



New contribution to the Evanioidea (Hymenoptera, Apocrita) of Türkiye with checklist of Turkish species

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ABSTRACT. The superfamily Evanioidea (Hymenoptera, Apocrita) of Türkiye is reviewed based on the data taken from literature as well as newly collected material. In the current study, two species from Aulacidae, 10 species from Gasteruptiidae and two species from Evaniidae are identified, being new records for the mentioned provinces. Moreover, *Brachygaster minutus* (Olivier, 1791) is recorded for the first time from Türkiye. *Gasteruption insidiosum* Semenov, 1892, *G. merceti* Kieffer, 1904, *G. tournieri* Schletterer, 1885, *Pristaulacus gloriator* (Fabricius, 1804), and *Prosevania fuscipes* (Illiger, 1807) are also new records for the Black Sea region. An updated checklist of the Evanioidea from Türkiye is provided for the first time. The family Aulacidae is represented by five species belonging to the genus *Pristaulacus* Kieffer, 1900, Evaniidae by five species belonging to three genera, *Brachygaster* Leach, 1815 (one species), *Evania* Fabricius, 1775 (three species), *Prosevania* Kieffer, 1911 (one species), and Gasteruptiidae by 36 species belonging to the genus *Gasteruption* Latreille, 1797.

Key words: Aulacidae, Gasteruptiidae, Evaniidae, new record, checklist, Türkiye

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INTRODUCTION

Evanioidea is a small superfamily of Hymenoptera that includes three families: Aulacidae, Evaniidae and Gasteruptiidae. Members of this superfamily are divided into two groups: Aulacidae and Gasteruptiidae, which are very similar to each other and were considered as a family by old authors, and Evaniidae, which have a different appearance (Goulet & Huber, 1993; Turrisi et al., 2009). In addition, these family members display a different biology. Aulacids are parasitoids of wood boring sawflies and beetles, evaniids develop as solitary egg predators within the egg cases (oothecae) of cockroaches (Dictyoptera, Blattodea), and gasteruptiids are predator-inquilines within the nests of solitary bees and wasps (Deans et al., 2022). Aulacidae, Evaniidae and Gasteruptiidae are represented with 310, 580 and 500 species worldwide, respectively (Ramage & Jouault, 2020).

Until recently, Turkish Evanioidea was insufficiently and sporadically investigated. For Gasteruptiidae, there is a comprehensive faunistic data of Türkiye (Yıldırım et al., 2004; van Achterberg & Talebi, 2014; Paşalı & Gürbüz, 2017; Özbek & van Achterberg, 2020), while a few data are available for Aulacidae and Evaniidae from this country (Turrisi, 2007, 2011; Yıldırım, 2008; Yıldırım & Tezcan, 2018). As a result of previous studies, five species of Aulacidae (Turrisi, 2007, 2011), five species of Evaniidae (Yıldırım & Tezcan, 2018) and 36 species of Gasteruptiidae (Özbek & van Achterberg, 2020) were

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reported. However, there is no comprehensive checklist of Evanioidea species that includes all superfamily members from Türkiye. The aim of this paper is to present new locality records of Evanioidea material from some provinces of Türkiye with a new species record. A preliminary checklist of the Evanioidea fauna of the country is also provided.

MATERIAL AND METHODS

This study was conducted with a single Malaise trap at Yeşilırmak Delta of Samsun province (22 m, 41°12'43.2"N, 36°44'07.7"E) between April and October in 2022 (Fig. 1). A few specimens collected with insect net from Giresun and Tokat provinces were also included in this study. The collected specimens were kept in 75% ethanol and then they were prepared as standard museum material. The specimens were preserved in the Entomology Research Laboratory, Department of Biology, Tokat Gaziosmanpaşa University (Tokat, Türkiye). For species identification, keys given by Turrisi (2007) and van Achterberg & Talebi (2014) were used for Aulacidae and Gasteruptionidae, respectively. The photographs of the specimens were taken using a Leica M205C (Leica Microsystems GmbH, Germany) stereomicroscope controlled by Leica Application Suite 3 software. The species list of superfamily Evanioidea, which was detected in previous studies conducted in Türkiye, is presented in Table 1.

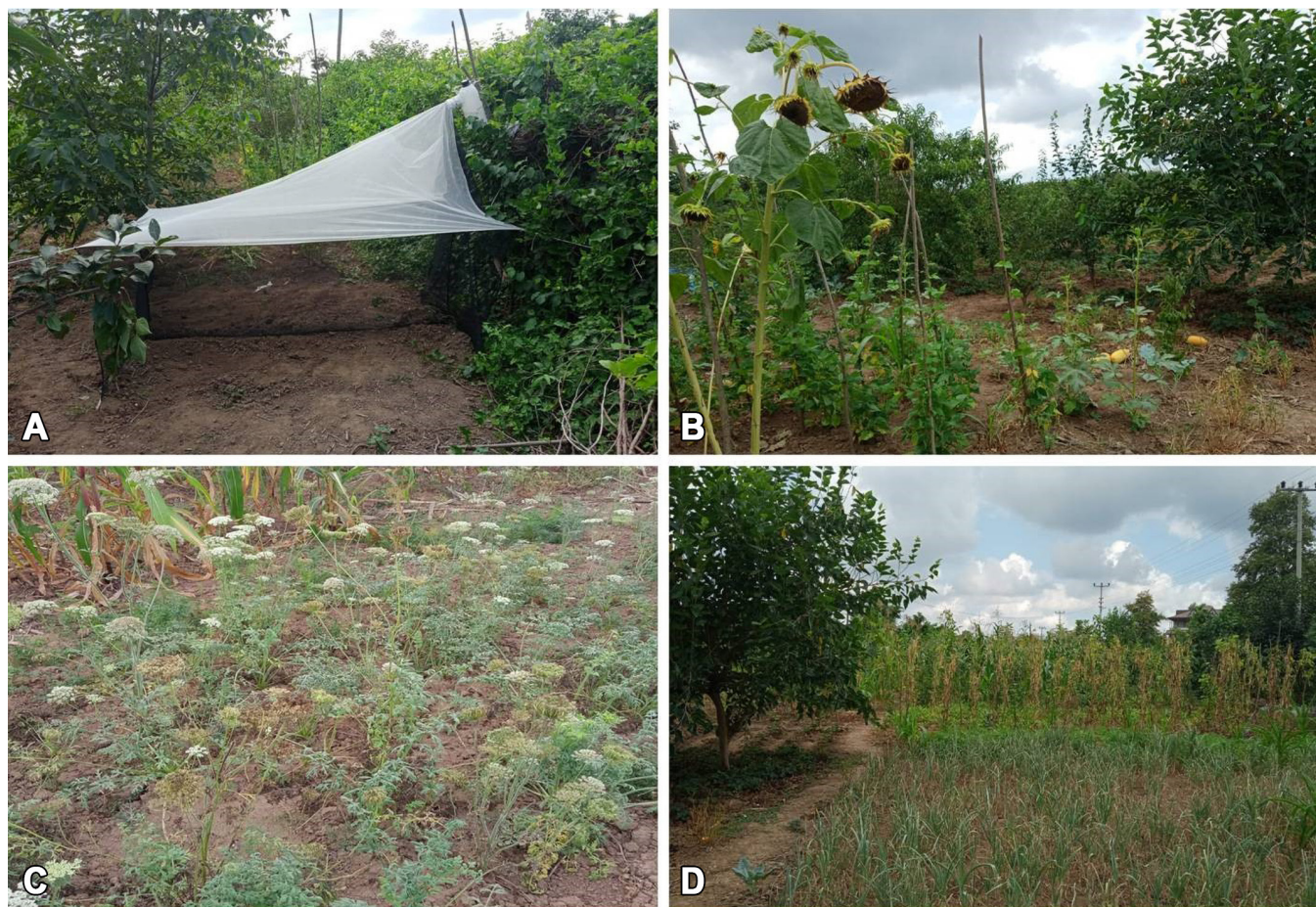


Figure 1. General view of the locality, where most of the Evanioid specimens were collected and plant species commonly encountered in the area. **A.** Malaise trap placed among fruit trees; **B.** *Helianthus* sp. and *Phaseolus* sp.; **C.** *Daucus* sp.; **D.** Mixed orchard with *Allium* sp., *Fragaria* sp., *Morus* sp. and *Zea* sp..

RESULTS

Taxonomic hierarchy

Class Insecta Linnaeus, 1758

Order Hymenoptera Linnaeus, 1758

Superfamily Evanioidea Latreille, 1802

Family Aulacidae Shuckard, 1841

Genus *Pristaulacus* Kieffer, 1900

Diagnosis. This genus is distinguished from the genus *Aulacus*, the only other genus of the Aulacidae, by the presence of the occipital carina and two or more teeth on the tarsal claws (Smith, 2017).

Pristaulacus galitae (Gribodo, 1879)

New records: Samsun: Çarşamba, 41°12'43.2"N, 36°44'07.7"E, 30 m, 14.VII.2022, 1 ♀; 15.VII–19.VIII.2022, 4 ♀♀; 19.VIII–03.IX.2022, 2 ♀♀.

Previous records: Tokat (Turrisi, 2007).

Pristaulacus gloriator (Fabricius, 1804)

New records: Samsun: Çarşamba, 41°12'43.2"N, 36°44'07.7"E, 30 m, 05.VI–05.VII.2022, 1 ♀.

Previous records: Konya (Oehlke, 1983).

Remarks: Along with Samsun province, the Black Sea region has been added to the distribution range of the species. This species is here recorded from Samsun as the second known locality.

Family Evaniidae Latreille, 1802

Genus *Brachygaster* Leach, 1815

Diagnosis. This genus is characterized by the following features: forewing with three complete cells surrounded by tubular veins; first submarginal cell absent; 4RS and r-m present spectrally; notauli absent; body intensely foveolate (Deans & Huben, 2003).

Brachygaster minutus (Olivier, 1791) (Fig. 2)

Material examined: Samsun: Çarşamba, 41°12'43.2"N, 36°44'07.7"E, 30 m, 19.VIII–03.IX.2022, 15 ♂♂; 03–16.IX.2022, 22 ♂♂; 16.IX–22.X.2022, 1 ♀, 7 ♂♂.

Remarks: This species is recorded for the first time from Türkiye.

Global distribution: Algeria, Austria, Azerbaijan, Belgium, Britain, Croatia, France, Georgia, Germany, Greece, Israel, Italy, Kazakhstan, Kyrgyzstan, Russia, Spain, Tanzania, Tunisia, Ukraine (Deans, 2005; Belokobylskij, 2019; Deans et al., 2022).

Genus *Prosevania* Kieffer, 1912

Diagnosis. This genus is characterized by the following features: forewing with seven complete cells surrounded by tubular or nebulous veins; 2M, 3M, 3CU present as nebulous veins; marginal cell not elongate; distance between mid- and hind coxa 0.6× or less the distance between fore- and mid coxae; hind tibia and tarsus without prominent spines; gena costate or strigate, legs relatively long (Deans & Huben, 2003).

Prosevania fuscipes (Illiger, 1807)

New records: Tokat: 650 m, 10.VII.2012, ♀; 05.VIII.2022, ♀.

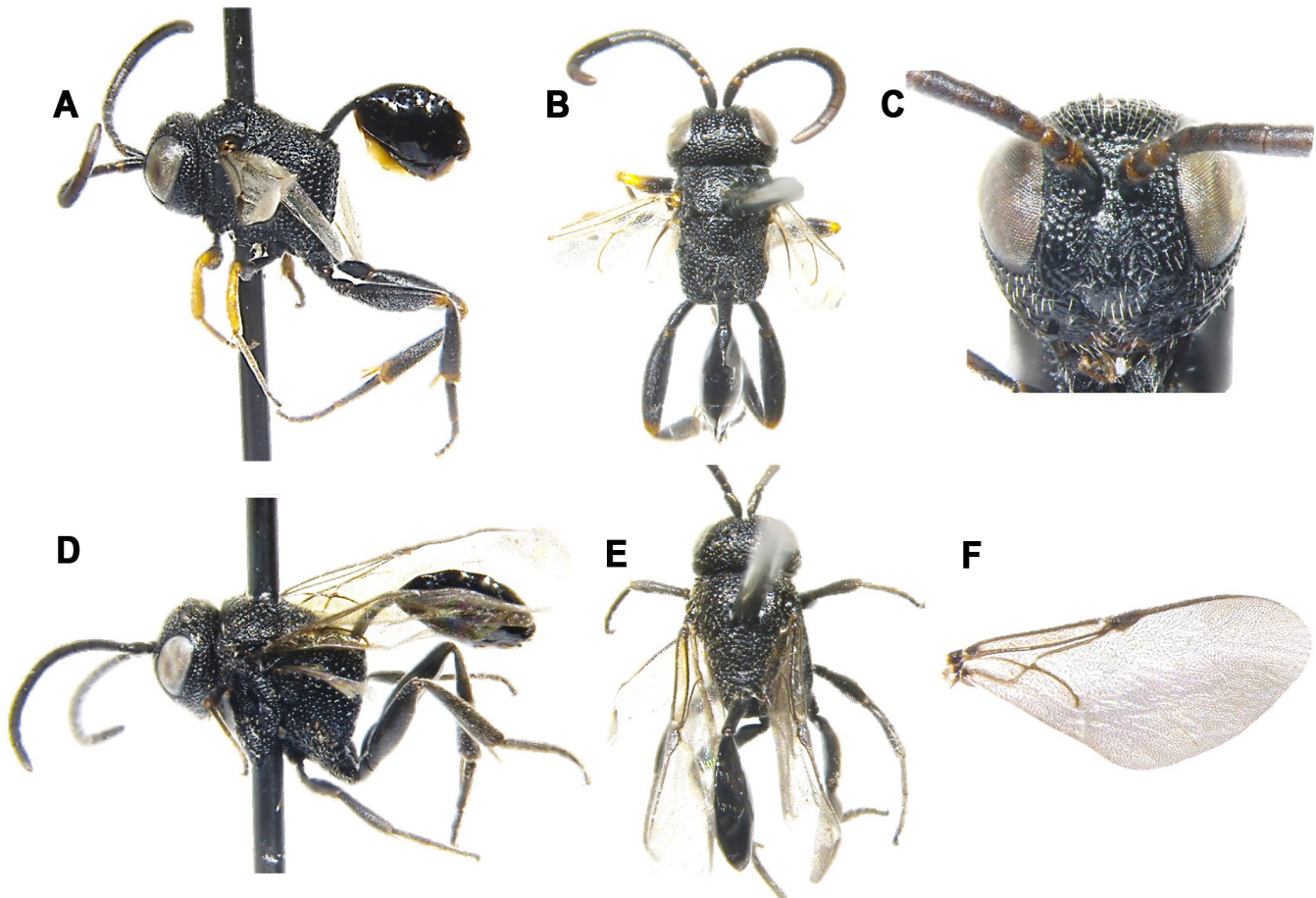


Figure 2. *Brachygaster minutus* (Olivier, 1791). **A.** Lateral view of female; **B.** Dorsal view of female; **C.** Front view of female head; **D.** Lateral view of male; **E.** Dorsal view of male; **F.** Forewing of male.

Previous records: Ankara, Antalya, Aydın, Bursa, İzmir, Muğla (Bodenheimer, 1958; Yıldırım, 2008; Yıldırım & Tezcan, 2018).

Remarks: Along with Tokat province, the Black Sea region has been added to the distribution range of the species.

Family Gasteruptiidae Ashmead, 1900

Subfamily Gasteruptiinae Ashmead, 1900

Genus *Gasteruption* Latreille, 1797

Diagnosis: This genus is characterized by the following features: the propleura form an elongated "neck", the petiole is attached very high on the propodeum, and the hind tibiae are swollen and club-like (Özbek & van Achterberg, 2020).

***Gasteruption assectator* (Linnaeus, 1758)**

New records: Tokat: 650 m, 10.VII.2007, 1 ♂.

Previous records: Ağrı, Antalya, Bingöl, Bursa, Denizli, Diyarbakır, Erzincan, Erzurum, Gümüşhane, Hakkari, Isparta, Kars, Konya, Manisa, Mersin, Muğla, Nevşehir, Osmaniye, Sakarya, Trabzon, Van (Yıldırım et al., 2004; van Achterberg & Talebi, 2014; Paşalı & Gürbüz, 2017; Özbek & van Achterberg, 2020; Kaplan & Yıldırım, 2023).

***Gasteruption hastator* (Fabricius, 1804)**

New records: Giresun: Çamoluk, 40°10'58.00"N, 38°49'15.00"E, 1410 m, 24.VII.2016, 1♀.

Previous records: Adıyaman, Aksaray, Bilecik, Bingöl, Bitlis, Bolu, Burdur, Bursa, Çanakkale, Denizli, Diyarbakır, Elazığ, Erzurum, Eskişehir, Hakkâri, Iğdır, Isparta, İzmir, Kars, Konya, Kütahya, Malatya, Manisa, Mersin, Muğla, Nevşehir, Sakarya, Sivas, Van (Semenov, 1892; van Achterberg & Talebi, 2014; Paşalı & Gürbüz, 2017; Özbek & van Achterberg, 2020; Kaplan & Yıldırım, 2023).

***Gasteruption insidiosum* Semenov, 1892**

New records: Samsun: Çarşamba, 41°12'43.2"N, 36°44'07.7"E, 30 m, 15.VII-19.VIII.2022, 2 ♂♂; 19.VIII-03.IX.2022, 1 ♂; 16.IX-22.X.2022, 1 ♂.

Previous records: Adıyaman, Balıkesir, Burdur, Erzurum, Hakkâri, Hatay, Isparta, Kahramanmaraş, Kars, Konya, Malatya, Manisa, Nevşehir, Van (Yıldırım et al., 2004; van Achterberg & Talebi, 2014; Paşalı & Gürbüz, 2017; Özbek & van Achterberg, 2020).

Remarks: Along with Samsun province, the Black Sea region has been added to the distribution range of the species.

***Gasteruption merceti* Kieffer, 1904**

New records: Samsun: Çarşamba, 41°12'43.2"N, 36°44'07.7"E, 30 m, 17.IV-01.V.2022, 1 ♂; 11.VII.2022, 1 ♂.

Previous records: Ağrı, Ankara, Bilecik, Bingöl, Burdur, Denizli, Diyarbakır, Erzincan, Erzurum, Hakkâri, Hatay, Iğdır, Isparta, Kahramanmaraş Kars, Kayseri, Konya, Malatya, Manisa, Mersin, Muğla, Nevşehir, Sivas, Şanlıurfa, Van (Yıldırım et al., 2004; van Achterberg & Talebi, 2014; Paşalı & Gürbüz, 2017; Kaplan & Yıldırım, 2023).

Remarks: Along with Samsun province, the Black Sea region has been added to the distribution range of the species.

***Gasteruption minutum* (Tournier, 1877)**

New records: Samsun: Çarşamba, 41°12'43.2"N, 36°44'07.7"E, 30 m, 15.VII-19.VIII.2022, 2 ♂♂; 19.VIII-03.IX.2022, 1 ♀, 4 ♂♂; 03.IX-16.IX.2022, 1 ♂; 16.IX-22.X.2022, 1 ♂.

Previous records: Aksaray, Bolu, Hatay, Isparta, Tunceli, Van (van Achterberg & Talebi, 2014; Paşalı & Gürbüz, 2017).

***Gasteruption opacum* (Tournier, 1877)**

New records: Samsun: Çarşamba, 41°12'43.2"N, 36°44'07.7"E, 30 m, 15.VII-19.VIII.2022, 1 ♂.

Previous records: Artvin, Bilecik, Bitlis, Burdur, Yalova, Van (Yıldırım et al., 2004; van Achterberg & Talebi, 2014).

***Gasteruption syriacum* Szépligeti, 1903**

New records: Samsun: Çarşamba, 41°12'43.2"N, 36°44'07.7"E, 30 m, 11.VII.2022, 1 ♂.

Previous records: Adıyaman, Artvin, Bingöl, Burdur, Bursa, Elazığ, Eskişehir, Denizli, Hakkâri, Iğdır, Isparta, Kahramanmaraş, Kars, Konya, Malatya, Manisa, Mersin, Muğla, Nevşehir, Siirt, Şanlıurfa, Van (van Achterberg & Talebi, 2014; Kaplan & Yıldırım, 2023).

***Gasteruption tournieri* Schletterer, 1885**

New records: Giresun: Çamoluk, 40°10'58.00"N, 38°49'15.00"E, 1410 m, 24.VII.2016, 1 ♂.

Previous records: Adana, Antalya, Burdur, Bursa, Çanakkale, Denizli, Erzincan, Erzurum, Eskişehir, Gaziantep, Hakkâri, Hatay, Isparta, Kahramanmaraş, Kilis, Kars, Konya, Manisa, Mersin, Muğla, Osmaniye (Yıldırım et al., 2004; van Achterberg & Talebi, 2014; Paşalı & Gürbüz, 2017; Özbek & van Achterberg, 2020).

Remarks: Along with Samsun province, the Black Sea region has been added to the distribution range of the species.

Gasteruption undulatum (Abeille de Perrin, 1879)

New records: Samsun: Çarşamba, 41°12'43.2"N, 36°44'07.7"E, 30 m, 11.VII.2022, 1 ♀; 15.VII–19.VIII.2022, 3 ♀♀, 1 ♂.

Previous records: Bilecik, Bingöl, Bitlis, Bolu, Burdur, Denizli, Diyarbakır, Iğdır, Isparta, Konya, Manisa, Nevşehir, Niğde, Sivas (Madl, 1988; van Achterberg & Talebi, 2014; Paşalı & Gürbüz, 2017; Kaplan & Yıldırım, 2023).

Gasteruption variolosum (Abeille de Perrin, 1879)

New records: Tokat: 650 m, 10.VII.2007, 1 ♂.

Previous records: Ağrı, Antalya, Bingöl, Burdur, Diyarbakır, Erzurum, Gümüşane, Hakkâri, Iğdır, Isparta, Kars, Konya, Manisa, Mersin, Nevşehir, Niğde, Sivas, Van (van Achterberg & Talebi, 2014; Özbek & van Achterberg, 2020; Kaplan & Yıldırım, 2023).

Table 1. Species list of Turkish Evanioida after this study (* recorded in this study, ** new record for Türkiye).

Taxa	Distribution in Türkiye	References
Family Aulacidae		
<i>Pristaulacus barbeyi</i> (Ferrière)	Antalya, Mersin	Turrisi (2007)
<i>Pristaulacus compressus</i> (Spinola)	Adana, Erzincan, Manisa, Mersin	Oehlke (1983); Turrisi (2007, 2011)
<i>Pristaulacus galitae</i> (Gribodo)*	Samsun*, Tokat	Turrisi (2007)
<i>Pristaulacus gloriator</i> (Fabricius)*	Konya, and Samsun*	Oehlke (1983)
<i>Pristaulacus samai</i> Turrisi, 2011	Hatay	Turrisi (2011)
Family Evaniidae		
<i>Brachygaster minutus</i> (Olivier)**	Samsun	Current study
<i>Evania appendigaster</i> (Linnaeus)	Adana, Antalya, Hatay, İzmir	Gül-Zümreoğlu (1972); Yıldırım (2008)
<i>Evania cribrata</i> Semenov	Kastamonu, Malatya, Muş	Yıldırım (2008)
<i>Evania caspia</i> Eichwald	Adana, Adıyaman, Batman, Burdur, Diyarbakır, Gaziantep, Hatay, İstanbul, Kahramanmaraş, Malatya, Mardin, Mersin, Niğde, Şanlıurfa, and Tunceli	Yıldırım (2008); Yıldırım & Tezcan (2018)
<i>Prosevania fuscipes</i> (Illiger)*	Ankara, Antalya, Aydın, Bursa, İzmir, Muğla, Samsun*	Bodenheimer (1958); Yıldırım (2008); Yıldırım & Tezcan (2018)
Family Gasteruptionidae		
<i>Gasteruption aciculatum</i> van Achterberg	Van	van Achterberg & Talebi (2014)
<i>Gasteruption agrenum</i> van Achterberg	Ağrı, Bingöl, Bitlis, Burdur, Hakkari, Karaman, Konya, Nevşehir, Van	van Achterberg & Talebi (2014); Kaplan & Yıldırım (2023)
<i>Gasteruption assectator</i> (Linnaeus)*	Ağrı, Antalya, Bingöl, Bursa, Diyarbakır, Denizli, Erzincan, Erzurum, Gümüşhane, Hakkari, Isparta, Kars, Konya, Manisa, Mersin, Muğla, Nevşehir, Osmaniye, Sakarya, Trabzon, Tokat*, Van	Yıldırım et al. (2004); van Achterberg & Talebi (2014); Paşalı & Gürbüz (2017); Özbek & van Achterberg (2020); Kaplan & Yıldırım (2023)
<i>Gasteruption boreale</i> (Thomson)	Erzurum	Özbek & van Achterberg (2020)

Taxa	Distribution in Türkiye	References
<i>Gasteruption brevisbasale</i> van Achterberg & Saure	Erzincan, Erzurum, Nevşehir	van Achterberg & Talebi (2014); Özbek & van Achterberg (2020)
<i>Gasteruption caucasicum</i> (Guérin-Méneville)	Adana, Antalya, Bursa, Burdur, Denizli, Erzurum, Hakkari, Isparta, Malatya, Mersin, Muğla, Şanlıurfa	van Achterberg & Talebi (2014); Özbek & van Achterberg (2020)
<i>Gasteruption coriacoxale</i> van Achterberg	Kars, Malatya, Van	van Achterberg & Talebi (2014); Özbek & van Achterberg (2020)
<i>Gasteruption diversipes</i> (Abeille de Perrin)	Konya, Şanlıurfa	Madl (1988); van Achterberg & Talebi (2014); Özbek & van Achterberg (2020)
<i>Gasteruption dolichoderum</i> Schletterer	Antalya, Bingöl, Burdur, Çanakkale, Denizli, Elazığ, Eskişehir, Hatay, Kahramanmaraş, Konya, Malatya, Manisa, Mersin, Nevşehir, Van	van Achterberg & Talebi (2014); Kaplan & Yıldırım (2023)
<i>Gasteruption flavimarginatum</i> van Achterberg	Kars, Mersin, Şanlıurfa, Van	van Achterberg & Talebi (2014)
<i>Gasteruption freyi</i> (Tournier)	Erzurum, Isparta, Nevşehir	Yıldırım et al. (2004); van Achterberg & Talebi (2014); Paşalı & Gürbüz (2017); Özbek & van Achterberg (2020)
<i>Gasteruption goberti</i> (Tournier)	Burdur, Eskişehir, Hakkari, İstanbul, Şanlıurfa	van Achterberg & Talebi (2014)
<i>Gasteruption hastator</i> (Fabricius)*	Adıyaman, Aksaray, Bilecik, Bingöl, Bitlis, Bolu, Burdur, Bursa, Çanakkale, Denizli, Diyarbakır, Elazığ, Erzurum, Eskişehir, Giresun*, Hakkâri, Iğdır, Isparta, İzmir, Kars, Konya, Kütahya, Malatya, Manisa, Mersin, Muğla, Nevşehir, Sakarya, Sivas, Van	Semenov, 1892; van Achterberg & Talebi (2014); Paşalı & Gürbüz (2017); Özbek & van Achterberg (2020); Kaplan & Yıldırım (2023)
<i>Gasteruption henseni</i> van Achterberg	Ağrı, Bingöl, Erzurum, Kars	van Achterberg & Talebi (2014); Kaplan & Yıldırım (2023)
<i>Gasteruption insidiosum</i> Semenov*	Adıyaman, Balıkesir, Burdur, Erzurum, Hakkâri, Hatay, Isparta, Kahramanmaraş, Kars, Konya, Malatya, Manisa, Nevşehir, Samsun*, Van	Yıldırım et al. (2004); van Achterberg & Talebi (2014); Paşalı & Gürbüz (2017); Özbek & van Achterberg (2020)
<i>Gasteruption ischnolaimum</i> van Achterberg	Erzurum, Hakkari	van Achterberg & Talebi (2014); Özbek & van Achterberg (2020)
<i>Gasteruption jaculator</i> (Linnaeus)	Bitlis, Çanakkale, Diyarbakır, Erzincan, Erzurum, Gaziantep, Hakkâri, Konya, Rize, Van	Yıldırım et al. (2004); van Achterberg & Talebi (2014); Özbek & van Achterberg (2020); Kaplan & Yıldırım (2023)
<i>Gasteruption laticeps</i> (Tournier)	Afyon, Antalya, Burdur, Denizli, Isparta, Kahramanmaraş, Kars, Kayseri, Konya, Manisa, Muğla, Nevşehir	van Achterberg & Talebi (2014); Özbek & van Achterberg (2020)
<i>Gasteruption lugubre</i> Schletterer	Kars, Nevşehir	van Achterberg & Talebi (2014)
<i>Gasteruption merceti</i> Kieffer*	Ağrı, Ankara, Bilecik, Bingöl, Burdur, Denizli, Diyarbakır, Erzincan, Erzurum, Hakkâri, Hatay, Iğdır, Isparta, Kahramanmaraş, Kars, Kayseri, Konya, Malatya, Manisa, Mersin, Muğla, Nevşehir, Samsun*, Sivas, Şanlıurfa, Van	Yıldırım et al. (2004); van Achterberg & Talebi (2014); Paşalı & Gürbüz (2017); Kaplan & Yıldırım (2023)
<i>Gasteruption minutum</i> (Tournier)*	Aksaray, Bolu, Hatay, Isparta, Samsun*, Tunceli, Van	van Achterberg & Talebi (2014); Paşalı & Gürbüz (2017)
<i>Gasteruption nigrescens</i> Schletterer	Adıyaman, Ağrı, Ankara, Bolu, Burdur, Bursa, Erzincan, Erzurum, Hakkâri, Iğdır, Isparta, Kars, Konya, Kütahya, Malatya, Manisa, Nevşehir, Sivas, Van	Schmid-Egger & Saure (2010); van Achterberg & Talebi (2014); Paşalı & Gürbüz (2017); Özbek & van Achterberg (2020)
<i>Gasteruption nigritarse</i> (Thomson)	Erzurum	Johansson & van Achterberg (2016); Özbek & van Achterberg (2020)
<i>Gasteruption opacum</i> (Tournier)*	Artvin, Bilecik, Bitlis, Burdur, Samsun*, Yalova, Van	Yıldırım et al. (2004); van Achterberg & Talebi (2014)

Taxa	Distribution in Türkiye	References
<i>Gasteruption paglianoi</i> van Achterberg & Saure	Antalya, Bursa, Hatay, Manisa, Şanlıurfa	van Achterberg & Talebi (2014)
<i>Gasteruption phragmiticola</i> Saure,	Adıyaman, Denizli	van Achterberg & Talebi (2014)
<i>Gasteruption pseudolaticeps</i> van Achterberg	Ağrı, Bitlis, Burdur, Hakkâri, Iğdır, Isparta, Kayseri, Malatya, Manisa, Muğla, Nevşehir, Şanlıurfa, Van	van Achterberg & Talebi (2014)
<i>Gasteruption punctifrons</i> van Achterberg	Adana, Antalya, Burdur, Muğla	van Achterberg & Talebi (2014); Paşalı & Gürbüz (2017)
<i>Gasteruption schlettereri</i> Magretti	Adana, Adıyaman, Ağrı, Antalya, Aydın, Burdur, Denizli, Gaziantep, Hakkâri, Kars, Isparta, İzmir, Malatya, Mardin, Manisa, Mersin, Muğla, Nevşehir, Van	van Achterberg & Talebi (2014); Ceccolini (2016); Paşalı & Gürbüz (2017); Özbek & van Achterberg (2020)
<i>Gasteruption schmideggeri</i> van Achterberg & Saure	Adıyaman, Bitlis, Burdur, Erzincan,	van Achterberg & Talebi (2014)
<i>Gasteruption scorteum</i> van Achterberg	Isparta, Kayseri, Mersin, Muğla, Van	van Achterberg & Talebi (2014)
<i>Gasteruption smitorum</i> van Achterberg	Erzincan, Konya, Mersin	van Achterberg & Talebi (2014); Özbek & van Achterberg (2020)
<i>Gasteruption syriacum</i> Szépligeti*	Ağrı, Erzurum, Malatya, Nevşehir, Şanlıurfa, Van	van Achterberg & Talebi (2014); Kaplan & Yıldırım (2023)
<i>Gasteruption tournieri</i> Schletterer*	Adıyaman, Artvin, Bingöl, Burdur, Bursa, Denizli, Elazığ, Eskişehir, Hakkâri, Iğdır, Isparta, Kahramanmaraş, Kars, Konya, Malatya, Manisa, Mersin, Muğla, Nevşehir, Samsun*, Siirt, Şanlıurfa, Van	Yıldırım et al. (2004); van Achterberg & Talebi (2014); Paşalı & Gürbüz (2017); Özbek & van Achterberg (2020)
<i>Gasteruption undulatum</i> (Abeille de Perrin)*	Adana, Antalya, Burdur, Bursa, Çanakkale, Denizli, Erzincan, Erzurum, Eskişehir, Gaziantep, Giresun*, Hakkâri, Hatay, Isparta, Kahramanmaraş, Kilis, Kars, Konya, Manisa, Mersin, Muğla, Osmaniye	Madl (1988); van Achterberg & Talebi (2014); Paşalı & Gürbüz (2017); Kaplan & Yıldırım (2023)
<i>Gasteruption variolosum</i> (Abeille de Perrin)*	Ağrı, Antalya, Bingöl, Burdur, Diyarbakır, Erzurum, Gümüşane, Hakkâri, Iğdır, Isparta, Kars, Konya, Manisa, Mersin, Nevşehir, Niğde, Sivas, Tokat*, Van	van Achterberg & Talebi (2014); Özbek & van Achterberg (2020); Kaplan & Yıldırım (2023)

DISCUSSION

In the present study, fourteen species belonging to three evanioid families are identified from newly collected specimens. Among these species, *Brachygaster minutus* is newly reported from Türkiye for first time. *Brachygaster*, has recently been recorded from neighboring countries such as Georgia and Iran (Lotfalizadeh et al., 2017; Belokobylskij, 2019) and the genus is recorded from Türkiye for the first time in this study. All identified species are new records for the provinces where the study was conducted. *Gasteruption insidiosum*, *G. merceti*, *G. tournieri*, *Pristaulacus gloriator*, and *Prosevania fuscipes* are also new records for the Black Sea region. In addition, this study confirmed the second record of *Pristaulacus galitae* and *P. gloriator*, which were previously given only from Tokat and Konya provinces, respectively, in Türkiye (Oehlke, 1983; Turrisi, 2007).

The knowledge of superfamily Evanioidea from Türkiye mostly derives from scattered records except for van Achterberg & Talebi (2014) and Özbek & van Achterberg (2020), a comprehensive study for the genus *Gasteruption*. *Evania cribrata* was first reported from Türkiye by Yıldırım (2008 - as *E. cibriata*, misspelling). *Evania schlettereri* and *E. dimidiata* were recorded for the first time in Türkiye by Yıldırım (2008) are currently treated under *E. cribrata* and *E. caspia*, respectively (Deans et al., 2022). An updated checklist of Evanioidea of Türkiye, with a total of 46 species in three families, including five

Pristaulacus (Aulacidae), three *Evania*, one *Brachygaster*, one *Prosevania* (Evaniidae) and 36 *Gasteruption* (Gasteruptionidae) is presented (Table 1).

Türkiye, located at the intersection of the Asian and European continents, is a very rich country faunistically, with its diverse habitats and different climatic characteristics. The description of 13 new species and some new records belonging to the genus *Gasteruption* from Türkiye by van Achterberg and Talebi (2014) is proof of this richness. It is quite obvious that the number of Evanioidea is probably higher than currently ascertained due to many unexplored territories.

AUTHOR'S CONTRIBUTION

The author confirms his contribution in the whole processing steps in the research, preparation and revising the manuscript. He read and approved the final version of the manuscript.

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AVAILABILITY OF DATA AND MATERIAL

The specimens listed in this study are deposited in the Entomology Research Laboratory, Department of Biology, Tokat Gaziosmanpaşa University (Tokat, Türkiye) and are available from the curator, upon request.

ETHICS APPROVAL AND CONSENT TO PARTICIPATE

Not applicable.

CONSENT FOR PUBLICATION

Not applicable.

CONFLICT OF INTERESTS

The author declares that there is no conflict of interest regarding the publication of this paper.

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یافته‌های جدید از زنبورهای بالاخانواده (Hymenoptera, Aporita) Evanioidea در ترکیه و فهرست گونه‌ها

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چکیده: گونه‌های بالاخانواده (Hymenoptera, Apocrita) Evanioidea در ترکیه بر اساس نمونه‌های جدید و منابع موجود، بازنگری شد. در تحقیق حاضر، دو گونه از خانواده Aulacidae، ۱۰ گونه از خانواده Gasteruptionidae و دو گونه از خانواده Evaniidae شناسایی شدند. همه گونه‌های شناسایی شده برای اولین بار از استان‌های مورد مطالعه گزارش می‌شوند. در بین این گونه‌ها، *Brachygaster minutus* (Olivier, 1791) برای اولین بار از ترکیه گزارش می‌شود. حضور چندین گونه شامل *Gasteruption insidiosum* Semenov, 1892، *G. merceti* Kieffer, 1904، *Prosevania fuscipes* و *Pristaulacus gloriator* (Fabricius, 1804)، *G. tournieri* Schletterer, 1885 (Illiger, 1807) برای اولین بار در منطقه مجاور دریای سیاه ثبت شد. با در نظر گرفتن گونه‌های یافت شده در این تحقیق، فهرست به‌روز شده زنبورهای بالاخانواده Evanioidea کشور ترکیه برای اولین بار تهیه شد. در این فهرست، خانواده Aulacidae دارای پنج گونه متعلق به جنس *Pristaulacus* Kieffer, 1900، خانواده Evaniidae با پنج گونه از سه جنس *Brachygaster* Leach, 1815 (یک گونه)، *Evania* Fabricius, 1775 (سه گونه) و *Prosevania* Kieffer, 1911 (یک گونه) و خانواده Gasteruptionidae شامل ۳۶ گونه متعلق به جنس *Gasteruption* مشخص شدند.

واژگان کلیدی: زنبورهای گردن‌دراز، زنبورهای پاچماقی، زنبورهای علم‌دار، گزارش جدید، فهرست، ترکیه