

A New Genus and a New Species of Entedontinae (Hymenoptera, Eulophidae) from Southeastern Anatolia, Turkey

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Abstract: *Urfacus bozovaensis* gen. et sp. nov. of the Entedontinae (Hymenoptera, Eulophidae) are described. The specimens were swept from a wheat field together with many specimens of *Haplothrips tritici* Kurdj. (Thysanoptera, Phleothripidae) in Bozova, Şanlıurfa, Turkey. The diagnostic characters of the taxa are illustrated and the taxonomic position of the genus and species is discussed.

Key Words: New genus, new species, Entedontinae, Eulophidae, Hymenoptera, Turkey

Güneydoğu Anadolu, Türkiye'den Entedontinae'ye Giren Yeni Bir Cins ve Türün Tanımı (Hymenoptera, Eulophidae)

Özet: Entedontinae (Hymenoptera, Eulophidae) alt familyasına ait *Urfacus bozovaensis* gen. et sp. nov. tanımlanmıştır. Örnekler Bozova, Şanlıurfa'da buğday tarlalarından *Haplothrips tritici* Kurdj. (Thysanoptera, Phleothripidae) örnekleri ile birlikte atrapla toplanmıştır. Yeni taxa'nın tanıttıcı karakterlerinin şekilleri verilmiş, taksonomik durumları tartışılmıştır.

Anahtar Sözcükler: Yeni cins, yeni tür, Entedontinae, Eulophidae, Hymenoptera, Türkiye

Introduction

The genera of Entedontinae (Eulophidae) were keyed out by several authors (Graham, 1959; Peck et al. 1964; Nikol'skaya and Trjapitcyn, 1978; Boucek, 1976; 1988; Schauff, 1991; Schauff et al., 1997). The European genera were keyed out by Graham (1959) as 19 genus; the palaeartic ones by Peck et al. (1964) as 26 genus and by Nikol'skaya and Trjapitcyn (1978) as 24 genus ; the Australasian genera by Boucek (1988) as 44 genus and the nearctic genera by Schauff et al. (1997) as 29 genus. In these works there are only four genera parasitizing Thysanoptera, viz. *Goetheana* Girault, *Thripobius* Ferriere *Ceranisus* Walker and *Entedonastichus* Girault. In the subfamily Entedontinae, the genera parasitizing Thysanoptera have distinctive group characters (Boucek, 1976 and 1988, Schauff et al., 1997, Boucek, 1976). The main characters of the group are: body brownish, poorly sclerotized, hence easily collapsing, without distinct sculpture; female

antennae with two funicular segments; complete vertexal suture. The specimens swept from a wheat field in Bozova, Şanlıurfa share characters with the Thysanoptera parasitizing group of Entedontinae. However, by the characters given in the generic diagnosis they can be easily separated from other known genera of Entedontinae worldwide and it presents a new genus and species. The new genus is also the first of the Hymenoptera to have a tube-shaped mouth without a mandible.

Materials and Methods

Our specimens were swept from a wheat field by net, and card-mounted for collection. Their diagnostic characters were photographed by a stereoscopic microscope and some of them were illustrated by using a camera lucida.

The following abbreviations were used in the text: oculo-ocellar length (OOL), the distance between lateral

ocellus and eye margin; postero-ocellar length (POL), the distance between the lateral ocelli.

Findings and Discussion

Urfacus nov. gen.

(Figures 1-7)

Type species: *Urfacus bozovaensis* n. sp.

Etymology: The name was derived from old name for Şanlıurfa; Gender masculine.

Description: Head broader than thorax, occiput carinated, temple wide, eye with lower margin broad, tapering posteriorly, width of eye in lateral view almost equal to height of eye (Figs. 1, 2); genae broad; clypeus semi-circularly emarginated, mandible absent, mouth tube fomed (Fig. 3); antennae inserted distinctly above level of ventral edge of eye; antennae with two funicular segments and three segmented club (Fig. 4).

Pronotum conical, twice as broad as length, without carina; mesoscutum smooth; without notauli; with two pairs of submedian setae; scutellum with a pair of setae; forewing broad, with submarginal vein having two setae dorsally (Fig. 5), marginal vein with basal half broader, narrowed distally in female (Fig. 6) and normal in male (Fig. 7), stigmal and postmarginal veins equal in length.

Petiole transverse, metasoma as long as mesosoma.

Biology: Not known. The specimens were collected together with many specimens of *Haplothrips tritici* Kudj. (Thysanoptera, Phleothripidae) from a wheat field.

Distribution: Turkey.

Diagnosis: Mouth tube-shaped, with vestigial mouth parts, without mandible (Figs. 1-3); semi-circularly emarginated clypeus, broad genae (Fig. 3); pronotum conical, without carina; marginal vein broadly developed basally in female (Fig. 6).

Discussion: *Urfacus* belongs to the subfamily Entedontinae on the basis of the following characters: one pair of setae on the scutellum; incomplete notauli; and submarginal vein with two setae. The new genus may be grouped with the thrips parasitic genera of Entedontinae in having two segmented funicula; occiput distinctly carinated, two pairs of submedian setae on mesoscutum and a pair of setae on scutellum. It is distinct from all known genera of Entedontinae in having the characters given in the diagnosis. In particular, the special

type of mouth unusual in the Hymenoptera and the basally broad marginal vein in the female are unique characters not found in any other eulophid.

Urfacus bozovaensis n. sp.

(Figures 1-8)

Etymology: The name was derived from the town Bozova, from where the specimens of the new species were collected.

Description: Female: 0.75 mm, body brown to black, non metallic; mouth, antennae, tarsi yellow, wings hyaline, venation brown.

Head (Figures 1-3, 8) in dorsal view 1.57 times broader than length (11:7); temple almost 0.3 length of eye; OOL:POL 1.5:5; eye 0.6 times as wide as height; genae almost half height of eye; antenna (Fig. 4) with scapus, twice length of pedicellus, its tip above level of vertex; the length of antennal segments in following ratios: 9:2.5; 4.5:2.5; 0.5:0.5; 0.5:0.5; 1.5:1.5; 1.5:1.5; 6:3 + 1.5.

Head in lateral view (Fig. 1) lower margin of eyes broad, triangularly tapering towards occiput; in frontal view (Fig. 3) as broad as height; front with distinct frontal suture, widely separated from median ocellus; face elevated, with distinct clypo-genal suture; antennae placed on a shelf; clypeus broadly, semi-circularly emarginated; mandible absent, length of mouth 1.33 times its basal breadth (4:3); eyes with hairs; vertex with distinct erect setae.

Thorax almost twice as long as broad (27:14); smooth, without reticulation, almost flat dorsally; mesoscutum excavated after collapsing; pronotum 0.5 times as long as broad, without carina, with 6 erect, moderately long setae; mesoscutum 0.76 times as long as broad, with two pairs of submedian setae, distance between front and hind pairs 0.8 times distance between hind pairs. Axillae slightly produced forward from the level of scutellum. Scutellum 0.9 times as long as broad, with a pair of setae placed hind half, distance between paired setae and basal margin of scutellum 1.7 times the distance between the setae and hind margin of scutellum. Dorsellum half length of propodeum medially. Propodeum 2.6 times as long as distance between spiracles, without carinae and plicae, finely reticulated, callus without setae. Forewing (Fig. 6) almost 5 times as long as broad; costal cell 6 times as long as broad, basal cell bare; speculum absent; marginal vein including

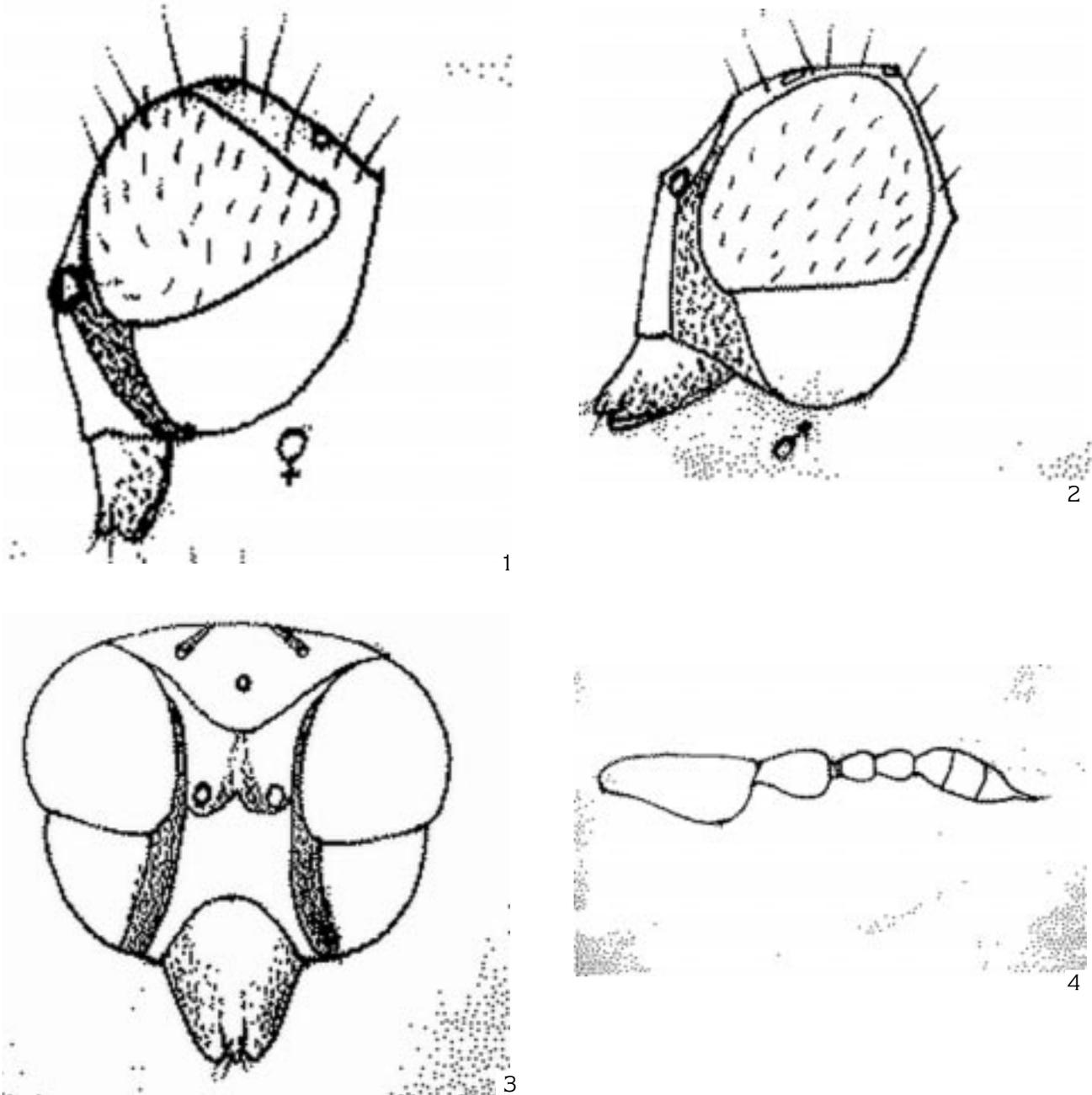
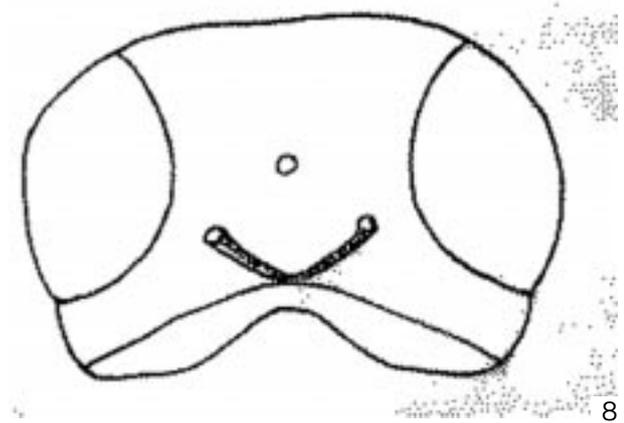
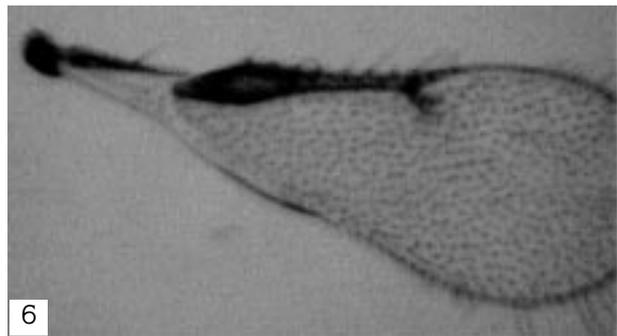
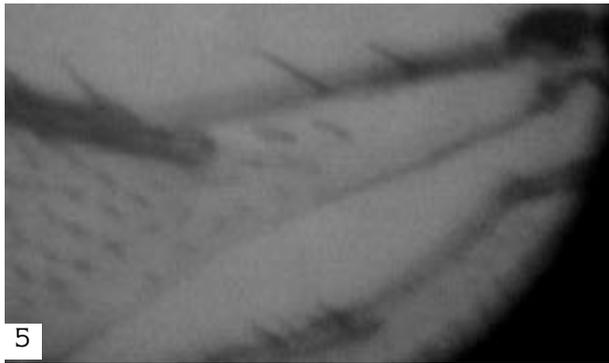


Figure 1-4. *Urfacus bozovaensis* gen. et sp. nov.: 1, 2. head in lateral view: 1, female, 2. male; 3. female head in frontal view; 4. female antenna.

prestigma 4.5 times as long as basal breadth, 7 times as long as stigmal vein; postmarginal vein 0.7 times stigmal vein. Margin with shorter pilosity. Hind wing 7 times as long as breadth, with long marginal pilosity, almost equal breadth of the wing. Legs slim, tibiae as long as femora, hind tarsi 0.8 length of tibia, tarsal segments equal in length.

Petiole 3 times as broad as long. Metasoma almost twice as long as broad (27:13), with ovipositor hidden.

Male: Similar to female except as follows: head (Fig. 2) in lateral view with eyes broader posteriorly, lower margin straight; forewing (Fig. 7) having marginal vein narrow, many times longer than its basal breadth, speculum narrow; scapus brown, other parts of antennae



Figures 5-8. *Urfacus bozovaensis* gen. et sp. nov.: 5. basal part of forewing; 6. female forewing; 7. male, fore- and hind wings; 8. head in dorsal view.

and tarsi pale brown; metasoma slightly shorter than mesosoma.

Holotype female, 15.VI.2002, Bozova, Şanlıurfa, Turkey (Doğanlar); deposited in the Museum of Plant Protection Department, Agriculture Faculty, M.K.U. Antakya, Hatay, Turkey. Paratypes: 1 male and 3 females, same data as the holotype.

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