

Annotated checklist of Turkish Cheloninae (Hymenoptera, Ichneumonoidea, Braconidae)

Ahmet Beyarslan^{1,✉}, Mitat Aydođdu^{2,✉}

Department of Biology, Faculty of Sciences, Trakya University, Edirne-Türkiye

*Correspondence: abeyars@gmail.com

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Abstract

In this article the Cheloninae (Hymenoptera: Braconidae) species recorded from Türkiye until the end of 2020 are listed. The list contains a total of 108 species belonging to 3 tribes and 6 genera that are collected from 67 provinces of Türkiye. Forty-two of the species covered by the checklist are only found in Asian Türkiye, and 2 species are found only in European Türkiye, while 55 species occur in both regions. The presented checklist covers synonyms, zoogeographical region(s), hosts, host plants of the host species and parasitoid data for the species. The number of species of each genus is represented by: *Adelius* Hal.=2, *Ascogaster* Wesm.=20, *Chelonus* Panz. =33, *Microchelonus* Szépl.=34, *Phanerotoma* Wesm.=11, *Phanerotomella* Szépl.=2.

Keywords: Cheloninae, Hymenoptera, Ichneumonoidea, Braconidae, Türkiye, *Adelius*

Introduction

Cheloninae Foerster, 1863 (Hymenoptera: Braconidae) is represented worldwide with 1523 species described and include the tribes Chelonini Foerster, 1863, Adeliini Viereck, 1918, Odontosphaeropygini Zettel, 1990, and Phanerotomini Baker, 1926.

The largest tribe of the subfamily is Chelonini and includes 1077 species. The Phanerotomini is the second largest tribe of the subfamily and includes 166 species. Adeliini is the smallest tribe, encompassing only 67 species. The tribe Odontosphaeropygini distributed occur only in the Afrotropical region (Yu et al., 2016). The Subfamily Cheloninae is characterized by the following apomorphic characters: Metasomal carapace, short and wide radial cell, the presence of the postpectal carina, eyes with setae, which are often intensely seen (van Achterberg, 1976). Final instar larvae with thin and cylindrical mandibles and usually the presence of indeterminate hypostomal sutures (Kaeslin et al., 2005).

The Chelonines are egg-larval solitary endoparasitoids and koinobionts of Lepidoptera especially Tortricodea and Pyraloidea. They are able to put their eggs in the cryptobiont host. The hosts of chelonines are found in the grooves, galls, fruits, curled or rounded leaves and under bark. The physical and chemical effects of the substances produced by the host are important in its settlement and acceptance. The Parasitoid larvae encounter less problems in the host body and develop

rapidly. The koinobionts allow the development of the host until the next cycle, that is, they allow the host larva to survive until the parasitoid larva becomes pupa. Chelonines provide the most extreme examples of such delayed development. (Shaw & Huddleston, 1991). Parasitoids are free-living as adults and parasitic as larvae; the larvae feed on their hosts, which are mostly insects of various developmental stages. Hosts do not survive and thus parasitoids play an important role as the regulatory agents for phytophagous insect population (La Salle & Gauld, 1993). While *Ascogaster* species are more common in bush areas and forest habitats, since *Chelonus* Panzer species are mostly tolerant of heat and drought, they are commonly found in steppe and grassland areas. *Phanerotoma* species are more abundant in arid regions or during dry seasons.

The Turkish fauna of Cheloninae is poorly known due to the low number of studies performed on the genera which were followed by studies all performed decades later: Aydoğdu (2008, 2014, 2016, 2017), Aydoğdu & Beyarslan (2002, 2006a, 2006b, 2007, 2009, 2011, 2012), Beyarslan (1985, 1995, 2021), Beyarslan et al. (2020), Beyarslan & Inanç (1992), Beyarslan et al. (2002a, 2002b), Beyarslan & Şahan (2019), Beyarslan & Şahin (2018), Beyarslan et al. (2006), Çiftçi et al. (1995), Curtis (1837), Dalla Torre (1867), Doganlar (1982), Gozuacik et al. (2009), Fahringer (1922), Kirchner (1867), Kittel & Austin (2016), Khol (1905), Ku et al. (2001), Ozkan & Ozmen (2001), Papp (1995), Reinhard (1867), Sertkaya & Bayram (2005), Szépligeti (1908), Tamer (1995), Tezcan et al. (2006), Thomson (1874), Thomson (1892), Tobias (1976, 1986, 2008), Lozan (2005), Özgen et al. (2012), van Achterberg (1982, 1990), Yu et al. (2016), Zhang (2008). On the other hand, important contributions to Turkish Cheloninae fauna were made in the past in a number of studies. Some of these studies: 23 Cheloninae species were determined in the Eastern Anatolian region with 20 being new records for the region (Aydoğdu, 2016). More recently, 13 *Chelonus* species were identified from the Middle Anatolian region (Aydoğdu, 2017). Aydoğdu & Beyarslan (2006a) published 18 *Microchelonus* species from the Marmara, Western, and Middle Black Sea regions of Türkiye and 8 of these species were reported for the first time from Türkiye. 26 species of *Ascogaster* and *Chelonus* were recorded by the same researchers in the same region in 2007. Aydoğdu & Beyarslan (2009) determined 13 Phanerotomini species, and 6 of these were reported for the first time from Türkiye. 13 *Chelonus* species were identified, and 5 of them are new records for the Turkish fauna (Aydoğdu & Beyarslan, 2011). 18 *Ascogaster* species were recorded from Türkiye and 2 of these are new to the Turkish fauna (Aydoğdu & Beyarslan, 2012). 5 species of *Chelonus*, *Phanerotoma*, and *Phanerotomella* were recorded from the Turkish islands Imbros and Tenedos (Beyarslan et al., 2002b). As a result of this study, 59 species including to 5 genera were identified.

Materials and Methods

The most of the data for the checklist were assembled from the previously published records from 67 provinces of Türkiye by the authors. Publications consulted for distribution data include: Aydoğdu (2008, 2016, 2017), Aydoğdu & Beyarslan (2002, 2006a, 2006b, 2007, 2009, 2011, 2012), Belokobylskij (1993), Beyarslan (1985, 1995, 2021), Beyarslan et al. (1992a, 1992b), Beyarslan & Şahan (2019), Beyarslan & Şahin (2018, 2019), Tobias (1976, 1986, 2008), van Achterberg (1976, 1982, 1990). Information on parasitoids, Hosts, general distributions (in terms of zoogeographical region) and parasitoids of species were given according to Yu et al. (2016) and Tobias (1986). In the text, the host plants of Host species are shown in brackets. The genera and species are tabulated alphabetically therein. The species recorded from Asian Türkiye are marked with one asterisk (*) while those recorded from European Türkiye are marked with two asterisks (**) (Figure 1).

Results

The data for the checklist were assembled from the previously published records from 67 provinces of Türkiye and 108 species under 3 tribes and 6 genera have been compiled (Figure 1; Table 1).



Figure 1. Provinces of Türkiye with and without Cheloninae registrations (dark green: provinces with Cheloninae records and pink-red: provinces without Cheloninae records).

Table 1. The tribes, genera, species, number of species, zoogeographic regions, distribution in Anatolia and Thrace and introduced species covered by the Turkish Cheloninae (Hymenoptera, Braconidae) checklist (ZR: Zoogeographic region; AD: Anatolian distribution; TD: Thrace distribution*; A+TD: Anatolian and Thrace distribution; I: Introduced species; PA: Palaearctic; AT: Afrotropical; EPA: Eastern Palaearctic; WPA: Western Palaearctic; OR: Oriental; NA: Nearctic, NT: Neotropical, OC: Oceanic)

Species	ZR	AD	TD	I
Adelius Haliday, Adelius Str. s. (2)				
<i>Adelius (A.) erythronotus</i> (Foers.)	PA	+		
<i>Adelius (A.) subfasciatus</i> Hal.	PA	+	+	
Ascogaster Wesm. Ascogaster str.s. (20)				
<i>Ascogaster (A.) abdomina tor</i> (Dahl)	EPA			
<i>A. (A.) annularis</i> (Nees)	PA	+	+	
<i>A. (A.) armata</i> Wesm.	WPA	+		
<i>A. (A.) bicarinata</i> (Herrich-Schäffer, 1838)	PA.	+	+	
<i>M.(M.) bidentula</i> Wesm.	OR, PA	+	+	
<i>A. (A.) canifrons</i> Wesm.	PA	+		
<i>A. (A.) caucasica</i> Kok.	PA	+	+	
<i>A. (A.) disparilis</i> Tob.	PA	+	+	
<i>A. (A.) excisa</i> (H.-S.)	PA	+	+	
<i>A. (A.) gonocephala</i> Wesm.	WPA	+		
<i>A.(A.) grahami</i> Huddleston, 1984	OR, PA,	+	+	
<i>A. (A.) kasparyani</i> Tob.	PA, ,	+		
<i>A. (A.) klugii</i> (Nees, 1816)	PA	+	+	
<i>A. (A.) magnidentis</i> Tob.	WPA	+		
<i>A. (A.) quadridentata</i> Wesm.	NA, NT, OC, OR, PA,	+	+	
<i>A. (A.) rufidens</i> Wesm.	PA,	+	+	
<i>A. (A.) rufipes</i> (Latr.)	OR, PA	+	+	
<i>A. (A.) scabricula</i> (Dahl.)	PA,	+		
<i>A. (A.) similis</i> (Nees)	WPA,	+		
<i>A. (A.) varipes</i> Wesm.	PA,	+	+	
Chelonus Panzer, Chelonus s.str. (35 species)				
<i>Chelonus Chelonus) aberrans</i> Tob.	WPA	+		
<i>Chelonus (Chelonus) ahngerii</i> Tob.	EPA	+		
<i>C. (C.) andrievskii</i> Tob.	WPA	+	+	
<i>C. (C.) annulatus</i> (Nees)	PA	+		
<i>C. (C.) annulipes</i> Wesm.	NA, OR, PA	+	+	
<i>C. (C.) armeniacus</i> Tob	PA	+		
<i>C. (C.) beyarslani</i> Ayd.	WPA	+		
<i>C. (C.) bidens</i> Tob.	PA	+	+	
<i>C. (C.) bimaculatus</i> Szépl.	PA	+		
<i>C. (C.) brevoiventris</i> Thom.	PA	+	+	

<i>C. (C.) canescens</i> Wesm.	PA	+	+	
<i>C. (C.) capsa</i> Tob.	PA	+		
<i>C. (C.) caradrinae</i> Kok.	PA	+	+	
<i>C. (C.) cesa</i> Koç & Kem.	PA	+	+	
<i>C. (C.) contrarius</i> Tob.	PA	+		
<i>C. (C.) corvulus</i> Marsh.	PA	+	+	
<i>C. (C.) cylindrus</i> (Klug)	OR, PA	+	+	
<i>C. (C.) dauricus</i> Tel.	PA	+	+	
<i>(C.) elongatus</i> Szépl.	OR, WPA	+	+	
<i>C. (C.) inanitus</i> (L.)	NA, PA	+	+	
<i>C. (C.) jacobsoni</i> Tob.	PA	+	+	
<i>C. (C.) lissogaster</i> Tob.	PA	+		
<i>C. (C.) microsomus</i> Tob.	PA	+	+	
<i>C. (C.) obscuratus</i> H-S.	PA	+		
<i>C. (C.) ocellatus</i> Alex.	PA	+		
<i>C. (C.) oculator</i> (Fabr.)	PA	+	+	
<i>C. (C.) olgae</i> Kok.	PA	+	+	
<i>C. (C.) planiventris</i> Tob.	PA	+		
<i>C. (C.) processiventris</i> Tob.	PA	+		
<i>C. (C.) rimosus</i> H.-S.	WPA	+		
<i>C. (C.) scabrator</i> (Fabricius, 1793)	OR, PA	+	+	
<i>C. (C.) smirnovi</i> Tel.	PA	+	+	
<i>C. (C.) submuticus</i> Wesm.	PA	+	+	
<i>C. (C.) szepligetti</i> Dalla Torre	PA	+	+	
<i>C. (C.) wesmaelii</i> Curt.	WPA	+	+	
Subgenus Parachelonus Tob. (1 species)				
<i>C. (Parachelonus) pellucens</i> (Nees)	PA	+	+	
Microchelonus Szépl. Microchelonus str.s. (35 species)				
<i>Microchelonus (Microchelonus) arnoldii</i> (Tob.)	PA	+	+	
<i>M. (M.) artus</i> Tob.	WPA	+	+	
<i>M. (M.) atripes</i> (Thom.)	PA	+	+	
<i>M. (M.) calcaratus</i> Tob.	PA	+	+	
<i>M. (M.) chetini</i> Beyars & Şahan	WPA	+		
<i>M. (M.) contractus</i> Nees	PA	+		
<i>M. (M.) depressus</i> (Thom.)	PA	+	+	
<i>M. (M.) devius</i> (Tob.)	PA	+	+	
<i>M. (M.) erythrogaster</i> (Luc.)	PA	+		
<i>M. (M.) exilis</i> (Marsh.)	PA	+	+	
<i>M. (M.) fenestratus</i> (Nees)	PA	+		
<i>M. (M.) fissilis</i> Tob.	PA	+		
<i>M. (M.) flavipalpis</i> (Szépl.)	PA	+	+	
<i>M. (M.) flavoneavulus</i> (Abdinb.)	PA	+	+	
<i>M. (M.) kiritshenkoi</i> (Tob.)	WPA	+		
<i>M. (M.) kopetdagicus</i> (Tob.)	PA	+	+	
<i>M. (M.) latrunculus</i> (Marsh.)	PA	+	+	
<i>M. (M.) longiventris</i> (Tob.)	PA	+		
<i>M. (M.) luzhetzkji</i> (Tob.)	PA	+		
<i>M. (M.) magnifissuralis</i> (Abdinb.)	WPA	+	+	
<i>M. (M.) micropthalmus</i> (Wesm.)	PA	+	+	
<i>M. (M.) minifossa</i> Tob.	WPA	+		
<i>M. (M.) nachtshevanicus</i> (Abdinb.)	WPA	+	+	
<i>M. (M.) nigritibialis</i> (Abdinb.)	WPA	+	+	
<i>M. (M.) pectoralis</i> (Tob.)	PA	+		
<i>M. (M.) risorius</i> (Reinh.)	PA	+	+	
<i>M. (M.) rostratus</i> (Tob.)	PA	+	+	
<i>M. (M.) rugicollis</i> (Thom.)	AT, WPA	+		
<i>M. (M.) subarcuatilis</i> Tob.	PA	+	+	
<i>M. (M.) subcontractus</i> (Abdinb.)	PA	+	+	
<i>M. (M.) sulcatus</i> (Jurine, 1807)	PA	+	+	
<i>M. (M.) vescus</i> (Kokujev, 1899)	PA	+		
<i>M. (Parachelonus) gravenhorstii</i> (Nees)	PA	+		
<i>M. (P.) starki</i> (Tel.)	PA	+		
<i>M. (Stylochelonus) mucronatus</i> (Thom.)	PA	+	+	
<i>M. (S.) pusillus</i> Szépl.	PA	+	+	

<i>Phanerotoma</i> Wesm. Subgenus <i>Bracotritoma</i> Csiki (13 species)				
<i>P. (B.) atra</i> Snofl.	PA	+	+	
<i>P. (B.) bilinea</i> Lyle	PA	+	+	
<i>P. (B.) capeki</i> Acht.	WPA	+	+	
<i>P. (B.) gracilisoma</i> Acht.	WPA		+	
<i>P. (B.) intermedia</i> Acht.	WPA	+		
<i>P. (B.) parva</i> Kok.	PA	+	+	
<i>P. (B.) permixtella</i> Fi	PA	+		
<i>P. (P.) acuminata</i> Szépl.	NA, PA	+		
<i>P. (P.) dentata</i> (Panzer, 1805)	AT, NT, PA		+	+
<i>P. (P.) leucobasis</i> Kriechbaumer, 1894	AT, NA, OC PA	+	+	+
<i>P. (P.) planifrons</i> (Nees)	NA, OR, PA	+		+
<i>P. (P.) potanini</i> Kok.	E.PA	+		
<i>Phanerotomella</i> Szépl. (2 species)				
<i>Phanerotomella bisulcata</i> (H-S.)	PA	+		
<i>P. rufa</i> (Marsh.)	OR, PA	+	+	

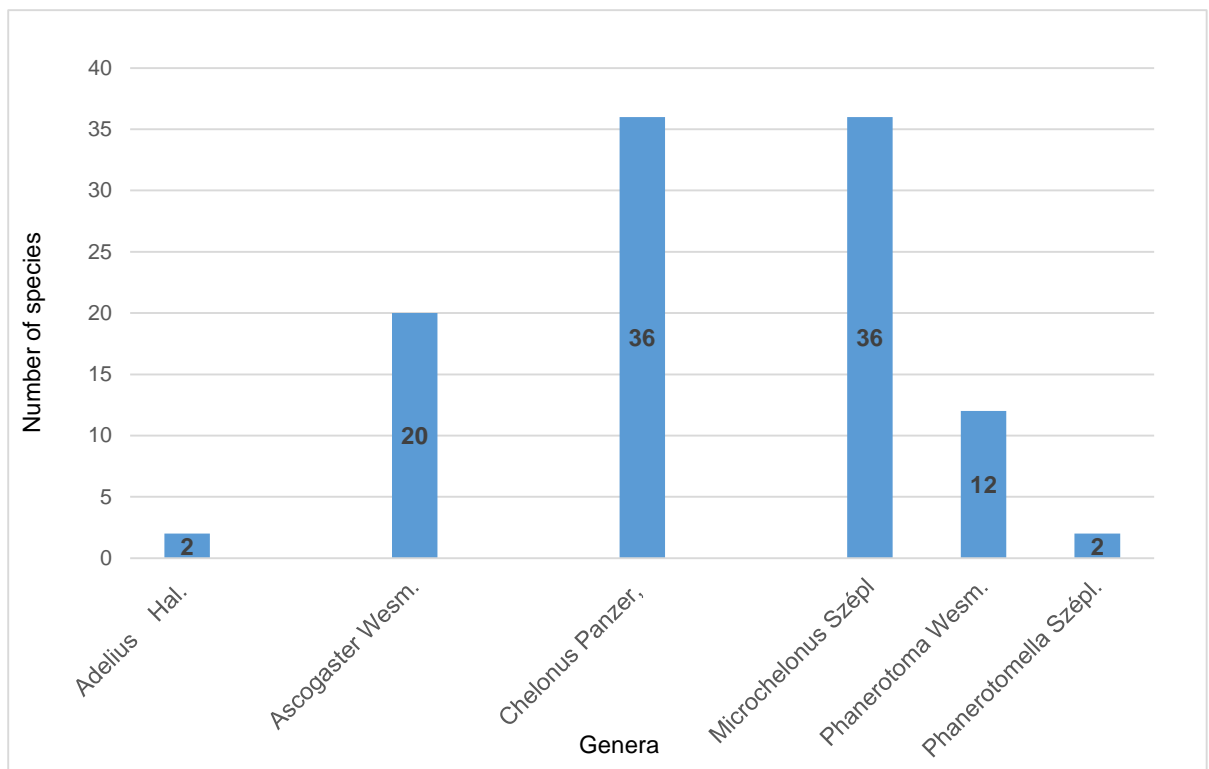


Figure 2. The genera and number species of the checklist of the subfamily Cheloninae of Türkiye.

Tribe Adeliini Viereck, 1918

Genus *Adelius* Haliday, 1833

Subgenus *Adelius* str.s.

**Acoelius erythronotus* (Foerster, 1851)

Adelius (*Adelius*) *erythronotus*. Tobias, 1976

Synonym. *Acoelius flavus*, *Acoelius pyrrhia*

Hosts. Lepidoptera. Nectulidae. *E. decentella* (Herrich-Schäffer, 1855), *E. decentella* (Herrich-Schäffer, 1855) [*Acer pseudoplatanus*], *E. hexapetalae* [*Filipendula vulgaris*], *E. liebwerdella* Zimmermann, 1940 [*Fagus sylvatica*], *E. louisella* (Sircom, 1849) [*Acer campestre*], *E. occultella* (Linnaeus, 1767), *E. sericopeza* (Zeller, 1839). [*Acer platanoides*]. *Stigmella anomalella* (Goeze, 1783) [*Quercus petraea*, *Rosa* sp.], *S. caradjai* (Groschke, 1944) [*Quercus pubescens*], *S. hybnerella* (Hübner, 1796) [*Crataegus monogyna*], *S. incognitella* (Herrich-Schäffer, 1855). [*Malus sylvestris*], *S. lediella* (Schleich, 1867), *S. lemniscella* (Zeller, 1839) [*Ulmus carpiniifolia*, *Ulmus laevis*], *S. minusculella* (Herrich-Schäffer, 1855) [*Pyrus communis*], *S. obliquella* (Heinemann, 1862) [*Salix alba*, *Salix fragilis*], *S. paradoxa* (Frey, 1858) [*Crataegus monogyna*], *S. plagicolella* (Stainton, 1854) [*Prunus cerasifera*, *Prunus domestica*, *Prunus spinosa*], *S. poterii* (Stainton, 1857)

[*Sanguisorba officinalis*], *S. pyri* (Glitz, 1865). [*Pyrus communis*], *S. roborella* (Johansson, 1971) [*Quercus robur*], *S. ruficapitella* (Haworth, 1828) [*Quercus robur*], *S. salicis* (Stainton, 1854) [*Salix cinerea*], *S. tiliae* (Frey, 1856) [*Tilia* sp.], *S. trimaculella* (Haworth, 1828). [*Populus nigra*, *Populus x canadensis*], *S. zangherii* (Klimesch, 1951). [*Quercus cerris*], *Trifurcula bupleurella* (Chretien, 1907).

Zoogeographic region. Palaearctic.

Distribution in Türkiye. Kastamonu (Beyarslan & Aydoğdu, 2013). Kastamonu (Beyarslan & Aydoğdu, 2014).

Distribution. Azerbaijan, Bosnia Hercegovina, Bulgaria, former Czechoslovakia, France, Georgia, Germany, Hungary, Iran, Ireland, Korea, Moldova, Poland, Romania, Russia, Türkiye, Turkmenistan, Ukraine, United Kingdom, Uzbekistan, former Yugoslavia.

Adelius (Adelius) subfasciatus Haliday, 1833

Adelius subfasciatus Haliday, 1833

Adelius (Adelius) subfasciatus. Perkins & Nixon, 1939

Synonym. *Acoelius parvulus*, *Microgaster germanus*, *Microgaster minutissimus*

Hosts. **Diptera. Cecidomyiidae.** *Rabdophaga rosaria* (Felt, 1908). **Lepidoptera. Coleophoridae.** *Coleophora ahenella* Heinemann & Wocke, 1877. **Gracillariidae.** *Parornix scoticella* (Stainton, 1850). *Phyllonorycter pomonella* (Zeller, 1846) [*Prunus spinosa*], *P. populifoliella* (Treitschke, 1833) [*Populus canadensis*], *P. schreberella* (Fabricius, 1781), *P. spinolella* Duponchel, [Lyonetiidae-Lyonetia rajella]. **Nepticulidae.** *Bohemannia pulverosella* (Stainton, 1849) [*Malus sylvestris*], *Ectoedemia agrimoniae* (Frey, 1858), *E. angulifasciella* (Stainton, 1849) [*Rosa* sp.], *E. argyropeza* (Zeller, 1839) [*Populus tremula*], *E. atricollis* (Stainton, 1857). [*Malus sylvestris*, *Staphylea pinnata*], *E. cerris* (Zimmermann, 1944). [*Quercus cerris*], *E. erythrogea* (Joannis, 1908) [*Rubus fruticosus*], *E. hannoverella*. (Glitz, 1872) [*Populus nigra*], *E. klimeschi* (Skala, 1933) [*Populus alba*], *E. occultella* (Linnaeus, 1767) [*Betula pendula*, *Betula pubescens*], *E. rubivora* (Wocke, 1860), *E. rubivora* (Wocke, 1860) [*Rubus caesius*], *E. septembrella* (Stainton, 1849) [*Hypericum maculatum*, *Hypericum perforatum*], *E. sericopeza* (Zeller, 1839). [*Acer platanoides*], *E. spinosella* (Joannis, 1908) [*Prunus spinosa*], *E. spiraeae* Gregor & Povolny, 1983 [*Spiraea media*], *E. turbidella* (Zeller, 1848) [*Populus alba*], *E. weaveri* (Stainton, 1855) [*Vaccinium vitis-idaea*]. *Parafomoria helianthemella* (Herrich-Schäffer, 1860) [*Helianthemum nummularium*], *Stigmella* sp. [*Quercus pubescens*, *Rosa* sp.], *S. anomalella* (Goeze, 1783) [*Rosa glauca*, *Rosa tomentosa*, *Rosa villosa*], *S. aurella* (Fabricius, 1775) [*Rubus fruticosus*], *S. auromarginella* (Richardson, 1890) [*Rubus fruticosus*], *S. basiguttella* (Heinemann, 1862). [*Quercus cerris*], *S. betulicola* (Stainton, 1856). [*Betula pubescens*], *S. centifoliella* (Zeller, 1848) [*Rosa canina*, *Rosa sherardii*], *S. desperatella*. (Frey, 1856) [*Pyrus communis*], *S. dryadella* (O. Hofmann, 1868) [*Dryas octopetala*], *S. filipendulae* (Wocke, 1871) [*Filipendula vulgaris*], *S. freyella* (Heyden, 1858), *S. freyella* (Heyden, 1858) [*Convolvulus arvensis*], *S. glutinosae* (Stainton, 1858) [*Alnus glutinosa*], *S. hemargyrella* (Kollar, 1832). [*Fagus sylvatica*], *S. hybnerella* (Hübner, 1796). [*Crataegus monogyna*], *S. lediella* (Schleich, 1867). [*Ledum palustre*], *S. lemniscella* (Zeller, 1839) [*Ulmus laevis*], *S. microtheriella* (Stainton, 1854) [*C. arpinus betulus*, *Corylus avellana*, *Pyrus pyraeaster*], *S. myrtillella* (Stainton, 1857). [*Vaccinium myrtillus*], *S. nylandriella* (Tengsdtröm, 1848). [*Sorbus aucuparia*], *S. obliquella* (Heinemann, 1862) [*Salix fragilis*, *Salix triandra*], *S. oxyacanthella* (Stainton, 1854). [*Crataegus monogyna*], *S. paradoxa* (Frey, 1858). [*Crataegus monogyna*], *S. perpygmaeella* (Doubleday, 1959) [*Crataegus monogyna*], *S. plagicolella* (Stainton, 1854) [*Prunus cerasifera*, *Prunus domestica*, *Prunus spinosa*], *S. poterii*. (Stainton, 1857) [*Potentilla erecta*, *Poterium sanguisorba*], *S. pretiosa* (Heinemann, 1862). [*Geum montanum*], *S. prunetorum* (Stainton, 1855) [*Prunus spinosa*], *S. pyri* (Glitz, 1865) [*Pyrus communis*], *S. regiella* (Herrich-Schäffer, 1855) [*Crataegus monogyna*], *S. ruficapitella* (Haworth, 1828) [*Quercus* sp.], *S. salicis* (Stainton, 1854). [*Salix caprea*], *S. sanguisorbae* (Wocke 1865), *S. thuringiaca* (Petty, 1904), *S. tiliae*, (Frey, 1856) [*Tilia cordata*], *S. tityrella* (Stainton, 1854) [*Fagus sylvatica*], *S. trimaculella* (Haworth, 1828). [*Populus nigra*], *S. ulmariae* (Wocke, 1879) [*Filipendula ulmaria*], *Trifurcula eurema* (Tutt, 1899) [*Lotus corniculatus*, *Thymus glabrescens*, (*Thymus pannonicus*)]. **Tischeriidae.** *Tischeria ekebladella* (Bjerkander, 1795). **Tortricidae.** *Rhopobota ustomaculana* (Curtis, 1831).

Zoogeographic region. Palaearctic.

Distribution in Türkiye. Tekirdağ (Beyarslan et al., 2006). Kastamonu (Beyarslan & Aydoğdu, 2013). Bolu, Karabük, Trabzon, Sivas (Beyarslan & Aydoğdu, 2014).

Distribution. Palearctic, Belgium, Bulgaria, Croatia, Czech Republic, former Czechoslovakia, Finland, France, Georgia, Germany, Hungary, Kazakhstan, Latvia, Lithuania, Moldova, Netherlands, Poland, Russia, Slovakia, Spain, Sweden, Switzerland, Ukraine, United Kingdom, former Yugoslavia.

Tribes Chelonini Foerster, 1863

Genus *Ascogaster* Wesmael, 1835

Subgenus *Ascogaster* str.s.

Ascogaster (Ascogaster) abdominalator (Dahlbom, 1833)

Chelonus abdominalator Dahlbom, 1833

Ascogaster (Ascogaster) abdominalator. Huddleston, 1984

Synonym. *Ascogaster fulviventris*, *Ascogaster instabilis*, *Ascogaster pallida*, *Chelonus femoralis*, *Chelonus rufiventris*

Hosts. Lepidoptera. Tortricidae. *Epinotia cruciana* (Linnaeus, 1761). **Yponomeutidae.** *Roeslerstammia erxlebella* (Fabricius, 1787). **Crambidae.** *Scoparia basistrigalis* Knaggs, 1866.

Zoogeographic region. Palaearctic.

Distribution in Türkiye. Antalya, Isparta (Beyarslan, 1985). Afyon, Denizli, Muđla (Beyarslan et al., 2002a). Kastamonu, Kırklareli, Ordu (Aydođdu & Beyarslan, 2007). Eskişehir, Trabzon, Antalya, Isparta, Kastamonu, Kırklareli, Ordu (Aydođdu & Beyarslan, 2012).

Distribution. Austria, Azerbaijan, Belgium, Bulgaria, Czech Republic, former Czechoslovakia, Finland, France, Georgia, Germany, Hungary, Ireland, Italy, Lithuania, Macedonia, Moldova, Netherlands, Norway, Poland, Romania, Russia, Slovenia, Sweden, Switzerland, Türkiye, United Kingdom, former Yugoslavia.

Ascogaster (Ascogaster) annularis (Nees, 1816)

Sigalphus annularis Nees, 1816

Ascogaster (Ascogaster) annularis. Curtis, 1837

Hosts. Hymenoptera. Cynipidae. *Dichomeris* sp. [*Cercis siliquastram*], *Diplolepis rosae* (Linnaeus, 1758).

Lepidoptera. Coleophoridae. *Coleophora lutipennella* (Zeller, 1838), **Gelechiidae.** *Parachronistis albiceps* (Zeller, 1839), *Recurvaria leucatella* (Clerck, 1759) [*Malus domestica*, *Pyrus communis*], *R. nanella* (Denis & Schiffermüller, 1775) [*Malus domestica*], *Stenolechia gemmella* (Linnaeus, 1758), **Oecophoridae.** *Batia lambdella* (Donovan, 1793), **Parametriotidae.** *Chrysoclista linneella* (Clerck, 1759), **Psychidae.** *Narycia duplicella* (Goeze, 1783), **Tortricidae.** *Pandemis cerasana* (Hübner, 1786), *P. heparana* (Denis & Schiffermüller, 1775) [*Malus domestica*], *Spilonota ocellana* (Denis & Schiffermüller, 1775) [*Malus domestica*], **Yponomeutidae.** *Yponomeuta malinella* Zeller, 1838, *Y. padella* (Linnaeus, 1758) [*Euonymus europaeus*].

Zoogeographic region. Palaearctic.

Distribution in Türkiye. Edirne, Denizli, Kütahya (Beyarslan et al. 2002a), (Edirne, Kütahya (Beyarslan et al. 2002b), Aydođdu & Beyarslan 2007). Artvin, Giresun, Gümüşhane, Rize (Aydođdu & Beyarslan 2011). Elazığ, Gümüşhane (Aydođdu & Beyarslan 2012). Iğdır (Beyarslan, 2021).

Distribution. Armenia, Austria, Bulgaria, former Czechoslovakia, Finland, France, Georgia, Germany, Hungary, Iran, Israel, Italy, Kazakhstan, Korea, Latvia, Lithuania, Moldova, Netherlands, Norway, Poland, Romania, Russia, Slovakia, Spain, Sweden, Switzerland, Türkiye, Ukraine, United Kingdom.

****Ascogaster (Ascogaster) armata* Wesmael, 1835**

Ascogaster armata Wesmael, 1835

Ascogaster (Ascogaster) armata. Reinhard, 1867

Synonym. *Ascogaster cavifrons*, *Ascogaster esenbeckii*, *Chelonus luteicornis*, *Chelonus pulchellus*

Hosts. Lepidoptera. Coleophoridae. *Coleophora hornigi* Toll, 1952, *C. violacea* (Ström, 1783).

Zoogeographic region. Western Palaearctic.

Distribution in Türkiye. Adana, Antalya (Beyarslan, 1985; Aydođdu & Beyarslan, 2012). Aydın, Denizli (Beyarslan et al., 2002a).

Distribution. Austria, Belgium, Bulgaria, Czechoslovakia, France, Germany, Hungary, Italy, Lithuania, Moldova, Netherlands, Poland, Romania, Russia, Switzerland, Türkiye, United Kingdom.

Ascogaster (Ascogaster) bicarinata* (Herrich-Schäffer, 1838)Chelonus bicarinatus* Herrich-Schäffer, 1838*Ascogaster (Ascogaster) bicarinata*. Reinhard, 1867**Synonym.** *Ascogaster caucasicus*, *Ascogaster mlokossewitschi*, *Ascogaster rostratus*, *Ascogaster rufiventris***Host.** **Lepidoptera. Tortricidae.** *Archips rosana* (Linnaeus, 1758).**Zoogeographic region.** Palaearctic.**Distribution in Türkiye.** Adana, Tekirdag (Beyarslan, 1985). Adana, Tekirdađ (Beyarslan & İnanç). Amasya, Ballıkesir Bolu, Edirne, Bilecik, Bursa, Çanakkale, Çorum, Karabük, Kastamonu, Kırklareli, İstanbul, Ordu, Samsun, Tekirdag, Tokat (Aydođdu & Beyarslan, 2007). Ankara, Artvin, Bartın, Elazığ, Erzincan, Kayseri, Kırıkkale, Sivas, Malatya, Adana, Amasya, Balıkesir, Bilecik, Bolu, Bursa, Çanakkale, Çorum, Karabük, Kastamonu, Kırklareli, İstanbul, Ordu, Samsun, Tekirdađ, Tokat Yozgat (Aydođdu & Beyarslan, 2012). Türkiye (Lozan, 2005). Erzurum (Beyarslan, 2021).**Distribution.** Azerbaijan, Croatia, Georgia, Germany, Greece, Hungary, Iran, Italy, Macedonia, Moldova, Romania, Russia, Slovakia, Spain, Türkiye, Ukraine, former Yugoslavia.***Ascogaster (Ascogaster) bidentula* Wesmael, 1835***Ascogaster bidentula* Wesmael, 1835*Ascogaster (Ascogaster) bidentula*. Kirchner, 1867**Synonym.** *Ascogaster atamiensis*, *Ascogaster fuscipennis*, *Ascogaster gibbiscuta*, *Chelonus multiarticulatus*, *Sigalphus scabriusculus***Hosts.** Lepidoptera. Geometridae. *Eupithecia venosata* (Fabricius, 1787), **Tortricidae.** *Archips* sp. [*Populus*], *A. rosana* (Linnaeus, 1758), *Epinotia cruciana* (Linnaeus, 1761), *Gypsonoma sociana* (Haworth, 1811), *Notocelia roborana* (Denis & Schiffermüller, 1775), *Rhopobota myrtillana* (Humphreys & Westwood, 1845).**Zoogeographic region.** Oriental, Palaearctic.**Distribution in Türkiye.** Afyon, Denizli (Beyarslan et al., 2002a). İzmir (Beyarslan et al., 2002b). Kırklareli (Aydođdu & Beyarslan, 2007). İzmir, Tekirdađ (Aydođdu & Beyarslan, 2012). Ardahan, Erzurum, Kars (Beyarslan, 2021).**Distribution.** Austria, Belgium, Bulgaria, China, Czech Republic, Czechoslovakia, Finland, Germany, Hungary, Ireland, Italy, Japan, Korea, Latvia, Lithuania, Moldova, Netherlands, Poland, Russia, Slovakia, Sweden, Switzerland, Türkiye, United Kingdom.****Ascogaster (Ascogaster) canifrons* Wesmael, 1835***Ascogaster canifrons* Wesmael, 1835**Synonym.** *Ascogaster graniger*, *Ascogaster zernyanus***Hosts.** Hymenoptera. **Cynipidae.** *Andricus curvator* Hartig, 1840. **Lepidoptera. Geometridae.** *Eupithecia pyreneata* Mabille, 1871, **Tortricidae.** *Cydia pomonella* (Linnaeus, 1758), *C. splendana* (Hübner, 1799), *Endothenia quadrimaculana* (Haworth, 1811), *Eupoecilia angustana* (Hübner, 1799), *Gypsonoma dealbana* (Frölich, 1828), *Rhopobota naevana* (Hübner, [1817]).**Zoogeographic region.** Palaearctic.**Distribution in Türkiye.** Erzurum (Beyarslan, 2021).**Distribution.** Austria, Belgium, former Czechoslovakia, Finland, France, Germany, Hungary, Ireland, Kazakhstan, Mongolia, Netherlands, Poland, Russia, Slovakia, Spain, Sweden, Switzerland, United Kingdom, Uzbekistan.***Ascogaster (Ascogaster) caucasica* Kokujev, 1895***Ascogaster caucasica* Kokujev, 1895*Ascogaster (Ascogaster) caucasica*. Fahringer, 1934**Synonym.** *Ascogaster rostratus***Zoogeographic region.** Palaearctic.**Distribution in Türkiye.** Türkiye (Huddleston 1984). Adana, Bolu, Edirne, Çanakkale, Tekirdađ (Beyarslan & İnanç 1990). Bursa, Edirne (Beyarslan 1995). Adana, Edirne, Tekirdag (Beyarslan & İnanç, 1992). Bolu, Edirne, Tekirdag (Aydođdu & Beyarslan, 2007). Adapazari, Bolu, Bursa, Çanakkale, Çorum,

Edirne, Karabuk, Kastamonu, Kırklareli, Istanbul, Ordu, Sinop, Tekirdag, Tokat (Aydođdu & Beyarslan, 2006a). Eskişehir, Yozgat (Aydođdu & Beyarslan, 2012).

Distribution. Bulgaria, Croatia, Cyprus, former Czechoslovakia, Georgia, Greece, Hungary, Iran, Macedonia, Romania, Spain, Türkiye, former Yugoslavia.

***Ascogaster (Ascogaster) disparilis* Tobias, 1986**

Ascogaster disparilis Tobias, 1986

Ascogaster (Ascogaster) disparilis. Tobias, 1986

Zoogeographic region. Palaearctic.

Distribution in Türkiye. Samsun (Aydođdu & Beyarslan, 2006a). Bilecik, Edirne, Kırklareli, Sinop (Aydođdu & Beyarslan, 2012).

Distribution. Iran. Russia. Türkiye.

***Ascogaster (Ascogaster) excisa* (Herrich-Schäffer, 1838)**

Chelonus excisus Herrich-Schäffer, 1838

Ascogaster (Ascogaster) excisa. Dalla Torre, 1898

Zoogeographic region. Palaearctic.

Distribution in Türkiye. Çorum, Edirne (Aydođdu & Beyarslan, 2006a). + Edirne (Aydođdu & Beyarslan, 2007). Amasya, (Aydođdu & Beyarslan, 2012). Bingöl, Bitlis (Beyarslan et al., 2020).

Distribution. Azerbaijan, Bulgaria, Croatia, France, Germany, Hungary, Italy, Kazakhstan, Moldova, Spain, Switzerland, Türkiye.

****Ascogaster (Ascogaster) gonocephala* Wesmael, 1835**

Ascogaster gonocephala Wesmael, 1835

Ascogaster (Ascogaster) gonocephala. Kirchner, 1867

Hosts. Lepidoptera. Sesiidae. *Bembecia scopigera* Scopoli, 1763 [*Onobrychis viciifolia*].

Zoogeographic region. Western Palaearctic.

Distribution in Türkiye. Çorum (Aydođdu & Beyarslan, 2007). Erzurum, Çorum (Gültekin & Güçlü 1997). Erzurum, Malatya, Yozgat (Aydođdu & Beyarslan, 2012).

Distribution. Belgium, France, Hungary, Moldova, Slovakia, Switzerland, Türkiye, United Kingdom, former Yugoslavia.

***Ascogaster (Ascogaster) grahami* Huddleston, 1984**

Ascogaster grahami Huddleston, 1984

Ascogaster (Ascogaster) grahami. Zettel, 1987

Hosts. Lepidoptera. Cosmopterigidae. *Sorhagenia lophyrella* Douglas, 1846. **Oecophoridae.** *Borkhausenia einsleri* Amsel, 1935. **Tineidae.** *Infurcitinea argentimaculella* (Stainton, 1849).

Zoogeographic region. Oriental, Palaearctic.

Distribution in Türkiye. Kırklareli (Aydođdu & Beyarslan, 2007). Artvin (Aydođdu & Beyarslan, 2012).

Distribution. Austria, China, Czechoslovakia, France, Germany, Hungary, Iran, Israel, Italy, Korea, Netherlands, Russia, Sweden, Switzerland, Türkiye, United Kingdom.

****Ascogaster (Ascogaster) kasparyani* Tobias, 1976**

Ascogaster kasparyani Tobias, 1976

Ascogaster (Ascogaster) kasparyani. Tobias, 1986

Zoogeographic region. Palaearctic.

Distribution in Türkiye. Malatya, Yozgat (Aydođdu & Beyarslan, 2012).

Distribution. Georgia, Greece, Iran, Türkiye.

***Ascogaster (Ascogaster) klugii* (Nees, 1816)**

Sigalphus klugii Nees, (1813) 1816

Ascogaster (Ascogaster) klugii. Thomson, 1874

Synonym. *Ascogaster neesii*, *Ascogaster ruficeps*

Hosts. Lepidoptera. Oecophoridae. *Borkhausenia subochreella* Doubleday, 1935. *Denisia stipella* (Linnaeus, 1758). **Coleoptera. Curculionidae.** *Dryocoetes villosus* (Fabricius, 1792).

Zoogeographic region. Palaearctic.

Distribution in Türkiye. Türkiye (Papp, 1994). Denizli (Beyarslan et al., 2002a). Tekirdağ, (Aydoğdu & Beyarslan, 2012).

Distribution. Austria, Azerbaijan, Belgium, Bulgaria, Czech Republic, Czechoslovakia, Finland, France, Georgia, Germany, Hungary, Iran, Italy, Japan, Korea, Latvia, Lithuania, Moldova, Netherlands, Norway, Poland, Russia, Slovakia, Sweden, Switzerland, Türkiye, former Yugoslavia.

***Ascogaster (Ascogaster) magnidentis Tobias, 1986**

Hosts. Lepidoptera. Tortricidae. *Cydia milleniana* Razowski, 1991.

Zoogeographic region. Western Palaearctic.

Distribution in Türkiye. Ardahan, Artvin, Erzurum (Beyarslan, 2021).

Distribution. Russia, Spain, Türkiye.

Ascogaster (Ascogaster) quadridentata Wesmael, 1835

Ascogaster quadridentatus Wesmael, 1835

Ascogaster (Ascogaster) quadridentata. Curtis (1837)

Synonyms. *Ascogaster consobrinus*, *Ascogaster cynipum*, *Ascogaster egregius*, *Ascogaster epinotiae*, *Ascogaster limitatus*, *Ascogaster nigricornis*, *Ascogaster pallidicornis*, *Chelonus bisulcatus*, *Chelonus carpocapsae*, *Chelonus impressus*, *Chelonus nigrator*, *Chelonus quadridens*, *Sigalphus rufipes*, *Sigalphus similis*

Hosts. Coleoptera. Curculionidae. *Anthonomus pomorum* (Linnaeus, 1758). *Pachytychius strumarius* Gyllenhal, 1836. **Diptera. Anthomyiidae.** *Anthomyia albimana* Zetterstedt, 1845. **Clusiidae.** *Clusiodes albimanus* (Meigen, 1830). **Hymenoptera. Cynipidae.** *Biorhiza terminalis* (Fabricius, 1798), *B. pallida* (Olivier, 1791). **Tenthredinidae.** *Phyllocolpa leucosticta* (Hartig, 1837). **Lepidoptera. Elachistidae.** *Blastodacna atra* (Haworth, 1828), *B. hellerella* (Duponchel, 1838). **Gelechiidae.** *Filatima persicaeella* (Murtfeldt, 1899). *Recurvata leucataella* (Clerck, 1759) [*Malus domestica*, *Pyrus communis*], *R. nanella* ([Denis & Schiffermüller], 1775). **Geometridae.** *Eupithecia absinthiata* (Clerck, 1759). *Operophtera brumata* (Linnaeus, 1758). **Limacodidae.** *Cnidocampa flavescens* (Walker, 1855). **Pyralidae.** *Desmia funeralis* (Hübner, 1796). *Etiella zinckenella* (Treitschke, 1832) [*Colutea arborescens*, *Lathyrus sativus*], *Loxostege sticticalis* (Linnaeus, 1761). **Tortricidae.** *Aethes francillana* (Fabricius, 1794) [*Ferula communis*], *A. achatana* Denis & Schiffermüller 1775 [*Crataegus* sp.], *A. apicella* (Denis & Schiffermüller, 1775), *A. comptana* Frolich, 1828, *A. rosana* (Linnaeus, 1758). *Argyroplote arbutella* (Linnaeus, 1758). *Croesia bergmanniana* (Linnaeus, 1758). *Cydia delineaana* Walker, 1863, *C. duplicana* (Zetterstedt, 1839) [*Juniperus*], *C. funebrana* (Treitschke, 1835) [*Prunus domestica*], *C. medicaginis* (Kuznetzov, 1962), *C. nigricana* (Fabricius, 1794), *C. pactolana* (Zeller, 1840), *C. pallifrontana* (Lienig & Zeller, 1846), *C. pomonella* (Linnaeus, 1758) [*Malus domestica*, *Malus pumila*], *C. pomonella* (Linnaeus, 1758), *C. splendana* (Hübner, [1799]), *C. zebeana* (Ratzeburg, 1840). *Adoxophyes orana* (Fischer Röslerstamm, 1834) [*Malus domestica*]. *Epinotia solandriana* (Linnaeus, 1758), *E. ambiguella* (Hübner, 1796). *Grapholita molesta* (Busck, 1916) [*Persica vulgaris*, *Prunus persica*], *G. packardi* (Zeller, 1875), *G. prunivora* (Walsh, 1868) [*Pyrus coronaria*], *Gypsonoma aceriana* (Duponchel, 1842), *G. dealbana* (Frölich 1828), *G. oppressana* (Treitschke, 1835), *G. sociana* (Haworth, [1811]). *Hedya nubiferana* (Haworth, 1811) [*Crataegus* sp., *Cydonia oblonga*].

Zoogeographic region. Nearctic, Neotropical, Oceanic, Oriental, Palaearctic.

Distribution in Türkiye. Adana, Tekirdağ (Beyarslan & Inanç, 1992). Amasya, Edirne, Ballkesir, Bartın-Bilecik, Bolu, Istanbul, Kastamonu, Karabük, Kırklareli, Ordu, Samsun, Tekirdağ (Aydoğdu & Beyarslan, 2007). Adapazarı, Ankara, Artvin, Bayburt, Gümüşhane, İstanbul, İzmir, Konya, Niğde, Uşak (Aydoğdu & Beyarslan, 2012. Antalya (Çiftçi et al., 1995).

Distribution. Armenia, Austria, Azerbaijan, Belgium, Bulgaria, Canada, China, Croatia, Cyprus, former Czechoslovakia, Egypt, Finland, France, Germany, Greece, Hungary, Iran, Israel, Japan, Kazakhstan, Korea, Latvia, Lithuania, Macedonia, Madeira Islands, Moldova, Mongolia, Morocco, Netherlands, New Zealand, Norway, Peru, Poland, Romania, Russia, Slovakia, Spain, Sweden, Switzerland, Syria, Türkiye, Turkmenistan, U.S.A., Ukraine, United Kingdom, Uzbekistan, former Yugoslavia. The following countries have introduced *Ascogaster quadridentata* for the biological control

of the aforementioned plant pests species of Coleoptera, Diptera and Lepidoptera: Argentina, Australia, Australia-Victoria, Canada-British Columbia, Canada-Nova Scotia, Canada-Ontario, Canada-Quebec, New Zealand, Pakistan, Peru, South Africa, Spain-main, U.S.A.-California, U.S.A.-Connecticut, U.S.A.-Delaware, U.S.A.-Florida, U.S.A.-Idaho, U.S.A.-Louisiana, U.S.A.-Missouri, U.S.A.-Montana, U.S.A.-New Jersey, U.S.A.-New York, U.S.A.-Ohio, U.S.A.-Tennessee, U.S.A.-Virginia, U.S.A.-Washington, Uruguay.

***Ascogaster (Ascogaster) rufidens* Wesmael, 1835**

Ascogaster rufidens Wesmael, 1835

Ascogaster (Ascogaster) rufidens. Kirchner, 1867

Synonym. *Chelonus laevigator*, *Chelonus rufipes*

Hosts. **Coleoptera.** **Curculionidae.** *Anthonomus pomorum* (Linnaeus, 1758). **Hymenoptera.** **Tenthredinidae.** *Blennocampa pusilla* (Klug, 1814). **Lepidoptera.** **Arctiidae.** *Coscinia cribraria* (Linnaeus, 1758) *Coleophora discordella* Zeller, 1849 **Coleophoridae.** *Coleophora gryphipennella* (Hübner, 1796). **Depressariidae.** *Agonopterix conterminella* (Zeller, 1839). **Ethmiidae.** *Ethmia funerella* (Fabricius, 1787). **Nolidae.** *Earias clorana* (Linnaeus, 1761). **Tortricidae.** *Acleris hastiana* (Linnaeus, 1758). *Archips oporana* (Linnaeus, 1758), *A. rosana* (Linnaeus, 1758). *Croesia holmiana* (Linnaeus, 1758). **Tortricidae.** *Cydia funebrana* (Treitschke, 1835), *C. pomonella* (Linnaeus, 1758). *Dichelia histrionana* (Frölich, 1828), *Hedya nubiferana* (Haworth, 1811). *Lobesia botrana* (Denis & Schiffermüller), 1775. *Notocelia uddmanniana* (Linnaeus, 1758), *Olethreutes lediana* (Linnaeus, 1758). *Rhopobota ustomaculana* Pierce & Metcalfe, 1922. *Selania leplastriana* (Curtis, 1831). **Yponomeutidae.** *Yponomeuta evonymella* (Linnaeus, 1758) *Y. padella* (Linnaeus, 1758).

Zoogeographic region. Palaearctic.

Distribution in Türkiye. Adana, Edirne (Beyarslan & Inanç, 1992). Ballkesir, Kırklareli (Aydoğdu & Beyarslan, 2007). Muğla (Aydoğdu & Beyarslan, 2012).

Distribution. Austria, Belgium, Bulgaria, China, former Czechoslovakia, Finland, France, Germany, Hungary, Ireland, Italy, Latvia, Lithuania, Netherlands, Poland, Russia, Slovakia, Sweden, Switzerland, United Kingdom.

***Ascogaster (Ascogaster) rufipes* (Latreille, 1809)**

Sigalphus rufipes Latreille, 1809

Ascogaster (Ascogaster) rufipes. Smith, 1853

Synonym. *Ascogaster arisanicus*, *Ascogaster bidentulus*, *Ascogaster egregius*, *Ascogaster nigribasis*, *Ascogaster ratzeburgii*, *Ascogaster soror*, *Chelonus fasciatus*, *Chelonus multiarticulatus*, *Chelonus pallipes*, *Chelonus rubripes*, *Chelonus rugosulus*, *Sigalphus elegans*, *Sigalphus similis*

Hosts. **Coleoptera.** **Curculionidae.** *Anthonomus pomorum* (Linnaeus, 1758). **Hymenoptera.** **Tenthredinidae.** *Blennocampa pusilla* (Klug, 1814). **Lepidoptera.** **Arctiidae.** *Coscinia cribraria* (Linnaeus, 1758). **Coleophoridae.** *Coleophora discordella* (Zeller, 1849). *C. gryphipennella* (Hübner, 1796). **Depressariidae.** *Agonopterix conterminella* (Zeller, 1839). **Elachistidae.** *Ethmia funerella* (Fabricius, 1787). **Nolidae.** *Earias clorana* (Linnaeus, 1761). **Tortricinae.** *Acleris hastiana* (Linnaeus, 1758). *Archips oporana* (Linnaeus, 1758), *A. rosana* (Linnaeus, 1758). *Cydia funebrana* (Treitschke, 1835), *C. pomonella* (Linnaeus, 1758). *Dichelia histrionana* (Frölich, 1828). *Hedya nubiferana* (Haworth, 1811). *Lobesia botrana* (Denis & Schiffermüller, 1775). *Notocelia uddmanniana* (Linnaeus, 1758). *Olethreutes, lediana* (Linnaeus, 1758). *Phalaena holmiana* Linnaeus, 1758. *Rhopobota ustomaculana* (Curtis, 1831). *Selania leplastriana*. (Curtis, 1831). **Yponomeutidae.** *Yponomeuta padella* (Linnaeus, 1758), *Y. evonymella* (Linnaeus, 1758).

Zoogeographic region. Oriental, Palaearctic.

Distribution in Türkiye. Adana, Edirne, Kırklareli (Beyarslan & Inanç, 1992). Afyon, Denizli, izmir, Muğla (Beyarslan et al., 2002a). Adana, Edirne, Kırklareli (Aydoğdu & Beyarslan, 2007). Muğla (Aydoğdu & Beyarslan, 2012). Edirne (Aydoğdu, 2014).

Distribution. Algeria, Austria, Azerbaijan, Belarus, Belgium, Bulgaria, China, Croatia, Czech Republic, former Czechoslovakia, Finland, France, Germany, Hungary, Ireland, Italy, Japan, Korea, Kyrgyzstan, Latvia, Moldova, Mongolia, Netherlands, Norway, Poland, Russia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Türkiye, Ukraine, United Kingdom, Uzbekistan.

****Ascogaster (Ascogaster) scabricula* (Dahlbom, 1833)***Chelonus scabricula* Dahlbom, 1833*Ascogaster (Ascogaster) scabricula*. Zettel, 1987**Synonym.** *Ascogaster clypealis*, *Ascogaster limitatus***Hosts. Lepidoptera. Tortricidae.** *Cydia zebeana* (Ratzeburg, 1840) [*Larix europaea*].**Zoogeographic region.** Palaearctic.**Distribution in Türkiye.** Ardahan (Beyarslan, 2021).**Distribution.** Austria, Belgium, China, Czechoslovakia, Finland, France, Germany, Greece, Hungary, Norway, Romania, Sweden, Switzerland.****Ascogaster (Ascogaster) similis* (Nees, 1816)***Sigalphus similis* Nees, 1816*Ascogaster (Ascogaster) similis*. Curtis, 1837**Synonym.** *Ascogaster brevicornis*, *Chelonus monilicornis*, *Chelonus scabriculus***Hosts. Lepidoptera, Tortricidae.** *Cydia splendana* (Hubner, 1799). *Spilonota ocellana* ([Denis & Schiffermüller], 1775). **Gelechiidae.** *Teleiodes saltuum* (Zeller, 1878), **Yponomeutidae.** *Yponomeuta padella*. (Linnaeus, 1758).**Zoogeographic region.** Western Palaearctic.**Distribution in Türkiye.** Kastamonu, Sivas (Beyarslan et al., 2017). Bingöl, Bitlis (Beyarslan et al., 2020).**Distribution.** Belgium, Czech Republic, former Czechoslovakia, France, Germany, Hungary, Italy, Latvia, Lithuania, Netherlands, Poland, Russia, Slovenia, Spain, United Kingdom, former Yugoslavia.***Ascogaster (Ascogaster) varipes* Wesmael, 1835+***Ascogaster varipes* Wesmael, 1835*Ascogaster varipes* Wesmael, 1835*Ascogaster (Ascogaster) varipes*. Kirchner, 1867**Synonym.** *Ascogaster cavifrons*, *Ascogaster jaroslawnensis*, *Ascogaster sternalis*, *Ascogaster tersus*, *Chelonus atriceps*, *Chelonus catulus***Hosts. Coleoptera. Curculionidae.** *Magdalis violacea* (Linnaeus, 1758). **Lepidoptera. Coleophoridae.** *Coleophora binderella* (Kollar, 1832), **Gelechiidae.** *Gelechia rhombella* (Denis & Schiffermüller, 1775), **Tortricidae.** *Cydia compositella* (Fabricius, 1775), *C. grunertiana* (Ratzeburg, 1868), *C. pactolana* (Zeller, 1840), *C. zebeana* (Ratzeburg, 1840), *Endothenia gentianaena* (Hübner, 1799), *Epinotia cruciana* (Linnaeus, 1761).**Zoogeographic region.** Palaearctic.**Distribution in Türkiye.** Kırklareli (Beyarslan, 1995). Eskişehir, Kırklareli, İstanbul, Ordu (Aydoğdu & Beyarslan, 2007). Eskişehir (Aydoğdu & Beyarslan, 2012). Ardahan, Kars (Beyarslan, 2021).**Distribution.** Albania, Armenia, Austria, Azerbaijan, Belgium, China, Czechoslovakia, Finland, France, Germany, Greece, Hungary, Iran, Ireland, Italy, Kazakhstan, Korea, Latvia, Lithuania, Moldova, Mongolia, Netherlands, Norway, Poland, Romania, Russia, Slovakia, Slovenia, Spain, Spain-main, Sweden, Switzerland, Türkiye, Ukraine, United Kingdom, former Yugoslavia.**Genus *Chelonus* Panzer, 1806****Subgenus *Chelonus* s.str.******Chelonus (Chelonus) aberrans* Tobias, 1964***Chelonus aberrans* Tobias, 1964**Zoogeographic region.** Eastern Palaearctic.**Distribution in Türkiye.** Bitlis (Beyarslan et al., 2020).**Distribution.** Kazakhstan.****Chelonus (Chelonus) ahngeri* Tobias, 1966 2021+***Chelonus ahngeri* Tobias, 1966.*Chelonus (Chelonus) ahngeri*. Tobias, 1972**Zoogeographic region.** Eastern Palaearctic.

Distribution in Türkiye. Bingöl, Bitlis (Beyarslan et al., 2020). Kars (Beyarslan, 2021).

Distribution. Turkmenistan.

Chelonus (Chelonus) andrievskii Tobias, 1972

Zoogeographic region. Western Palaearctic.

Distribution in Türkiye. Türkiye (Tobias, 2011).

Distribution. Armenia, Türkiye.

**Chelonus (Chelonus) annulatus* (Nees, 1816)+

Sigalphus annulatus Nees, 1816

Chelonus (Chelonus) annulatus. Tobias 1972

Synonym. *Chelonus carbonator*, *Chelonus decorus*, *Chelonus maculatus*, *Sigalphus fenestratus*

Zoogeographic region. Palaearctic.

Host. Diptera. Tephritidae. *Chaetostomella cylindrica* (Robineau-Desvoidy, 1830) [*Cirsium eriophorum*], *Trypeta acuticornis* (Meigen 1824) [*Cirsium eriophorum*], *Urophora eriolepidis* (Loew, 1856) [*Cirsium eriophorum*], **Lepidoptera. Agonoxenidae.** *Chrysoclista linneella* (Clerck, 1759). *Parachronistis albiceps* (Zeller, 1839). *Recurvaria nanella* ([Denis & Schiffermüller], 1775), *Stenolechia gemmella* (Linnaeus, 1758), **Oecophorinae.** *Batia lambdella* (Donovan, 1793), Psychidae. *Narycia duplicella* (Goeze, 1783), **Tortricidae.** *Dichrorampha petiverella* (Linnaeus, 1758), **Yponomeutidae.** *Yponomeuta malinellus* Zeller, 1838, *Y. padella* (Linnaeus, 1758).

Distribution in Türkiye. Amasya, Bilecik, Balıkesir, Bursa, Çorum, Kastamonu, Ordu Samsun, Sinop, Tokat (Aydoğdu & Beyarslan, 2007). Artvin, Gümüşhane, Rize (Aydoğdu & Beyarslan, 2011). Erzurum (Beyarslan, 2021).

Distribution. Belarus, Bulgaria, Canary Islands, China, Croatia, Czechoslovakia, Finland, France, Georgia, Germany, Hungary, Iran, Italy, Kazakhstan, Kyrgyzstan, Lithuania, Moldova, Mongolia, Norway, Poland, Russia, Slovakia, Spain, Sweden, Switzerland, Türkiye, Ukraine, United Kingdom.

Chelonus (Chelonus) annulipes Wesmael, 1835+

Chelonus annulipes Wesmael, 1835

Chelonus (Chelonus) annulipes. Abdinbekova

Synonym. *Chelonus falcatus*, *Sigalphus annulatus*, *Sigalphus sulcatus* Szépligeti, 1901

Hosts. Lepidoptera. Crambidae. *Loxostege sticticalis* (Linnaeus, 1761), **Tortricidae.** *Cydia pomonella* (Linnaeus, 1758), **Pyralidae.** *Ostrinia nubilalis* (Hübner, 1796) [*Zea mays*], *Ephestia kuehniella* Zeller, 1879, **Noctuidae.** *Agrotis (Agrotis) segetum* (Schiffermüller, 1775), *Eublemma pannonica* (Freyer, 1840), *Heliothis virescens* (Hüfnagel, 1766), *Spodoptera exigua* (Hübner, 1808).

Zoogeographic region. Nearctic, Oriental, Palaearctic.

Distribution in Türkiye. Türkiye (Lozan, 2005). Aydın, İzmir, Muğla (Beyarslan et al., 2002a). Ordu (Aydoğdu & Beyarslan, 2007). Bingöl, Bitlis, Muş, Van (Beyarslan et al., 2020). Erzurum, Kars (Beyarslan, 2021).

Distribution. Afghanistan, Armenia, Azerbaijan, Belgium, Bulgaria, Canada, China, Croatia, former Czechoslovakia, France, Georgia, Germany, Greece, Hungary, Iran, Italy, Kazakhstan, Latvia, Lithuania, Moldova, Netherlands, Norway, Poland, Romania, Russia, Switzerland, Tajikistan, Türkiye, Turkmenistan, U.S.A., Ukraine, United Kingdom, Uzbekistan, former Yugoslavia. Introduced into Canada-Ontario, Guam, Puerto Rico and Connecticut, Delaware, Florida, Illinois, Indiana, Iowa, Louisiana, Massachusetts, Michigan, New Jersey, New York, Ohio, Pennsylvania, Virginia and Wisconsin in USA for biological control of pests.

**Chelonus (Chelonus) armeniacus* Tobias, 1976

Zoogeographic region. Palaearctic.

Distribution in Türkiye. Aydın (Aydoğdu, 2008). Bingöl, Muş (Beyarslan et al., 2020).

Distribution Armenia, Iran.

****Chelonus (Chelonus) Beyarslani Aydođdu, 2008*****Zoogeographic region.** Western Palaearctic.**Distribution in Türkiye.** Aydın (Aydođdu, 2008).**Distribution.** Türkiye.***Chelonus (Chelonus) bidens Tobias, 1972*****Zoogeographic region.** Palaearctic.**Distribution in Türkiye.** Adapazarı, Balıkesir, Bursa, Edirne, Kırklareli, Tekirdađ (Aydođdu & Beyarslan, 2002b) Bitlis (Beyarslan et al., 2020). Ardahan, Erzurum. İđdir, Kars (Beyarslan, 2021).**Distribution.** Former Czechoslovakia, Hungary, Iran, Kazakhstan, Russia, Türkiye, Ukraine.****Chelonus (Chelonus) bimaculatus Szépligeti, 1896****Chelonus (Chelonus) bimaculatus* Szépligeti, 1896*Chelonus (Chelonus) bimaculatus*. Zhang, 2008**Synonym.** *Chelonus minör*, *Chelonus sculpturatus***Hosts. Lepidoptera. Tortricidae.** *Gypsonoma dealbana* (Frölich, 1828), *G. incarnana* Haworth, 1811.**Zoogeographic region.** Palaearctic.**Distribution in Türkiye.** Balıkesir (Aydođdu & Beyarslan, 2011).**Distribution.** Albania, Bulgaria, China, Croatia, Czechoslovakia, Germany, Hungary, Kazakhstan, Mongolia, Russia, Switzerland, Türkiye, Ukraine, Uzbekistan, former Yugoslavia.***Chelonus (Chelonus) breviventris Thomson, 1874****Chelonus breviventris* Thomson, 1874*Chelonus (Chelonus) breviventris*. Papp, 1997**Zoogeographic region.** Palaearctic.**Distribution in Türkiye.** Türkiye (Papp, 1997).**Distribution.** Austria, China, Croatia, Finland, Greece, Hungary, Iran, Jordan, Sweden, Türkiye, former Yugoslavia.***Chelonus (Chelonus) canescens Wesmael, 1835****Chelonus canescens* Wesmael, 1835*Chelonus (Chelonus) canescens*. Tobias, 1972**Hosts. Lepidoptera. Tortricidae.** *Cnephasia pasiuana* (Hübner, 1799).**Zoogeographic region.** Palaearctic.**Distribution in Türkiye.** Bilecik, Edirne, Kırklareli, Manisa (Aydođdu & Beyarslan, 2002b). Amasya, Bolu, Çankırđ, Edirne, İzmit, Kastamonu, Samsun, Tekirdađ, Tokat (Aydođdu & Beyarslan, 2007). No record (Beyarslan et al., 2002a). Artvin, Gümüşhane (Aydođdu & Beyarslan, 2011). Bitlis (Beyarslan et al., 2020).**Distribution.** Belarus, Belgium, Czech Republic, former Czechoslovakia, France, Germany, Hungary, Iran, Italy, Mongolia, Poland, Romania, Russia, Spain, Sweden, Switzerland, Türkiye, United Kingdom.****Chelonus (Chelonus) capsa Tobias, 1972*****Zoogeographic region.** Palaearctic.**Distribution in Türkiye.** Afyon (Aydođdu & Beyarslan, 2011).**Distribution.** China, Hungary, Israel, Mongolia, Russia, Türkiye.***Chelonus (Chelonus) caradrinae Kokujev, 1914****Chelonus caradrinae* Kokujev, 1914*Chelonus (Chelonus) caradrinae*. Abdinbekova, 1971**Hosts. Lepidoptera. Noctuidae.** *Spodoptera exigua* (Hubner, 1808).**Zoogeographic region.** Palaearctic.

Distribution in Türkiye. Afyon, Aydın, Denizli, Uşak (Beyarslan et al., 2002a). Bilecik, Bursa, Çorum, Edirne, Kastamonu, Kırklareli, Ordu, Samsun, Tekirdađ, Tokat (Aydođdu & Beyarslan, 2007). Sivas (Beyarslan et al., 2018).

***Chelonus (Chelonus) cesa* Koçak & Kemal, 2013**

Chelonus asiaticus Telenga, 1941 homonym of *Chelonus asiatica* Fahringer, 1932

Chelonus (Chelonus) asiaticus. Tobias 1972

Chelonus (Chelonus) cesa. Koçak & Kemal, 2013

Zoogeographic region. Palaearctic.

Distribution in Türkiye. Kırklareli (Aydođdu & Beyarslan, 2002b). Amasya, Bursa, Çanakkale, Kırklareli, Istanbul, Ordu (Aydođdu & Beyarslan, 2007). Bitlis, Muş (Beyarslan et al., 2020). Ardahan, Erzurum, Iğdır, Kars (Beyarslan, 2021).

Distribution. Armenia, China, China-Xinjiang, Czech Republic, former Czechoslovakia, Greece, Hungary, Iran, Israel, Kazakhstan, Lithuania, Moldova, Mongolia, Russia, Slovakia, Spain, Türkiye, Uzbekistan.

****Chelonus (Chelonus) contrarius* Tobias, 1964**

Chelonus contrarius Tobias, 1964

Chelonus (Chelonus) contrarius. Tobias, 1972

Zoogeographic region. Palaearctic.

Distribution in Türkiye. Bitlis (Beyarslan et al., 2020).

Distribution. China, Hungary, Kazakhstan, Moldova, Mongolia, Romania, Russia, Slovakia, Turkmenistan, former Yugoslavia.

***Chelonus (Chelonus) corvulus* Marshall, 1885+**

Chelonus corvulus Marshall, 1885

Chelonus (Chelonus) corvulus. Zhang & Hong 2008

Synonym. *Chelonus suturatus* Szépligeti, 1898

Hosts. Lepidoptera. Coleophoridae. *Coleophora caespitiella* Zeller, 1839. **Erebida.** *Eublemma pannonica* Freyer, 1840, *Eublemma respersa* Hübner, 1790. **Gelechiidae.** *Scrobipalpa icella* (F.v Röslerstam, 1841). **Sesiidae.** *Chamaesphecia leucopsiformis* (Esper, 1800). **Noctuidae.** *Autographa gamma* (Linnaeus, 1758), *Shargacucullia verbasci* (Linnaeus, 1758), *Spodoptera exigua* (Hübner 1808). **Tortricidae.** *Dichrorampha simpliciana* (Haworth, 1811), *Epiblema foenella* (Linnaeus, 1758).

Zoogeographic region. Palaearctic.

Distribution in Türkiye. Türkiye (Kohl, 1905, Lozan, 2005). Rize (Aydođdu & Beyarslan, 2011). Bitlis (Beyarslan et al., 2020). Ardahan, Erzurum, Kars (Beyarslan, 2021).

Distribution. Azerbaijan, Belgium, China, Croatia, Czech Republic, Czechoslovakia, Finland, France, Germany, Greece, Hungary, Israel, Italy, Kazakhstan, Latvia, Lithuania, Macedonia, Moldova, Mongolia, Netherlands, Poland, Romania, Russia, Slovakia, Slovenia, Spain, Switzerland, Türkiye, Ukraine, United Kingdom, Uzbekistan, former Yugoslavia.

***Chelonus (Chelonus) cylindrus* (Klug, 1816)**

Sigalphus cylindrus Klug, 1816

Chelonus (Chelonus) cylindrus. Zhang, 2008.

Synonym. *Chelonus ebeninus*, *Chelonus erythropodus*, *Chelonus macrocerus*, *Chelonus ruflava*, *Chelonus speculator*, *Chelonus variabilis*

Zoogeographic region. Oriental, Palaearctic.

Distribution in Türkiye. Türkiye (Papp, 1997). Bingöl (Beyarslan et al., 2020).

Distribution. Belarus, China, Denmark, Finland, Germany, Hungary, Kazakhstan, Moldova, Mongolia, Netherlands, Romania, Russia, Spain, Sweden, Switzerland, Türkiye, United Kingdom.

Chelonus (Chelonus) dauricus* Telenga, 1941+Chelonus dauricus* Telenga, 1941*Chelonus (Chelonus) dauricus*. Zhang, 2008**Zoogeographic region.** Palaearctic.**Distribution in Türkiye.** Türkiye (Lozan, 2005). Edirne (Aydođdu & Beyarslan, 2007). Artvin (Aydođdu & Beyarslan, 2011). Muş (Beyarslan et al., 2020). Ardahan, Erzurum, Iğdır, Kars (Beyarslan, 2021).**Distribution.** China, former Czechoslovakia, Mongolia, Russia, Türkiye, former Yugoslavia.***Chelonus (Chelonus) elongatus* Szépligeti, 1898***Chelonus elongatus* Szépligeti, 1898*Chelonus (Chelonus) elongatus*. Zhang, 2008.**Zoogeographic region.** Oriental, Western Palaearctic.**Distribution in Türkiye.** Istanbul (Aydođdu & Beyarslan, 2007). Bitlis (Beyarslan et al., 2020).**Distribution.** China, Finland, Germany, Hungary, Iran, Poland, Switzerland, Türkiye, former Yugoslavia.***Chelonus (Chelonus) inanitus* (Linnaeus, 1767)***Cynips inanita* Linnaeus, 1767*Chelonus (Chelonus) inanitus*. Muesebeck, 1967**Hosts. Lepidoptera. Noctuidae.** *Chortodes elymi* (Treitschke, 1825). *Leucania loreyi* (Duponchel, 1827). *Mesoligia literosa* (Haworth, 1809). *Oligia strigilis* (Linnaeus, 1758). *Peridroma saucia* (Hübner, [1808]). *Pseudaletia unipuncta* (Haworth, 1809). *Spodoptera exigua* (Hübner, [1808]). *S. littoralis* (Boisduval, 1833). **Pyralidae.** *Etiella zinckenella* (Treitschke, 1832). *Haritalodes derogata* (Fabricius, 1775). *Ostrinia nubilalis* (Hübner, 1796). **Tortricidae.** *Aethes francillana* (Fabricius, 1794). *Eucosma aemulana* (Schläger, 1849).**Zoogeographic region.** Nearctic, Palaearctic.**Distribution in Türkiye.** Türkiye (Fahringer, 1922, Kohl, 1905). Afyon, Aydın, Denizli, İzmir, Muğla, Uşak (Beyarslan et al., 2002a). Adapazarı, Afyon, Ballkesir, Bilecik, Bursa, Çanakkale, Edirne, içel, Kayseri, Kırklareli, Tekirdag (Aydođdu & Beyarslan, 2002b). Amasya, Çorum, Kastamonu (Aydođdu & Beyarslan, 2007). Giresun (Aydođdu & Beyarslan, 2011). Iğdır (Beyarslan et al., 2020).**Distribution.** Albania, Algeria, Armenia, Belgium, Bulgaria, Canary Islands, China, Croatia, Cyprus, Czech Republic, Czechoslovakia, Denmark, Egypt, Finland, France, Germany, Greece, Hungary, Iran, Ireland, Israel, Italy, Kazakhstan, Korea, Latvia, Lithuania, Mongolia, Netherlands, Norway, Poland, Romania, Russia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Türkiye, U.S.A., United Kingdom, former Yugoslavia. Introduced into U.S.A.-California.***Chelonus (Chelonus) jacobsoni* Tobias, 1986****Zoogeographic region.** Western Palaearctic.**Distribution in Türkiye.** Edirne (Aydođdu & Beyarslan, 2007). Ardahan, Erzurum, Kars (Beyarslan, 2021).**Distribution.** Finland, Hungary, Romania, Russia, Switzerland.****Chelonus (Chelonus) lissogaster* Tobias, 1972****Zoogeographic region.** Palaearctic.**Distribution in Türkiye.** Adapazarı (Aydođdu & Beyarslan, 2011).**Distribution.** China, Kazakhstan, Norway, Türkiye, Ukraine.***Chelonus (Chelonus) microsomus* Tobias, 1964***Chelonus microsomus* Tobias, 1964*Chelonus (Chelonus) microsomus*. Tobias, 1972**Zoogeographic region.** Palaearctic.**Distribution in Türkiye.** Kırklareli (Aydođdu & Beyarslan, 2002). No record (Beyarslan et al., 2002a). Bitlis (Beyarslan et al., 2020).

Distribution. Iran, Kazakhstan, Türkiye, Uzbekistan.

***Chelonus (Chelonus) obscuratus Herrich-Schüffer, 1838**

Chelonus obscuratus Herrich-Schüffer, 1838

Chelonus (Chelonus) obscuratus. Tobias, 1972

Synonym. *Chelonus intermedius*, *Chelonus speculator*, *Sigalphus mutabilis*

Hosts. **Lepidoptera. Noctuidae.** *Spodoptera exigua* (Hübner, 1808). **Tortricidae.** *Rhyacionia buoliana* (Denis & Schiffmüller, 1775).

Zoogeographic region. Palaearctic.

Distribution in Türkiye. Adana, Antalya, Burdur, Gaziantep, Kahramanmaraş, İçel, Isparta (Beyarslan, 1985). Aydın, Denizli (Beyarslan et al., 2002a). Eastern Mediterranean Region of Türkiye (Sertkaya & Bayram, 2005). Bilecik, Kastamonu, Sinop (Aydođdu & Beyarslan, 2007), Giresun (Aydođdu & Beyarslan, 2011). Gaziantep (Beyarslan et al., 2020).

Distribution. Bulgaria, China, Czech Republic, Czechoslovakia, Egypt, Finland, France, Germany, Greece, Hungary, Israel, Italy, Kazakhstan, Moldova, Mongolia, Poland, Russia, Slovakia, Spain, Sweden, Switzerland, Tunisia, Türkiye, Ukraine, United Kingdom.

***Chelonus (Chelonus) ocellatus Alexeev, 1971**

Chelonus ocellatus Alexeev, 1971

Chelonus (Chelonus) ocellatus. Alexeev, 1971

Zoogeographic region. Palaearctic.

Distribution in Türkiye. Bilecik (Aydođdu & Beyarslan, 2002).

Distribution. Hungary, Iran, Slovakia, Türkiye, Turkmenistan, Ukraine.

Chelonus (Chelonus) oculator (Fabricius, 1775)

Ichneumon oculator Fabricius, 1775

Chelonus (Chelonus) oculator. Abdinbekova 1971

Synonym. *Anomala integra*, *Ichneumon scabrator*, *Sigalphus cylindrus*, *Sigalphus mutabilis*

Hosts. **Lepidoptera. Coleophoridae.** *Coleophora anatipennella* (Hübner 1796), **Crambidae.** *Loxostege sticticalis* (Linnaeus, 1761), **Pyralidae.** *Ostrinia nubilalis* (Hübner 1796), *Ephestia kuehniella* Zeller, 1879, *Etiella zinckenella* (Treitschke, 1832), *Homoeosoma nebulella* Denis-Schiffmüller, 1775, **Tortricidae.** *Apotomis turbidana* Hübner, [1825], *Archips rosana* (Linnaeus, 1758), *Zeiraphera isertana* (Fabricius, 1794), **Noctuidae.** *Agrotis segetum* Denis-Schiffmüller, 1775, *Chortodes elymi* (Treitschke, 1825), *Helicoverpa armigera* (Hübner, 1805), *Heliothis peltigera* (Denis-Schiffmüller, 1775), *H. virescens* (Hübner, 1796), *Leucania loreyi* (Duponchel, 1827) [*Zea mays*], *Spodoptera exigua* (Hübner 1808).

Zoogeographic region. Palaearctic.

Distribution in Türkiye. Adana (Özkan & Özmen, 2001). Afyon, Aydın, Denizli, İzmir, Muğla (Beyarslan et al., 2002a). Adapazarı, Afyon, Balıkesir, Bilecik, Bursa, Çanakkale, Denizli, Edirne, İzmir, Kırklareli, Kütahya, Manisa, Muğla, Tekirdağ, Uşak (Beyarslan et al., 2002b). Mediterranean region (Sertkaya & Bayram, 2005). Türkiye (Lozan, 2005). Tekirdağ (Beyarslan et al., 2006). Adapazar, Bartın, Bilecik, Bolu, Bursa, Çanakkale, Çankırı, Çorum, Edirne, İstanbul, İzmit, Kastamonu, Kırklareli, Osmaniye, Samsun, Sinop, Tekirdağ, Tokat, Zonguldak (Aydođdu & Beyarslan, 2007) Southeast Anatolian Region (Gözüaçık et al., 2009). Artvin, Giresun, Gümüşhane (Aydođdu & Beyarslan, 2011). Bitlis, Iğdır, Van (Beyarslan et al., 2020). Ardahan, Iğdır (Beyarslan, 2021).

Distribution. Afghanistan, Albania, Azerbaijan, Belgium, Bulgaria, Canary Islands, China, Croatia, Czech Republic, former Czechoslovakia, Egypt, Finland, France, Georgia, Germany, Greece, Hungary, Iran, Israel, Kazakhstan, Latvia, Lithuania, Moldova, Mongolia, Netherlands, Norway, Poland, Romania, Russia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Tajikistan, Türkiye, Turkmenistan, Ukraine, United Kingdom, Uzbekistan, former Yugoslavia.

Chelonus (Chelonus) olgae Kokujev, 1895

Chelonus olgae Kokujev, 1895

Chelonus (Chelonus) olgae. Tobias, 1972

Synonym. *Chelonus schmiedeknechtii*

Zoogeographic region. Palaearctic.

Distribution in Türkiye. No record (Beyarslan et al., 2002a). Balıkesir, Edirne, Tekirdag (Aydođdu & Beyarslan, 2007).

Distribution. Georgia, Germany, Hungary, Kazakhstan, Spain, Türkiye, Uzbekistan.

***Chelonus (Chelonus) planiventris Tobias, 1960**

Zoogeographic region. Palaearctic.

Distribution in Türkiye. Ardahan (Beyarslan, 2021).

Distribution. Hungary, Tajikistan, Uzbekistan.

***Chelonus (Chelonus) processiventris Tobias, 1964**

Chelonus processiventris Tobias, 1964

Chelonus (Chelonus) processiventris. Tobias, 1972

Zoogeographic region. Palaearctic.

Distribution in Türkiye. Ordu (Aydođdu & Beyarslan, 2007). Sivas (Beyarslan et al., 2018). Bingöl (Beyarslan et al., 2020).

Distribution. Kazakhstan, Türkiye.

***Chelonus (Chelonus) rimosus Herrich-Schäffer, 1838**

Chelonus rimosus Herrich-Schäffer, 1838

Chelonus (Chelonus) rimosus. Szépligeti, 1904

Zoogeographic region. Western Palaearctic.

Distribution in Türkiye. Afyon, İzmir, Muğla, Uşak (Beyarslan et al., 200a).

Distribution. Germany.

Chelonus (Chelonus) scabrator (Fabricius, 1793)

Ichneumon scabrator Fabricius, 1793

Chelonus (Chelonus) scabrator. Tobias, 1972

Synonym. *Chelonus buccatus*, *Chelonus humilis*, *Chelonus rostrornis*, *Chelonus rugigena*. Sigalphus scaber.

Hosts. **Lepidoptera.** **Noctuidae.** *Oligia strigilis* (Linnaeus, 1758). **Pyralidae.** *Loxostege sticticalis* (Linnaeus, 1761). **Tortricidae.** *Rhopobota stagnana* (Denis & Schiffermüller, 1775).

Zoogeographic region. Oriental, Palaearctic.

Distribution in Türkiye. Afyon, Bursa, Edirne, istanbul, İzmir, Denizli, MuEla, Tekirdag, Usak (Aydogdu & Beyarslan, 2002). No record Beyarslan et al., 2002a). Tekirdađ (Beyarslan et al., 2006). Bartın, Bilecik, Bolu, Çorum, Düzce, Karabük, Kastamonu, Kırklaarwli, Tekirdađ, Zonguldak (Aydođdu & Beyarslan, 2007). Bayburt, Gümüşhane (Aydođdu & Beyarslan, 2011).

Distribution. Albania, Armenia, Austria, Belgium, Bulgaria, China, Czech Republic, former Czechoslovakia, Finland, France, Germany, Greece, Hungary, Iran, Italy, Kazakhstan, Lithuania, Macedonia, Moldova, Mongolia, Netherlands, Norway, Norway-main, Poland, Romania, Russia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Türkiye, Ukraine, United Kingdom, former Yugoslavia.

Chelonus (Chelonus) smirnovi Telenga, 1953

Chelonus smirnovi Telenga, 1953

Chelonus (Chelonus) smirnovi. Tobias, 1972

Host. **Lepidoptera.** **Tortricidae.** *Etiella zinckenella* (Treitschke, 1832).

Zoogeographic region. Palaearctic.

Distribution in Türkiye. Kirklareli (Aydogdu & Beyarslan, 2002marmara). Bolu (Aydođdu & Beyarslan, 2007).

Distribution. Iran, Mongolia, Russia, Türkiye, Turkmenistan.

Chelonus (Chelonus) submuticus* Wesmael, 1835Chelonus ubmuticus* Wesmael, 1835*Chelonus (Chelonus) submuticus*. Tobias, 1972**Synonym.** *Chelonus luteipes*, *Chelonus productus*, *Chelonus subannulatus***Hosts.** **Lepidoptera. Noctuidae.** *Spodoptera littoralis* (Boisduval, 1833). **Pyralidae.** *Homoeosoma nebulella* (Denis & Schiffermüller, 1775).**Zoogeographic region.** Palaearctic.**Distribution in Türkiye.** Kirklareli (Aydoğdu & Beyarslan, 2002). Bolu (Aydoğdu & Beyarslan, 2007). Bartın (Aydoğdu & Beyarslan, 2011). Bitlis (Beyarslan et al., 2020).**Distribution.** Albania, Azerbaijan, Belgium, Bulgaria, Croatia, former Czechoslovakia, former Yugoslavia, Finland, France, Georgia, Hungary, Israel, Italy, Kazakhstan, Macedonia, Moldova, Mongolia, Poland, Romania, Russia, Sweden, Switzerland, Ukraine, United Kingdom.***Chelonus (Chelonus) szepligetti* Dalla Torre, 1898***Chelonus (Chelonus) szepligetti* Dalla Torre, 1898*Chelonus (Chelonus) szepligetti*. Tobias, 1972**Zoogeographic region.** Palaearctic.**Distribution in Türkiye.** Bilecik, Tekirdağ (Aydoğdu & Beyarslan, 2007, 2002). Bitlis (Beyarslan et al., 2020).**Distribution.** Azerbaijan, Croatia, Hungary, Iran, Israel, Türkiye, former Yugoslavia.***Chelonus (Chelonus) wesmaelii* Curtis, 1837***Chelonus wesmaelii* Curtis, 1837**Hosts.** **Coleoptera. Curculionidae.** *Scolytus scotylus* (Fabricius, 1775).**Zoogeographic region.** Western Palaearctic.**Distribution in Türkiye.** Kirklareli (Aydoğdu & Beyarslan, 2002). Afyon (Aydoğdu & Beyarslan, 2011).**Distribution.** Former Czechoslovakia, Germany, Hungary, Poland, Russia, Slovakia, United Kingdom.***Chelonus (Parachelonus) pellucens* (Nees, 1816)***Sigalphus pellucens* Nees, 1816*Microchelonus (Parachelonus) pellucens*. Tobias 1995*Chelonus (Parachelonus) pellucens*. Nees, 1834**Synonym.** *Chelonus alboannulatus* Szépligeti, 1896, *Chelonus nitens* Reinhard, 1867, *Chelonus pulchricornis* Szépligeti, 1896, *Chelonus varimaculatus* Tobias, 1986**Hosts.** **Lepidoptera. Sesiidae.** *Bembecia hungarica* (Tomala, 1910), *B. ichneumoniformis* ([Denis-Schiffermüller]1775), *B. scopigera* (Scopoli, 1763), *Chamaesphecia euceraeformis* (Ochsenheimer, 1816), *C. tenthrediniformis* (Denis-Schiffermüller, 1775).**Zoogeographic region.** Palaearctic.**Distribution in Türkiye.** Çanakkale, Edirne, Tekirdağ (Aydoğdu & Beyarslan, 2002). No record (Beyarslan et al., 2002a). No record (Doğanlar, 1982). Türkiye (Tamer, 1995, Papp, 2004). Ardahan, Erzurum, Kars (Beyarslan, 2021).**Distribution.** Armenia, Azerbaijan, Bosnia Hercegovina, Bulgaria, Croatia, Czechoslovakia, France, Germany, Hungary, Iran, Israel, Italy, Kazakhstan, Kyrgyzstan, Lithuania, Macedonia, Moldova, Mongolia, Poland, Romania, Russia, Spain, Switzerland, Türkiye, Ukraine, United Kingdom, Uzbekistan, former Yugoslavia.**Genus *Microchelonus* Szépligeti, 1908****Subgenus.** *Microchelonus* s.str.***Microchelonus (Microchelonus) arnoldii* (Tobias, 1964)***Neochelonella arnoldii* Tobias, 1964*Microchelonus (Microchelonus) arnoldii*. Tobias, 2001**Zoogeographic region.** Palaearctic.

Distribution in Türkiye. Edirne, Kastamonu, Tokat (Aydođdu & Beyarslan, 2006b).

Distribution. Hungary, Kazakhstan, Romania, Russia, Türkiye.

***Microchelonus (Microchelonus) artus* Tobias, 1986**

Microchelonus artus Tobias, 1986

Microchelonus (Microchelonus) artus. Papp, 2014

Zoogeographic region. Western Palaearctic.

Distribution in Türkiye. Türkiye (Papp, 2014). Ardahan, Kars (Beyarslan, 2021). Bingöl (Beyarslan et al., 2020).

Distribution Armenia. Bulgaria. Moldova. Spain. Türkiye.

***Microchelonus (Microchelonus) atripes* (Thomson, 1874)**

Chelonus atripes Thomson, 1874

Microchelonus (Microchelonus) atripes. Papp, 2014

Synonym. *Microchelonus cunctator*, *Microchelonus kamtshaticus*

Hosts. Lepidoptera. Coleophoridae. *Coleophora alticolella* Zeller, 1849, *C. glaucicolella* Wood, 1892.

Zoogeographic region. Palaearctic.

Distribution in Türkiye. Kirklareli (Beyarslan, 1995). Türkiye (Tobias, 2000). Bilecik- Canakkale, Duzce, Karabuk, Kirklareli, Ordu, Sinop, Tekirdag, Zonguldak (Aydođdu & Beyarslan, 2006b). Erzurum, Kars (Beyarslan, 2021).

Distribution. Albania, Bulgaria, China, Croatia, Finland, Germany, Hungary, Kazakhstan, Kyrgyzstan, Lithuania, Macedonia, Mongolia, Romania, Russia, Slovakia, Sweden, Türkiye, Uzbekistan, former Yugoslavia.

***Microchelonus (Microchelonus) calcaratus* Tobias, 1989**

Microchelonus calcaratus Tobias, 1989

Microchelonus (Microchelonus) calcaratus. Papp, 2014

Zoogeographic region. Palaearctic.

Distribution in Türkiye. Türkiye (Papp, 2014).

Distribution. China, Macedonia, Mongolia, Syria, Türkiye, former Yugoslavia.

****Microchelonus (Microchelonus) chetini* Beyarslan & Şahan, (2019)**

Chelonus chetini Beyarslan & Şahan, 2019

Microchelonus (Microchelonus) chetini. Beyarslan, 2023

Zoogeographic region. Western Palaearctic.

Distribution in Türkiye. Gaziantep (Beyarslan & Şahan, 2019).

Distribution. Türkiye.

****Microchelonus (Microchelonus) contractus* (Nees, 1816)**

Sigalphus contractus Nees, 1816

Microchelonus (Microchelonus) contractus. Papp, 2014.

Synonyms. *Chelonus compressiscapus* Szépligeti, 1898, *Chelonus depressus* Thomson, 1874

Hosts. Lepidoptera. Choreutidae. *Anthophila fabriciana* (Linnaeus, 1767) [*Urtica*], *Prochoreutis myllerana* (Fabricius, 1794) [*Scutellaria galericulata*]; **Coleophoridae.** *Coleophora hungariae* Gozmány, 1955 [*Camphorosma annua*]; **Cosmopterigidae.** *Stagmatophora extremella* Wocke, 1871 [*Salvia pratensis*]; **Gelechiidae.** *Mirificarma mulinella* (Zeller, 1839), *Phthorimaea operculella* (Zeller, 1873); **Plutellidae.** *Plutella xylostella* (Linnaeus, 1758); **Tischeriidae.** *Emmetia szoeci* (Kasy, 1961) [*Sanguisorba officinalis*]; Tortricidae. *Cydia nigricana* (Fabricius, 1794), *Rhyacionia buoliana* (Denis-Schifferrmüller, 1775); **Yponomeutidae.** *Argyresthia pygmaeella* (Denis-Schifferrmüller, 1775).

Zoogeographic region. Palaearctic.

Distribution in Türkiye. Bitlis (Beyarslan et al., 2020).

Distribution. Albania, Armenia, Azerbaijan, Belgium, Bosnia Hercegovina, Bulgaria, China, Croatia, Czech Republic, former Czechoslovakia, Denmark, Finland, France, Germany, Greece, Hungary, Iran,

Italy, Kazakhstan, Korea, Kyrgyzstan, Lithuania, Macedonia, Mongolia, Netherlands, Norway, Poland, Romania, Russia, Slovakia, Spain, Sweden, Switzerland, Syria, Türkiye, Turkmenistan, Ukraine, United Kingdom, former Yugoslavia.

Microchelonus (Microchelonus) depressus (Thomson, 1874)

Chelonus depressus Thomson, 1874

Microchelonus (Microchelonus) depressus. Papp, 2014

Hosts. Lepidoptera. Gelechiidae. *Phthorimaea operculella* (Zeller, 1873).

Zoogeographic region. Palaearctic.

Distribution in Türkiye. Istanbul, Kirklareli (Aydođdu & Beyarslan, 2006b).

Distribution. Finland, Sweden, Türkiye.

Microchelonus (Microchelonus) devius (Tobias, 1964)

Neochelonella devia Tobias, 1964

Microchelonus (Microchelonus) devius. Papp, 2014

Zoogeographic region. Palaearctic.

Distribution in Türkiye. Balıkesir, Edirne, Kirklareliİgne (Aydođdu & Beyarslan, 2006b).

Distribution. China, Croatia, Greece, Kazakhstan, Kyrgyzstan, Türkiye, Uzbekistan, former Yugoslavia.

****Microchelonus (Microchelonus) erythrogaster (Lucas, 1849)***

Chelonus erythrogaster (Lucas, 1849)

Microchelonus (Microchelonus) erythrogaster. Papp, 2014

Zoogeographic region. Palaearctic.

Distribution in Türkiye Aydın, Denizli (Beyarslan et al., 2002a).

Distribution. Algeria, Croatia, former Yugoslavia.

Microchelonus (Microchelonus) exilis (Marshall, 1885)

Chelonus exilis Marshall, 1885

Microchelonus (Microchelonus) exilis. Papp, 2014

Synonym. *Chelonus excavatus*.

Hosts. Lepidoptera. Cosmopterigidae. *Cosmopterix scribaiella* Zeller, 1850 [*Phragmites communis*]. *Lienigia lienigiella* Zeller 1846, **Lepidoptera. Elachistidae. *Elachista gangabella* Zeller, 1850 [*Brachypodium pinnatum*]. **Pyralidae. *Myelois circumvoluta* (Fourcroy, 1785).****

Zoogeographic region. Palaearctic.

Distribution in Türkiye. Afyon, Denizli, Muđla (Aydođdu & Beyarslan, 2006a). Edirne (Aydođdu & Beyarslan, 2006b). Sivas (Beyarslan et al., 2018). Bitlis (Beyarslan et al., 2020).

Distribution. Armenia, Azerbaijan, Bulgaria, Croatia, Czechoslovakia, France, Germany, Hungary, Italy, Kazakhstan, Latvia, Lithuania, Moldova, Mongolia, Netherlands, Poland, Russia, Slovenia, Spain, Sweden, Switzerland, Türkiye, United Kingdom, Uzbekistan, former Yugoslavia.

****Microchelonus (Microchelonus) fenestratus (Nees, 1816)***

Sigalphus fenestratus Nees, 1816

Microchelonus (Microchelonus) fenestratus. Papp, 2014

Synonym. *Chelonella mongolica*, *Chelonus dispar*, *Chelonus lugubris*, *Sigalphus contractus*

Hosts. Tortricidae. Olethreutinae. *Dichrorampha alpinana* (Treitschke, 1830), *D. petiverella* (Linnaeus, 1758). *Epiblema foenella* (Linnaeus, 1758). *Rhyacionia buoliana* (Denis & Schiffmüller, 1775).

Zoogeographic region. Palaearctic.

Distribution in Türkiye. Adana, İcel (Beyarslan & Inanç). Karabuk, Kastamonu, Tokat, Samsun (Aydođdu & Beyarslan, 2006b). Bingöl (Beyarslan et al., 2020).

Distribution. Azerbaijan, Belgium, Czech Republic, former Czechoslovakia, Finland, France, Germany, Hungary, Ireland, Italy, Kazakhstan, Korea, Moldova, Mongolia, Poland, Romania, Russia, Iovenia, Türkiye, Ukraine, United Kingdom, Uzbekistan, former Yugoslavia.

****Microchelonus (Microchelonus) fissilis* Tobias, 1985***Microchelonus fissilis* Tobias, 1985*Microchelonus (Microchelonus) fissilis*. Tobias, 2010**Zoogeographic region.** Western Palaearctic.**Distribution in Türkiye.** Şanlıurfa (Beyarslan, 1995).**Distribution.** Georgia.***Microchelonus (Microchelonus) flavipalpis* (Szépligeti, 1896)***Chelonus flavipalpis* Szépligeti, 1896*Microchelonus (Microchelonus) flavipalpis*. Tobias, 2000**Hosts. Lepidoptera. Coleophoridae.** *Parametriotes theae* Kuznetsov, 1916. **Tineidae.** *Kermania pistaciella* Amsel, 1964 [*Pistacia vera*]. **Tortricidae.** *Sparganothis pilleriana* (Denis & Schiffermüller 1775).**Zoogeographic region.** Palaearctic.**Distribution in Türkiye.** Edirne, Bilecik, Kirklareli, Istanbul, Tekirdag (Aydoğdu & Beyarslan, 2006b). Siirt (Özgen et al., 2012). Bitlis (Beyarslan et al., 2020).**Distribution.** Georgia, Hungary, Iran, Moldova, Mongolia, Russia, Türkiye, Ukraine.***Microchelonus (Microchelonus) flavoneavulus* (Abdinbekova, 1971)***Chelonus (Neochelonella) flavoneavulus* Abdinbekova, 1971*Microchelonus (Microchelonus) flavoneavulus*. Papp, 2014**Zoogeographic region.** Palaearctic.**Distribution in Türkiye.** Kirklareli (Beyarslan, 1995), Bolu, Bilecik, Bursa, Edirne, Istanbul, Kastamonu, Kirklareli, Tokat, Zonguldak (Aydoğdu & Beyarslan, 2006a). Türkiye (Papp, 2014). Bingöl (Beyarslan et al., 2020).**Distribution.** Azerbaijan, Bulgaria, Greece, Hungary, Iran, Macedonia, Moldova, Russia, Türkiye, former Yugoslavia.****Microchelonus (Microchelonus) kiritshenkoi* (Tobias, 1976)***Chelonus (Microchelonus) kiritshenkoi* Tobias, 1976*Microchelonus (Microchelonus) kiritshenkoi*. Papp 2014**Zoogeographic region.** Western Palaearctic.**Distribution in Türkiye.** Bingöl (Beyarslan et al., 2020). Ardahan, Erzurum, Iğdır, Kars (Beyarslan, 2021).**Distribution.** Azerbaijan, Bulgaria, Macedonia, Russia, former Yugoslavia, *Taxonomic note.* Tobias described the new species as *Microchelonus (Microchelonus) kiritshenkoi* but he mentioned it as *Chelonus (Microchelonus) kiritshenkoi* in diagnostic key.***Microchelonus (Microchelonus) kopetdagicus* (Tobias, 1966)***Neochelonella kopetdagicus* Tobias, 1966*Microchelonus (Microchelonus) kopetdagicus*. Papp 2014**Synonym.** *Neochelonella caucasica***Zoogeographic region.** Palaearctic.**Distribution in Türkiye.** No record (Beyarslan, 1995). No record (Aydoğdu & Beyarslan, 2006b). Türkiye (Lozan, 2005). Bingöl, Bitlis (Beyarslan et al., 2020). Sivas (Beyarslan et al., 2018). Erzurum (Beyarslan, 2021).**Distribution.** Azerbaijan, Croatia, Greece, Hungary, Israel, Kazakhstan, Kyrgyzstan, Macedonia, Moldova, Russia, Spain, Switzerland, Türkiye, Turkmenistan, former Yugoslavia.***Microchelonus (Microchelonus) latrunculus* (Marshall, 1885)***Chelonus latrunculus* (Marshall, 1885)*Microchelonus (Microchelonus) latrunculus*. Papp, 2014**Synony.** *Chelonus parvicornis*, *Microchelonus rectus*, *Microchelonus rufipedator***Hosts. Coleoptera. Curculionidae.** *Anthonomus pomorum* (Linnaeus, 1758).

Zoogeographic region. Palaearctic.

Distribution in Türkiye. Corum, Kirklareli (Aydođdu & Beyarslan, 2006b).+ Bitlis, Gaziantep (Beyarslan et al., 2020).

Distribution. Armenia, Azerbaijan, Czech Republic, Czechoslovakia, Finland, Germany, Hungary, Italy, Moldova, Poland, Russia, Slovakia, Sweden, Switzerland, Tajikistan, Türkiye, Ukraine, United Kingdom.

****Microchelonus (Microchelonus) longiventris (Tobias, 1964)***

Neochelonella longiventris Tobias, 1964

Microchelonus (Microchelonus) longiventris. Papp, 2014

Zoogeographic region. Palaearctic.

Distribution in Türkiye. Manisa (Tezcan et al. 2006). Bingöl, Bitlis (Beyarslan et al., 2020). Ardahan, Erzurum, Iğdır, Kars (Beyarslan, 2021).

Distribution. Azerbaijan, Germany, Hungary, Kazakhstan, Lithuania, Moldova, Russia, Türkiye, former Yugoslavia.

****Microchelonus (Microchelonus) luzhetzkji (Tobias, 1966)***

Neochelonella luzhetzkji Tobias, 1966

Microchelonus (Microchelonus) luzhetzkji. Tobias, 2001

Hosts. Hymenoptera. Yponomeutidae. *Yponomeuta malinella* Zeller, 1838, *Y. padella* (Linnaeus, 1758).

Zoogeographic region. Palaearctic.

Distribution in Türkiye. Iğdır (Beyarslan, 2021).

Distribution. Armenia, Hungary, Kazakhstan, Mongolia, Romania, Tajikistan, Turkmenistan, Uzbekistan.

*****Microchelonus (Microchelonus) magnifissuralis (Abdinbekova, 1971)***

Chelonus (Neochelonella) magnifissuralis Abdinbekova, 1971

Microchelonus (Microchelonus) magnifissuralis. Papp, 2014

Zoogeographic region. Western Palaearctic.

Distribution in Türkiye. Kirklareli (Beyarslan 1995). Amasya, Edirne (Aydođdu & Beyarslan, 2006b).+

Distribution. Azerbaijan, Spain, Türkiye.

Microchelonus (Microchelonus) microphtalmus (Wesmael, 1838)

Chelonus microphtalmus Wesmael, 1838

Microchelonus (Microchelonus) microphtalmus. Papp, 2014

Hosts. Lepidoptera. Coleophoridae. *Coleophora hemerobiella* (Scopoli, 1763). **Diptera. Tephritidae.** *Myopites inulaedyssentericae* Blot, 1827.

Zoogeographic region. Palaearctic.

Distribution in Türkiye. Edirne (Beyarslan 1995). Bartın, Bolu, Duzce, Edirne, Karabuk, Kastamonu, Kirklareli, Ordu, Samsun, Sinop (Aydođdu & Beyarslan, 2006a). Türkiye (Lozan, 2005, Papp, 2014, Tobias, 2008).

Distribution. Albania, Belgium, Bulgaria, Croatia, Czech Republic, former Czechoslovakia, Denmark, Finland, France, Germany, Greece, Hungary, Italy, Kazakhstan, Korea, Kyrgyzstan, Macedonia, Mongolia, Poland, Romania, Russia, Spain, Sweden, Switzerland, Tunisia, Türkiye, Turkmenistan, Ukraine, Uzbekistan, former Yugoslavia.

****Microchelonus (Microchelonus) minifossa Tobias, 1986***

Microchelonus minifossa Tobias, 1986

Microchelonus (Microchelonus) minifossa. Papp, 2014

Zoogeographic region. Western Palaearctic.

Distribution in Türkiye. Ardahan (Beyarslan, 2021).

Distribution. Czech Republic, Denmark, Hungary, Macedonia, Moldova, Slovakia, Türkiye, former Yugoslavia.

Microchelonus (Microchelonus) nachitshevanicus (Abdinbekova, 1971)*Chelonus (Neochelonella) nachitshevanicus* Abdinbekova, 1971*Microchelonus (Microchelonus) nachitshevanicus*. Papp, 2014.**Zoogeographic region.** Western Palaearctic.**Distribution in Türkiye.** Türkiye (Papp, 2014).**Distribution.** Algeria, Armenia, Austria, Azerbaijan, Syria, Türkiye.***Microchelonus (Microchelonus) nigriritibialis (Abdinbekova, 1971)****Chelonus (Neochelonella) nigriritibialis* Abdinbekova, 1971*Microchelonus (Microchelonus) nigriritibialis*. Papp 2014**Zoogeographic region.** Western Palaearctic.**Distribution in Türkiye.** Edirne, Tekirdag (Beyarslan 1995). Adapazari, Bilecik, Bursa, Canakkale, Edirne, Istanbul, Karabuk, Kastamonu, Kirklareli, Samsun, Sinop, Tekirdag (Aydođdu & Beyarslan, 2006b). Bitlis (Beyarslan et al., 2020). Iğdır (Beyarslan, 2021).**Distribution.** Algeria, Azerbaijan, Bulgaria, France, Hungary, Israel, Jordan, Moldova, Netherlands, Spain, Syria, Tunisia, Türkiye.****Microchelonus (Microchelonus) pectoralis (Tobias, 1976)****Chelonus (Microchelonus) pectoralis* Tobias, 1976*Microchelonus (Microchelonus) pectoralis*. Papp, 2014**Zoogeographic region.** Palaearctic.**Distribution in Türkiye.** Ardahan, Erzurum (Beyarslan, 2021).**Distribution.** Azerbaijan, Mongolia.***Microchelonus (Microchelonus) risorius (Reinhard, 1867)****Chelonus risorius* Reinhard, 1867*Microchelonus (Microchelonus) risorius*. Papp, 2014**Synonym.** *Chelonus fissus*, *Chelonus rimatus*, *Microchelonus magnifissus*, *Neochelonella fissuralis***Hosts. Hymenoptera. Cynipidae.** *Biorhiza pallida* (Olivier, 1791), *B. terminalis* (Fabricius, 1798).**Zoogeographic region.** Palaearctic.**Distribution in Türkiye.** Afyon, İzmir, Muğla, Uşak (Beyarslan et al., 2002a). Bilecik, Kirklareli, Ordu (Aydođdu & Beyarslan, 2006b). Türkiye (Papp, 2014).**Distribution.** Armenia, Croatia, Czech Republic, former Czechoslovakia, Finland, Germany, Hungary, Italy, Kazakhstan, Kyrgyzstan, Moldova, Mongolia, Russia, Slovakia, Türkiye, United Kingdom.***Microchelonus (Microchelonus) rostratus (Tobias, 1966)****Neochelonella rostratus* Tobias, 1966*Microchelonus (Microchelonus) rostratus*. Papp, 2014**Zoogeographic region.** Palaearctic.**Distribution in Türkiye.** Edirne (Beyarslan, 1995). Amasya, Corum Edirne, Karabuk, Kastamonu, Ordu, Tokat (Aydođdu & Beyarslan, 2006b). +Türkiye (Lozan, 2005, Papp, 2014, Tobias & Lozan, 2005). Bitlis (Beyarslan et al., 2020). Erzurum (Beyarslan, 2021).**Distribution.** Armenia, Azerbaijan, Bulgaria, Czech Republic, Denmark, Hungary, Macedonia, Moldova, Russia, Slovakia, Spain, Türkiye, Turkmenistan, Ukraine, former Yugoslavia.****Microchelonus (Microchelonus) rugicollis (Thomson, 1874)****Chelonus rugicollis* Thomson, 1874*Microchelonus (Microchelonus) rugicollis*. Papp, 2014**Synonym.** *Microchelonus temporalis***Host. Lepidoptera. Alucitidae.** *Alucita hexadactyla* Linnaeus, 1758.**Zoogeographic region.** Afrotropical, Western Palaearctic.**Distribution in Türkiye.** Erzurum (Beyarslan, 2021).

Distribution. Albania, Azerbaijan, Czechoslovakia, Hungary, Italy (country), Italy-main, Norway, Norway-main, Slovakia, Spain, Spain-main, Sweden, Türkiye, Yemen, Yemen-main, former Yugoslavia.

***Microchelonus (Microchelonus) subarcuatilis* Tobias, 1986**

Microchelonus subarcuatilis Tobias, 1986

Microchelonus (Microchelonus) subarcuatilis. Tobias, 1910

Zoogeographic region. Palaearctic.

Distribution in Türkiye. Edirne, Gaziantep, İçel (Beyarslan, 1995). Amasya, Bilecik, Bursa, Canakkale, Kirklareli, Tekirdag (Aydođdu & Beyarslan, 2006b). Van (Beyarslan et al., 2020). Erzurum (Beyarslan, 2021).

Distribution. Armenia, Bulgaria, Hungary, Kazakhstan, Moldova, Spain, Spain-main, Türkiye, Turkmenistan, Uzbekistan.

***Microchelonus (Microchelonus) subcontractus* (Abdinbekova, 1971)**

Chelonus (Neochelonella) subcontractus Abdinbekova, 1971

Microchelonus (Microchelonus) subcontractus. Papp, 2014

Hosts. Lepidoptera. Elachistidae. *Elachista* sp., Cosmopterigidae. *Stigmatophora extremella* Wocke, 1871.

Gelechiidae. *Phthorimaea operculella* (Zeller, 1873).

Zoogeographic region. Palaearctic.

Distribution in Türkiye. Edirne, Gaziantep, Icel, Kirklareli (Beyarslan, 1995). Canakkale, Edirne, Kirklareli, Karabuk, Samsun, Sinop, Tekirdag (Aydođdu & Beyarslan, 2006b).

Distribution. Azerbaijan, Georgia, Greece, Hungary, Iran, Kazakhstan, Lithuania, Moldova, Mongolia, Poland, Romania, Russia, Slovakia, Türkiye, Ukraine, former Yugoslavia.

***Microchelonus (Microchelonus) sulcatus* (Jurine, 1807)**

Chelonus sulcatus Jurine, 1807

Microchelonus (Microchelonus) sulcatus. Papp, 2014

Synonym. *Chelonus curvisulcatus*, *Chelonus pamiricus*, *Chelonus rimatus*, *Chelonus rimulosus*. *Chelonus scabrosus*

Hosts. Lepidoptera. Carposinadae. *Carposina niponensis* Walsingham, 1900, Coleophoridae. *Coleophora tadzhikiella* Danilevsky, 1955, *Augasma aeratella* (Zeller, 1839), Crambidae. *Eudonia truncicolella* (Stainton, 1849), Erebiidae. *Metachrostis dardouini* (Boisduval, 1840), Gelechiidae. *Pexicopia malvella* (Hübner, [1805]), *Pectinophora gossypiella* (Saunders, 1844) [*Gossypium* sp.], *Scrobipalpa ocellatella* (Botd, 1859), Mycetophilidae. *Neoempheria striata* (Meigen, 1818), Tortricidae. *Rhyacionia buoliana* (Denis & Schiffmüller, 1775), Yponomeutidae. *Prays citri* (Millière, 1873), *Euhyponomeutoides albithoracellus* Gaj, 1954 [*Ribes nigrum*].

Zoogeographic region. Palaearctic.

Distribution in Türkiye. Antalya, Burdur, Isparta, Icel, Kahramanmaraş (Beyarslan 1985). Edirne (Beyarslan, 1995). Adapazari, Balıkesir, Bilecik, Bolu, Bursa, Canakkale, Edirne, Karabuk, Kastamonu, Kirklareli, İstanbul, İzmit, Sinop, Tekirdag, Tokat, Zonguldak (Aydođdu & Beyarslan, 2006b). Türkiye (Papp, 2004, Tobias, 2008). Ardahan, Erzurum (Beyarslan, 2007). Bingöl, Bitlis, Gaziantep (Beyarslan et al., 2020).

Distribution. Armenia, Azerbaijan, Belgium, Bulgaria, China, Croatia, Czech Republic, Czechoslovakia, Egypt, Finland, France, Germany, Greece, Hungary, Israel, Italy, Kazakhstan, Latvia, Lithuania, Macedonia, Moldova, Mongolia, Morocco, Netherlands, Norway, Poland, Russia, Slovakia, Spain, Sweden, Switzerland, Türkiye, Ukraine, United Kingdom, Uzbekistan, former Yugoslavia.

****Microchelonus (Microchelonus) vescus* (Kokujev, 1899)**

Chelonus vescus (Kokujev, 1899)

Synonym. *Chelonus minutus* Szépligeti, 1898

Zoogeographic region. Palaearctic.

Distribution in Türkiye. Ardahan (Beyarslan, 2021).

Distribution. Armenia, Azerbaijan, Hungary, Kazakhstan, Macedonia, Russia, former Yugoslavia.

Subgenus *Parachelonus* Tobias, 1995

****Microchelonus (Parachelonus) gravenhorstii* (Nees, 1816)**

Sigalphus gravenhorstii (Nees, 1816)

Microchelonus (Parachelonus) gravenhorstii. Tobias, 1995

Synonym. *Chelonus adjaricus*, *Chelonus decorus*, *Chelonus eurytheca*, *Chelonus maculator*, *Chelonus pictipes*, *Chelonus seticornis*, *Chelonus tricolor*, *Sigalphus pellucens*

Zoogeographic region. Palaearctic.

Distribution in Türkiye. Denizli, İzmir, Muğla Beyarslan et al., 2002a).

Distribution. Armenia, Azerbaijan, Belgium, Czech Republic, Czechoslovakia, Finland, France, Georgia, Germany, Greece, Greece-main, Hungary, Italy, Kazakhstan, Lithuania, Netherlands, Poland, Romania, Russia, Sweden, Switzerland, United Kingdom.

****Microchelonus (Parachelonus) starki* (Telenga, 1953)**

Chelonus starki Telenga, 1953

Chelonus (Parachelonus) starki. Tobias, 1995

Hosts. Lepidoptera. Sesiidae. *Chamaesphexia bibioniformis* (Esper, 1800), *Paranthrene tabaniformis* (Rottentburg, 1775), *Synanthedon formicaeformis* (Esper, 1782), *S. myopaeformis* (Borkhausen, 1789), *S. tipuliformis* (Clerck, 1759), **Tortricidae.** *Cydia pomonella* Linnaeus, 1758.

Zoogeographic region. Palaearctic.

Distribution in Türkiye. Muş (Beyarslan et al., 2020). Erzurum, Kars (Beyarslan, 2021).

Distribution. Bulgaria, Czech Republic, Czechoslovakia, Hungary, Kazakhstan, Moldova, Mongolia, Russia.

Subgenus *Stylochelonus* Hellén, 1958

***Microchelonus (Stylochelonus) natus* (Thomson, 1874)**

Chelonus mucronatus Thomson, 1874

Microchelonus (Stylochelonus) mucronatus. Tobias, 2010

Synonym. *Chelonus tuberculifer*

Zoogeographic region. Palaearctic.

Distribution in Türkiye. Edirne (Aydoğdu & Beyarslan, 2002). Denizli, İzmir, Muğla, Uşak (Beyarslan et al. 2002a). Bingöl (Beyarslan et al., 2020).

Distribution. China, Hungary, Iran, Russia, Sweden, Türkiye, Ukraine, Uzbekistan.

***Microchelonus (Stylochelonus) pusillus* (Szépligeti, 1908)**

Chelonus pusillus (Szépligeti, 1908)

Microchelonus (Stylochelonus) pusillus. Tobias, 1995

Synonym. *Chelonus acuminatus*, *Microchelonus furtivus*, *Microchelonus tuberculiventris*

Zoogeographic region. Palaearctic.

Distribution in Türkiye. Edirne (Aydoğdu & Beyarslan, 2002). Denizli, İzmir, Muğla, Uşak (Beyarslan et al. 2002a). Bitlis (Beyarslan et al., 2020).

Distribution. Azerbaijan, Croatia, Czech Republic, Denmark, Finland, Georgia, Hungary, Italy, Lithuania, Moldova, Mongolia, Poland, Russia, Spain, Ukraine, former Yugoslavia.

Tribe Phanerotomini Baker, 1926

Genus *Phanerotoma* Wesmael, 1838

Subgenus *Bracotritoma* Csiki, 1909

Phanerotoma (Bracotritoma) atra Snoflák, 1951 +

Zoogeographic region. Palaearctic.

Distribution in Türkiye. Canakkale (Bozcaada) (Beyarslan et al., 2002b). Kastamonu, Kırklareli, Samsun, Tokat (Beyarslan et al. 2002a).

Distribution Armenia, Austria, Azerbaijan, former Czechoslovakia, France, Greece, Hungary, Macedonia, Moldova, Russia, Spain, Switzerland, Türkiye, former Yugoslavia.

***Phanerotoma (Bracotritoma) bilinea* Lyle, 1924**

Phanerotoma bilinea Lyle, 1924

Phanerotoma (Bracotritoma) bilinea. van Achterberg, 1990

Synonym. *Phanerotoma gregori*

Hosts. **Lepidoptera. Tortricidae.** *Argyrotaenia ljunghiana* (Thunberg, 1797). **Praydidae.** *Prays citri* Millère, 1873.

Zoogeographic region. Palaearctic.

Distribution in Türkiye. Edirne, Samsun (Aydoğdu & Beyarslan, 2009).

Distribution Austria, Azerbaijan, Belgium, Czech Republic, former Czechoslovakia, France, Germany, Greece, Hungary, Japan, Korea, Moldova, Netherlands, Poland, Romania, Russia, Slovakia, Spain, Switzerland, Ukraine, United Kingdom, former Yugoslavia.

***Phanerotoma (Bracotritoma) capeki* van Achterberg, 1990**

Host. **Lepidoptera. Gelechiidae.** *Teleiodes* sp.

Zoogeographic region. Western Palaearctic.

Distribution in Türkiye. Türkiye (van Achterberg, 1990). Ankara (Aydoğdu & Beyarslan, 2009).

Distribution. Czechoslovakia, Hungary, Switzerland, Türkiye.

*****Phanerotoma (Bracotritoma) gracilisoma* van Achterberg, 1990**

Phanerotoma gracilisoma van Achterberg, 1990

Phanerotoma (Bracotritoma) gracilisoma. van Achterberg, 1990

Zoogeographic region. Western Palaearctic.

Distribution in Türkiye. Edirne (Aydoğdu & Beyarslan, 2009).

Distribution. France, Spain.

****Phanerotoma (Bracotritoma) intermedia* van Achterberg, 1990**

Phanerotoma intermedia van Achterberg, 1990

Phanerotoma (Bracotritoma) intermedia. van Achterberg, 1990

Zoogeographic region. Western Palaearctic.

Distribution in Türkiye. Hakkari (Aydoğdu & Beyarslan, 2009).

Distribution. Israel, Türkiye.

***Phanerotoma (Bracotritoma) parva* Kokujev, 1903**

Phanerotoma parva Kokujev, 1903

Phanerotoma (Bracotritoma) parva. Van Achterberg, 1990

Synonym. *Phanerotoma aberrans*, *Phanerotomina gussakovskii*

Zoogeographic region. Palaearctic.

Distribution in Türkiye. Balıkesir, Edirne (Aydoğdu & Beyarslan, 2009).

Distribution. Armenia Cyprus, Greece, Iran, Israel, Kazakhstan, Kyrgyzstan, Libya, Mongolia, Turkmenistan.

****Phanerotoma (Bracotritoma) permixtellae* Fischer, 1968**

Phanerotoma permixtellae Fischer, 1968

Phanerotoma (Bracotritoma) permixtellae. van Achterberg, 1990

Synonym. *Phanerotoma olearia*

Zoogeographic region. Palaearctic.

Distribution in Türkiye. Gaziantep (Aydoğdu & Beyarslan, 2009).

Distribution. Greece, Iran, Israel, Syria.

Subgenus *Phanerotoma* str. s.****Phanerotoma (Phanerotoma) acuminata* Szépligeti, 1908+***Phanerotoma acuminata* Szépligeti, 1908*Phanerotoma (Phanerotoma) acuminata*. Papp, 2005**Hosts. Lepidoptera. Pyralidae.** *Hypsopygia costalis* Fabricius, 1775**Zoogeographic region.** Nearctic, Palearctic.**Distribution in Türkiye.** Çanakkale (Gökçeada) (Beyarslan et al., 2002b).**Distribution.** Armenia, Austria, Azerbaijan, Canada, Czech Republic, former Czechoslovakia, France, Georgia, Germany, Hungary, Iran, Italy, Korea, Moldova, Mongolia, Netherlands, Romania, Russia, Switzerland, Türkiye, U.S.A., Ukraine, United Kingdom, former Yugoslavia.*****Phanerotoma (Phanerotoma) dentata* (Panzer, 1805)***Chelonus dentatus* Panzer, 1805. 100.*Phanerotoma (Phanerotoma) dentata*. Papp, 2005**Synonym.** *Phanerotoma antennalis*, *Phanerotoma minor*, *Phanerotoma rendilea*, *Phanerotoma rugiferum*, *Sigalphus dentator*, *Sigalphus rufescens***Hosts. Lepidoptera. Gelechiidae.** *Gelechia turpella* ([Denis & Schiffermüller], 1775). **Lymantriidae.***Lymantria dispar* (Linnaeus, 1758). **Pyralidae.** *Acrobasis advenella* Zincken, 1818, *A. consociella* (Hübner, 1813), *A. sodalella* Ragonot, 1887. *Amyelois transitella* (Walker, 1863). *Apomyelois ceratoniae* (Zeller, 1839).*Carcina quercana* (Fabricius, 1775). *Conobathra tumidana* (Denis & Schiffermüller 1775). *Etielle zinckenella*(Treitschke, 1832) [*Robinia pseudoacacia*]. **Tortricidae.** *Cydia funebrana* (Treitschke, 1835), *C. pomonella*(Linnaeus, 1758). *Epinotia ramella* (Linnaeus, 1758). *Euzophera punicaeella* Moore, 1891, *E. bigella* (Zeller, 1848).*Pammene amygdalana* (Duponchel, 1842), *P. gallicolana* (Lienig & Zeller, 1846), *P. populana*(Fabricius, 1787), *P. regiana* (Zeller, 1849). *Spilonota ocellana* (Denis & Schiffermüller, 1775). *Rhopobota**ustomaculana* (Curtis, 1831). *Zeiraphera isertana* (Fabricius, 1794). **Yponomeutidae.** *Prays citri* (Millière, 1873).**Sesiidae.** *Synanthedon andrenaeformis* (Laspeyres, 1801).**Zoogeographic region.** Afrotropical, Neotropical, Palearctic.**Distribution in Türkiye.** Edirne (Aydoğdu & Beyarslan, 2009).**Distribution.** Algeria, Argentina, Armenia, Austria, Azerbaijan, Belgium, Canary Islands, Croatia, former Czechoslovakia, Egypt, Finland, France, France-main, Germany, Greece, Hungary, Italy, Kazakhstan, Kenya, Korea, Latvia, Lithuania, Moldova, Netherlands, Norway, Poland, Romania, Russia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Ukraine, United Kingdom, Uzbekistan, former Yugoslavia, Introduced into U.S.A.-California.****Phanerotoma (Phanerotoma) leucobasis* Kriechbaumer, 1894***Phanerotoma leucobasis* Kriechbaumer, 1894*Phanerotoma (Phanerotoma) leucobasis*. Papp, 2012**Synonym.** *Phanerotoma desertorum*, *Phanerotoma flavitestacea*, *Phanerotoma media*, *Phanerotoma ocularis*, *Phanerotoma ornatulopsis*, *Phanerotoma rjabovi***Hosts. Lepidoptera. Crambidae.** *Desmia horaria* Meyrick, 1937 [*Antiaris africana*]. *Maruca vitrata*Fabricius, 1787 [*Arachis hypogaea*, *Glycine*, *Lonchocarpus cyanescens*, *Lonchocarpus sericeus*, *Pterocarpus**santalinooides*, *Pueraria phaseoloides*, *Tephrosia platycarpa*, *Vigna unguiculata*]. **Gelechiidae.** *Pectinophora**gossypiella* (Saunders, 1844). **Noctuidae.** *Busseola fusca* (Fuller, 1901). *Earias biplaga* Walker, 1866[*Gossypium hirsutum*]. **Pyralidae.** *Amyelois transitella* (Walker, 1863). *Apomyelois ceratoniae* (Zeller, 1839)[*Ceratonia siliqua*]. *A. decolor* (Zeller, 1881). *Cadra calidella* (Guenée, 1845). *Edulicodes hylobatis* Ghesquière,1832 [*Allophylus africanus*, *Harungana madagascariensis*]. *Etiella zinckenella* (Treitschke, 1832). *Galleria**mellonella* (Linnaeus, 1758). *Prays citri* Millière, 1873.**Zoogeographic region.** Afrotropical, Nearctic, Oceanic Palearctic.**Distribution in Türkiye.** Adana, Aydın, Balıkesir, Bursa, Tekirdağ (Aydoğdu & Beyarslan, 2009). Bitlis (Beyarslan et al., 2020).**Distribution.** Algeria, Belgium, Benin, Burkina Faso, Cameroon, Cape Verde Islands, Comoros, Croatia, Cyprus, Democratic Republic of Congo, Egypt, Ethiopia, France, Greece, Hungary, Iran, Israel, Italy, Kenya, Korea, Libya, Madagascar, Morocco, Niger, Nigeria, Saudi Arabia, Somalia, Spain,

Switzerland, Tanzania, Togo, Tunisia, Türkiye, U.S.A., United Kingdom, Uzbekistan, Yemen, Yemen-Socotra, Yugoslavia. Introduced into Tunisia, U.S.A.-California.

****Phanerotoma (Phanerotoma) planifrons* (Nees, 1816)**

Sigalphus planifrons Nees, 1816

Phanerotoma (Phanerotoma) planifrons. Ku et al., 2001

Hosts. Lepidoptera. Crambidae. *Diaphania indica* (Saunders, 1851), *D. indica* (Saunders, 1851), *D. pyloalis* (Hampson, 1859). *Glyphodes pyloalis* (Walker, 1859). *Haritalodes derogata* (Fabricius, 1775).

Lasiocampidae. *Dendrolimus punctatus* (Walker, 1855).

Pyralidae. *Assara terebrella* (Zincken, 1818). *Conobathra repandana* (Fabricius, 1798). *Ephestia elutella* (Hübner, 1796), *E. terebellum* Zeller, ?. *Phycita diaphana* (Staudinger, 1870). *Etiella zinckenella* (Treitschke, 1832). **Tortricidae.** *Cydia delineana* (Walker, 1863), *C. strobilella* (Linnaeus, 1758), *C. zebeana* (Ratzeburg, 1840). [*Larix decidua*]. *Grapholita molesta* Busck, 1916. *Leguminivora glycinivorella* (Matsumura, 1900).

Zoogeographic region. Nearctic, Oriental, Palaearctic.

Distribution in Türkiye. Bozcaada, Gökçeada (Aydođdu & Beyarslan, 2009). Çanakkale (Bozcaada) (Beyarslan et al. 2002b).

Distribution. Afghanistan, Algeria, Azerbaijan, Belgium, Bulgaria, China, former Czechoslovakia, France, France-main, Georgia, Germany, Hungary, Italy (country), Italy-main, Japan, Japan-main, Kazakhstan, Korea, Moldova, Mongolia, Morocco, Portugal, Russia, Slovenia, Spain, Switzerland, Tunisia, Türkiye, U.S.A., Ukraine, United Kingdom, Uzbekistan, former Yugoslavia, Introduced into Puerto Rico, U.S.A.-California.

****Phanerotoma (Phanerotoma) potanini* Kokujev, 1895**

Phanerotoma potanini Kokujev, 1895

Phanerotoma (Phanerotoma) potanini. Tobias, 2000

Synonym. *Phanerotoma zaidamensis* Shestakov, 1930

Zoogeographic region. Eastern Palaearctic.

Distribution in Türkiye. Kars, Siirt (Beyarslan et al. 2020).

Distribution. China, Mongolia.

Genus *Phanerotomella* Szépligeti, 1900

****Phanerotomella bisulcata* (Herrich-Schäffer, 1838)**

Chelonus bisulcatus Herrich-Schäffer, 1838

Phanerotomella bisulcata. Fahringer, 1934

Synonym. *Phanerotomella flavipes*, *Phanerotomella nigra*

Zoogeographic region. Palaearctic.

Distribution in Türkiye. Bursa (Aydođdu & Beyarslan, 2009).

Distribution. Austria, former Czechoslovakia, Germany, Greece, Hungary, Israel, Italy, Korea, Moldova, Russia, Spain, former Yugoslavia.

***Phanerotomella rufa* (Marshall, 1898)**

Phanerotoma rufa Marshall, 1898

Phanerotomella rufa. Masi, 1932

Synonym. *Phanerotomella graeffei*, *Phanerotomella kerteszi*

Zoogeographic region. Oriental, Palaearctic.

Distribution in Türkiye. Türkiye (van Achterberg 1990, Zettel, 1989). Adan, Kırklareli, Tekirdađ (Beyarslan & Inan, 1992). Çanakkale (Gökçeada) (Beyarslan et al., 2002b). Bilecik, Bursa, Çanakkale (Aydođdu & Beyarslan, 2009).

Distribution. Austria, Bulgaria, China, China-Fujian, China-Yunnan, Croatia, Cyprus, Greece, Hungary, Iran, Israel, Italy, Moldova, Romania, Spain, Switzerland, Türkiye, Yugoslavia.

Discussion

In this study, 108 species belonging to 3 tribes and 6 genera were compiled by taxonomic studies on Cheloninae (Hymenoptera, Braconidae) Fauna in 67 provinces of Türkiye. 42 of these species are distributed only in Asian Türkiye, 2 in European Türkiye and 64 in both regions. (Figure 1 and Table 1).

Chelones are natural enemies of important agricultural pests and they control these pests in nature. The following species have been introduced by various countries for the biological control of agricultural pests: *C. (C.) annulipes*, *C. (C.) inanus*, *P. (P.) dentata*, *P. (P.) leucobasis* and *P. (P.) planifrons* (Table 2). *C. (C.) annulipes* is distributed in the Nearctic, Oriental, Palaearctic region. It is a parasitoid of the **Crambidae, Pyralidae, Noctuidae (Lepidoptera)** species that are harmful in agriculture. Because of these features these species are introduced into Canada-Ontario, Guam, Puerto Rico and Connecticut, Delaware, Florida, Illinois, Indiana, Iowa, Louisiana, Massachusetts, Michigan, New Jersey, New York, Ohio, Pennsylvania, Virginia and Wisconsin in USA for biological control of this pests.

C. (C.) inanus distributed in Nearctic, Palaearctic region and introduced into U.S.A. (California) for biological control of the Noctuidae, Pyralidae Tortricidae (Lepidoptera) agricultural pest species. *P. (P.) dentata* is a common species, and it is spread in the Afrotropical, Neotropical, Palaearctic region and parasitoid of Gelechiidae, Lymantriidae, Pyralidae, Tortricidae, Yponomeutidae, Sesiidae (Lepidoptera) species. U.S.A.-California have imported *P. (P.) dentata* for the biocontrol of these agricultural pests. *P. (P.) leucobasis* is the most common species. It was recorded from Afrotropical, Nearctic, Oceanic Palaearctic regions. It is a parasitoid of pest species of Crambidae, Gelechiidae, Noctuidae, Pyralidae (Lepidoptera). It is used in biological control of the above pests. It was introduced into Tunisia, U.S.A.(California) for the biological control of pest species. *P. (P.) planifrons* uses the sprcies of the Crambidae, Lasiocampidae, Tortricidae (Lepidoptera) as hosts. For the biocontrol of this pest species, *P. (P.) planifrons* was introduced into Puerto Rico, U.S.A.(California) (Yu et al., 2016).

The promising species for biological control in the world ((*C. (C.) annulipes*, *C. (C.) inanus*, *P. (P.) dentata*, *P. (P.) leucobasis* and *P. (P.) planifrons*) are members of the fauna of Türkiye.

However, among these species, only (*C. (C.) annulipes*, *C. (C.) inanus*, and *P. (P.) leucobasis* are common in Türkiye and can be used for biological control in Türkiye against related agricultural pests. The distribution of remaining species by zoogeographical regions is as follows: Afrotropical, Western Palaearctic=1, Eastern Palaearctic=3, Nearctic, Neotropical, Oceanic, Oriental, Palaearctic=1, Oriental, Palaearctic =7, Palaearctic=70, Western Palaearctic=19. That is, 64.8% of the species distributed in the Palaearctic region (Table 1).

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