

## ARTIGO / ARTÍCULO / ARTICLE

## A faunistic study on some families of Coleoptera from Iran.

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**Abstract:** This paper deals with a faunistic survey on 6 families of Coleoptera including Bostrichidae, Cantharidae, Latridiidae, Malachiidae, Oedemeridae, and Ptinidae from some regions of Iran. In total 4 species within 3 genera of Bostrichidae, 11 species within 5 genera of Cantharidae, 5 species within 5 genera of Latridiidae, 5 species within 3 genera of Malachiidae, 10 species within 5 genera of Oedemeridae, and 4 species within 4 genera of Ptinidae were collected and identified. Four species (Latridiidae: 1 species; Malachiidae: 1 species; Oedemeridae: 1 species; Ptinidae: 1 species) are new records for the fauna of Iran.

**Key words:** Coleoptera, Bostrichidae, Cantharidae, Latridiidae, Malachiidae, Oedemeridae, Ptinidae, faunistics, new records, Iran.

**Resumen:** Estudio faunístico sobre algunas familias de Coleoptera de Irán. Este trabajo trata sobre un estudio faunístico de 6 familias de Coleoptera, incluyendo Bostrichidae, Cantharidae, Latridiidae, Malachiidae, Oedemeridae y Ptinidae de algunas regiones de Irán. En total se capturaron e identificaron 4 especies de 3 géneros de Bostrichidae, 11 especies de 5 géneros de Cantharidae, 5 especies de 5 géneros de Latridiidae, 5 especies de 3 géneros de Malachiidae, 10 especies de 5 géneros de Oedemeridae y 4 especies de 4 géneros de Ptinidae. Cuatro especies (Latridiidae: 1 especie; Malachiidae: 1 especie; Oedemeridae: 1 especie; Ptinidae: 1 especie) son nuevas citas para la fauna de Irán.

**Palabras clave:** Coleoptera, Bostrichidae, Cantharidae, Latridiidae, Malachiidae, Oedemeridae, Ptinidae, faunística, nuevas citas, Irán.

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## Introduction

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Among Insecta, Coleoptera is the largest order and contains 40% of all described insect species (more than 350,000 species), and new species are constantly discovered (Rozek et al. 2004). These insects live throughout the world (except Antarctica), but most of them occur in the tropics (White 1983; Lawrence & Britton 1994). This paper aims to improve the knowledge of some families of Coleoptera in Iran including Bostrichidae, Cantharidae, Latridiidae, Malachiidae, Oedemeridae, and Ptinidae, adding new faunistic records and distributional data. The fauna of the mentioned families was poorly studied in Iran. Modarres Awal (1997) listed 8 species of Bostrichidae, 2 species of Cantharidae, 1 species of Latridiidae, 6 species of Malachiidae, 3 species of Oedemeridae, and 6 species of Ptinidae.

## Material and methods

The specimens were collected in different regions of Iran by sweeping nets and aspirator. Collected beetles were killed using ethyl acetate and taken to the laboratory for further analysis and dissection. Additionally some materials preserved in different museums and insect collections were used in this paper. The information concerning specific name, describer and description date, locality, coordinate and date of collection, and number of species (in brackets) was given. Classification, nomenclature and distribution data suggested by Löbl & Smetana (2007) for Bostrichidae, Cantharidae, Latridiidae, Malachiidae, and Ptinidae, and Löbl & Smetana (2008) for Oedemeridae have been followed.

## Results

A total of 39 species of Bostrichidae (4 species within 3 genera), Cantharidae (11 species within 5 genera), Latridiidae (5 species within 5 genera), Malachiidae (5 species within 3 genera), Oedemeridae (10 species within 5 genera), and Ptinidae (4 species within 4 genera) were collected and identified in different regions of Iran. Four species, *Corticaria elongata* Gyllenhal, 1827 (Latridiidae), *Colotes maculatus* (Laporte de Castelnau, 1836) (Malachiidae), *Xanthochroina auberti* (Abeille de Perrin, 1876) (Oedemeridae), and *Ptinus (Ptinus) villiger* Reitter, 1884 (Ptinidae) are new records for Iran. Since Iran presents a diverse fauna of Coleoptera, faunistic researches are necessary to complete the knowledge of Iranian Coleoptera. Among the different coleopteran families of Iran, the fauna of Curculionoidea (Legalov et al. 2010), Kateretidae and Nitidulidae (Lason & Ghahari 2013), Scarabaeoidea (Bunalski et al. 2014), Lucanidae (Bartolozzi et al. 2014), Alleculinae (Novak & Ghahari 2015), Buprestidae (Ghahari et al. 2015), and Cybocephalidae (Samin 2015) have been well studied and all the data is catalogued. But other coleopteran families, especially the families listed in this paper, need to be catalogued in order to know their species diversity. Surely, this faunistic paper and other faunistic works will be important for this purpose.

### Family Bostrichidae Latreille, 1802

#### Genus *Amphicerus* LeConte, 1861

##### *Amphicerus (Caenophrada) bimaculata* A.G. Olivier, 1790

**Material examined:** Province of Golestan: Gorgan, 36°50'N 54°30'E, (2), April 2010.

**Distribution outside Iran:** Afghanistan, Algeria, Bosnia-Herzegovina, Bulgaria, Croatia, Cyprus, France, Hungary, Greece, Israel, Italy, Kazakhstan, Kyrgyzstan, Mongolia, Portugal, Romania, Spain, Syria, Tajikistan, Tunisia, Turkey, Turkmenistan, UK, former Yugoslavia.

#### Genus *Lyctus* Fabricius, 1792

##### *Lyctus (Lyctus) pubescens* Panzer, 1792

**Material examined:** Province of West Azarbaijan: Piranshahr, 36°42'N 45°10'E, (1), June 2012.

**Distribution outside Iran:** Algeria, Armenia, Azerbaijan, Austria, Belgium, Bosnia-Herzegovina, Bulgaria, Croatia, Cyprus, Czech Republic, France, Germany, Greece, Hungary, Italy, Kazakhstan, Moldavia, Netherlands, Poland, Portugal, Romania, Russia, Slovakia, Spain, Switzerland, Turkey, UK, former Yugoslavia.

*Lyctus (Lyctus) suturalis* Faldermann, 1837

**Material examined:** Province of Mazandaran: Behshahr, 36°41'N 53°44'E, (1), August 2011.

**Distribution outside Iran:** Armenia, Azerbaijan, Belarus, Georgia, Kazakhstan, Russia, Turkmenistan, UK, Uzbekistan.

**Genus *Xylogenes* Lesné, 1901**

*Xylogenes mesopotamicus* Lesné, 1937

**Material examined:** Province of West Azarbaijan: Khoy, 38°33'N 44°57'E, (1), May 2012.

**Distribution outside Iran:** Armenia, Iraq, Syria.

**Family Cantharidae Imhoff, 1856**

**Genus *Boveycantharis* Wittmer, 1969**

*Boveycantharis rufimana* (Ménétrières, 1832)

**Material examined:** Province of West Azarbaijan: Khoy, 38°33'N 44°57'E, (1), May 2012.

**Distribution outside Iran:** Azerbaijan, Armenia, Georgia, South Russia, Turkey.

**Genus *Cantharis* Linnaeus, 1758**

*Cantharis forticornis* Heyden, 1885

**Material examined:** Province of Razavi Khorasan: Sabzevar, 36°12'N 57°35'E, (2), May 2011.

**Distribution outside Iran:** Kyrgyzstan, Uzbekistan.

*Cantharis (Cyrtomoptila) lateralis* Linnaeus, 1758

**Material examined:** Province of Hamadan: Bahar, 34°55'N 48°20'E, (2), July 2010. Province of West Azarbaijan: Miandoab, 36°57'N 46°00'E, (1), April 2013.

**Distribution outside Iran:** Europe, Morocco, Western Asia.

*Cantharis livida* Linnaeus, 1758

**Material examined:** Province of West Azarbaijan: Oshnavieh, 37°03'N 45°05'E, (3), May 2013.

**Distribution outside Iran:** Most of Palaearctic and Nearctic Regions.

*Cantharis melaspoides* Wittmer, 1971

**Material examined:** Province of East Azarbaijan: Maragheh, 37°23'N 46°24'E, (1) September 2008.

**Distribution outside Iran:** Jordan, Lebanon, Syria.

**Genus *Malthinus* Latreille, 1806**

*Malthinus facialis* Thomson, 1864

**Material examined:** Province of West Azarbaijan: Mahabad, 36°46'N 45°44'E, (1), June 2012.

**Distribution outside Iran:** Europe, Turkey.

**Genus *Metacantharis* Bourgeois, 1886**

***Metacantharis clypeata* Illiger, 1798**

**Material examined:** Province of Hamadan: Nahavand, 34°14'N 48°14'E, (1), July 2010.

**Distribution outside Iran:** Europe, Algeria, Iran.

***Metacantharis raptor* Ballion, 1870**

**Material examined:** Province of Northern Khorasan: Bojnord, 37°35'N 57°20'E, (2), April 2009.

**Distribution outside Iran:** Afghanistan, Kazakhstan, Tajikistan, Turkmenistan, Uzbekistan.

**Genus *Rhagonycha* Eschscholtz, 1830**

***Rhagonycha aliena* Dahlgren, 1972**

**Material examined:** Province of Kurdistan: Kamyaran, 34°55'N 46°55'E, (3), July 2007.

**Distribution outside Iran:** Algeria, Cyprus, Greece, Iraq, Lebanon, Syria, Turkey.

***Rhagonycha delagrangi* (Pic, 1898)**

**Material examined:** Province of West Azarbaijan: Khoy, 38°33'N 44°57'E, (2), May 2012.

**Distribution outside Iran:** Iraq, Syria, Turkey.

***Rhagonycha fulva* Scopoli, 1763**

**Material examined:** Province of Hamadan: Bahar, 34°55'N 48°20'E, (1), July 2010.

**Distribution outside Iran:** Europe, Morocco, Syria, Turkmenistan.

**Family Latridiidae Erichson, 1842**

**Genus *Corticaria* Marsham, 1802**

***Corticaria elongata* Gyllenhal, 1827**

**Material examined:** Province of West Azarbaijan: Oshnavieh, 37°03'N 45°05'E, (2), May 2013. **New record for Iran.**

**Distribution outside Iran:** Armenia, Austria, Azerbaijan, Belgium, Bielorussia, Croatia, Czech Republic, Denmark, Finland, France, Georgia, Germany, Hungary, Italy, Kazakhstan, Lithuania, Mongolia, Nepal, Netherlands, Pakistan, Russia, Saudi Arabia, Slovakia, Spain, Switzerland, Turkey, UK.

**Genus *Melanophthalma* Motschulsky, 1866**

***Melanophthalma pallens* Mannerheim, 1844**

**Material examined:** Province of Southern Khorasan: Birjand, 32°32'N 58°50'E, (3) May 2009.

**Distribution outside Iran:** Afghanistan, Armenia, Bulgaria, Kazakhstan, UK.

**Genus *Dienerella* Reitter, 1911**

***Dienerella elegans* Aubé, 1850**

**Material examined:** Province of Razavi Khorasan: Sabzevar, 36°12'N 57°35'E, (1), May 2011.

**Distribution outside Iran:** Afghanistan, Algeria, Armenia, Austria, Bielorrussia, France, Greece, Hungary, Israel, Italy, Japan, Malta, Poland, Russia, Spain, Tadjikistan, UK.

**Genus *Enicmus* Thomson, 1859**

***Enicmus claviger* C. Johnson, 1977**

**Material examined:** Province of Golestan: Gorgan, 36°50'N 54°30'E, (2), August 2012.

**Distribution outside Iran:** Afghanistan, Jordan, Mongolia, Turkmenistan.

**Genus *Latridius* Herbst, 1793**

***Latridius amplus* Johnson, 1977**

**Material examined:** Province of Kurdistan: Bijar, 35°52'N 47°36'E, (1), September 2010. Province of West Azarbaijan: Miandoab, 36°57'N 46°00'E, (2), April 2013.

**Distribution outside Iran:** Afghanistan, Azerbaijan, Cyprus, France, Greece, Iraq, Jordan, Spain, Turkey.

**Family Malachiidae Fleming, 1821**

**Genus *Axinotarsus* Motschulsky, 1854**

***Axinotarsus pulicarius* (Fabricius, 1775)**

**Material examined:** Province of Guilan: Astara, 38°20'N 48°46'E, (2), September 2012.

**Distribution outside Iran:** Europe, Algeria, Morocco.

**Genus *Colotes* Erichson, 1840**

***Colotes bernardi* Wittmer, 1970**

**Material examined:** Province of Golestan: Gorgan, 36°50'N 54°30'E, (1), August 2012.

**Distribution outside Iran:** Caucasus, Iran.

***Colotes maculatus* (Laporte de Castelnau, 1836)**

**Material examined:** Province of Hamadan: Bahar, 34°55'N 48°20'E, (2), July 2010. **New record for Iran.**

**Distribution outside Iran:** Europe, North Africa, Syria.

**Genus *Malachius* Fabricius, 1775**

***Malachius rubidus* Erichson, 1840**

**Material examined:** Province of Isfahan: Kashan, 34°00'N 51°20'E, (2), August 2011.

**Distribution outside Iran:** Europe, Syria.

***Malachius (Malachius) vittatus* Ménétrières, 1832**

**Material examined:** Province of Mazandaran: Behshahr, 36°41'N 53°44'E, (2), April 2013.

**Distribution outside Iran:** Caucasus.

**Family Oedemeridae Latreille, 1810****Genus *Anisochrodes* Švihla, 1983*****Anisochrodes jelineki* Švihla, 1983**

**Material examined:** Province of Sistan & Baluchestan: Khash, 28°13'N 61°12'E, April 2009.  
**Distribution outside Iran:** Pakistan.

**Genus *Anogcodes* Dejean, 1834*****Anogcodes ustulatus* (Scopoli, 1763)**

**Material examined:** Province of Kurdistan: Bijar, 35°52'N 47°36'E, (2), July 2007.  
**Distribution outside Iran:** Europe, Asia Minor.

**Genus *Ischnomera* Stephens, 1832*****Ischnomera caerulea* (Linnaeus, 1758)**

**Material examined:** Province of Mazandaran: Savadkooh, 36°05'N 52°55'E, (3), May 2011.  
**Distribution outside Iran:** Europe, Turkmenistan, Turkey.

**Genus *Oedemera* Olivier, 1789*****Oedemera (Oedemera) femorata* (Scopoli, 1763)**

**Material examined:** Province of Gilan: Astara, 38°20'N 48°46'E, (1), September 2012.  
**Distribution outside Iran:** Europe, Siberia, Kazakhstan, Turkmenistan, Turkey.

***Oedemera lateralis* Gebler, 1829**

**Material examined:** Province of Ardabil: Germe, 39°00'N 47°57'E, (1), September 2010.  
**Distribution outside Iran:** Europe, Turkmenistan, West Siberia.

***Oedemera lurida* (Marsham, 1802)**

**Material examined:** Province of West Azarbaijan: Mahabad, 36°46'N 45°44'E, (2), June 2012.  
**Distribution outside Iran:** Europe, Syria, Turkmenistan, Turkey.

***Oedemera (Oedemera) podagrariae* (Linnaeus, 1767)**

**Material examined:** Province of Golestan: Gorgan, 36°50'N 54°30'E, (3), August 2012.  
**Distribution outside Iran:** Europe, Turkey.

***Oedemera (Oedemera) rostralis rostralis* Reitter, 1885**

**Material examined:** Province of East Azarbaijan: Maragheh, 37°23'N 46°24'E, (2), September 2008.  
**Distribution outside Iran:** Azerbaijan, Armenia, Caucasus, Carpathians.

***Oedemera (Oedemera) subrobusta* (Nakane, 1954)**

**Material examined:** Province of Northern Khorasan: Bojnord, 37°35'N 57°20'E, (1), April 2009.  
**Distribution outside Iran:** Europe, Asia.

**Genus *Xanthochroina* Ganglbauer, 1881*****Xanthochroina auberti* (Abeille de Perrin, 1876)**

**Material examined:** Province of West Azarbaijan: Oshnavieh, 37°03'N 45°05'E, (1), May 2013. **New record for Iran.**

**Distribution outside Iran:** South Europe, Lebanon, Turkey.

**Family Ptinidae Latreille, 1802****Genus *Gastrallus* Jacquelin du Val, 1860*****Gastrallus laevigatus* Olivier, 1790**

**Material examined:** Province of Isfahan: Golpayegan, 33°30'N 50°20'E, (2), October 2011.

**Distribution outside Iran:** Algeria, Austria, Belgium, Bosnia-Herzegovina, Bulgaria, Croatia, Cyprus, Czech Republic, France, Georgia, Germany, Greece, Hungary, Israel, Italy, Japan, Morocco, Netherlands, Poland, Portugal, Russia, Slovakia, Spain, Switzerland, Syria, Tunisia, Turkey, Ukraine.

**Genus *Lasioderma* Stephens, 1835*****Lasioderma redtenbacheri redtenbacheri* Bach, 1852**

**Material examined:** Province of Kermanshah: Kangavar, 34°29'N 47°56'E, (1), April 2010.

**Distribution outside Iran:** Armenia, Austria, Azerbaijan, Belgium, Bulgaria, Croatia, Cyprus, Czech Republic, Egypt, France, Georgia, Germany, Greece, Hungary, Iraq, Israel, Italy, Kazakhstan, Lebanon, Mongolia, Netherlands, Poland, Portugal, Romania, Russia, Slovakia, Spain, Switzerland, Syria, Tunisia, Turkey, Turkmenistan, UK, Uzbekistan.

**Genus *Ptinus* Linnaeus, 1767*****Ptinus (Ptinus) villiger* Reitter, 1884**

**Material examined:** Province of Northern Khorasan: Bojnord, 37°35'N 57°20'E, (3), June 2009. **New record for Iran.**

**Distribution outside Iran:** Austria, Azerbaijan, Bulgaria, Bosnia-Herzegovina, Croatia, Czech Republic, Denmark, Georgia, Germany, Greece, Hungary, Italy, Kazakhstan, Netherlands, Poland, Russia, Slovakia, Turkmenistan, UK.

**Genus *Xestobium* Motschulsky, 1845*****Xestobium subincanum* Reitter, 1878**

**Material examined:** Province of West Azarbaijan: Oshnavieh, 37°03'N 45°05'E, (2), July 2012.

**Distribution outside Iran:** Armenia, Azerbaijan, Georgia, Italy, Russia, Turkey, UK.

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