poaceae) (GRISSELL 1995; NOYES 2015).

**D i s t r i b u t i o n :** given by GRISSEL (1995) and NOYES (2015).

**D i a g n o s t i c c h a r a c t e r s :** Hind femur serrate; propodeum with 2 submedian carinae; antenna with 2-3 anelli. Occipital carina usually present (GRISSELL 1995). Hypopygium with posterior median incision (Fig. 9 b of DOĞANLAR 2016) 0.5x as long as anterior median incision; median sclerotized area at least 2.0x as long as posterior median incision; median length of hypopygium 1.56x length of anterior lobe; median sclerotized area 2.25x as long as its own minimum width; width of hypopygium 2.12x median length, 1.55x lateral length, and 1.51x distance between anterior margin of median lobe and posterior tip of median sclerotized area (DOĞANLAR 2016).

**Identification key for the Turkish species of *Eridontomerus***

- 1 Antennae (Fig. 6c) with flagellar segments strongly transverse, anelli small, 3x as wide as long, 1st smaller than second; funicular segments gradually widening and lengthening, F1 1.6x; F2 1.67x; F3- F4 1.7-1.8x; F6 twice as wide as long; club twice as long as wide. Body (Fig. 5c) with head and mesosoma black with metallic-green reflexion, metasoma yellow; Antenna with scape and pedicel brown, flagellar segments yellow; scape cylindrical, about 5.4x as long as wide; pedicel twice as long as wide; pedicel plus flagellum 2.1x as long as scape Legs wholly yellow. Forewing (Fig. 7c) with basal cell closed, with some hairs; speculum narrow, reaching at most to beginning of marginal vein, widely open; stigma petiolate; marginal vein 3.55x stigmal vein and twice postmarginal vein, the latter 1.8x radial vein (Fig. 3 d). Hind femora (Fig. 6g) elliptical, broad, 2.5x as long as wide, with 4 teeth in apical 1/3; Ovipositor 0.3x length of metasoma (Fig. 5c) ..... *E. rufipes* ERDÖS
- Antennae (Fig. 6a,b) with two anelli, distinctly differs from funicular segments; the latter with F1-F6 slightly widening towards tip ..... 2
- 2(3) Body (Fig. 5b) dark bronze-green; antennae with scape, and funicular segments ventrally yellow; antenna (Fig. 6b) funicular segments and club massive very closely connected each other, anelli small, 1st twice; 2nd 4.0x as wide as long; F1 1.43x; F5 1.3x as wide as long; F6 1.5x as wide as long; F6 1.5x as wide as F1; club almost twice as long as wide; Fore wing (Fig. 7b) with marginal vein 3.46x stigmal vein, 1.6x postmarginal vein, the latter 2.15x as long as stigmal vein. Hind femora (Fig. 6e,f) with ventral margin straight in basal half; in apical half wider, with 3 big teeth and one small tooth. Ovipositor (Fig. 5b) 0.47x length of metasoma ..... *E laticornis* (FÖRSTER)

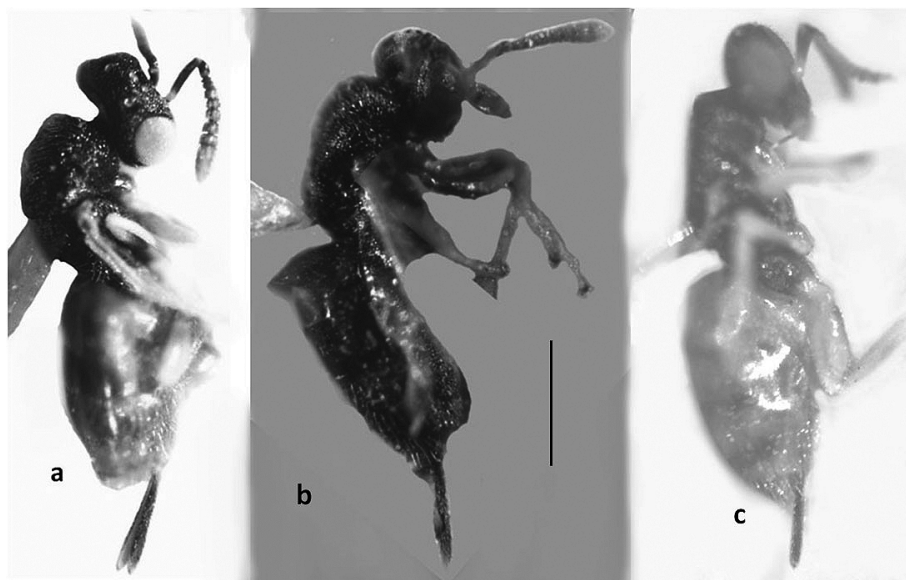
3 (2) Body (Fig. 5a) with head and thorax metallic green, with purple reflection, metasoma yellow; antenna (Fig. 6a) brown, basal part of funicular segments yellow, scape 5.33x; pedicel 1.3x as long as width; pedicel plus flagellum 2.4x as long as scape; F6 1.2x wider than F2 and 1.5x wider than F1, anelli strongly transverse, F1 small, almost twice; F2-F6 1.8-1.9x as wide as long; club almost twice as long as width; Fore wing (Fig. 7a) with marginal vein 2.5x stigmal vein, 1.57x postmarginal vein, the latter 1.6x as long as stigmal vein. Hind femora (Fig. 6d) with ventral margin broadly C-shaped, with 3 big teeth. Ovipositor (Fig. 5a) 0.4-0.5x length of metasoma .....*E. fulviventris* ERDÖS

***Eridontomerus rufipes* ERDÖS, 1954 (Figs 5c,6c,g, 7c)**

*Eridontomerus rufipes* ERDÖS, 1954: 153. 158-159. Lectotype female, (Designated by THROCZY (1992), Tumpa, Hungary (HNHM). Paralectotypes: 7 females, all Hungary: 1, Ujpest;1 Gyón; 2, Vac; 3. Tompa (HNHM).

Synonyms, hosts and distribution: given by NOYES (2015).

Taxonomy : The status of this species was discussed by GRISSELL (1995). ZEROVA & SEREGINA (1999) redescribed and figured the species from several parts of Kazakhstan, Tadzchikistan.



**Fig. 5:** *Eridontomerus* spp. Females body. (a) *E. fulviventris* ERDÖS; (b) *E. laticornis* (FÖRSTER, 1859); (c) *E. rufipes* ERDÖS (Scale bar for a= 0.44 mm; for b,c=0.58 mm).

Diagnostic characters from the Turkish specimens : Antennae (Fig. 6c) with flagellar segments strongly transverse, anelli small, 3x as wide as long, 1st smaller than second; funicular segments gradually widening and lengthening, F1 1.6x; F2 1.67x; F3- F4 1.7-1.8x; F6 twice as wide as long; club twice as long as wide. Body (Fig. 5c) with head and mesosoma black with metallic-green reflexion, metasoma

yellow; Antenna with scape and pedicel brown, flagellar segments yellow; scape cylindrical, about 5.4x as long as wide; pedicel twice as long as wide; pedicel plus flagellum 2.1x as long as scape Legs wholly yellow. Forewing (Fig. 7c) with basal cell closed, with some hairs; speculum narrow, reaching at most to beginning of marginal vein, widely open; stigma petiolate; marginal vein 3.55x stigmal vein and twice postmarginal vein, the latter 1.8x radial vein (Fig. 3 d). Hind femora (Fig. 6g) elliptical, broad, 2.5x as long as wide, with 4 teeth in apical 1/3; Ovipositor 0.3x length of metasoma (Fig. 5c) Body including ovipositor 2.7 mm. (ovi.0.36 mm).

**Distribution in Turkey:** 1 female, Ekolojik Köy, Polatlı, Ankara, 20.vi.2011, swept from pasture, M. Doğanlar; 1 female, Yenigöl, Polatlı, Ankara, 20.vi.2011, swept from pasture, M. Doğanlar.

***Eridontomerus laticornis* (FÖRSTER, 1859) (Figs 5b, 6b,e,f, 7b)**

*Cryptopristus fulviventris* FÖRSTER, 1859: 103. Holotype male, Frankfurt, Germany (NMW).

**Synonyms, hosts and distribution:** given by NOYES (2015).

**Taxonomy:** The status of this species was discussed by GRISELL (1995). ZEROVA & SEREGINA (1999) redescribed and figured the species from several parts of Ukraine.



**Fig. 6:** *Eridontomerus* spp. Females. (a-c) antennae. (d-g) hind legs. a,d. *E. fulviventris* ERDÖS b,e,f. *E. laticornis* (FÖRSTER 1859); c, g. *E. rufipes* ERDÖS. (Scale bar for a= 0.17 mm; for b= 0.20 mm; for c= 0.14 mm; for d= 0.21 mm; for e, f= 0.40 mm; for g= 0.24 mm).

**Diagnostic characters from the Turkish specimens:** Antennae with two anelli, distinctly differs from funicular segments; the latter with F1-F6 slightly widening towards tip; Body (Fig. 5b) dark bronze-green; antennae Antennae (Fig. 6b) with scape, and funicular segments ventrally yellow; antenna (Fig. 6b) funicular segments and club massive very closely connected each other, anelli small, 1st twice; 2nd 4.0x as wide as long; F1 1.43x; F5 1.3x as wide as long; F6 1.5x as wide as long; F6

1.5x as wide as F1; club almost twice as long as wide; Fore wing (Fig. 7b) with marginal vein 3.46x stigmal vein, 1.6x postmarginal vein, the latter 2.15x as long as stigmal vein. Hind femora (Fig. 6e,f) with ventral margin straight in basal half; in apical half wider, with 3 big teeth and one small tooth. Ovipositor (Fig. 5b) 0.47x length of metasoma. Body including ovipositor 2,62 mm (ovi.0.48 mm).

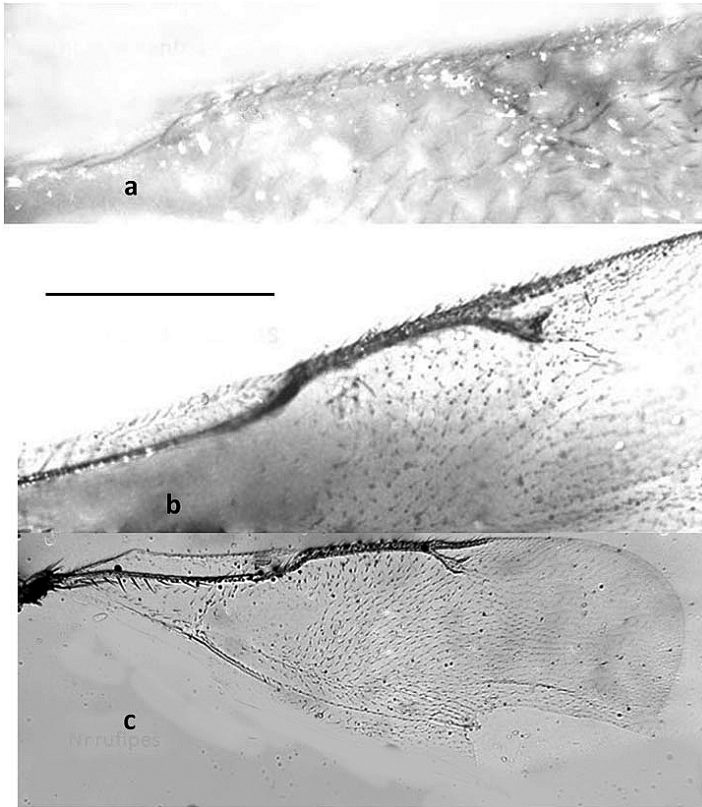
**Distribution in Turkey:** Tokat: 1 female, 21. viii.1989, H.Çam, swept from pasture; 1 female, 28. viii.1989, swept from pasture, H.Çam.

***Eridontomerus fulviventris* ERDŐS, 1954 (Figs 5a, 6a,d, 7a)**

*Eridontomerus fulviventris* ERDŐS, 1954: 154-155. Holotype female, Budapest, Hungary (HNHM).

**Synonyms, hosts and distribution:** given by NOYES (2015).

**Taxonomy:** The status of this species was discussed by GRISSELL (1995). ZEROVA & SEREGINA (1999) redescribed and figured the species from several parts of Ukraine.



**Fig. 7:** *Eridontomerus* spp. Females fore wings. (a) *E. fulviventris* ERDŐS; (b) *E. laticornis* (FÖRSTER 1859); (c) *E. rufipes* ERDŐS. (Scale bar for a= 0.12 mm; for b= 0.20 mm; for c= 0.43 mm).

**D i a g n o s t i c c h a r a c t e r s f r o m t h e T u r k i s h s p e c i m e n s :**  
Antennae (Fig. 6a) with two anelli, distinctly differs from funicular segments; the latter with F1-F6 slightly widening towards tip; Body (Fig. 5a) with head and thorax metallic green, with purple reflection, metasoma yellow; antenna brown, basal part of funicular segments yellow, scape 5.33x; pedicel 1.3x as long as width; pedicel plus flagellum 2.4x as long as scape, F6 1.2x wider than F2 and 1.5x wider than F1, anelli strongly transverse, F1 small, almost twice; F2-F6 1.8-1.9x as wide as long; club almost twice as long as width; Fore wing (Fig. 7a) with marginal vein 2.5x stigmal vein, 1.57x postmarginal vein, the latter 1.6x as long as stigmal vein. Hind femora (Fig. 6d) with ventral margin broadly C-shaped, with 3 big teeth. Ovipositor (Fig. 5a) 0.4-0.5x length of metasoma. Body including ovipositor 2,14 mm (ovi.0.4 mm).

**D i s t r i b u t i o n i n T u r k e y :** 1 female, Oğuldere, Yavuzeli, Gaziantep, 15.v. 2007, swept from pasture, M. Doğanlar; 1 female, Tokat, 25.vii. 1987, swept from pasture, H.Çam.

### References

- CRAWFORD J.C. (1907): New North American Hymenoptera. – Journal of the New York Entomological Society **15**: 177-183.
- DOĞANLAR M. (2016): The morphology of hypopygia and its importance in taxonomy of the genera of Torymidae (Hymenoptera), with review of the genera and species of Turkey. – Entomofauna **37**: 521-544.
- ERDÖS J. (1954): Az *Eridontomerus* CRAWFORD nemzetség (Torymidae, Hymen.) fajai. – Allattani Közlemények **44** (3-4): 149-160.
- FÖRSTER A. (1859): Zweite Centurie neuer Hymenopteren. – Verhandlungen des Naturhistorischen Vereins der Preussischen Rheinlande und Westfalens **16**: 87-124.
- GRAHAM M.W.R. de V. (1994): Recognition of some species of Hymenoptera Chalcidoidea described by M. Spinola (1808), with some synonymy. – Entomologist's Monthly Magazine **130**: 99-113.
- GIBSON G.A.P. (1997): Morphology and terminology. pp. 16-44. – In: GIBSON G.A.P., HUBER J.T. & J.B. WOOLLEY (eds), Annotated keys to the genera of Nearctic Chalcidoidea (Hymenoptera). Ottawa, Ontario, National Research Council Research Press.
- GRISSEL E.E. (1995): Toryminae (Hymenoptera: Chalcidoidea: Torymidae) a redefinition, generic classification, and annotated world catalog of species. – Mem. Entomol. Int. **2**: 1-470.
- GRISSEL E.E. (2005): A review of North American Species of *Microdontomerus* CRAWFORD (Torymidae: Hymenoptera). – J. Hym. Res. **14** (1): 22-65.
- NOYES J.S. (2015): Universal Chalcidoidea Database. – World Wide Web electronic publication. <http://www.nhm.ac.uk/chalcidoids>.
- RILEY C.V. (1882): The wheat Isosoma. – U.S. Dept. Agr. Rep. Comm. Agr. 1881-1882: 183-187.
- SPINOLA M. (1808): Insectorum Liguria species novae aut rariores, quas in agro ligustico nuper detexit, descripsit, et iconibus illustravit **2** (2-4): 215.

ZEROVA M.D. & L.Y. ZEROVA (1991): Chalcids of the genus *Eridontomerus* (Hymenoptera, Torymidae) of the USSR fauna. – Zoologicheskij Zhurnal **70** (6): 141-144

ZEROVA M.D. & L.Y. ZEROVA (1999): Torymid chalcidoid wasps (Hymenoptera, Chalcidoidea, Torymidae) of tribes Podagrionini and Monodontomerini of the Ukrainian fauna. – Vestn. Zool. Suppl. **12**: 1-130.

Author's address:

Honorary Professor Mikdat DOĞANLAR

Biological Control Research Station/ Adana, Turkey

E-mail: mikdoganlar@yahoo.com.tr

---

Druck, Eigentümer, Herausgeber, Verleger und für den Inhalt verantwortlich:

Maximilian SCHWARZ, Konsulent f. Wissenschaft der Oberösterreichischen Landesregierung, Eibenweg 6, A-4052 Ansfelden, Austria; maximilian.schwarz@liwest.at.

Redaktion: Fritz GUSENLEITNER, Biologiezentrum Linz, f.gusenleitner@landesmuseum.at;  
Roland GERSTMEIER, Lehrstuhl f. Zoologie, TU München, gerstmei@wzw.tum.de;  
Thomas WITT, Tengstraße 33, D-80796 München, thomas@witt-thomas.com;  
Berthold CLEWING, Akademischer Verlag München, avm@druckmedien.de;  
Harald SULAK, Museum Witt München, h.sulak@atelier-sulak.de.

Mitarbeiter: Karin TRAXLER, Biologiezentrum Linz, bio.redaktion@landesmuseum.at;  
Heike REICHERT, Museum Witt München, heike\_reichert66@web.de;  
Erich DILLER, Zool. Staatssammlung München, erich.diller@zsm.mwn.de.

Adresse: Entomofauna, Redaktion und Schriftentausch Thomas WITT, c/o Museum Witt München,  
Tengstr. 33, 80796 München, Deutschland, thomas@witt-thomas.com;  
Entomofauna, Redaktion c/o Fritz GUSENLEITNER, Lungitzerstr. 51, 4222 St. Georgen/Gusen,  
Austria, f.gusenleitner@landesmuseum.at.



# ZOBODAT - [www.zobodat.at](http://www.zobodat.at)

Zoologisch-Botanische Datenbank/Zoological-Botanical Database

Digitale Literatur/Digital Literature

Zeitschrift/Journal: [Entomofauna](#)

Jahr/Year: 2016

Band/Volume: [0037](#)

Autor(en)/Author(s): Doganlar Miktat

Artikel/Article: [Species of Microdontomerus \(CRAWFORD, 1907\) and Eridontomerus \(CRAWFORD, 1907\) \(Hymenoptera: Torymidae: Microdontomerini\) from Turkey, with descriptions of new species 505-520](#)