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## A CHECKLIST OF PTINIDAE (COLEOPTERA BOSTRICHOIDEA) OF IRAN

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Viñolas A., Ghahari H. – A checklist of Ptinidae (Coleoptera Bostrichoidea) of Iran.

The fauna of Iranian Ptinidae (Coleoptera: Bostrichoidea) is summarized. In total 43 species belonging to 21 genera and 8 subfamilies are listed: Anobiinae (7 genera, 10 species), Dorcatominae (1 genus, 1 species), Ernobiinae (3 genera, 4 species), Eucradinae (2 genera, 2 species), Gibbiinae (1 genus, 3 species), Ptiliniinae (2 genera, 5 species), Ptininae (3 genera, 8 species) and Xyletininae (2 genera, 10 species). Four species, *Gastrallus pubens* Fairmaire, 1875, *Priobium carpini* Herbst, 1793 (Anobiinae), *Hyperisus plumbeum* (Illiger, 1801) (Ernobiinae), and *Stagetus pilula* (Aubé, 1861) (Dorcatominae) are newly recorded from Iran.

KEY WORDS: Coleoptera, Bostrichoidea, Ptinidae, checklist, new record, Iran.

## INTRODUCTION

Worldwide about 220 genera and some 2200 species of Ptinidae are known, and they are distributed throughout the major regions of the world, although they are especially abundant in the driest parts of the subtropical and temperate zones (ARANGO & YOUNG, 2012). Ptinidae are mainly scavengers, and many species feed equally readily on more or less dried plant or animal materials. Many species are associated with the nests or excrement of other animal species, while others are found in dead or decaying wood, leaf litter or among other plant debris (BELLÉS, 2009; MOSENEAGU, 2012). Some other species, especially among Anobiinae and Dorcatominae subfamilies, have a very specialized life form. Anobiinae generally are xylophagous, attacking the wood of deciduous and coniferous trees, wild or elaborated (ESPAÑOL, 1992). Dorcatominae species live at the expense of different models of fungi. They can be in fungi on trees and fungi of the rotten wood (VIÑOLAS, 2013a, b, c, d).

Iran forms a large part of the Iranian plateau, and covers an area of 1,623,779 km<sup>2</sup>. It is bordered to the north by the Caucasus Mountains, Middle Asian natural regions, and the Caspian Sea (-27 m below sea level); to the west by the Anatolian and Mesopotamian regions; to the east by the eastern part of the Iranian plateau (Afghanistan and adjacent west Pakistan) and the Baluch-Sindian region; and finally to the south by the Persian Gulf and Gulf of Oman, which are connected by the latter to the Indian Ocean. Climatologically, Iran is a predominantly arid and semi-arid country, but the northern slopes of the Alburz ranges and the Caspian lowland receive 800 to 2000 mm annual rainfall, making them the most humid parts of the country. The Dasht-e Kavir and Dasht-e Lut deserts are the driest areas with an annual precipitation of less than 150 mm. The highlands receive between 250 and 800 mm (ZEHZAD *et al.*, 2002).

This paper lists all the data on Iranian Bostrichidae, and it is a continuation of a series of checklists of Coleoptera of Iran (see LEGALOV *et al.*, 2010: Curculionidae; LASON & GHAHARI, 2013: Kateretidae and Nitidulidae; BUNALSKI *et*

*al.*, 2014: Scarabaeoidea; BARTOLOZZI *et al.*, 2014: Lucanidae; GHAHARI *et al.*, 2015: Buprestidae; NOVÁK & GHAHARI, 2015: Alleculinae; GHAHARI & HAVA, 2015: Silphidae; BEAVER *et al.*, 2016: Platypodinae and Scolytinae; PLATIA & GHAHARI, 2016: Elateridae; LIU *et al.*, 2016: Bostrichidae; ZAPPI & GHAHARI, 2016: Cleridae; THOMAS & GHAHARI, 2016: Cucujidae, Laemphloeidae, Silvanidae; MIRUTENKO & GHAHARI, 2016: Malachiidae; FANTI & GHAHARI, 2016: Cantharidae; GHAHARI *et al.*, 2017: Oedemeridae; OTERO *et al.*, 2017: Cryptophagidae).

## MATERIAL AND METHODS

The published data on distribution of the family Ptinidae (Coleoptera) in Iran are summarized by province. Data about nomenclature and distribution data are mainly based on BOROWSKI (2007: Gibbiinae and Ptininae subfamilies) and ZAHRADNÍK (2007: Ptinidae family, except Gibbiinae and Ptininae subfamilies), and in other cases the related references are given. When accurate data about local distribution in Iran are lacking in a quoted reference, the mention "Iran (no locality cited)" is used. The provinces of Iran are represented in the Fig. 1.

## RESULTS

This checklist includes 43 Ptinidae species belonging to 21 genera (in brackets the number of species): *Anobium* Fabricius, 1775 (1), *Dignomus* Wollaston, 1682 (1), *Ernobius* Thomson, 1859 (2), *Gastrallus* Jacquelin du Val, 1860 (3), *Gibbium* Scopoli, 1777 (3), *Hedobia* Dejean, 1821 (1), *Hemicoelus* LeConte, 1861 (2), *Hyperisus* Mulsant & Rey, 1863 (1), *Lasioderma* Stephens, 1835 (5), *Nicobium* LeConte, 1861 (1), *Niptus* Boieldieu, 1856 (1), *Oligomerm* Redtenbacher, 1849 (1), *Plumilus* White, 1974 (1), *Priobium* Motschulsky, 1845 (1), *Ptilinus* Geoffroy, 1762 (4), *Ptinomorphus* Mulsant & Rey, 1868 (1), *Ptinus* Linnaeus, 1767 (6), *Stagetus* Wollaston, 1861 (1),

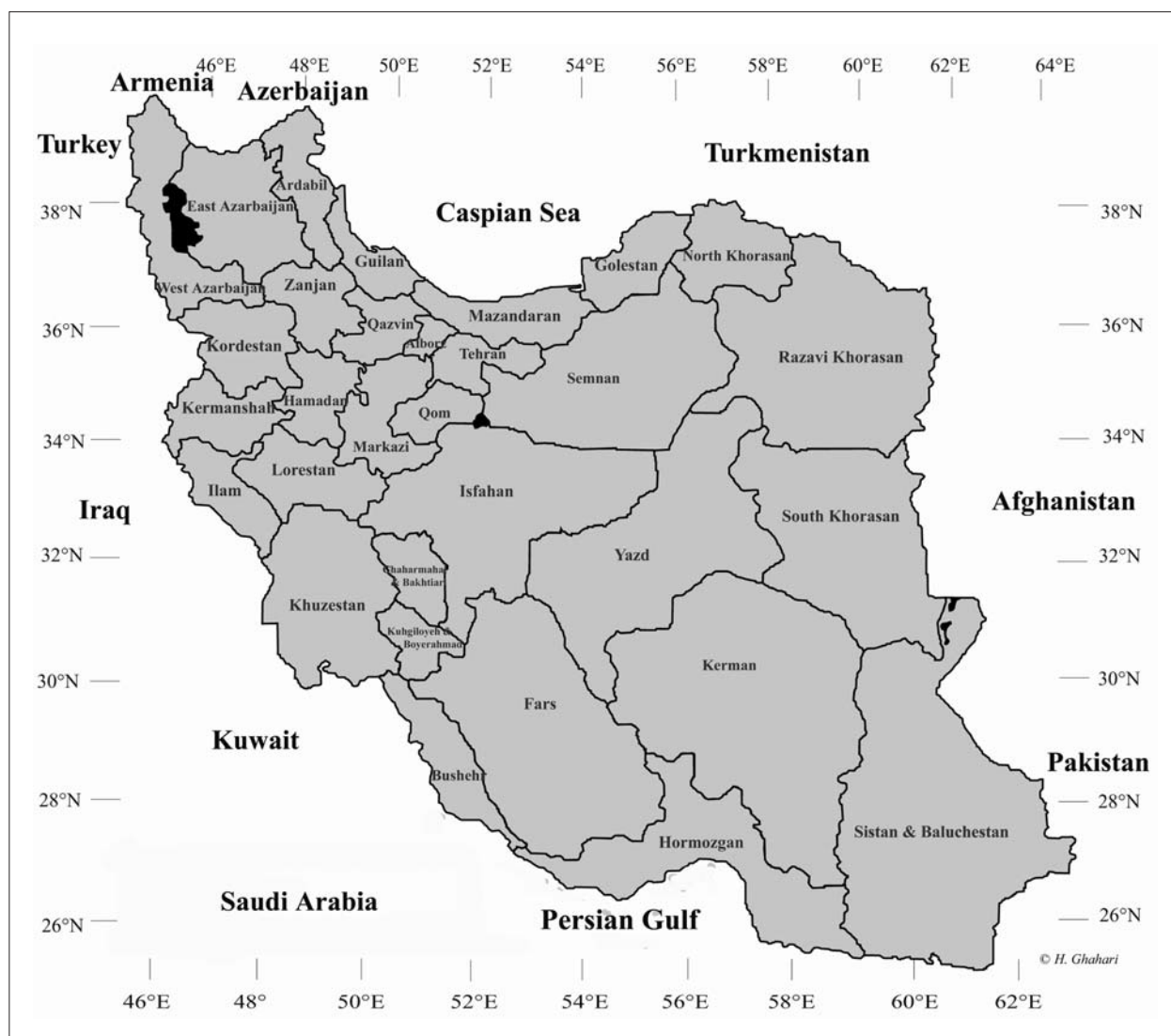


Fig. I – Map of Iran with boundaries of Provinces.

*Stegobium* Motschulsky, 1860 (1), *Xestobium* Motschulsky, 1845 (1) and *Xyletinus* Latreille, 1809 (5). *Gastrallus pubens* Fairmaire 1875, *Hyperisus plumbeum* (Illiger, 1801), *Priobium carpini* Herbst 1793 and *Stagetus pilula* (Aubé, 1861) are new records for the fauna of Iran.

Family Ptinidae Latreille, 1802  
Subfamily Anobiinae Fleming, 1821  
Tribe Anobiini Fleming, 1821  
Genus *Anobium* Fabricius, 1775

*Anobium punctatum* (DeGeer, 1774)  
*Byrrhus domesticus* Geoffroy, 1785; *Anobium striatum* A.G. Olivier, 1790 (non Fabricius, 1787); *Anobium ruficolle* Herbst, 1793; *Anobium pubescens* Herbst, 1793; *Ptinus cylindricus* Marsham, 1802; *Anobium latreillei* Dufour, 1843; *Anobium caelatum* Mulsant & Rey, 1864; *Hadrobregmus pumilus* LeConte, 1865; *Anobium amplicolle* Broun, 1880; *Anobium ruficorne* Broun, 1880.

DISTRIBUTION IN IRAN – Golestan (ABD-RABOU *et al.*, 2005), Gilan, northern and central provinces (MODARRES AWAL, 1997), Tehran (MODARRES AWAL, 1997 as *Anobium*

*domesticum* (Geoffroy, 1785)), Iran (no locality cited) (ZAHRADNÍK, 2007).

GENERAL DISTRIBUTION – Species currently considered cosmopolitan (ESPAÑOL, 1992; ZAHRADNÍK, 2007).

HOSTS – Alder, ash, oak, pine, poplar, walnut and other hard wood and coniferous timbers used in construction and furniture (MODARRES AWAL, 1997).

REMARKS – *Theocalax formiciformis* Westwood, 1832 (Hymenoptera: Pteromalidae) is parasitoid of *Anobium punctatum* (DeGeer) (ABD-RABOU *et al.*, 2005).

Genus *Hemicoelus* LeConte, 1861

*Hemicoelus canalicularis* (C.G. Thomson, 1863)

DISTRIBUTION IN IRAN – Iran (no locality cited) (ZAHRADNÍK, 2007).

GENERAL DISTRIBUTION – Austria, Azerbaijan, Belarus, Belgium, Croatia, Czech Republic, Denmark, Estonia, Finland, France, Germany, Great Britain, Greece, Iran, Italy, Latvia, Malta, Montenegro, Netherlands, Norway, Poland, Romania, Serbia, Slovakia, Spain, Russia, Sweden, Switzerland, Ukraine (ZAHRADNÍK, 2007).

*Hemicoelus fulvicornis* (Sturm, 1837)

*Anobium morio* A. Villa & G.B. Villa, 1835; *Byrrhus ruber* Reitter, 1897; *Anobium khnzoriani* Karapetyan, 1980.

DISTRIBUTION IN IRAN – Iran (no locality cited) (ZAHRADNÍK, 2007).

GENERAL DISTRIBUTION – Armenia, Austria, Azerbaijan, Belgium, Bulgaria, Croatia, Czech Republic, Denmark, Finland, France, Georgia, Germany, Great Britain, Greece, Hungary, Italy, Iran, Netherlands, Poland, Romania, Russia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey, Ukraine (ZAHRADNÍK, 2007).

## Tribe Gastrallini White, 1982

Genus *Gastrallus* Jacquelin du Val, 1860*Gastrallus immarginatus* (P.W.J. Müller, 1821)

*Anobium cornicularium* Beck, 1817; *Anobium exilis* Gyllenhal, 1827; *Anobium sericatum* Laporte, 1840.

DISTRIBUTION IN IRAN – Mazandaran (SAMIN *et al.*, 2016).

GENERAL DISTRIBUTION – Armenia, Austria, Belgium, Bulgaria, China, Croatia, Czech Republic, Denmark, France, Germany, Greece, Hungary, Italy, Iran, Japan, Lebanon, Poland, Romania, Slovakia, Spain, Sweden, Switzerland, Ukraine (ZAHRADNÍK, 2007; SAMIN *et al.*, 2016).

*Gastrallus laevigatus* (Olivier, 1790)

*Anobium parallelum* Küster, 1849.

DISTRIBUTION IN IRAN – Isfahan (SAMIN *et al.*, 2015).

GENERAL DISTRIBUTION – Algeria, Austria, Belgium, Bosnia-Herzegovina, Bulgaria, Croatia, Cyprus, Czech Republic, France, Georgia, Germany, Greece, Hungary, Iran, Israel, Italy, Japan, Morocco, Netherlands, Poland, Portugal, Russia, Slovakia, Spain, Switzerland, Syria, Tunisia, Turkey, Ukraine (ZAHRADNÍK, 2007; SAMIN *et al.*, 2015).

HOSTS – The species lives in the mistletoe and old trunks of oak, beech, elm, etc. (ESPAÑOL, 1992).

*Gastrallus pubens* Fairmaire, 1875

*Gastrallus striatus* Zoufal, 1897; *Gastrallus rollei* Reitter, 1912; *Gastrallus subtuberculatus* Pic, 1949.

EXAMINED MATERIAL – Golestan province, Minudasht, 37°10'N 55°30'E, 2 ex., 6.vi.2002, leg. H. Ghahari. New record for Iran.

GENERAL DISTRIBUTION – Azerbaijan, Chad, Egypt, Ethiopia, Israel, Jordan, Kenya, Lebanon, Senegal, Spain, Sudan, Syria, Tunisia, Turkmenistan, Uganda (ESPAÑOL, 1963; ZAHRADNÍK, 2007).

HOSTS – Different authors quote records of the species in libraries, where it attacks the old books (ESPAÑOL, 1992).

## Tribe Hadrobregmini White, 1982

Genus *Priobium* Motschulsky, 1845*Priobium carpini* (Herbst, 1793)

*Anobium serricorne* Duftschmid, 1825; *Anobium excisum* Mannerheim, 1843; *Trypopytis dendrobiformis* Reitter, 1901.

EXAMINED MATERIAL – West Azarbaijan province, Oshnavieh, 37°03'N 45°05'E, 2 ex., 14.v.2003, leg. N. Samin. New record for Iran.

GENERAL DISTRIBUTION – Armenia, Austria, Azerbaijan, Belarus, Belgium, Bosnia-Herzegovina, Bulgaria, Cyprus, Czech Republic, Denmark, Finland, France, Germany, Georgia, Hungary, Italy, Kazakhstan, Latvia, Lebanon, Lithuania, Montenegro, Netherlands, Norway, Poland, Portugal, Romania, Russia (Siberia), Serbia, Slovakia,

Spain, Syria, Sweden, Switzerland, Turkey, Ukraine (ZAHRADNÍK, 2007).

## Tribe Nicobiini White, 1982

Genus *Nicobium* LeConte, 1861*Nicobium schneideri* Reitter, 1878

DISTRIBUTION IN IRAN – Iran (no locality cited) (ZAHRADNÍK, 2007).

GENERAL DISTRIBUTION – Azerbaijan, Egypt, Georgia, Iran, Portugal (Azores), Russia, Turkey, Ukraine (ZAHRADNÍK, 2007).

## Tribe Stegobiini White, 1982

Genus *Oligoerm* Redtenbacher, 1849*Oligoerm ptilinoides* (Wollaston, 1854)

*Anobium brunneus* Duftschmid, 1825 (non A. G. Olivier, 1790); *Anobium oculatum* Wollaston, 1865; *Anobium reyi* Ch. Brisout, 1867.

DISTRIBUTION IN IRAN – Iran (no locality cited) (ZAHRADNÍK, 2007).

GENERAL DISTRIBUTION – Algeria, Azerbaijan, Austria (Introduced), China, Croatia, Cyprus, Egypt, Francia, Germany (Introduced), Greece, Hungary, Iran, Israel, Italy, Japan, Kazakhstan, Malta, Montenegro, Morocco, Poland (Introduced), Portugal (Madeira Archipelago), Romania, Russia, Serbia, Slovakia, Slovenia, Spain (Canary Islands), Syria, Switzerland, Turkey, Tunisia, Ukraine (ZAHRADNÍK, 2007).

HOSTS – Soft dead wood and wood furniture (ESPAÑOL, 1992).

COMMENTS – *Pediculoides ventricosus* (Newport, 1855) (Acarina: Pediculoidae) is parasitoid of *O. ptilinoides* (ESPAÑOL, 1992).

Genus *Stegobium* Motschulsky, 1860*Stegobium paniceum* (Linnaeus, 1758)

*Anobium ferrugineum* Herbst, 1783; *Ptinus testaceus* Thunberg, 1784; *Ptinus upsaliensis* Gmelin, 1790; *Anobium minutum* Fabricius, 1792 (non Fabricius, 1781); *Ptinus tenuicornis* Marsham, 1802; *Ptinus rubellus* Marsham, 1802; *Anobium tenuestriatum* Say, 1825; *Anobium ireos* A. Villa & G.B. Villa, 1833; *Anobium obesum* Melsheimer, 1846; *Anobium villosum* Melsheimer, 1846; *Anobium nanum* Küster, 1849; *Cis striatopunctata* Steinheil, 1873; *Cis bonariensis* Steinheil, 1873.

DISTRIBUTION IN IRAN – Largely distributed (Modarres Awal 1997), Iran (no locality cited) (ZAHRADNÍK, 2007).

GENERAL DISTRIBUTION – Cosmopolite (ZAHRADNÍK, 2007).

HOSTS – All dry plants and animal products and bread, cookies, tobacco, insect collections, wood, paper, seeds, books, grains, legumes and their products and also barley (in granaries (MODARRES AWAL, 1997)).

## Subfamily Dorcatominae C.G. Thomson, 1859

## Tribe Prothecini White, 1982

Genus *Stagetus* Wollaston, 1861*Stagetus pilula* (Aubé, 1861)

*Theca obscurior* Pic, 1908; *Theca pilula* var. *rufonotata* Pic, 1910.

EXAMINED MATERIAL – Ardabil province, Germi, 39°002

N 47°57'2" E, 1 ex., 14.viii.2004, leg. H. Ghahari. New record for Iran.

GENERAL DISTRIBUTION – Algeria, Austria, Croatia, Czech Republic, France, Egypt, Germany, Greece, Hungary, Israel, Italy, Kazakhstan, Macedonia, Poland, Slovakia, Slovenia, Spain, Syria, Tajikistan, Turkey, Ukraine (ZAHRADNIK, 2007; VIÑOLAS & MASÓ, 2007; VIÑOLAS, 2013b).

Subfamily Ernobiinae Pic, 1912

Tribe Ernobiini Pic, 1912

Genus *Ernobius* Thomson, 1859

*Ernobius iranicus* Zahradnik, 2016

DISTRIBUTION IN IRAN – Kermanshah (ZAHRADNIK, 2016).

GENERAL DISTRIBUTION – Endemic to Iran (ZAHRADNIK, 2016).

COMMENTS – ZAHRADNIK (2016) recorded this species from Bachtaraa province (Bisolul). There is not Bachtaraa prov. in Iran (see fig. 1). However, the old name of Kermanshah province is Bakhtaran which we think it is the type locality.

*Ernobius mollis mollis* (Linnaeus, 1758)

*Anobium testaceus* Kugelann, 1792; *Anobium sybaris* Kugelann, 1792; *Anobium convexifrons* Melsheimer, 1846; *Liozoum sulcatulum* Mulsant & Rey, 1863; *Liozoum consimile* Mulsant & Rey, 1863; *Liozoum consimile* var. *laetum* Mulsant & Rey, 1864; *Ernobius tarsatus* Kraatz, 1881; *Ernobius reversus* Sharp, 1916.

DISTRIBUTION IN IRAN – Isfahan (GHAHARI *et al.*, 2010), Iran (no locality cited) (MODARRES AWAL, 1997).

GENERAL DISTRIBUTION – Armenia, Austria, Azores, Belarus, Belgium, China, Croatia, Czech Republic, Denmark, Egypt, Estonia, Faeroe Islands, Finland, France, Georgia, Germany, Great Britain, Greece, Hungary, Iceland, Iran, Ireland, Israel, Italy, Japan, Latvia, Lithuania, Macedonia, Morocco, Netherlands, Norway, North Korea, Poland, Portugal (Madeira Archipelago), Romania, Russia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Taiwan, Tunisia, Turkmenistan, Turkey, Ukraine. Introduced in Afrotropical, Australian, Nearctic, Neotropical and Oriental regions (ZAHRADNIK, 2007; GHAHARI *et al.*, 2010).

HOSTS – The species lives in conifer stumps (ESPAÑOL, 1992).

COMMENTS – *Trychnosoma ernobii* Hedqvist 1974 (Hymenoptera: Pteromalidae) is parasitoid of *Ernobius mollis* in dry wood (GHAHARI *et al.*, 2010).

Tribe Xestobiini White, 1982

Genus *Hyperisus* Mulsant & Rey, 1863

*Hyperisus plumbeum* (Illiger, 1801)

*Byrrhus coeruleus* Geoffroy, 1785; *Anobium thoracicum* P. Rossi, 1790; *Anobium politum* Duftschmid, 1825; *Anobium erythropum* Stephens, 1830; *Anobium aeneicolle* Bach, 1852; *Xestobium subaeneum* Reitter, 1897; *Xestobium syriacum* Pic, 1897; *Xestobium ernobiformis* Reitter, 1901; *Xestobium variabile* Pic, 1912; *Xestobium subaeneum* var. *circassicum* Pic, 1922; *Xestobium plumbeum* var. *rufonotatum* Pic, 1923; *Xestobium plumbeum* var. *bicoloripenne* Pic, 1933; *Xestobium graecum* Mañan, 1941.

EXAMINED MATERIAL – Golestan province, Gorgan, 36°50'N 54°30'E, 2 ex., 1.V.1970, Natural Sciences Museum of Barcelona, Spain (MCNB). New record for Iran.

GENERAL DISTRIBUTION: Armenia, Austria, Belarus,

Belgium, Bosnia-Herzegovina, Bulgaria, Croatia, Czech Republic, Cyprus, Denmark, France, Georgia, Germany, Great Britain, Greece, Hungary, Italy, Macedonia, Montenegro, Netherlands, Poland, Romania, Russia, Slovakia, Serbia, Slovenia, Spain, Syria, Switzerland, Turkey, Ukraine (ZAHRADNIK, 2007).

HOSTS – It usually develops in *Fagus sylvatica* (Fagaceae), although it also quoted from resinous plants (ESPAÑOL, 1992).

Genus *Xestobium* Motschulsky, 1845

*Xestobium subincanum* Reitter, 1878

*Xestobium circassicum* Reitter, 1890.

DISTRIBUTION IN IRAN – West Azarbaijan (SAMIN *et al.*, 2015).

GENERAL DISTRIBUTION – Armenia, Azerbaijan, Georgia, Iran, Italy, Russia, Turkey, Ukraine (ZAHRADNIK, 2007; SAMIN *et al.*, 2015).

Subfamily Eucradinae LeConte, 1861

Tribe Hedobiini White, 1982

Genus *Hedobia* Dejean, 1821

*Hedobia unicolor* Pic, 1897

DISTRIBUTION IN IRAN – Mazandaran (ESPAÑOL, 1977), Iran (no locality cited) (ZAHRADNIK, 2007).

GENERAL DISTRIBUTION – Armenia, Azerbaijan, Georgia, Iran, Russia, Saudi Arabia, Turkey (ESPAÑOL, 1977; ZAHRADNIK, 2007).

Genus *Ptinomorphus* Mulsant & Rey, 1868

*Ptinomorphus regalis* (Duftschmid, 1825)

*Hedobia regalis* var. *circassica* Pic, 1896; *Hedobia belia* Reitter, 1898; *Ptinomorphus regalis* var. *aureopilosus* Pic, 1901; *Hedobia regalis* var. *satanula* Reitter, 1901; *Hedobia regalis* var. *dispersa* Pic, 1930.

DISTRIBUTION IN IRAN – Iran (no locality cited) (ZAHRADNIK, 2007).

GENERAL DISTRIBUTION – Austria, Azerbaijan, Bosnia-Herzegovina, Croatia, Czech Republic, France, Georgia, Germany, Greece, Hungary, Iran, Italy, Netherlands, Poland, Romania, Russia, Slovakia, Spain, Switzerland, Turkey, Ukraine (ZAHRADNIK, 2007).

HOSTS – It develops in the wood of: oak, blackthorn, hawthorn, hazel tree, etc. (ESPAÑOL, 1992).

Subfamily Gibbiinae Mulsant & Rey, 1868

Tribe Gibbiini Mulsant & Rey, 1868

Genus *Gibbium* Scopoli, 1777

*Gibbium aequinoctiale* Boieldieu, 1854

*Gibbium chevrolati* Boieldieu, 1854; *Gibbium aegyptiacum* Pic, 1894; *Gibbium einsteini* Bellés, 1980.

DISTRIBUTION IN IRAN – Northern Iran (no locality cited) (BELLÉS, 1985), Iran (no locality cited) (BOROWSKI, 2007).

GENERAL DISTRIBUTION – Cosmopolitan species (BOROWSKI, 2007).

*Gibbium boieldieui* Levrat, 1857

*Gibbium laevigena* Reitter, 1884.

DISTRIBUTION IN IRAN – Fars, Tehran (Bellés 1985),

widely distributed (FARAHBAKHS, 1961; MODARRES AWAL, 1997), Iran (no locality cited) (BOROWSKI, 2007).

GENERAL DISTRIBUTION – Armenia, Azerbaijan, Georgia, Greece, Iran, Russia, Turkey, Ukraine (BOROWSKI, 2007).

HOSTS – Barley, wheat and other cereals (FARAHBAKHS, 1961; MODARRES AWAL, 1997).

*Gibbium psylloides* (Czenpinski, 1778)

*Ptinus scotias* Fabricius, 1781; *Ptinus seminulum* Schrank, 1781; *Bruchus apterus* Geoffroy, 1785; *Gibbium longicorne* Reitter, 1884.

DISTRIBUTION IN IRAN – Largely distributed (FARAHBAKHS, 1961; MODARRES AWAL, 1997), Iran (no locality cited) (BELLÉS, 1985; BOROWSKI 2007).

GENERAL DISTRIBUTION – Albania, Algeria, Armenia, Austria, Azerbaijan, Belgium, Bosnia-Herzegovina, Bulgaria, China (Introduced), Croatia, Cyprus, Czech Republic, Denmark (Introduced), Egypt, Finland (Introduced), France, Great Britain, Germany, Georgia, Greece, Hungary, Iran, Iraq, Ireland (Introduced), Israel, Italy, Japan (Introduced), Lebanon, Libya, Malta, Macedonia, Moldavia, Montenegro, Morocco, Netherlands, Poland, Portugal (Madeira Archipelago), Russia (Introduced), Saudi Arabia, Serbia, Slovakia, Slovenia, South Korea (Introduced), Spain, Swede (Introduced), Switzerland, Syria, Taiwan (Introduced), Tunisia, Turkey, Ukraine (BOROWSKI, 2007).

HOSTS – Wool, paper, animal and plant collections, cereals and seeds (in granary) (FARAHBAKHS, 1961; MODARRES AWAL, 1997).

Subfamily Ptilininae Shuckard, 1840

Tribe Ptilinini Shuckard, 1840

Genus *Plumilus* White, 1974

*Plumilus grandicollis* (Ménétries, 1832)

DISTRIBUTION IN IRAN – Iran (no locality cited) (ZAHRADNIK, 2007).

GENERAL DISTRIBUTION – Armenia, Azerbaijan, Georgia, Germany (introduced), Iran, Israel, Romania, Russia, Turkmenistan, Turkey (ZAHRADNIK, 2007).

Genus *Ptilinus* Geoffroy, 1762

*Ptilinus asiaticus* Toskina, 1995

DISTRIBUTION IN IRAN – Iran (no locality cited) (ZAHRADNIK, 2007).

GENERAL DISTRIBUTION – Iran, Turkmenistan (Ashkhabad, type locality) (TOSKINA, 1995; ZAHRADNIK, 2007).

*Ptilinus fuscus* (Geoffroy, 1785)

*Ptilinus flabelicornis* Le Peletier de Saint Fargeau & Audinet-Serville, 1825; *Ptilinus costatus* Gyllenhal, 1827; *Ptilinus flavescens* (Geoffroy): Laporte de Castelnau, 1840 (non Geoffroy, 1785); *Ptilinus aspericollis* Mulsant & Rey, 1853 (non Ménétries, 1832); *Ptilinus asperulus* Gemminger, 1870; *Ptilinus mulsanti* Marseul, 1886.

DISTRIBUTION IN IRAN – Golestan (SAMIN *et al.*, 2016).

GENERAL DISTRIBUTION – Afghanistan, Algeria, Austria, Belarus, Belgium, Bulgaria, China, Czech Republic, Estonia, Finland, France, Germany, Greece, Hungary, Iran, Italy, Japan, Kazakhstan, Macedonia, Netherlands, Norway, Poland, Romania, Russia, Slovakia, Spain, Sweden, Switzerland, Tajikistan, Turkey, Turkmenistan, Ukraine, Uzbekistan (ZAHRADNIK, 2007; SAMIN *et al.*, 2016).

HOSTS – Species sporadically in anthropogenic habitats. In nature it attacks branches and trunks of: beech, oak, poplar, etc. (ESPAÑOL, 1992).

*Ptilinus iranicus* Toskina, 1995

DISTRIBUTION IN IRAN – Tehran (TOSKINA, 1995), Iran (no locality cited) (ZAHRADNIK, 2007).

GENERAL DISTRIBUTION – Known only from the type locality (Iran).

*Ptilinus pectinicornis* (Linnaeus, 1758)

*Ptilinus cylindricus* O.F. Müller, 1776; *Bostrichus pectinatus* Laicharting, 1781; *Ptinus serraticornis* Marsham, 1802 (non Thunberg, 1784); *Ptilinus aspericollis* Ménétries, 1832; *Xiletinus discolor* Faldermann, 1839; *Ptilinus impressifrons* Küster, 1847.

DISTRIBUTION IN IRAN – Razavi Khorasan (SAMIN *et al.*, 2016).

GENERAL DISTRIBUTION – Armenia, Austria, Azerbaijan, Belarus, Bosnia-Herzegovina, Bulgaria, China, Croatia, Czech Republic, Denmark, France, Georgia, Germany, Hungary, India, Iran, Ireland, Italy, Japan, Latvia, Lithuania, Montenegro, Morocco, Netherlands, Norway, Poland, Portugal, Romania, Russia, Serbia, Slovakia, Spain, Sweden, Switzerland, Syria, Turkey, Turkmenistan, Ukraine (ZAHRADNIK, 2007; SAMIN *et al.*, 2016).

HOSTS – Species sporadically of anthropogenic habitats. In nature attacks branches and trunks of: beech, oak, poplar, etc. (ESPAÑOL, 1992).

Subfamily Ptininae Latreille, 1802

Tribe Ptinini Latreille, 1802

Genus *Dignomus* Wollaston, 1862

*Dignomus mesopotamicus* (Pic, 1894)

DISTRIBUTION IN IRAN – Iran (no locality cited) (BELLÉS, 1996, 2009; BOROWSKI, 2007).

GENERAL DISTRIBUTION – Iran, Iraq, Saudi Arabia, Yemen (BOROWSKI, 2007).

Genus *Niptus* Boieldieu, 1856

*Niptus hololeucus* (Faldermann, 1835)

*Niptus brevesetosus* Pic, 1956.

DISTRIBUTION IN IRAN – Fars (DASHAN *et al.*, 2014), generally distributed (FARAHBAKHS, 1961; MODARRES AWAL, 1997), Iran (no locality cited) (BOROWSKI, 2007).

GENERAL DISTRIBUTION – It is considered a cosmopolitan species. Afghanistan, Albania, Algeria, Armenia, Austria, Belgium, Bosnia-Herzegovina, Bulgaria, Belarus, China, Croatia, Cyprus, Czech Republic, Denmark, Egypt, Estonia, Finland, France, Georgia, Germany, Great Britain, Greece, Hong Kong, Hungary, Iceland (Introduced), India, Ireland, Iran, Iraq, Israel, Italy, Japan, Jordan, Kazakhstan, Kuwait, Kyrgyzstan, Latvia, Lebanon, Liechtenstein, Lithuania, Libya, Luxembourg, Malta, Macedonia, Moldavia, Mongolia, Montenegro, Morocco, Nepal, Netherlands, North Korea, Norway, Pakistan, Poland, Portugal (Azores), Russia, Serbia, Slovakia, Slovenia, South Korea, Spain (Canary Islands), Syria, Sweden, Switzerland, Tunisia, Tajikistan, Turkey, Turkmenistan, Ukraine, Uzbekistan (BOROWSKI, 2007).

HOSTS – Wool, skin, silk, linen, paper, flour, carpets, cotton and related products, tobacco, tea, medicinal plants, rice and other cereals, feathers, cork (in granary), and also

beehive, wing and bee carcasses (FARAHBAKHS, 1961; MODARRES AWAL, 1997).

Genus *Ptinus* Linnaeus, 1767

*Ptinus (Bruchoptinus) elbrusicola* A. Fleischer, 1915  
DISTRIBUTION IN IRAN – Tehran (Elburz Mountains) (FLEISCHER, 1915), Iran (no locality cited) (BOROWSKI, 2007).

GENERAL DISTRIBUTION – Endemic to Iran (BOROWSKI, 2007).

*Ptinus (Gynopterus) quadrisignatus* Ménétries, 1832  
*Ptinus sexsignatus* Faldermann, 1835.

DISTRIBUTION IN IRAN – Ardabil (SAMIN *et al.*, 2016).

GENERAL DISTRIBUTION – Armenia, Azerbaijan, Georgia, India, Iran, Kazakhstan, Russia, Turkey, Uzbekistan (BOROWSKI, 2007; SAMIN *et al.*, 2016).

*Ptinus (Ptinus) fur* (Linnaeus, 1758)  
*Ptinus rapax* DeGeer, 1774; *Bruchus furunculus* O. F. Müller, 1776; *Ptinus pulex* Goeze, 1776; *Ptinus germanus* Goeze, 1777; *Ptinus striatus* Fabricius, 1787; *Ptinus longipes* P. Rossi, 1792; *Ptinus humeralis* Say, 1835.

DISTRIBUTION IN IRAN – Northern and central provinces (FARAHBAKHS, 1961; MODARRES AWAL, 1997), Iran (no locality cited) (BOROWSKI, 2007).

GENERAL DISTRIBUTION – Cosmopolitan species (BOROWSKI, 2007).

HOSTS – Insect and other animal collections, wool, skin, seeds, dried fruits, old books, flour and related products (in granaries) (FARAHBAKHS, 1961; MODARRES AWAL, 1997).

*Ptinus (Ptinus) latro* Fabricius, 1775  
*Ptinus testaceus* A. G. Olivier, 1790; *Ptinus clavipes* Panzer, 1805; *Ptinus brunneus* Duftschmid, 1825; *Ptinus hirtellus* Sturm, 1837; *Ptinus rufus* P. H. Lucas, 1846; *Ptinus hirticollis* P. H. Lucas, 1846; *Ptinus advena* Wollaston, 1854; *Ptinus lucasii* Boieldieu, 1856; *Ptinus corticinus* Rottenberg, 1871; *Ptinus obsoletus* Baudi di Selve, 1874; *Ptinus letourneuxi* Pic, 1894; *Ptinus brevipennis* Pic, 1896; *Ptinus furoides* Escalera, 1914; *Ptinus pueli* Pic, 1936; *Ptinus densepubens* Pic, 1950; *Ptinus mobilis* Moore, 1957; *Ptinus moorei* Iablokoff-Khuzorian & Karapetyan, 1991.

DISTRIBUTION IN IRAN – Widely distributed (FARAHBAKHS, 1961, MODARRES AWAL, 1997 as *Ptinus brunneus* Duftschmid, 1825), Iran (no locality cited) (MODARRES AWAL, 1997 as *Ptinus clavipes* Panzer, 1805; BOROWSKI, 2007).

GENERAL DISTRIBUTION – Cosmopolitan species (BOROWSKI, 2007).

HOSTS – Animal and plant collections, wool, skins, silk, linen, paper, cotton and related products, flour, tobacco, tea, medicinal plants, old books, and dried fruits (in granaries) (Modarres Awal 1997 as *P. brunneus*), stored products (FARAHBAKHS, 1961, MODARRES AWAL, 1997 as *P. clavipes*).

*Ptinus (Ptinus) villiger* (Reitter, 1884)  
*Ptinus balticus* Iablokoff-Khuzorian & Karapetyan, 1991.

DISTRIBUTION IN IRAN – Northern Khorasan (SAMIN *et al.*, 2015).

GENERAL DISTRIBUTION – Austria, Azerbaijan, Belarus, Bosnia-Herzegovina, Bulgaria, Croatia, Czech Republic, Denmark, Estonia, Finland, Georgia, Germany, Great Britain (Introduced), Greece, Hungary, Iran, Kazakhstan,

Latvia, Lithuania, Moldavia, Montenegro, Norway, Poland, Romania, Russia, Serbia, Slovakia, Slovenia, Sweden, Turkmenistan, Ukraine; Nearctic Region (Introduced) (BOROWSKI, 2007; SAMIN *et al.*, 2015).

*Ptinus (Tectoptynus) tectus* Boieldieu, 1856  
*Ptinus pilosus* White & Butler, 1846; *Ptinus ocellus* Brown, 1929.

DISTRIBUTION IN IRAN – Iran (no locality cited) (BOROWSKI, 2007).

GENERAL DISTRIBUTION – Cosmopolitan species (BOROWSKI, 2007).

HOSTS – The species is considered as a pest in museums (Pinniger 2001). It is recorded from at least 55 museums and historic houses in the United Kingdom (PINNIGER, 2012).

Subfamily Xyletininae Gistel, 1856  
Tribe Lasiodermini White, 1982  
Genus *Lasioderma* Stephens, 1835

*Lasioderma costulatum* Schilsky, 1899  
DISTRIBUTION IN IRAN – Kerman (SAMIN *et al.*, 2016).

GENERAL DISTRIBUTION – Armenia, Azerbaijan, Iran, Kazakhstan, Mongolia, Tajikistan, Turkmenistan, Uzbekistan (ZAHRADNIK, 2007; SAMIN *et al.*, 2016).

*Lasioderma kiesewetteri* Schilsky, 1899  
DISTRIBUTION IN IRAN – Semnan (SAMIN *et al.*, 2016).

GENERAL DISTRIBUTION – Armenia, Azerbaijan, Croatia, Czech Republic, France, Georgia, Greece, Iran, Israel, Italy, Kazakhstan, Russia, Spain, Syria, Turkey, Turkmenistan, Ukraine, Uzbekistan (ZAHRADNIK, 2007; SAMIN *et al.*, 2016).

*Lasioderma obscurum* (Solsky, 1868)  
DISTRIBUTION IN IRAN – Iran (no locality cited) (ZAHRADNIK, 2007).

GENERAL DISTRIBUTION – Austria, Azerbaijan, Bosnia-Herzegovina, Bulgaria, Croatia, France, Georgia, Greece, Hungary, Iran, Italy, Kazakhstan, Mongolia, Montenegro, Romania, Russia, Serbia, Slovakia, Turkey, Ukraine (ZAHRADNIK, 2007).

*Lasioderma redtenbacheri redtenbacheri* (Bach, 1852)  
*Xyletinus cyphonoides* Moravitz, 1861; *Pseudochina fulvescens* Mulsant & Rey, 1864; *Lasioderma redtenbacheri* var. *caucasicum* Pic, 1904.

DISTRIBUTION IN IRAN – Kermanshah (SAMIN *et al.*, 2015).

GENERAL DISTRIBUTION – Armenia, Austria, Azerbaijan, Belgium, Bulgaria, Croatia, Cyprus, Czech Republic, Egypt, France, Georgia, Germany, Greece, Hungary, Iran, Iraq, Israel, Italy, Kazakhstan, Lebanon, Mongolia, Netherlands, Poland, Portugal, Romania, Russia, Slovakia, Spain, Switzerland, Syria, Tunisia, Turkey, Turkmenistan, Ukraine, Uzbekistan (ZAHRADNIK, 2007; SAMIN *et al.*, 2015).

HOSTS – It develops in dry chapters of Asteraceae (*Centaurea*, *Carduus*, etc.) and also in stems of Umbelliferae (*Ferula*) (ESPAÑOL, 1992).

*Lasioderma serricorne* (Fabricius, 1792)  
*Ptilinus testaceus* Duftschmid, 1825; *Lasioderma testaceum* Stephens, 1835; *Lasioderma castaneum* Melsheimer, 1846; *Xyletinus brevis* Wollaston, 1861.

DISTRIBUTION IN IRAN – Ardabil (GHAHARI & LIM, 2012), Golestan (KHORMALI *et al.*, 2002; MAROUF *et al.*, 2009),

Kordestan (ALLAHVAISI, 2013), Mazandaran (MAROUF *et al.*, 2009), largely distributed (MODARRES AWAL, 1997).

GENERAL DISTRIBUTION – Cosmopolitan species (ESPAÑOL, 1992; ZAHRADNIK, 2007).

HOSTS – Tobacco products especially cigarettes and dried leaves and materials used in stuffing furniture, seeds and other dried plant products especially those used as drugs, black and red pepper (in granaries, tobacco factories and cigar stores) (MODARRES AWAL, 1997).

COMMENTS – *Cephalonomia gallicola* (Ashmead, 1887) (Hymenoptera: Bethyliidae) is a parasitoid of this species (GHAHARI & LIM, 2012).

Tribe Xyletinini Gistel, 1856  
Genus *Xyletinus* Latreille, 1809

*Xyletinus (Xeronthobius) bucephaloides* Reitter, 1901  
DISTRIBUTION IN IRAN – Iran (no locality cited) (ZAHRADNIK, 2007).

GENERAL DISTRIBUTION – Cyprus, Egypt, Iran, Libya, Oman, Tunisia, Turkey (ZAHRADNIK, 2007).

*Xyletinus (Xeronthobius) pallens* (Germar, 1824)  
*Xyletinus pallidus* Laporte, 1840.

DISTRIBUTION IN IRAN – Generally distributed (MODARRES AWAL, 1997), Iran (no locality cited) (ZAHRADNIK, 2007).

GENERAL DISTRIBUTION – Azerbaijan, Iran, Kazakhstan, Pakistan, Russia, Turkey, Turkmenistan, Ukraine, Uzbekistan (ZAHRADNIK, 2007).

HOSTS – Tobacco and related products (MODARRES AWAL, 1997).

*Xyletinus (Xyletinus) iranicus* Toskina, 2006  
DISTRIBUTION IN IRAN – Tehran (Naraz bei Abu Ask, Elbursgeb) (TOSKINA, 2006).

GENERAL DISTRIBUTION – Known only from the type locality (Iran).

*Xyletinus (Xyletinus) laticollis* (Duftschmid, 1825)  
*Xyletinus flavipes* Laporte de Castelnau, 1840; *Xyletinus holosericius* Dufour, 1854; *Xyletinus oblongulus* Mulsant & Rey, 1864; *Xyletinus flavipes* var. *fulvicollis* Reitter, 1890; *Xyletinus laticollis* var. *simplex* Rey, 1892; *Xyletinus flavipes* var. *flavicornis* Rey, 1892; *Xyletinus fulvicollis* var. *rufescens* Schilsky, 1899; *Xyletinus kocheri* Pic, 1952; *Xyletinus fulvicollis* var. *robustus* Pic, 1924.

DISTRIBUTION IN IRAN – Iran (no locality cited) (ZAHRADNIK, 2007).

GENERAL DISTRIBUTION – Armenia, Austria, Azerbaijan, Belarus, Bosnia-Herzegovina, Bulgaria, Croatia, Czech Republic, Denmark, Egypt, Estonia, France, Germany, Greece, Hungary, Iran, Israel, Italy, Jordan, Kazakhstan, Latvia, Lebanon, Lithuania, Libya, Montenegro, Morocco, Netherlands, Norway, Poland, Portugal, Romania, Russia, Serbia, Slovakia, Spain, Syria, Sweden, Switzerland, Tajikistan, Turkey, Ukraine (Zahradnik, 2007).

HOSTS – It develops in dry droppings of sheeps and cows (ESPAÑOL, 1992).

*Xyletinus (Xyletinus) sareptanus* Kiesenwetter, 1877  
DISTRIBUTION IN IRAN – Golestan (SAMIN *et al.*, 2016).

GENERAL DISTRIBUTION – Armenia, Azerbaijan, Bulgaria, Croatia, France, Georgia, Greece, Hungary, Iran, Kazakhstan, Kyrgyzstan, Macedonia, Russia, Turkey, Turkmenistan, Ukraine, Uzbekistan (ZAHRADNIK, 2007; SAMIN *et al.*, 2015).

INCERTAE SEDIS

ABAI (1984) and MODARRES AWAL (1997) cited *Anobium denticolae* Panzer (year of description is missing) from Iran (northern and central provinces) as the pest of dried wood of pine and poplar. *A. denticolae* does not occur in Iran. They most probably refer to *Anobium denticolle* Creutzer in Panzer, 1796, currently *Hadrobregmus denticollis*, although the genus *Hadrobregmus* has European distribution and is not present in Asia. So it should be a species belonging to the genus *Hemicoelus*, the only related genus recorded from Iran. Therefore we do not consider *A. denticolae* as part of the fauna of Iran.

DISCUSSION

Recording of 43 species of Ptinidae from Iran indicates that this family has a high species diversity in Iran. Among the 8 subfamilies reported from Iran Anobiinae with 10 species of 7 genera and Xyletininae with 10 species of 2 genera are more diverse than the other subfamilies. Two species, *Ernobius iranicus* and *Ptinus (Bruchoptinus) elbrusicola* are endemic to Iran.

Ptinids (especially Anobiinae) have several parasitoids in various insect taxa, especially subfamily Xoridae (Hymenoptera: Ichneumonidae) (KASPARYAN, 1981), Eulophidae, Eupelmidae, Pteromalidae (Hymenoptera: Chalcidoidea) (NOYES, 2015) and *Bracon* spp. (Hymenoptera: Braconinae) (YU *et al.*, 2012). Among the *Bracon* species quoted as parasitoids of Anobiinae by ŽIKIĆ *et al.* (2012), two species [*Bracon (Glabrobracon) pineti* Thomson, 1892 and *B. (Habrobracon) variegator* (SPINOLA, 1808)] have been recorded from Iran by GADALLAH & GHAHARI (2015). New findings of parasitoids from different regions of Iran can be expected in the future.

ACKNOWLEDGEMENTS

Sincere gratitude to Berta Caballero, Glòria Masó (curators of the collection of arthropods, the Natural Sciences Museum of Barcelona) and N. Samin (Islamic Azad University), for the facilities provided for the consultation of the specimens, and anonymous reviewers for insightful comments. The research was supported by the Islamic Azad University (Young Researchers and Elites Club, Science and Research Branch), and by the University of Barcelona.

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