

## CONTRIBUTIONS TO THE GALLWASP (HYMENOPTERA: CYNIPIDAE) FAUNA OF MANİSA PROVINCE, TURKEY

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ABSTRACT: The present paper deals with the study of family Cynipidae of Manisa province of Turkey which includes six species. All of them is new record for Manisa province of Turkey.

KEY WORDS: Fauna, gall wasp, Cynipidae, Manisa, Turkey

Studies on Cynipidae fauna of Turkey have great importance and during the last decade the studies of Melika et al. (2004), Katılmış & Kıyak (2009, 2011), Azmaz et al. (2012) and Katılmış & Azmaz (2015) have given detailed information in this field.

In this study gallwasp material reared in plastic cages from galls of *Quercus cerris*, *Q. infectoria*, *Q. ithaburensis* and *Q. pubescens* in Muradiye Campus, Celal Bayar University, Manisa, Western Turkey, 80 m above sea level, during the period of May 2013-April 2014 were evaluated.

### RESULTS

In this study a total of six species were recognized and all of them is new record for Manisa province of Turkey.

#### *Andricus bulgaricus* Vassileva & Samnalieva, 1977

**Material examined:** Totally 15 specimens have been reared in May 17-21, 2013 at Muradiye Campus (N: 38° 40 799', E: 27° 18 722' 70 m, and N: 38° 40 566' E: 027° 18 506, 59 m), from *Q. pubescens* galls.

**Distribution in Turkey:** Previously reported from Kütahya between Domaniç-Tahtaköprü, on *Q. pubescens* galls by Katılmış & Kıyak (2011).

#### *Andricus sternlichti* (Bellido, Pujade & Melika, 2003)

**Material examined:** Totally one specimen has been reared in May, 2013 at Muradiye Campus (N: 38° 40 568' E: 27° 18 506' 58 m) from *Q. infectoria* galls.

**Distribution in Turkey:** This species previously reported from Afyon, Devlethan village, Sandıklı, Yavaşlar, Sandıklı, Otluk village (Akdağ Mountain), Sultandağı, Dereçine village, Denizli, Pamukkale University, Sciences and Arts Faculty, Buldan, way to lake 2 km, Çal, Selcen village, Beyağaç, between Beyağaç-Kartal lake 5 km, Serinhisar, Kefe upland, Babadağ, Yeniköy village, Çivril, Çağlayan village (Akdağ Mountain), Serinhisar, Ayaz village, Serinhisar, Yatağan,

Çal, Selcen village (way to Kabalar), Kütahya, Söğüt village, surrounding Söğüt dam, Kütahya, between Afyon-Kütahya 66 km, Kütahya, between Kütahya-Eskişehir, 14 km, Tavşanlı, Köprücek village, surrounding dam, Altıntaş, between Genişler village, Altıntaş, Pınarcık village, Aslanapa, between Aslanapa-Kütahya 5 km, Domaniç, Berçin village, Tavşanlı, between Tavşanlı-Emet 12 km, Kütahya, Türkmen Mountain, Kozluca village, Simav, Gümüşsu town, Simav, Örenli village, surrounding lake, Hisarcık, Dereli village, Uşak, Banaz, Ulupınar village, on *Q. infectoria* and *Q. pubescens* galls by Katılmış and Kıyak (2011). Recently reported from Denizli, Kale, Mezarlık, on *Q. infectoria* galls by Azmaz et al. (2012) and Erzincan, Kemaliye, on *Q. pubescens* galls by Mete & Demirsoy (2012).

***Aphelonyx persica* Melika, Stone, Sadeghi & Pujade-Villar, 2004**

**Material examined:** Totally two specimens have been reared in October 23, 2013 at Muradiye Campus, (N: 38° 40 568' E: 27° 18 506' 58 m), from *Q. ithaburensis* galls.

**Distribution in Turkey:** Previously recorded from Afyon province, Emirdağ district, Çatallı village, Yüreğir village, Başkonak village, Bayat district, Bayat lake surrounding, Sultandağı district, Yakasenek village, Sinanpaşa (Sincanlı) district, Kırka village, Sandıklı district, Otluk village (Akdağ Mountain), Denizli province, Çivril district, Gülpınar village, Bekilli district, Buldan district-Güney district, Babadağ district, Kütahya province, Frigian valley, Kütahya-Frigian valley, Pullar lake surrounding, Gelinkaya village, Domaniç district-Tahtaköprü district 4 km Tahtaköprü forest, Berçin village, Gediz district, Murat mountain, Emet district, Şaphane district, Sofulu village, Hisarcık district-Emet district 2 km, Tavşanlı district, Köprücek village, Simav district, Örenli village, Uşak province, Emirfakı village, Gögen lake surrounding, Karahallı district-Sivashlı district, Karahallı district, Kırkyaren village, Sivashlı district, Pınarbaşı village, Banaz district, Kuşdemir village, Kızılcaşöğüt village, Ulubey district, Inay village, Eşme district, Ahmetler village, on *Q. cerris*, *Q. ithaburensis*, *Q. trojana* galls by Katılmış & Kıyak (2009).

***Chilaspis nitida* (Giraud, 1882)**

**Material examined:** Totally one specimen has been reared in April 4, 2014 at Muradiye Campus (N: 38° 40 568' E: 27° 18 515') from *Q. cerris* galls.

**Distribution in Turkey:** Reported from Afyon, Emirdağ, Çatallı village, Sultandağı, Dereçine village, Sandıklı, Sorkun village (Akdağ Mountain, Sultandağı, Yakasenek town way to Çığırtgan stream Sultandağı, Dereçine village, Sultandağı, Kırca town, Denizli, Bekilli, Honaz, below Karaçay town, Serinhisar, between Yatağan town-Kefe upland Kütahya, Kütahya, Gelinkaya village, Kütahya, Yoncalı village, Aslanapa, between Aslanapa-Kütahya 2 km, Domaniç, between Domaniç-Tavşanlı, 5 km, Tavşanlı, Kuruçay village, Kuruçay surrounding, Çavdarhisarı, between Çavdarhisarı-Gediz, 8 km, Gediz, Murat Mountain, Gediz, Murat Mountain, Simav, between Simav-Demirciköy 2 km, Simav, Örenli village, surrounding lake, Emet, Yenice, Domaniç, Berçin village, Domaniç, between Domaniç-Tahtaköprü 2 km, Tavşanlı, surrounding Güzelyurt dam, Tavşanlı, Akçaçay village, surrounding Kayaboğazı dam, Kütahya, Frigian valley, Çayca village, Kütahya, between Döğer (Afyon)-Türkmen Mountain, Göçeri village, Tavşanlı, Sekbanlı village, Simav, Gökçeler village surrounding dam, Kütahya, Türkmen Mountain, Hürünlü farm-Söğüt upland Uşak, Ulubey, between Ulubey-Güney 5 km, Sivashlı, Pınarbaşı village, Banaz, Ahad village, Sivashlı,

between Cinoğlu village-Özbeyli village 2 km, on *Q. cerris* galls by Katılmış & Kıyak (2011).

### *Cynips quercusfolii* (Linnaeus, 1758)

**Material examined:** Totally two specimens have been reared in May, 2013 at Muradiye Campus (N: 38° 40 568' E: 27° 18 506' 58 m) from *Q. infectoria* and *Q. pubescens* galls.

**Distribution in Turkey:** Reported from Afyon, Sultandağı, Yakasenek village, Sultandağı way to fire tower, Emirdağ, Çatallı village, Sultandağı, Deresenek village, Sandıklı, Çağlayan village (Akdağ Mountain), Sinanpaşa (Sincanlı), Kırka, Sultandağı, Yakasenek village way to Çığırtgan stream, Sultandağı, Dereçine village, Denizli, Buldan, between Buldan-Buldan lake, Serinhisar, Yatağan town way to Kefe upland, Babadağ, Akyol upland, Çivril, Çağlayan village, Kütahya, between Kütahya-Eskişehir, 14 km, Emet, Simav, Simav-Hisarcık, Pazarlar, surrounding Pazarlar dam, Kütahya, Frigian valley, Fındık village, Altıntaş, Genişler village, Kütahya, Gelinkaya village, Tavşanlı, between Tavşanlı-Domaniç 2 km, Domaniç, Berçin village, Tavşanlı, between Tavşanlı-Emet 12 km, Pazarlar, Karamanca village, Kütahya, Türkmen Mountain between Yumaklı village-Kozluca village 1 km, Domaniç, Hayme Ana village, Hisarcık, Dereli village, on *Q. infectoria*, *Q. pubescens* and *Q. vulcanica* galls by Katılmış & Kıyak (2011). Recently reported from Erzincan, Kemaliye, on *Q. pubescens* and *Q. infectoria* galls by Mete & Demirsoy (2012).

### *Neuroterus quercusbaccarum* (Linnaeus, 1758)

**Material examined:** Totally one specimen has been reared in April 4, 2014 at Muradiye Campus (N: 38° 40 799' E: 27° 18 722') from *Q. pubescens* galls.

**Distribution in Turkey:** Previously recorded from Afyon, Emirdağ, Çatallı village, Emirdağ, Yüreğil town, Döneli district, Bayat, Emirir village, Bayat, Sağırılı village, Denizli, Çal, Selcen village way to Kabalar village, Honaz, Karaçay town, Kütahya, Tavşanlı, between Tavşanlı-Domaniç 2 km, Simav, between Simav-Demirciköy 2 km, Simav, Tavşanlı, between Tavşanlı-Emet 12 km, Kütahya, Türkmen Mountain, between Yumaklı village-Kozluca village 1 km, Tavşanlı, Sekbanlı village, Simav, between Söğüt village-Gökçeler village 4 km, Simav, Gökçeler village surrounding dam, on *Q. frainetto*, *Q. infectoria*, *Q. pubescens* and *Q. vulcanica* galls by Katılmış & Kıyak (2011). Recently recorded from Denizli, Kale, Narlı village, on *Q. infectoria* by Azmaz et al. (2012) and from Erzincan, Kemaliye, on *Q. infectoria* galls by Mete & Demirsoy (2012).

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