

CURCULIONOIDEA FROM GOLESTAN PROVINCE,
NORTHERN IRAN
(Coleoptera)

HASSAN GHAHARI (*) and ENZO COLONNELLI (**)

INTRODUCTION

The superfamily Curculionoidea, also known as weevils or snout-beetles, contains some 62,000 species and around 6,000 described genera (Thompson 1992; Kuschel 1995; Farrell 1998; Oberprieler et al. 2007; Alonso-Zarazaga & Lyal 1999, 2002, 2006, 2009). Although Curculionoidea, being the most speciose of all the beetle superfamilies, are a suitable taxon for insights into the evolution of diversity, yet they remain a challenging taxonomic group in terms of stability of classification (Marvaldi et al. 2002). Curculionoidea, despite their considerable diversity of form and size, can be recognized by their distinctive more or less long snout and clubbed and mostly geniculate antennae. Almost all of them are plant feeders, being several species associated with a narrow range of hosts, in many cases living only on a single species. The larvae are short, fleshy, apodous, and live as endophytes as a rule, only immature stages of a few species being ectophagous. This superfamily includes a large number of agricultural and forest pests (Bajtenov 1974; Anderson 1993, 1995).

Golestan province is in the north-east of Iran and south of the Caspian Sea (fig. 1). Geographically, Golestan is divided into two sections, the plains and the mountains of the Alborz range. In the eastern Alborz section, the direction of the mountains faces northeast and gradually decreases in height. The highest point of the province is Shavar, at 3,945 m above sea level. Golestan climate is temperate for most of the year. The fauna of Iranian Curculionoidea has been rather well surveyed in the

(*) Department of Plant Protection, Shahre Rey Branch, Islamic Azad University - Tehran, Iran. E-mail: hghahari@yahoo.com

(**) Via delle Giunchiglie, 56 - 00172 Roma, Italy. E-mail: ecolonnelli@yahoo.it

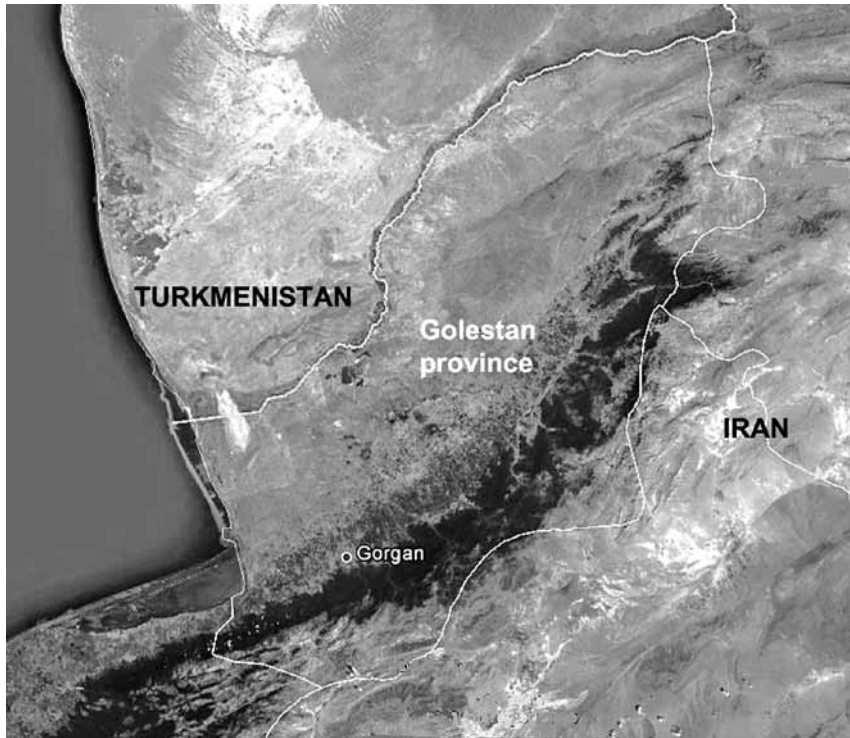


Fig. 1 – Geographical position of the Golestan province.

latest years (Modarres Awal 1997; Borumand 1998; Sakenin et al. 2009; Ghahari et al. 2009, 2010, 2011; Ghahari & Legalov 2011), and almost all the published data on Iranian weevils were catalogued by Legalov et al. (2010). In order to achieve a more complete knowledge of the species diversity of Iranian Curculionoidea, we summarize in this paper all what is thus far known about the weevil fauna of Golestan province by reporting all published literature records and by adding original findings, a good few of them new records for Golestan or even for Iran.

MATERIALS AND METHODS

Materials were collected by sweeping, beating tray, canopy fogging, leaf litter sifting and processing the samples through Berlese funnels, Malaise and flight intercept traps, and of course hand collecting by locating suitable hosts and searching for weevils (e.g. under the barks).

The sampled areas in this research were Azadshahr, Gorgan, Gonbad, Bandar-Torkaman, Bandar-Gaz, Ali-Abad, Kord-Kooy, Minoo-Dasht, Ramyan, Kalaleh, Galikesh, Golestan National Park, Gomishan, Maraveh-Tappeh. In addition, data of preserved materials in various collections in Iran, or museums and personal collections of some researchers of other countries have been included in this study, which also reports all literature records of weevils from Golestan. When available, information concerning date of collection, locality, altitude in brackets, number of specimens in brackets, and plant(s) on which the species are known to occur are also given. The plant is not necessarily meant as the host of the species, so we used term “ecology” instead of “host plant” as employed in Legalov et al. (2010). In this paper we follow the classification and the nomenclature of weevils as suggested by Zherichin & Egorov (1991), Alonso-Zarazaga & Lyal (1999, 2002, 2006, 2009), Colonnelli (2003, 2004), Velázquez de Castro et al. (2007), and Löbl & Smetana (2011). Both genera and species of the recorded insects have been listed in alphabetical order, whereas the order of families follows that by Alonso-Zarazaga & Lyal (1999).

RESULTS

Basing on literature and original records, 195 weevil species belonging to 6 families and 91 genera occurring in Golestan are dealt with in this paper. Are listed 2 Rhynchitidae, 7 Apionidae, 1 Brachyceridae, 3 Dryophthoridae, 2 Eirrhinidae, 160 Curculionidae, and 20 Scolytidae, including new data about 61 curculionids from 18 genera collected during this research. The list is given below.

RHYNCHITIDAE Gistel, 1848

Rhynchites (Epirhynchites) zaitzevi Kieseritzky, 1926

MATERIAL. Gorgan, (1), June 2007.

DISTRIBUTION. Iran (Legalov et al. 2010). New to Golestan.

ECOLOGY. On *Amygdalus* (Ter-Minassian 1965).

Tatianaerhynchites aequatus (Linnaeus, 1767)

PUBLISHED RECORDS. Gorgan, (Legalov 2002).

DISTRIBUTION. Western Palaearctic, central Asia (Alonso-Zarazaga 2011).

ECOLOGY. On several bushes and small trees of the Rosaceae, sometimes injurious to cultivated fruit trees *Pyrus* and *Malus* (Rheinheimer & Hassler 2010).

APIONIDAE Schoenherr, 1823

Alocentron (Alocentron) curvirostre (Gyllenhal, 1833)

PUBLISHED RECORDS. Gonbad (Borumand 1998 as *Apion (Alcentron)* [sic!] *curvirostre*); Golestan (Legalov et al. 2010 as *Alocertron (Alocertron)* [sic!] *curvirostre*).

DISTRIBUTION. Western Palaearctic (Alonso-Zarazaga 2011a).

ECOLOGY. On *Alcea* (Rheinheimer & Hassler 2010).

Apion frumentarium (Linnaeus, 1758)

PUBLISHED RECORDS. Golestan (Legalov et al. 2010).

DISTRIBUTION. Western Palaearctic (Alonso-Zarazaga 2011a).

ECOLOGY. On *Rumex* (Rheinheimer & Hassler 2010).

Aspidapion (Aspidapion) radiolus radiolus (Marsham, 1802)

MATERIAL. Minoo-Dasht, (1), September 2006.

DISTRIBUTION. Western Palaearctic (Alonso-Zarazaga 2011a). New to Golestan.

ECOLOGY. On Malvaceae (Rheinheimer & Hassler 2010).

Aspidapion (Koestlinia) motschulskyi (Hochhuth, 1847)

PUBLISHED RECORDS. Golestan (Legalov et al. 2010 as *Aspidapion (Koestlinia) aeneum* (Fabricius, 1775)).

DISTRIBUTION. Eastern Europe central Asia (Giusto 2011).

ECOLOGY. On *Malva silvestris* L., *Lavatera cretica* L., *Althea* sp. (Giusto 2011).

Ceratapion (Acanephodus) onopordi onopordi (W. Kirby, 1808)

PUBLISHED RECORDS. Gorgan (Wanat 1995).

DISTRIBUTION. Western Palaearctic, central Asia, Siberia (Wanat 1995).

ECOLOGY. On several thistles (Wanat 1995).

Metapion merale (Faust, 1885)

PUBLISHED RECORDS. 50-70 Km E of Minoo-Dasht (Wanat 1992).

DISTRIBUTION. Central Asia (Wanat 1992).

ECOLOGY. On *Haplophyllum* (Wanat 1992).

Pseudaplemonus aeneicollis (Gerstaecker, 1854)

MATERIAL. Lake Ala Gol, m 29, 11.VI.2007, E. Heiss leg. (Giusto pers. comm.).

PUBLISHED RECORDS. Gole Lovae (ca. 80 km SSW Gorgan), 750-1400 m (Wanat 1990; Legalov et al. 2010 as *Pseudaplemonus* [sic!] *aeneicollis*).

DISTRIBUTION. Caucasus, Asia minor, Saudi Arabia, central Asia (Legalov et al. 2010).

ECOLOGY. On *Psylliostachys* (Legalov et al. 2010).

BRACHYCERIDAE Billberg, 1820

Brachycerus persicus Zumpt, 1937

PUBLISHED RECORDS. Gorgan (Zumpt 1937).

DISTRIBUTION. Iran (Colonnelli 2011a).

ECOLOGY. Unknown.

DRYOPHTHORIDAE Schoenherr, 1825

Sitophilus oryzae (Linnaeus, 1763)

PUBLISHED RECORDS. Golestan (Legalov et al. 2010).

DISTRIBUTION. Cosmopolitan (Lyal 2011).

ECOLOGY. On stored grains (Rheinheimer & Hassler 2011).

Sitophilus zeamais Motschulsky, 1855

MATERIAL. Gorgan, (1), June 2007. Minoo-Dasht, (2), September 2006. Golestan National Park S of Qalan, (3), August 2007.

PUBLISHED RECORDS. Golestan (Legalov et al. 2010).

DISTRIBUTION. Cosmopolitan (Lyal, 2011).

ECOLOGY. On stored grains, particularly maize (Rheinheimer & Hassler 2011).

Sphenophorus piceus (Pallas, 1771)

MATERIAL. Gorgan, (1), June 2007. Minoo-Dasht, (1), September 2006.

DISTRIBUTION. Western Palaearctic (Lyal 2011). New to Golestan.

ECOLOGY. Larvae on *Arundo donax* L. (Hoffmann 1955), but surely also on other monocots, like all other species of the genus (Vaurie 1951).

COMMENT. The name of this species, described by Pallas (1771) as *Curculio piceus*, is a junior primary homonym of *Curculio piceus* Wulfen in Scopoli, 1763, previously described (Scopoli 1763). According to Art. 23.9.5 of the Code (ICZN 1999), since both names apply to taxa not considered congeneric after 1899, we maintain the current usage, while one of us (EC) submits an application to the Commission for maintaining the present name.

ERIRHINIDAE Schoenherr, 1825

Arthrostenus fullo Boheman, 1836

PUBLISHED RECORDS. Gonbad (Borumand 1998); Golestan (Legalov et al. 2010).

DISTRIBUTION. Eastern Europe, Caucasus, Western Asia (Caldara 2011).

ECOLOGY. Unknown.

Tanysphyrus lemnae (Paykull, 1792)

MATERIAL. Gorgan, (1), June 2007.

DISTRIBUTION. Western Palaearctic, introduced into North and South America (Caldara 2011). New to Golestan.

ECOLOGY. On *Lemna*, *Spirodela* and *Calla* (Rheinheimer & Hassler 2011).

CURCULIONIDAE Latreille, 1802

Ammocleonus aschabadensis (Faust, 1884)

MATERIAL. Minoo-Dasht (171 m), (1), September 2006; (1), September 2009. Gorgan (148 m), (1), June 2007.

PUBLISHED RECORDS. Golestan (Legalov et al. 2010).

DISTRIBUTION. Iran, Turkmenistan, India (Legalov et al. 2010).

ECOLOGY. On *Alhagi* and *Salsola* (Legalov et al. 2010).

Ammocleonus hieroglyphicus (Olivier, 1807)

MATERIAL. Gorgan (148 m), (3), May 2010.

DISTRIBUTION. Northern Africa, Middle East, Emirates, Ethiopia, India (Magnano et al. 2009; Legalov et al. 2010). New to Golestan.

ECOLOGY. On Chenopodiaceae (Magnano et al. 2009).

Archarius crux (Fabricius, 1776)

MATERIAL. Ali-Abad (138 m), (2), May 2010. Golestan National Park (1921 m), (1), September 2010.

DISTRIBUTION. Western and central Palaearctic (Legalov et al. 2010). New to Golestan.

ECOLOGY. On *Salix* (Rheinheimer & Hassel 2010). The finding on *Quercus* reported by Borumand (1998) is surely occasional.

Archarius salicivorus (Paykull, 1792)

MATERIAL. Kord-Kooy (21 m), (2), June 2010. Maraveh Tappeh (218 m), (1), July 2010.

DISTRIBUTION. Palaearctic (Legalov et al. 2010). New to Golestan.

ECOLOGY. On *Salix* (Legalov et al. 2010).

Asproparthenis bohemani (Faust, 1891)

MATERIAL. Azadshahr (190 m), (1), April 2010.

DISTRIBUTION. Iran, Southern Kazakhstan, Uzbekistan (Legalov et al. 2010). New to Golestan.

ECOLOGY. Unknown.

Asproparthenis obsoletefasciata (Menetries, 1842)

PUBLISHED RECORDS. Golestan (Legalov et al. 2010 as *Asproparthenis obsoletefasciatus* [sic!]).

DISTRIBUTION. Southern Kazakhstan, Middle Asia, Iran (Legalov et al. 2010).

ECOLOGY. On *Beta* (Legalov et al. 2010).

Asproparthenis punctiventris (Germar, 1824)

MATERIAL. Minoo-Dasht (171 m), (1), September 2006.

DISTRIBUTION. Western and Central Palaeartic (Legalov et al. 2010). New to Golestan.

ECOLOGY. On Chenopodiaceae (Legalov et al. 2010).

Asproparthenis vexata (Gyllenhal, 1834)

PUBLISHED RECORDS. Bandar-Torkeman (Borumand, 1998 as *Bothynoderes vexatus*); Golestan (Legalov et al. 2010).

DISTRIBUTION. Soutwestern European Russia, western and central Asia (Legalov et al. 2010).

ECOLOGY. On Chenopodiaceae (Legalov et al. 2010).

Aulacobaris coerulescens (Scopoli, 1763)

PUBLISHED RECORDS. Golestan (Legalov et al. 2010).

DISTRIBUTION. Western and central Palaeartic (Legalov et al. 2010).

ECOLOGY. On Brassicaceae (Legalov et al. 2010).

Baris kirschi (Desbrochers, 1892)

PUBLISHED RECORDS. Golestan (Legalov et al. 2010).

DISTRIBUTION. Southeastern Europe, central Asia (Prena 2011).

ECOLOGY. On *Halocnemum* (Legalov et al. 2010).

Borborocoetes squalidus Boheman, 1842

PUBLISHED RECORDS. Gorgan (Schoenherr, 1842).

DISTRIBUTION. Iran (Schoenherr 1842).

ECOLOGY. Unknown.

Brachyleonus fronto (Fischer de Waldheim, 1835)

PUBLISHED RECORDS. Kord-Kooy (Legalov et al. 2010).

DISTRIBUTION. Central Asia (Legalov et al. 2010).

ECOLOGY. On Chenopodiaceae (Legalov et al. 2010).

Brachypera (Brachypera) lunata (Wollaston, 1854)

MATERIAL. Golestan Natural Park S of Qalan, (1), August 2007. Minoo-Dasht (171 m), (1), September 2006.

DISTRIBUTION. Western Palaearctic (Dieckmann 1981). New to Iran.

ECOLOGY. Probably on Geraniaceae (Dieckmann 1981).

Caulomorpus wittmeri Osella, 1976

PUBLISHED RECORDS. Gole Lovae (ca. 80 km SSW Gorgan), 750-1400 m (Osella 1976).

DISTRIBUTION. Iran (Osella 1976, 1977).

ECOLOGY. Unknown.

Ceutorhynchus anatolicus A. Schultze, 1900

MATERIAL. Golestan National Park (1869 m), (2), September 2010.

DISTRIBUTION. Turkey, Lebanon, Syria (Colonnelli 2004). New to Iran.

ECOLOGY. Unknown.

Ceutorhynchus difficilis A. Schultze, 1898

MATERIAL. Ali-Abad (122 m), (1), May 2010.

DISTRIBUTION. Eastern Europe, Middle East, central Asia (Colonnelli 2004). New to Golestan.

ECOLOGY. On *Lepidium perfoliatum* L. (Colonnelli 2004).

Ceutorhynchus erysimi (Fabricius, 1787)

MATERIAL. Bandar-Torkaman (14 m), (1), August 2010.

PUBLISHED RECORDS. Golestan (Legalov et al. 2010).

DISTRIBUTION. Holarctic (Colonnelli 2004).

ECOLOGY. On Brassicaceae, primarily on *Capsella* (Colonnelli 2004).

Ceutorhynchus fallax Boheman, 1845

MATERIAL. Galikesh (126 m), (2), October 2010.

PUBLISHED RECORDS. Kord-Kooy (Ghahari et al. 2011).

DISTRIBUTION. Mediterranean, Caucasus, Iran (Colonnelli 2004; Ghahari et al. 2011).

ECOLOGY. On Brassicaceae (Colonnelli 2004).

Ceutorhynchus nanus Gyllenhal, 1837

MATERIAL. Bandar-Gaz (7 m), (1), April 2010.

DISTRIBUTION. Western Palaearctic (Colonnelli 2004). New to Golestan.

ECOLOGY. On *Alyssum* (Colonnelli 2004).

Ceutorhynchus pallidactylus (Marsham, 1802)

MATERIAL. Golestan National Park (1847 m), (2), September 2010.

DISTRIBUTION. Subcosmopolitan (Colonnelli 2004). New to Golestan.

ECOLOGY. On several Brassicaceae, some Resedaceae, occasionally on *Cannabis sativa* L. (Colonnelli 2004).

Ceutorhynchus rapae Gyllenhal, 1837

MATERIAL. Ramyan (230 m), (3), July 2010.

DISTRIBUTION. Holarctic (Colonnelli 2004). New to Golestan.

ECOLOGY. On Brassicaceae, occasionally on *Cannabis sativa* L. (Colonnelli 2004).

Ceutorhynchus sophiae Gyllenhal, 1837

PUBLISHED RECORDS. Golestan (Legalov et al. 2010).

DISTRIBUTION. Eurasia (Colonnelli, 2004).

ECOLOGY. On *Descurainia sophia* (L.) Webb, *Sisymbrium loeselii* L. (Colonnelli 2004).

Ceutorhynchus subtilirostris A. Schultze, 1902

PUBLISHED RECORDS. Golestan National Park (Legalov et al. 2010).

DISTRIBUTION. Central Asia (Colonnelli, 2004).

ECOLOGY. Unknown. Occasionally found on *Ajuga gorganica* Schönb.-Tem. in Golestan (Legalov et al. 2010).

Ceutorhynchus sulcatus C. Brisout, 1869

MATERIAL. Gonbad (27 m), (3), July 2010.

PUBLISHED RECORDS. Kord-Kooy (Ghahari et al. 2011).

DISTRIBUTION. Eastern Europe, Middle East, Iran (Colonnelli 2004).

ECOLOGY. On Brassicaceae (Colonnelli 2004).

Ceutorhynchus turbatus A. Schultze, 1903

MATERIAL. Golestan National Park N of Sulgard (1944 m), (2), October 2010.

PUBLISHED RECORDS. Gonbad (Ghahari et al. 2011).

DISTRIBUTION. Eurasia (Colonnelli 2004).

ECOLOGY. On *Cardaria* (Colonnelli 2004).

Chloebius immeritus (Schoenherr, 1826)

MATERIAL. Azadshahr (184 m), (2), April 2010.

DISTRIBUTION. Southwestern Europe, Caucasus, central Asia (Legalov et al. 2010). New to Golestan.

ECOLOGY. Probably polyphagous, having been indicated as collected on *Tamarix* and *Medicago* (Legalov et al. 2010).

Chlorophanus vittatus Schoenherr, 1832

PUBLISHED RECORDS. Gorgan (Ismailova, 1993).

DISTRIBUTION. Caucasus, Transcaucasia, Azerbaijan, northern Iran (Ismailova 1993).

ECOLOGY. Collected on *Populus* (Bolov & Bolov 1997).

Chromosomus fischeri (Fåhræus, 1842)

PUBLISHED RECORDS. Dashte-e Danial (Borumand, 1998); Golestan (Legalov et al. 2010).

DISTRIBUTION. Central Asia (Legalov et al. 2010).

ECOLOGY. On Chenopodiaceae (Legalov et al. 2010).

Cionus hortulanus (Fourcroy, 1785)

PUBLISHED RECORDS. Gorgan (Borumand, 1998); Golestan (Legalov et al. 2010).

DISTRIBUTION. Western and central Palaeartic, India (Legalov et al. 2010).

ECOLOGY. On *Verbascum* and *Scrophularia* (Legalov et al. 2010).

Cionus thapsus (Fabricius, 1792)

MATERIAL. 45 Km E of Minoo-Dasht (960 m), (1), 11 June 2010.

PUBLISHED RECORDS. Gorgan (Wingelmüller 1914).

DISTRIBUTION. Western and central Palaeartic (Legalov et al. 2010).

ECOLOGY. On *Verbascum* (Legalov et al. 2010).

Cleonis pigra (Scopoli, 1763) ssp. **iranensis** Voss, 1971

MATERIAL. Bandar-Gaz (15 m), (1), April 2010, on *Carduus nutans* L.

PUBLISHED RECORDS: Golestan (Legalov et al. 2010).

DISTRIBUTION. Western and central Palaeartic (Legalov et al. 2010). The ssp. *iranensis* is thus far known only from Iran.

ECOLOGY. On thistles (Legalov et al. 2010). Specimens of the ssp.

iranensis have been collected while feeding on *Cirsium arvense* L. 50 Km N of Mashhad (pers. rec.).

Coniatus (Coniatus) tamarisci (Fabricius, 1787)

PUBLISHED RECORDS. Gorgan (Ghahari et al. 2010); Golestan (Legalov et al. 2010).

DISTRIBUTION. Canary Islands, Mediterranean, Middle East, Iran (Legalov et al. 2010).

ECOLOGY. On *Tamarix* (Legalov et al. 2010).

Conioleonus cicatricosus (Hoppe, 1795)

MATERIAL. Minoo-Dasht (171 m), (1), September 2006.

PUBLISHED RECORDS. Gonbad (Borumand 1998); Golestan (Legalov et al. 2010 as *Plagiographus cicatricosus*).

DISTRIBUTION. Mediterranean, Caucasus, Iran (Legalov et al. 2010).

ECOLOGY. Unknown.

Conioleonus nigrosuturatus (Goeze, 1777)

MATERIAL. Minoo-Dasht (171 m), (1), September 2006; Gorgan (148 m), (3), July 2007; Golestan National Park N of Armodlu, (2), August 2007.

PUBLISHED RECORDS. Golestan (Legalov et al. 2010 as *Plagiographus nigrosuturatus*).

DISTRIBUTION. Western and central Palaearctic (Legalov et al. 2010).

ECOLOGY. Unknown. The collecting under *Thymus* reported by Terminassian (1988) does not mean that this is the host plant of this species.

Conorhynchus (Conorhynchus) candidulus Faust, 1890

MATERIAL. Golestan National Park S of Qalan, (1), August 2007.

DISTRIBUTION. Central Asia (Legalov et al. 2010). New to Golestan.

ECOLOGY. Unknown.

Conorhynchus (Conorhynchus) conirostris (Gebler, 1830)

PUBLISHED RECORDS. Gonbad, Maraveh-Tappeh, Hutton, Gorgan, Dasht-e Gorgan, Kalaleh (Borumand, 1998); Golestan (Legalov et al. 2010).

DISTRIBUTION. Southeastern Europe, central Asia (Legalov et al. 2010).

ECOLOGY. Unknown.

Conorhynchus (Conorhynchus) faldermanni (Fåhræus, 1842)

MATERIAL. Minoo-Dasht, (1), September 2006.

DISTRIBUTION. Central Asia (Legalov et al. 2010). New to Golestan.

ECOLOGY. On Chenopodiaceae (Legalov et al. 2010).

Conorhynchus (Conorhynchus) lacerta Chevrolat, 1873

PUBLISHED RECORDS. Golestan (Legalov et al. 2010).

DISTRIBUTION. Transcaucasia, Iran, Middle Asia (Legalov et al. 2010).

ECOLOGY. On Chenopodiaceae (Legalov et al. 2010).

Conorhynchus (Temnorhinus) hololeucus (Pallas, 1781)

MATERIAL. Gorgan, (1), July 2007.

DISTRIBUTION. Southeastern Russia, central Asia (Legalov et al. 2010 as *Pycnodactylus hololeucus*). New to Golestan.

ECOLOGY. On Chenopodiaceae (Legalov et al. 2010).

Cosmobaris scolopacea (Germar, 1824)

PUBLISHED RECORDS. Bandar-Torkeman (Borumand 1998); Golestan (Legalov et al. 2010 as *Melaleucus scolopaceus*).

DISTRIBUTION. Eurasia, introduced in North America (Prena 2011).

ECOLOGY. On Chenopodiaceae (Legalov et al. 2010).

Curculio elephas (Gyllenhal, 1836)

PUBLISHED RECORDS. Golestan (Sakenin et al. 2009).

DISTRIBUTION. Western Palaearctic (Legalov et al. 2010).

ECOLOGY. On *Quercus* (Legalov et al. 2010).

Curculio glandium Marsham, 1802

MATERIAL. Gomishan (- 6 m), (1), April 2010. Gonbad (8 m), (1), July 2010. 5 Km S of Azad Shahr (m 300), (1), 11 June 2010.

DISTRIBUTION: Western Palaearctic (Legalov et al. 2010). New to Golestan.

ECOLOGY. On *Quercus* (Legalov et al. 2010).

Curculio pellitus Boheman, 1843

MATERIAL. Bandar-Torkaman (22 m), (2), August 2010.

PUBLISHED RECORDS. Gonbad (Ghahari et al. 2011).

DISTRIBUTION. Europe, Caucasus, Asia minor, Iran (Legalov et al. 2010; Ghahari et al. 2011).

ECOLOGY. On *Quercus* and *Corylus* (Legalov et al. 2010).

Datonychus urticae (Boheman, 1845)

MATERIAL. Gorgan (59 m), (1), June 2010.

DISTRIBUTION. Europe, Mediterranean (Colonnelli 2004). New to Iran.

ECOLOGY. On *Stachys* (Colonnelli 2004).

Eusomus (Eusomus) ovulum Germar, 1824

PUBLISHED RECORDS. Gonbad: Gollidag (Borumand 1998); Golestan (Legalov et al. 2010).

DISTRIBUTION. Western and central Palaearctic (Legalov et al. 2010).

ECOLOGY. Polyphagous (Rheinheimer & Hassler 2010).

Eusomus (Eusomus) pilosus Schoenherr, 1832

PUBLISHED RECORDS. Golestan National Park (Legalov et al. 2010).

DISTRIBUTION. South-eastern Europe, Caucasus, Transcaucasia, Asia minor (Legalov et al. 2010).

ECOLOGY. Unknown.

Eustenopus villosus (Boheman, 1836)

PUBLISHED RECORDS. Kord-Kooy (Ghahari et al. 2010); Golestan (Legalov et al. 2010).

DISTRIBUTION. Greece, Caucasus, Asia minor, Iran (Ghahari et al. 2010).

ECOLOGY. On *Centaurea solstitialis* L. (Fornasari et al. 1991).

Georginus bellus Semenov, 1913

PUBLISHED RECORDS. Bandar-Torkam (Legalov et al. 2010).

DISTRIBUTION. Iran, Turkmenistan (Legalov et al. 2010).

ECOLOGY. Unknown.

Graptus armeniacus (Hochhuth, 1847)

PUBLISHED RECORDS. Golestan (Legalov et al. 2010).

DISTRIBUTION. Armenia, Iran (Legalov et al. 2010).

ECOLOGY. Unknown.

Hadroplontus trimaculatus (Fabricius, 1775)

PUBLISHED RECORDS. Gonbad, Maraveh-Tappeh (Borumand 1998 as *Ceuthorrhynchus (Hadroplontus) trimaculatus*); Golestan (Legalov et al. 2010).

DISTRIBUTION. Western Palaearctic (Legalov et al. 2010).

ECOLOGY. On thistles (Colonnelli 2004).

Hypera (Dapalinus) contaminata (Herbst, 1795)

MATERIAL. Minoo-Dasht (151 m), (3), September 2009.

DISTRIBUTION. Eastern Europe (Kippenberg 1983). New to Iran.

ECOLOGY. On *Lathyrus* (Rheinheimer & Hassler 2010).

Hypera (Dapalinus) maculipennis (Fairmaire, 1859)

PUBLISHED RECORDS. Gorgan (Ghahari et al. 2010); Golestan (Legalov et al. 2010).

DISTRIBUTION. Mediterranean, Asia minor, Iran (Legalov et al. 2010).

ECOLOGY. Unknown. Occasionally collected on *Urtica dioica* in Iran (Ghahari et al. 2010).

Hypera (Hypera) jucunda (Capiomont, 1868)

MATERIAL. Ali-Abad (130 m), (2), May 2010.

PUBLISHED RECORDS. Kord-Kooy (Ghahari et al. 2011).

DISTRIBUTION. Western Palaearctic (Legalov et al. 2010).

ECOLOGY. Unknown.

Hypera (Hypera) postica (Gyllenhal, 1813)

MATERIAL. Minoo-Dasht (171 m), (1), September 2006.

PUBLISHED RECORDS. Gonbad, Azadshahr (Borumand 1998); Golestan (Modarres Awal & Hossein Pour 2010).

DISTRIBUTION. Western and central Palaearctic, imported in North America (Rheinheimer & Hassler 2010).

ECOLOGY. On Fabaceae (Rheinheimer & Hassler 2010).

Hypera (Hypera) venusta (Fabricius, 1781)

PUBLISHED RECORDS. Bandar-Torkman (Ghahari et al. 2011, as *Hypera trilineata* (Marsham, 1802)).

DISTRIBUTION. Europe, Mediterranean (Hoffmann 1955), Iran (Ghahari et al. 2011), perhaps imported.

ECOLOGY. On Fabaceae (Rheinheimer & Hassler 2010).

Hypera (Hypera) viciae (Gyllenhal, 1813)

MATERIAL. Golestan National Park (1921 m), (2), September 2010. Galikesh (126 m), (1), October 2010.

DISTRIBUTION. Western and central Palaearctic (Rheinheimer & Hassler 2010). New to Iran.

ECOLOGY. On *Vicia* and *Lathyrus* (Rheinheimer & Hassler 2010).

Hypera (Tigrinellus) pastinacae (Rossi, 1790)

MATERIAL. Gorgan (73 m), (3), June 2010.

DISTRIBUTION. Europe, Asia minor, Iran (Legalov et al. 2010; Rheinheimer & Hassler 2010). New to Golestan.

ECOLOGY. On *Pastinaca* and *Daucus* (Rheinheimer & Hassler 2010).

Larinus (Larinomesius) bardus Gyllenhal, 1836

MATERIAL. Gomishan (- 6 m), (1), April 2010. Gorgan (64 m), (3), June 2010; Bandar-Gaz (6 m), (2), April 2010.

PUBLISHED RECORDS. Golestan (Legalov et al. 2010).

DISTRIBUTION. Southeastern Europe, Middle East, central Asia (Legalov et al. 2010).

ECOLOGY. On *Carduus* and *Cirsium* (Legalov et al. 2010).

Larinus (Larinomesius) canescens Gyllenhal, [1835]

MATERIAL. Gorgan (148 m), (1), July 2007.

DISTRIBUTION. Eastern Europe, Caucasus (Ter-Minassian 1967). New to Iran.

ECOLOGY. On *Centaurea* (Ter-Minassian 1967).

Larinus (Larinomesius) carthami (Olivier, 1807)

MATERIAL. Maraveh-Tappeh (218 m), (1), July 2010. Galikesh (126 m), (2), October 2010.

DISTRIBUTION. Eastern Europe, Caucasus, Turkey, Iran (Ter-Minassian 1967 as *Larinus crassus* Capiomont, 1874). New to Golestan.

ECOLOGY. On thistles (pers. rec.).

Larinus (Larinomesius) liliputanus Faust, 1890

PUBLISHED RECORDS. Gorgan (Borumand 1998); Golestan (Legalov et al. 2010).

DISTRIBUTION. Central Asia, Iran, China (Legalov et al. 2010).

ECOLOGY. On Asteraceae (Ter-Minassian 1967).

Larinus (Larinomesius) syriacus Gyllenhal, [1835]

PUBLISHED RECORDS. Golestan (Legalov et al., 2010 as *Larinus (Larinomesius) syraicus* [sic!]).

DISTRIBUTION. Southeastern Europe, Middle East, Caucasus, Central Asia (Legalov et al. 2010).

ECOLOGY. On Asteraceae (Legalov et al. 2010).

Larinus (Larinomesius) vitellinus Gyllenhal, [1835]

MATERIAL. Minoo-Dasht (151 m), (1), September 2006. Gorgan (148 m), (2), July 2007.

DISTRIBUTION. Armenia, central Asia, Iran (Legalov et al. 2010). New to Golestan.

ECOLOGY. Unknown.

Larinus (Larinus) aeruginosus Hochhuth, 1851

MATERIAL. Kord-Kooy (34 m), (1), June 2010.

PUBLISHED RECORDS. Gonbad (Borumand 1998); Golestan (Legalov et al. 2010).

DISTRIBUTION. Southeastern Europe, Asia minor, Transcaucasia, Iran (Legalov et al. 2010).

ECOLOGY. Probably on Asteraceae, occasionally found on Chenopodiaceae (Borumand 1998).

Larinus (Larinus) arabicus Capiomont, 1874

PUBLISHED RECORDS. Gonbad (Borumand 1998); Golestan (Legalov et al. 2010).

DISTRIBUTION. Asia minor, Arabia, Iran (Legalov et al. 2010).

ECOLOGY. Unknown.

Larinus (Larinus) latus (Herbst, 1784)

MATERIAL. Golestan National Park W of Yaghtiklan, (2), August 2007.

PUBLISHED RECORDS. Golestan (Legalov et al. 2010).

DISTRIBUTION. Southern Europe, Caucasus, Transcaucasia, Asia minor, Iran (Legalov et al. 2010).

ECOLOGY. Primarily on *Onopordum*, but found also on *Carduus* and *Cynara* (Legalov et al. 2010).

Larinus (Larinus) onopordi (Fabricius, 1787)

MATERIAL. Golestan National Park S of Qalan, (1), August 2007.

DISTRIBUTION. Western Palaearctic (Legalov et al. 2010). New to Golestan.

ECOLOGY. On *Echinops* and *Onopordum* (Legalov et al. 2010).

Larinus (Larinus) rudicollis Petri, 1906

PUBLISHED RECORDS. Kord-Kooy (Ghahari et al., 2010); Golestan (Legalov et al. 2010).

DISTRIBUTION. Greece, Caucasus, Middle East, Iran (Ghahari et al. 2010).

ECOLOGY. On thistles (pers. rec.).

Larinus (Phyllonomeus) adpersus Hochhuth, 1847

MATERIAL. Kalaleh (147 m), (1), August 2009. Golestan National Park (1830 m), (1), September 2010.

DISTRIBUTION. Greece, Moldova, Transcaucasus (Ter-Minassian 1967). New to Iran.

ECOLOGY. On thistles (pers. rec.).

Larinus (Phyllonomeus) grisescens Gyllenhal, [1835]

MATERIAL. Gonbad (16 m), (1), July 2010.

PUBLISHED RECORDS. Ali-Abad (Ghahari et al. 2011).

DISTRIBUTION. Southern Europe, Asia minor, Iran (Legalov et al. 2010).

ECOLOGY. On *Centaurea* (pers. rec.).

Larinus (Phyllonomeus) iaceae (Fabricius, 1775)

MATERIAL, Minoo-Dasht (192 m), (2), September 2009.

DISTRIBUTION. Western and central Palaearctic (Legalov et al. 2010).
New to Golestan.

ECOLOGY. On thistles (Legalov et al. 2010).

Larinus (Phyllonomeus) turbinatus Gyllenhal, 1836

MATERIAL. Golestan National Park S of Qalan, (1), August 2007.

PUBLISHED RECORDS. Golestan (Legalov et al. 2010).

DISTRIBUTION. Western and central Palaearctic (Legalov et al. 2010).

ECOLOGY. On thistles (Legalov et al. 2010).

Leucochromus imperialis (Zoubkof, 1837)

PUBLISHED RECORDS. Golestan (Legalov et al. 2010).

DISTRIBUTION. Turkmenistan, Iran (Legalov et al. 2010).

ECOLOGY. On *Haloxylon* (Legalov et al. 2010).

Leucomigus candidatus (Pallas, 1771)

MATERIAL. Kord-Kooy (40 m), (2), June 2010.

DISTRIBUTION. Southeastern Europe, Middle East, Caucasus, central Asia (Legalov et al. 2010). New to Golestan.

ECOLOGY. On *Artemisia* (Legalov et al. 2010).

***Liocleonus clathratus* (Olivier, 1807)**

PUBLISHED RECORDS. Golestan (Legalov et al. 2010).

DISTRIBUTION. Eastern Mediterranean, North Africa, Caucasus, central Asia, northwestern China, India (Legalov et al. 2010).

ECOLOGY. On *Tamarix* (Legalov et al. 2010).

***Lixus (Callistolix) furcatus* Olivier, 1807**

PUBLISHED RECORDS. Golestan (Sakenin et al. 2009).

DISTRIBUTION. Mediterranean, North Africa, Middle East, Caucasus, Iran (pers. rec.).

ECOLOGY. On Brassicaceae and Capparaceae (Dieckmann 1980; pers. rec.).

***Lixus (Compsolix) ascanii* (Linnaeus, 1767)**

MATERIAL. Gorgan (148 m), (2), July 2007. Ali-Abad (122 m), (3), May 2010. Gomishan (4 m), (2), April 2010.

DISTRIBUTION. Mediterranean, North Africa, Middle East, Caucasus (pers. rec.). New to Iran.

ECOLOGY. On Brassicaceae and Capparaceae (Dieckmann 1980; pers. rec.).

***Lixus (Compsolix) juncii* Boheman, 1836**

PUBLISHED RECORDS. Nokandeh (Ghahari et al., 2011 as *L. junci*).

DISTRIBUTION. Mediterranean basin, Turan, Iran (Hoffmann 1955; Ghahari et al. 2011).

ECOLOGY. On Amaranthaceae and Chenopodiaceae (Hoffmann 1955).

Lixus (Compsolixus) ochraceus Boheman, 1843

MATERIAL. Bandar-Gaz (31 m), (2), April 2010.

DISTRIBUTION. Western Palaearctic (Legalov et al. 2010). New to Golestan.

ECOLOGY. On Brassicaceae (Dieckmann 1980).

COMMENT. The larval parasitoid ichneumonid wasp, *Xylophrurus nigricornis* (Thomson, 1885) was reared from *L. ochraceus*.

Lixus (Dilixellus) bardanae (Fabricius, 1787)

MATERIAL. Ali-Abad (130 m), (2), May 2010. Kord-Kooy (40 m), (1), June 2010, on *Rumex* sp. Golestan National Park (1847 m), (2), September 2010.

DISTRIBUTION. Western Palaearctic (Ter-Minassian 1967). New to Golestan.

ECOLOGY. On *Rumex* and *Laserpitium* (Ter-Minassian 1967).

Lixus (Dilixellus) punctiventris Boheman, 1836

PUBLISHED RECORDS. Gorgan (Ghahari et al. 2011).

DISTRIBUTION. Western Palaearctic (Rheinheimer & Hassler 2010).

ECOLOGY. On Asteraceae (Rheinheimer & Hassler 2010).

Lixus (Dilixellus) pulverulentus (Scopoli, 1763)

MATERIAL. Golestan National Park (1907 m), (5), October 2010.

PUBLISHED RECORDS. Gorgan (Borumand 1998 as *Lixus (Dilixellus) algirus* Linnaeus, 1758); Golestan (Legalov et al. 2010).

DISTRIBUTION. Western and central Palaearctic (Legalov et al. 2010).

ECOLOGY. Polyphagous (Legalov et al. 2010).

Lixus (Epimeces) cardui Olivier, 1807

PUBLISHED RECORDS. Gonbad (Borumand 1998 as *Lixus (Lixocheilus) cardui*); Golestan (Legalov et al., 2010); Kord-Kooy (Ghahari et al. 2011).

DISTRIBUTION. Western and central Palaearctic (Legalov et al. 2010).

ECOLOGY. On thistles (Legalov et al. 2010).

Lixus (Epimeces) filiformis (Fabricius, 1781)

MATERIAL. Gorgan (103 m), (1), May 2010, on *Carduus nutans* L.

DISTRIBUTION. Western Palaearctic, Middle East, Iran (Legalov et al. 2010). New to Golestan.

ECOLOGY. On thistles (Legalov et al. 2010).

Lixus (Eulixus) incanescens Boheman, [1835]

MATERIAL. Golestan National Park S of Qalan, (1), August 2007. Minoo-Dasht (171 m), (1), September 2006.

DISTRIBUTION. Southeastern Europe, Caucasus, central Asia (Legalov et al. 2010). New to Golestan.

ECOLOGY. On Chenopodiaceae (Legalov et al. 2010).

Lixus (Hapalixus) rubicundus Zoubkof, 1833

MATERIAL. Bandar-Gaz (10 m), (1), April 2010. Golestan National Park (1921 m), (3), September 2010.

PUBLISHED RECORDS. Golestan (Legalov et al. 2010).

DISTRIBUTION. Southeastern Europe, Caucasus, Asia minor, central Asia (Legalov et al. 2010).

ECOLOGY. On Chenopodiaceae (Legalov et al. 2010).

Lixus (Ortholixus) elegantulus Boheman, 1843

PUBLISHED RECORDS. Agh Ghala, Azadshahr (Ghahari et al. 2011).

DISTRIBUTION. Western Palearctic (Dieckmann 1983).

ECOLOGY. On Asteraceae (Dieckmann 1983).

Malvaevora timida (Rossi, 1792)

MATERIAL. Minoo-Dasht, (1), June 2004.

PUBLISHED RECORDS. Gonbad, Kalaleh (Borumand 1998); Golestan (Legalov et al. 2010; Modarres Awal & Hossein Pour 2010).

DISTRIBUTION. Western and central Palearctic (Legalov et al. 2010).

ECOLOGY. On Malvaceae (Legalov et al. 2010).

Maximus obnoxius (Fåhraeus, 1842)

PUBLISHED RECORDS. Golestan (Legalov et al. 2010 as *Temnorhinus obnoxius*).

DISTRIBUTION. Turkmenistan, Uzbekistan, Iran (Legalov et al. 2010).

ECOLOGY. Unknown.

Maximus ostentatus (Faust, 1904)

PUBLISHED RECORDS. Gonbad, Gorgan, Maravehtappet, Chat, Hutton (Borumand 1998 as *Stephanophorus ostentatus*); Golestan (Legalov et al. 2010 as *Temnorhinus obstentatus*).

DISTRIBUTION. Kazakhstan, Turkmenistan, Iran (Legalov et al. 2010).

ECOLOGY. On *Salsola* (Legalov et al. 2010).

Maximus strabus (Gyllenhal, 1834)

PUBLISHED RECORDS. Gonbad, Gollidagh, Maravehtappet, Chat (Borumand 1998 as *Stephanophorus strabus*); Golestan (Legalov et al. 2010 as *Temnorhinus strabus*).

DISTRIBUTION. Southwestern Europe, Asia minor, western and central Asia, northwestern China (Legalov et al. 2010).

ECOLOGY. On Chenopodiaceae (Legalov et al. 2010).

Maximus subfuscus (Faust, 1883)

PUBLISHED RECORDS. Golestan (Legalov et al. 2010 as *Temnorhinus subfuscus*).

DISTRIBUTION. Central Asia (Legalov et al. 2010).

ECOLOGY. Unknown (Legalov et al. 2010).

Mecaspis darwini Faust, 1883

PUBLISHED RECORDS. Golestan (Legalov et al. 2010).

DISTRIBUTION. Central Asia (Legalov et al. 2010).

ECOLOGY. Unknown (Legalov et al. 2010).

Melanobaris carbonaria (Boheman, 1836)

MATERIAL. Golestan National Park, Sulgard (1847 m), (2), September 2010.

DISTRIBUTION. Europe, Caucasus, Asia minor, Kazakhstan, Iran (Legalov et al. 2010).

ECOLOGY. On Brassicaceae (Legalov et al. 2010).

Meneleonus signaticollis (Gyllenhal, 1834)

PUBLISHED RECORDS. Gonbad (Borumand 1998); Golestan (Legalov et al. 2010).

DISTRIBUTION. Central Asia, India (Legalov et al. 2010).

ECOLOGY. Unknown.

Mesagroicus petraeus Faust, 1885

PUBLISHED RECORDS. Gonbad (Legalov et al. 2010).

DISTRIBUTION. Central Asia (Legalov et al. 2010).

ECOLOGY. Unknown.

Microplontus rugulosus (Herbst, 1795)

MATERIAL. Ramyan (230 m), (1), July 2010. Maraveh Tappeh (201 m), (3), July 2010.

DISTRIBUTION. Western Palaearctic (Colonnelli 2004). New to Iran.

ECOLOGY. On Asteraceae (Colonnelli 2004).

Mogulones trisignatus (Gyllenhal, 1837)

Material. Azadshahr (206 m), (2), April 2010.

PUBLISHED RECORDS. Gorgan (Korotyaev 1992 as *Mogulones audisioi* Colonnelli, 1987).

DISTRIBUTION. Eastern Europe, central Asia (Colonnelli 2004).

ECOLOGY. On *Anchusa arvensis* (L.) Bieb., *Anchusa azurea* Miller (Colonnelli 2004).

Myllocerinus heydeni (Faust, 1885)

PUBLISHED RECORDS. Gorgan (Legalov et al. 2010).

DISTRIBUTION. Central Asia (Legalov et al. 2010).

ECOLOGY. Unknown.

Mylocerinus weisei (Faust, 1884)

PUBLISHED RECORDS. Gonbad, Maraveh-Tappeh (Borumand 1998); Golestan (Legalov et al. 2010).

DISTRIBUTION. Central Asia (Legalov et al. 2010).

ECOLOGY. Unknown.

Neoglocianus smyrnensis (A. Schultze, 1898)

Material. Kalaleh (172 m), (2), August 2009.

DISTRIBUTION. Middle East, Transcaucasus, Egypt (Colonnelli 2004). New to Iran.

ECOLOGY. On *Papaver rhoeas* L. (Colonnelli 2004).

Neoxyonyx strigatirostris (Hochhuth, 1847)

Material. Golestan National Park (1932 m), (1), October 2010.

DISTRIBUTION. Caucasus, Transcaucasus, Asia minor, Iran (Colonnelli 2004). New to Golestan.

ECOLOGY. On *Ephedra* (Colonnelli 2004).

Orchestes (Salius) fagi (Linnaeus, 1758)

PUBLISHED RECORDS. Gorgan (Perrin, 1970).

DISTRIBUTION. Western Palaearctic (Legalov et al. 2010).

ECOLOGY. Monophagous on *Fagus* (Perrin 1970).

Otiorhynchus (Choilisanus) grandicollis Boheman, 1843

MATERIAL. Bandar-Torkaman (23 m), (1), August 2010.

PUBLISHED RECORDS. Kord-Kooy (Ghahari et al. 2010); Golestan (Legalov et al. 2010).

DISTRIBUTION. Caucasus, Asia minor, Iran (Ghahari et al. 2010).

ECOLOGY. Probably polyphagous, found on *Amaranthus albus* at Kord-Kooy (Ghahari et al. 2010).

Otiorhynchus (Cryphiphorus) ligustici (Linnaeus, 1758)

PUBLISHED RECORDS. Gorgan (Ghahari et al. 2011).

DISTRIBUTION. Western Palaearctic, imported in North America (Rheinheimer & Hassler 2010).

ECOLOGY. Polyphagous (Rheinheimer & Hassler 2010).

Otiorhynchus (Melasemnus) tetrarchus Reitter, 1913

MATERIAL. Golestan National Park (1847 m), (1), September 2010.

DISTRIBUTION. Turkey (Lona 1936). New to Iran.

ECOLOGY. Unknown.

Otiorhynchus (Nehrodistus) scitus Gyllenhal, 1843

Material. Galikesh (126 m), (2), October 2010.

DISTRIBUTION. Southeastern Europe, Asia minor (Legalov et al. 2010). New to Iran.

ECOLOGY. Unknown.

Otiorhynchus (Nubidanus) punctirostris Stierlin, 1883

MATERIAL. Gorgan (400 m), (1), May 2001.

DISTRIBUTION. Asia minor, Transcasucasia, Iran, Kirgizia (Ghahari et al. 2011; pers. rec.). New to Golestan.

ECOLOGY. Unknown.

Otiorhynchus (Podonebistus) bleusei Faust, 1899

MATERIAL. Golestan National Park, Yaghtiklan (1944 m), (3), October 2010.

DISTRIBUTION. Rhodos, Turkey (Lona 1936), Iran (Ghahari & Legalov 2011). New to Golestan.

ECOLOGY. Unknown.

Otiorhynchus (Stupamacus) armicrus Fairmaire, 1866

MATERIAL. Azadshahr (206 m), (2), April 2010.

PUBLISHED RECORDS. Ali-Abad (Ghahari et al. 2011).

DISTRIBUTION. Turkey, Iran (Lona 1936; Ghahari et al. 2011).

ECOLOGY. Unknown.

Otiorhynchus (Tournieria) europaeus Stierlin, 1883

MATERIAL. Kalaleh (163 m), (1), August 2009.

PUBLISHED RECORDS. Gorgan (Ghahari et al. 2011).

DISTRIBUTION. Turkey, Iran (Lona, 1936; Ghahari et al. 2011).

ECOLOGY. Unknown.

Otiorhynchus (Tournieria) reitteri Stierlin, 1876

PUBLISHED RECORDS. Golestan (Legalov et al. 2010).

DISTRIBUTION. Caucasus, Iran (Legalov et al. 2010).

ECOLOGY. Unknown.

Parapholicodes sp.

MATERIAL. Gorgan, near Nahar-Khoran (450 m), (1), 28 May 2001.

DISTRIBUTION. Unknown. The genus is new to Golestan.

ECOLOGY. Unknown.

COMMENT. A new species close to *P. hirsutus* Pelletier, 1999, not described here waiting for recollection of additional specimens. The genus *Parapholicodes* Pelletier, 1999 was not indicated from Iran by Legalov et al. (2010) although one of its two species, *P. hirsutus*, was described from Khuzestan (Pelletier 1999).

Phacephorus argyrostomus Gyllenhal, 1840

PUBLISHED RECORDS. Gonbad (Borumand 1998); Golestan (Legalov et al. 2010; Modarres Awal & Hossein Pour 2010).

DISTRIBUTION. Southeastern Europe, Asia minor, central Asia, India, North China (Legalov et al. 2010).

ECOLOGY. Unknown, found on *Cucumis* in Iran (Legalov et al. 2010).

Phacephorus nubeculosus Fairmaire, 1866

PUBLISHED RECORDS. Gonbad (Borumand, 1998); Golestan (Legalov et al. 2010).

DISTRIBUTION. Asia minor, central Asia (Legalov et al. 2010).

ECOLOGY. On *Beta* (Legalov et al. 2010).

Phyllobius (Phyllobius) pallidipennis Hochhuth, 1847

PUBLISHED RECORDS. Gorgan (Stierlin 1883 as *P. caspius* Stierlin, 1883).

DISTRIBUTION. Caucasus, Iran (Pesarini 1981).

ECOLOGY. Unknown.

Phyllobius (Phyllobius) ruscicus Stierlin, 1884

PUBLISHED RECORDS. Gorgan ([Myers 2011]).

DISTRIBUTION. Azerbaijan, northern Iran (Pesarini 1981).

ECOLOGY. Unknown.

Platymycterus turkestanicus (Faust, 1885)

PUBLISHED RECORDS. Maraveh-Tappeh (Legalov et al. 2010).

DISTRIBUTION. Central Asia (Legalov et al. 2010).

ECOLOGY. Unknown.

Polydrusus (Eustolus) impressifrons Gyllenhal, 1834

PUBLISHED RECORDS. Gorgan (Perrin 1970).

DISTRIBUTION. Europe, Iran, introduced in North America (Legalov et al. 2010).

ECOLOGY. On broadleaved trees (Rheinheimer & Hassler 2010). Found on *Quercus* at Gorgan (Perrin 1970).

Polydrusus (Scythodrusus) pilifer Hochhuth, 1847

MATERIAL. 20 Km S of Gorgan, (1), May 29, 2001, G. Sama leg.; Minoo-Dasht 45-70 Km E of Minoo-Dasht, (2), April 24, 2008, G. Sama leg.

PUBLISHED RECORDS. Gonbad, Aghtogheh, Hutton (Borumand 1998); Golestan (Legalov et al. 2010).

DISTRIBUTION. Southeastern Europe, Caucasus, Asia minor, Transcaucasia, central Asia (Legalov et al. 2010).

ECOLOGY. On *Prunus* (Legalov et al. 2010).

Psallidium (Psallidium) maxillosum (Fabricius, 1792)

PUBLISHED RECORDS. Ramian (Borumand 1998 as *Psallidium maxillosum*); Golestan (Legalov et al. 2010).

DISTRIBUTION. Western Palaearctic (Legalov et al. 2010).

ECOLOGY. Polyphagous (Legalov et al. 2010).

Rhinoncus pericarpus (Linnaeus, 1758)

MATERIAL. Kord-Kooy (18 m), (4), June 2010. Golestan National Park (1921 m), (2), September 2010.

DISTRIBUTION. Holarctic (Colonnelli 2004). New to Golestan.

ECOLOGY. On Polygonaceae (Colonnelli 2004).

Rhinusa tetra (Fabricius, 1792)

MATERIAL. Golestan National Park S of Qalan, (1), August 2007.

DISTRIBUTION. Holarctic (Legalov et al. 2010). New to Golestan.

ECOLOGY. On *Verbascum* (Legalov et al. 2010).

Schelopius sp.

MATERIAL. Golestan National Park N of Yaghtiklan, (1), August 2007.

COMMENT. Probably a new species close to *Schelopius planifrons* (Fåhræus, 1840), not described here waiting for recollection of additional specimens.

Sibinia (Dichotychius) bipunctata Kirsch, 1870

PUBLISHED RECORDS. Gonbad (Voss 1971 as *Sibinia postsignata* Voss, 1971; Borumand 1998 as *S. postsignata*; Caldara, 2009); Golestan (Legalov et al. 2010).

DISTRIBUTION. West and central Palaearctic (Legalov et al. 2010).

ECOLOGY. Unknown, occasionally found in Iran on *Gossypium* (Legalov et al. 2010).

Sibinia (Sibinia) femoralis Germar, 1824

PUBLISHED RECORDS. Golestan (Legalov et al. 2010).

DISTRIBUTION. West and central Palaearctic (Legalov et al. 2010).

ECOLOGY. On *Silene* (Legalov et al. 2010).

Sibinia (Sibinia) primita (Herbst, 1795)

PUBLISHED RECORDS. Gonbad (Borumand 1998); Golestan (Legalov et al. 2010).

DISTRIBUTION. Mediterranean, Iran (Legalov et al. 2010).

ECOLOGY. On *Spergularia*, *Daphne* and *Limoniastrum*, occasionally found in Iran on *Gossypium* (Legalov et al. 2010).

Sitona callosus Gyllenhal, 1834

MATERIAL. Gorgan, (1), June 2007.

PUBLISHED RECORDS. Gonbad (Borumand 1998); Golestan (Legalov et al. 2010).

DISTRIBUTION. West and central Palaearctic (Legalov et al. 2010).

ECOLOGY. On *Onobrychis* and *Medicago* (Legalov et al. 2010).

Sitona concavirostris Hochhuth, 1851

MATERIAL. Gorgan, (1), June 2007.

DISTRIBUTION. Southeastern Europe, Caucasus, Asia minor, Iran (Legalov et al. 2010). New to Golestan.

ECOLOGY. On *Melilotus* and *Medicago* (Legalov et al. 2010).

Sitona humeralis Stephens, 1831

PUBLISHED RECORDS. Golestan (Legalov et al. 2010).

DISTRIBUTION. Holarctic (Legalov et al. 2010).

ECOLOGY. On Fabaceae (Legalov et al. 2010).

Sitona longulus Gyllenhal, 1834

PUBLISHED RECORDS. Golestan (Legalov et al. 2010).

DISTRIBUTION. Western and central Palaearctic (Legalov et al. 2010).

ECOLOGY. On *Medicago* (Legalov et al. 2010).

Sitona macularius (Marsham, 1802)

PUBLISHED RECORDS. Gonbad (Borumand 1998 as *Sitona crinitus* (Herbst, 1795)).

DISTRIBUTION. Holarctic (Legalov et al. 2010).

ECOLOGY. On Fabaceae (Legalov et al. 2010).

Stenocarus cardui (Herbst, 1784)

MATERIAL. Gorgan, (1), June 2007.

DISTRIBUTION. Western and central Palaearctic (Legalov et al. 2010).
New to Golestan.

ECOLOGY. On *Papaver* (Colonnelli 2004).

Sternuchopsis haemoptera (Boheman, 1836)

PUBLISHED RECORDS. Gorgan (Borumand 1998 as *Alcides haemopterus*); Golestan (Legalov et al. 2010; Modarres Awal & Hossein Pour 2010).

DISTRIBUTION. Africa, Iran (Legalov et al. 2010).

ECOLOGY. Unknown (Legalov et al. 2010).

Sternuchopsis karelini (Boheman, 1844)

PUBLISHED RECORDS. Gorgan (Schoenherr 1844 as *Alcides karelini*).

DISTRIBUTION. Southeastern Europe, Asia minor, Transcaucasia, Kazakhstan, Western Siberia, central Asia, Iran (Legalov et al. 2010).

ECOLOGY. On *Convolvulus* (Legalov et al. 2010).

Tainophthalmus (Tainophthalmus) crotchi Desbrochers, 1873

PUBLISHED RECORDS. Gorgan (Desbrochers 1873).

DISTRIBUTION. Iran, Azerbaijan (Zumpt 1939).

ECOLOGY. Unknown.

Tanymecus argentatus Gyllenhal, 1840

PUBLISHED RECORDS. Gonbad, Maraveh-Tappeh (Borumand 1998 as *Megamecus (Acercomecus) argentatus*); Golestan (Legalov et al. 2010 as *Esamus (Acercomecus) argentatus*).

DISTRIBUTION. Southeastern Europe, Caucasus, central Asia (Legalov et al. 2010).

ECOLOGY. Unknown.

Tanymecus confinis Gyllenhal, 1834

PUBLISHED RECORDS. Gonbad, Maraveh-Tappeh (Borumand 1998 as *Megamecus (Hypesamus) confinis*); Golestan (Legalov et al. 2010 as *Esamus (Hypesamus) confines* [sic!]).

DISTRIBUTION. Arabia, Iran (Legalov et al. 2010).

ECOLOGY. Unknown.

Terminasiania granosa (Zoubkov, 1833)

PUBLISHED RECORDS. Minoo-Dasht, Chat (Borumand 1998 as *Isomerus granosus*); Golestan (Legalov et al. 2010 as *Terminassiania granulosa* [sic!]).

DISTRIBUTION. Crimea, Kazakhstan, Turkmenistan, Tadjikistan, Iran (Legalov et al. 2010).

ECOLOGY. On *Salsola* (Legalov et al. 2010).

Trachodes (Trachodes) wittmeri Pesarini, 1973

PUBLISHED RECORDS. Gorgan (Pesarini 1973).

DISTRIBUTION. Iran (Pesarini 1973).

ECOLOGY. Unknown.

COMMENT. According to the description, very probably this species is a synonym of *Trachodes elongatus* Reitter, 1888, known from Azerbaijan and northern Iran (Reitter 1888; pers. rec.), but we have not studied the types of both taxa for formally establishing here the above synonymy.

Tychius (Tychius) aurarius Boheman, 1843

MATERIAL. Kalaleh (172 m), (2), August 2009.

DISTRIBUTION. Southern Europe, Asia minor, Iran (Legalov et al. 2010). New to Golestan.

ECOLOGY. Unknown.

Tychius (Tychius) balcanicus (Penecke, 1922)

MATERIAL. Golestan National Park (1910 m), (1), October 2010.

DISTRIBUTION. Southern Europe, Asia minor, Iran (Legalov et al. 2010).
New to Golestan.

ECOLOGY. Unknown.

Tychius (Tychius) brevisculus Desbrochers, 1873

MATERIAL. Kord-Kooy (47 m), (4), June 2010.

DISTRIBUTION. Palaearctic (Legalov et al. 2010). New to Golestan.

ECOLOGY. On *Melilotus* (Legalov et al. 2010).

Tychius (Tychius) cuprifer (Panzer, 1799)

MATERIAL. Golestan National Park, E of Sulgard (1834 m), (3), September 2010.

DISTRIBUTION. Western Palaearctic (Caldara 1990). New to Iran.

ECOLOGY. On *Trifolium* and *Teline* (Caldara 1990).

Tychius (Tychius) dieckmanni Caldara, 1986

PUBLISHED RECORDS. Gorgan (Caldara 1986).

DISTRIBUTION. Iran, Kazakhstan, Uzbekistan (Caldara 1986; Legalov et al. 2010).

ECOLOGY. Unknown.

Tychius (Tychius) flavus Becker, 1864

MATERIAL. Gorgan (92 m), (2), June 2010. Golestan National Park (1966 m), (1),
September 2010.

DISTRIBUTION. Western Palaearctic (Caldara 1990). New to Golestan.

ECOLOGY. On *Trifolium* and *Teline* (Caldara 1990).

Tychius (Tychius) franzi Caldara, 1986

PUBLISHED RECORDS. 80 Km NNE of Gorgan (Caldara, 1986).

DISTRIBUTION. Eastern European Russia, eastern Turkey, Caucasus, southwestern Palaearctic Asia (Caldara 1986).

ECOLOGY. Unknown.

Tychius (Tychius) graecus Kiesenwetter, 1864

MATERIAL. Ali-Abad (130 m), (2), May 2010.

DISTRIBUTION. Greece, Asia minor, Iran (Legalov et al. 2010). New to Golestan.

ECOLOGY. Unknown.

Tychius (Tychius) grenieri C. Brisout, 1861

MATERIAL. Kord-Kooy (18 m), (2), June 2010. Golestan National Park (1910 m), (1), October 2010. Galikesh (126 m), (2), October 2010.

DISTRIBUTION. Mediterranean, Transcaucasia, Middle East (Caldara 1990), Iran (Ghahari & Legalov 2011). New to Golestan.

ECOLOGY. On *Astragalus* (Caldara 1990).

Tychius (Tychius) hieckei Caldara, 1990

PUBLISHED RECORDS. Gorgan (Caldara 1990).

DISTRIBUTION. Armenia, Iran (Caldara 1990).

ECOLOGY. Unknown.

Tychius (Tychius) medicaginis C. Brisout, 1862

PUBLISHED RECORDS. Gorgan (Ghahari et al. 2011).

DISTRIBUTION. Western Palaearctic (Rheinheimer & Hassler 2010).

ECOLOGY. On *Medicago*, sometime injurious (Rheinheimer & Hasler 2010).

Tychius (Tychius) morawitzi Becker, 1864

PUBLISHED RECORDS. Gorgan (Caldara 1986).

DISTRIBUTION. Southeastern Europe, Transcaucasia, Middle East, central Asia (Legalov et al. 2010).

ECOLOGY. On *Alhagi maurorum* Medik. (Caldara 1986 as *A. camelorum* Fisch.).

Tychius (Tychius) ochraceus Tournier, 1873

PUBLISHED RECORDS. Golestan (Sakenin et. al. 2009).

DISTRIBUTION. Mediterranean, central Asia (Caldara 1990).

ECOLOGY. On *Trifolium* and *Alhagi* (Caldara 1990).

Tychius (Tychius) picirostris (Fabricius, 1787)

MATERIAL. Gorgan (121 m), (1), May 2010. Golestan National Park (1966 m), (4), September 2010.

DISTRIBUTION. Western and central Palaearctic (Caldara 1990). New to Iran.

ECOLOGY. On *Trifolium* (Caldara 1990).

Tychius (Tychius) rusicus Desbrochers, 1908

PUBLISHED RECORDS. Salikandeh, Minoo-Dasht (Ghahari et. al. 2011).

DISTRIBUTION. The Balkans, Turkey, Caucasus, Iran (Caldara 1990).

ECOLOGY. Unknown.

Tychius (Tychius) thoracicus Boheman, 1843

MATERIAL. Bandar-Torkaman (14 m), (4), August 2010.

DISTRIBUTION. Southeastern Europe, Asia minor, Caucasus (Caldara 1990). New to Iran.

ECOLOGY. On *Vicia* (Caldara, 1990).

Ulobaris loricata (Boheman, 1836)

PUBLISHED RECORDS. Gonbad, Kalaleh (Borumand 1998); Golestan (Legalov et al. 2010).

DISTRIBUTION. Southeastern Europe, Asia minor, Caucasus, Transcaucasia, central Asia (Legalov et al. 2010).

ECOLOGY. On Chenopodiaceae (Legalov et al. 2010).

Urometopus ferrugineus (Formánek, 1904)

PUBLISHED RECORDS. Gorgan (Formánek 1904).

DISTRIBUTION. Iran (Colonnelli 2011b).

ECOLOGY. Unknown.

Xanthochelus nomas (Pallas, 1771)

PUBLISHED RECORDS. Golestan (Legalov et al. 2010).

DISTRIBUTION. Transcaucasia, Kazakhstan, central Asia, Iran, north-eastern China (Legalov et al. 2010).

ECOLOGY. On *Artemisia* (Legalov et al. 2010).

Xylinophorus (Xylinophorus) verrucicollis (Faust, 1881)

PUBLISHED RECORDS. Surroundings of Gorgan (Faust 1881).

DISTRIBUTION. Iran (Zumpt 1931).

ECOLOGY. Unknown.

SCOLYTIDAE Latreille, 1804

Anisandrus dispar (Fabricius, 1792)

PUBLISHED RECORDS. Gorgan (Samin et al. 2011 as *Xyleborus dispar*).

DISTRIBUTION. Palaearctic, North America (Pfeffer 1995, as *Xyleborus dispar*).

ECOLOGY. On several broadleaved trees (Pfeffer 1995).

COMMENT. Nomenclature of Scolytidae genera follows Alonso-Zaragoza & Lyal (2009).

Crypturgus numidicus Ferrari, 1867

PUBLISHED RECORDS. Golestan National Park (Samin et al. 2011).

DISTRIBUTION. Mediterranean basin, Caucasus (Pfeffer 1995), Iran (Samin et al. 2011).

ECOLOGY. On *Pinus* (Pfeffer, 1995; Samin et al. 2011).

Hylastes attenuatus Erichson, 1836

PUBLISHED RECORDS. Golestan National Park (Samin et al. 2011).

DISTRIBUTION. Europe, Caucasus, Iran (Pfeffer 1995; Samin et al. 2011).

ECOLOGY. On *Pinus* (Pfeffer, 1995; Samin et al. 2011).

Hypothenemus eruditus Westwood, 1834

PUBLISHED RECORDS. Caspian sea area (Modarres Awal 1997, also as *H. aspericollis* Wollaston, 1860 and *H. lezhavai* Pyatnitskiy, 1929).

DISTRIBUTION. Subcosmopolitan (Pfeffer 1995).

ECOLOGY. Polyphagous (Pfeffer 1995).

Orthotomicus erosus (Wollaston, 1857)

PUBLISHED RECORDS. Northern provinces (Modarres Awal 1997).

DISTRIBUTION. Western Palaearctic (Pfeffer 1995).

ECOLOGY. On conifers (Pfeffer 1995).

Phloeosinus aubei (Perris, 1855)

PUBLISHED RECORDS. Caspian sea area (Modarres Awal 1997 as *P. bicolor* (Brullé, 1832) and *P. cupressi* Hopkins, 1903).

DISTRIBUTION. Western and central Palaearctic countries, tropical Africa (Pfeffer 1995).

ECOLOGY. On Cupressaceae (Pfeffer 1995).

Phloeotribus scarabaeoides (Bernard, 1788)

PUBLISHED RECORDS. Northern provinces (Modarres Awal 1997).

DISTRIBUTION. Western Palaearctic (Pfeffer 1995).

ECOLOGY. On Oleaceae (Pfeffer 1995; Modarres Awal 1997).

Scolytus eichhoffi Reitter, 1894

PUBLISHED RECORDS. Gorgan (Schedl 1948 as *S. iranicus* Eggers, 1941); northern provinces (Modarres Awal 1997).

DISTRIBUTION. Azerbaijan, Iran (Pfeffer 1995).

ECOLOGY. On *Zelkova carpinifolia* (Pall.) K. Koch and *Ulmus minor* Mill. (Pfeffer 1995).

Scolytus ensifer Eichhoff, 1881

PUBLISHED RECORDS. Northern provinces (Modarres Awal, 1997).

DISTRIBUTION. Western Palaearctic (Knížek 2011).

ECOLOGY. On *Ulmus* (Pfeffer, 1995; Modarres Awal 1997).

Scolytus orientalis Eggers, 1910

PUBLISHED RECORDS. Northern provinces (Modarres Awal 1997).

DISTRIBUTION. Eastern Europa, Turkmenistan (Knížek 2011), Iran (Modarres Awal 1997).

ECOLOGY. On *Ulmus* (Pfeffer 1995; Modarres Awal 1997).

Scolytus pygmaeus (Fabricius, 1787)

PUBLISHED RECORDS. Gonbad (Samin et al. 2011).

DISTRIBUTION. Western Palaearctic (Pfeffer 1995).

ECOLOGY. On *Ulmus* (Pfeffer 1995; Samin et al. 2011).

Scolytus rugulosus (P.W.J. Müller, 1818)

PUBLISHED RECORDS. Northern provinces (Modarres Awal 1997).

DISTRIBUTION. Palaearctic, becoming subcosmopolitan (Knížek 2011).

ECOLOGY. Primarily on Rosaceae (Pfeffer, 1995; Modarres Awal 1997).

Scolytus scolytus Eggers, 1910

PUBLISHED RECORDS. Caspian sea area (Modarres Awal 1997).

DISTRIBUTION. Western Palaearctic (Knížek 2011).

ECOLOGY. On *Ulmus* and *Zelkova* (Pfeffer 1995; Modarres Awal 1997).

Taphrorhynchus bicolor (Herbst, 1794)

PUBLISHED RECORDS. Northern provinces (Modarres Awal 1997).

DISTRIBUTION. Western Palaearctic (Knížek 2011).

ECOLOGY. On Fagales (Pfeffer, 1995; Modarres Awal 1997).

Taphrorhynchus ramicola (Reitter, 1914)

PUBLISHED RECORDS. Gorgan (Samin et al. 2011).

DISTRIBUTION. Eastern Europe, Caucasus, Turkey, Iran (Pfeffer 1995; Samin et al. 2011).

ECOLOGY. On *Fagus orientalis* Lipsky, *Carpinus orientalis* Mill. (Pfeffer 1995), *Corylus avellana* L. (Samin et al. 2011).

Taphrorhynchus villifrons (Dufour, 1843)

PUBLISHED RECORDS. Northern provinces (Modarres Awal 1997, also as *T. alni* Pfeffer, 1940).

DISTRIBUTION. Western Palaearctic (Knížek 2011).

ECOLOGY. Primarily on Fagales (Pfeffer 1995; Modarres Awal 1997).

Thamnurgus caucasicus Reitter, 1887

PUBLISHED RECORDS. Gorgan (Samin et al. 2011).

DISTRIBUTION. Eastern Europe, Caucasus, (Pfeffer 1995), Iran (Samin et al. 2011).

ECOLOGY. On *Euphorbia* and *Peganum* (Pfeffer 1995).

Tomicus destruens (Wollaston, 1865)

PUBLISHED RECORDS. Golestan National Park (Samin et al.,2011).

DISTRIBUTION. Madeira, Mediterranean basin (Pfeffer 1995), Iran (Samin et al. 2011).

ECOLOGY. On *Pinus* (Pfeffer 1995).

Trypodendron signatum (Fabricius, 1792)

PUBLISHED RECORDS. Caspian Sea area (Modarres Awal 1997 as *Xyloterus signatus*).

DISTRIBUTION. Palaearctic (Knížek 2011).

ECOLOGY. On broadleaved trees (Pfeffer 1995).

Xyleborus dryographus (Ratzeburg, 1837)

PUBLISHED RECORDS. Northern provinces (Modarres Awal 1997, also as *T. alni* Pfeffer, 1940).

DISTRIBUTION. Western Palaearctic (Knížek 2011).

ECOLOGY. Primarily on *Quercus* and *Castanea* (Pfeffer 1995).

DISCUSSION

The species of Curculionoidea from Golestan listed in this paper are 195, but considering that in this province are present quite diverse climatic zones going from seashores below the sea level up to almost 4,000 m of elevation, and passing through lowland to alpine steppes, it is presumable that several additional species will be discovered in this area.

A short zoogeographic analysis based on the above data can be attempted, as done by Mifsud & Colonnelli (2009), by grouping the faunistic elements listed in Table 1, where the abbreviations for the chorological categories primarily follow Abbazzi & Maggini (2009). Excluding from our reasoning the 4 surely introduced synanthropic cosmopolitan or subcosmopolitan species (abbreviated as COS), and the two species identified only at genus level (abbreviated as UNK, unknown), we can divide the remaining 189 weevils and bark beetles in groups.

Tab. 1 – List of the recorded species from Golestan, northern Iran.

RHYNCHITIDAE	
<i>Rhynchites (Epirhynchites) zaitzevi</i> Kieseritzsky, 1926	END
<i>Tatianaerhynchites aequatus</i> (Linnaeus, 1767)	CAE
APIONIDAE	
<i>Alocentron (Alocentron) curvirostre</i> (Gyllenhal, 1833)	CAE
<i>Apion frumentarium</i> (Linnaeus, 1758)	ASE
<i>Aspidapion (Aspidapion) radiolus radiolus</i> (Marsham, 1802)	PAL
<i>Aspidapion (Koestlinia) motschulskyi</i> (Hochhuth, 1847)	CAE
<i>Ceratapion (Acanephodus) onopordi onopordi</i> (W. Kirby, 1808)	CAE
<i>Metapion meralae</i> (Faust, 1885)	CAS
<i>Pseudaplemonus aeneicollis</i> (Gerstaecker, 1854)	TAR
BRACHYCERIDAE	
<i>Brachycerus persicus</i> Zumpt, 1937	CSP
DRYOPHTHORIDAE	
<i>Sitophilus oryzae</i> (Linnaeus, 1763)	COS
<i>Sitophilus zeamais</i> Motschulsky, 1855	COS
<i>Sphenophorus piceus</i> (Pallas, 1771)	SIE
ERIRHINIDAE	
<i>Arthrostenus fullo</i> Boheman, 1836	WAS
<i>Tanysphyrus lemnae</i> (Paykull, 1792)	HOL
CURCULIONIDAE	
<i>Ammocleonus aschabadensis</i> (Faust, 1884)	CAS
<i>Ammocleonus hieroglyphicus</i> (Olivier, 1807)	AFO
<i>Archarius crux</i> (Fabricius, 1776)	TUM
<i>Archarius salicivorus</i> (Paykull, 1792)	PAL
<i>Asproparthenis bohemani</i> (Faust, 1891)	TUR
<i>Asproparthenis obsoletefasciata</i> (Menetries, 1842)	TUR
<i>Asproparthenis punctiventris</i> (Germar, 1824)	CAE
<i>Asproparthenis vexata</i> (Gyllenhal, 1834)	WAS
<i>Aulacobaris coerulescens</i> (Scopoli, 1763)	CAM
<i>Baris kirschi</i> (Desbrochers, 1892)	CAE
<i>Borborocoetes squalidus</i> Boheman, 1842	CSP
<i>Brachyleonius fronto</i> (Fischel de Waldheim, 1835)	CAS
<i>Brachypera (Brachypera) lunata</i> (Wollaston, 1854)	TUM
<i>Caulomorplus wittmeri</i> Osella, 1976	CSP

<i>Ceutorhynchus anatolicus</i> Schultze, 1900	TUR
<i>Ceutorhynchus difficilis</i> Schultze, 1898	TUR
<i>Ceutorhynchus erysimi</i> (Fabricius, 1787)	HOL
<i>Ceutorhynchus fallax</i> Boheman, 1845	TUM
<i>Ceutorhynchus nanus</i> Gyllenhal, 1837	WPA
<i>Ceutorhynchus pallidactylus</i> (Marsham, 1802)	COS
<i>Ceutorhynchus rapae</i> Gyllenhal, 1837	HOL
<i>Ceutorhynchus sophiae</i> Gyllenhal, 1837	ASE
<i>Ceutorhynchus subtilirostris</i> Schultze, 1902	CAS
<i>Ceutorhynchus sulcatus</i> C. Brisout, 1869	TUE
<i>Ceutorhynchus turbatus</i> Schultze, 1903	ASE
<i>Chloebius immeritus</i> (Schoenherr, 1826)	WAS
<i>Chlorophanus vittatus</i> Schoenherr, 1832	TUR
<i>Chromosomus fischeri</i> (Fåhraeus, 1842)	CAS
<i>Cionus hortulanus</i> (Fourcroy, 1785)	CEM
<i>Cionus thapsus</i> (Fabricius, 1792)	TEM
<i>Cleonis pigra</i> (Scopoli, 1763) ssp. <i>iranensis</i> Voss, 1971	END
<i>Coniatus</i> (<i>Coniatus</i>) <i>tamarisci</i> (Fabricius, 1787)	TUM
<i>Coniocleonus cicatricosus</i> (Hoppe, 1795)	TUM
<i>Coniocleonus nigrosuturatus</i> (Goeze, 1777)	CEM
<i>Conorhynchus</i> (<i>Conorhynchus</i>) <i>candidulus</i> Faust, 1890	CAS
<i>Conorhynchus</i> (<i>Conorhynchus</i>) <i>conirostris</i> (Gebler, 1830)	CAE
<i>Conorhynchus</i> (<i>Conorhynchus</i>) <i>faldermanni</i> (Fåhraeus, 1842)	CAS
<i>Conorhynchus</i> (<i>Conorhynchus</i>) <i>lacerta</i> Chevrolat, 1873	TUR
<i>Conorhynchus</i> (<i>Temnorhinus</i>) <i>hololeucus</i> (Pallas, 1781)	CAE
<i>Cosmobaris scolopacea</i> (Germar, 1824)	ASE
<i>Curculio elephas</i> (Gyllenhal, 1836)	TUM
<i>Curculio glandium</i> Marsham, 1802	CAE
<i>Curculio pellitus</i> Boheman, 1843	TUE
<i>Datonychus urticae</i> (Boheman, 1845)	TUE
<i>Eusomus</i> (<i>Eusomus</i>) <i>ovulum</i> Germar, 1824	ASE
<i>Eusomus</i> (<i>Eusomus</i>) <i>pilosus</i> Schoenherr, 1832	TUE
<i>Eustenopus villosus</i> (Boheman, 1836)	TUM
<i>Georginus bellus</i> Semenov, 1913	TUR
<i>Graptus armeniacus</i> (Hochhuth, 1847)	TUR
<i>Hadroplontus trimaculatus</i> (Fabricius, 1775)	WPA
<i>Hypera</i> (<i>Dapalinus</i>) <i>contaminata</i> (Herbst, 1795)	TUE
<i>Hypera</i> (<i>Dapalinus</i>) <i>maculipennis</i> (Fairmaire, 1859)	TUM
<i>Hypera</i> (<i>Hypera</i>) <i>jucunda</i> (Capiomont, 1868)	TUM
<i>Hypera</i> (<i>Hypera</i>) <i>postica</i> (Gyllenhal, 1813)	HOL
<i>Hypera</i> (<i>Hypera</i>) <i>venusta</i> (Fabricius, 1781)	TEM
<i>Hypera</i> (<i>Hypera</i>) <i>viciae</i> (Gyllenhal, 1813)	SIE

<i>Hypera (Tigrinellus) pastinacae</i> (Rossi, 1790)	TUM
<i>Larinus (Larinomesius) bardus</i> Gyllenhal, 1836	WAS
<i>Larinus (Larinomesius) canescens</i> Gyllenhal, [1835]	TUR
<i>Larinus (Larinomesius) carthami</i> Olivier, 1807	TUE
<i>Larinus (Larinomesius) liliputanus</i> Faust, 1890	CAS
<i>Larinus (Larinomesius) syriacus</i> Gyllenhal, [1835]	WAS
<i>Larinus (Larinomesius) vitellinus</i> Gyllenhal, [1835]	TUR
<i>Larinus (Larinus) aeruginosus</i> Hochhuth, 1851	TUE
<i>Larinus (Larinus) arabicus</i> Capiomont, 1874	TUR
<i>Larinus (Larinus) latus</i> (Herbst, 1784)	TUM
<i>Larinus (Larinus) onopordi</i> (Fabricius, 1787)	TUM
<i>Larinus (Larinus) rudicollis</i> Petri, 1906	TUE
<i>Larinus (Phyllonomeus) adpersus</i> Hochhuth, 1847	TUE
<i>Larinus (Phyllonomeus) grisescens</i> Gyllenhal, [1835]	TUM
<i>Larinus (Phyllonomeus) iaceae</i> (Fabricius, 1775)	CAE
<i>Larinus (Phyllonomeus) turbinatus</i> Gyllenhal, 1836	CAM
<i>Leucochromus imperialis</i> (Zoubkoff, 1837)	TUR
<i>Leucomigus candidatus</i> (Pallas, 1771)	TUE
<i>Liocleonus clathratus</i> (Olivier, 1807)	CAM
<i>Lixus (Callistolixus) furcatus</i> Olivier, 1807	TUM
<i>Lixus (Compsolixus) ascanii</i> (Linnaeus, 1767)	TUM
<i>Lixus (Compsolixus) juncii</i> Boheman, 1836	TUM
<i>Lixus (Compsolixus) ochraceus</i> Boheman, 1843	TUM
<i>Lixus (Dilixellus) bardanae</i> (Fabricius, 1787)	ASE
<i>Lixus (Dilixellus) punctiventris</i> Boheman, 1836	TUE
<i>Lixus (Dilixellus) pulverulentus</i> (Scopoli, 1763)	CEM
<i>Lixus (Epimeces) cardui</i> Olivier, 1807	TEM
<i>Lixus (Epimeces) filiformis</i> (Fabricius, 1781)	CEM
<i>Lixus (Eulixus) incanescens</i> Boheman, [1835]	CAE
<i>Lixus (Hapalixus) rubicundus</i> Zoubkoff, 1833	CAE
<i>Lixus (Ortholixus) elegantulus</i> Boheman, 1843	TUM
<i>Malvaevora timida</i> (Rossi, 1792)	TUM
<i>Maximus obnoxius</i> (Fåhraeus, 1842)	TUR
<i>Maximus ostentatus</i> (Faust, 1904)	TUR
<i>Maximus strabus</i> (Gyllenhal, 1834)	CAE
<i>Maximus subfuscus</i> (Faust, 1883)	CAS
<i>Mecaspis darwini</i> Faust, 1883	CAS
<i>Melanobaris carbonaria</i> (Boheman, 1836)	CAE
<i>Meneclonus signaticollis</i> (Gyllenhal, 1834)	CAE
<i>Mesagroicus petraeus</i> Faust, 1885	CAS
<i>Microplontus rugulosus</i> (Herbst, 1795)	WPA
<i>Mogulones trisignatus</i> (Gyllenhal, 1837)	TUE

<i>Myllocerinus heydeni</i> (Faust, 1885)	CAS
<i>Myllocerinus weisei</i> (Faust, 1884)	CAS
<i>Neoglocianus smyrnensis</i> (Schultze, 1898)	TUR
<i>Neoxyonyx strigatirostris</i> (Hochhuth, 1847)	TUR
<i>Orchestes (Salius) fagi</i> (Linnaeus, 1758)	WPA
<i>Otiorhynchus (Choilisanus) grandicollis</i> Boheman, 1843	TUR
<i>Otiorhynchus (Cryphiphorus) ligustici</i> (Linnaeus, 1758)	WPA
<i>Otiorhynchus (Melasemmus) tetrarchus</i> Reitter, 1913	TUR
<i>Otiorhynchus (Nehrodistus) scitus</i> Gyllenhal, 1843	TUR
<i>Otiorhynchus (Nubidanus) punctirostris</i> Stierlin, 1883	TUR
<i>Otiorhynchus (Podonebistus) bleusei</i> Faust, 1899	TUM
<i>Otiorhynchus (Stupamacus) armicrus</i> Fairmaire, 1866	TUR
<i>Otiorhynchus (Tournieria) europaeus</i> Stierlin, 1883	TUR
<i>Otiorhynchus (Tournieria) reitteri</i> Stierlin, 1876	TUR
<i>Parapholicodes</i> sp.	UNK
<i>Phacephorus argyrostomus</i> Gyllenhal, 1840	ASE
<i>Phacephorus nubeculosus</i> Fairmaire, 1866	CAS
<i>Phyllobius (Phyllobius) pallidipennis</i> Hochhuth, 1847	TUR
<i>Phyllobius (Phyllobius) ruscicus</i> Stierlin, 1884	TUR
<i>Platymycterus turkestanicus</i> (Faust, 1885)	CAS
<i>Polydrusus (Eustolus) impressifrons</i> Gyllenhal, 1834	TUE
<i>Polydrusus (Scythodrusus) pilifer</i> Hochhuth, 1847	CAE
<i>Psallidium (Psallidium) maxillosum</i> (Fabricius, 1792)	WPA
<i>Rhinoncus pericarpus</i> (Linnaeus, 1758)	HOL
<i>Rhinusa tetra</i> (Fabricius, 1792)	HOL
<i>Schelopius</i> sp.	UNK
<i>Sibinia (Dichotychius) bipunctata</i> Kirsch, 1870	CAE
<i>Sibinia (Sibinia) femoralis</i> Germar, 1824	CEM
<i>Sibinia (Sibinia) primita</i> (Herbst, 1795)	TEM
<i>Sitona callosus</i> Gyllenhal, 1834	TUE
<i>Sitona concavirostris</i> Hochhuth, 1851	TUE
<i>Sitona humeralis</i> Stephens, 1831	HOL
<i>Sitona longulus</i> Gyllenhal, 1834	SIE
<i>Sitona macularius</i> (Marsham, 1802)	HOL
<i>Stenocarus cardui</i> (Herbst, 1784)	CAM
<i>Sternuchopsis haemoptera</i> (Boheman, 1836)	AFP
<i>Sternuchopsis karelini</i> (Boheman, 1844)	TUR
<i>Tainophthalmus (Tainophthalmus) crotchi</i> Desbrochers, 1873	CSP
<i>Tanymecus argentatus</i> Gyllenhal, 1840	CAE
<i>Tanymecus confinis</i> Gyllenhal, 1834	TAR
<i>Terminasiana granosa</i> (Zoubkov, 1833)	TUR
<i>Trachodes (Trachodes) wittmeri</i> Pesarini, 1973	CSP

<i>Tychius (Tychius) aurarius</i> Boheman, 1843	TUM
<i>Tychius (Tychius) balcanicus</i> (Penecke, 1922)	TUE
<i>Tychius (Tychius) breviusculus</i> Desbrochers, 1873	PAL
<i>Tychius (Tychius) cuprifer</i> (Panzer, 1799)	TUE
<i>Tychius (Tychius) dieckmanni</i> Caldara, 1986	TUR
<i>Tychius (Tychius) flavus</i> Becker, 1864	SIE
<i>Tychius (Tychius) franzi</i> Caldara, 1986	TUE
<i>Tychius (Tychius) graecus</i> Kiesenwetter, 1864	TUM
<i>Tychius (Tychius) grenieri</i> C. Brisout, 1861	TUM
<i>Tychius (Tychius) hieckei</i> Caldara, 1990	TUR
<i>Tychius (Tychius) medicaginis</i> C. Brisout, 1862	CAE
<i>Tychius (Tychius) morawitzi</i> Becker, 1864	CAE
<i>Tychius (Tychius) ochraceus</i> Tournier, 1873	CAM
<i>Tychius (Tychius) picirostris</i> (Fabricius, 1787)	PAL
<i>Tychius (Tychius) ruscicus</i> Desbrochers, 1908	TUM
<i>Tychius (Tychius) thoracicus</i> Boheman, 1843	TUE
<i>Ulobaris loricata</i> (Boheman, 1836)	CAE
<i>Urometopus ferrugineus</i> (Formánek, 1904)	CSP
<i>Xanthochelus nomas</i> (Pallas, 1771)	CAS
<i>Xylinophorus (Xylinophorus) verrucicollis</i> (Faust, 1881)	TUR

SCOLYTIDAE

<i>Anisandrus dispar</i> (Fabricius, 1792)	HOL
<i>Crypturgus numidicus</i> Ferrari, 1867	TUM
<i>Hylastes attenuatus</i> Erichson, 1836	TUE
<i>Hypothenemus eruditus</i> Westwood, 1834	COS
<i>Orthotomicus erosus</i> (Wollaston, 1857)	WPA
<i>Phloeosinus aubei</i> (Perris, 1855)	AFP
<i>Phloeotribus scarabaeoides</i> (Bernard, 1788)	WPA
<i>Scolytus eichhoffi</i> Reitter, 1894	CSP
<i>Scolytus ensifer</i> Eichhoff, 1881	WPA
<i>Scolytus orientalis</i> Eggers, 1910	TUE
<i>Scolytus pygmaeus</i> (Fabricius, 1787)	WPA
<i>Scolytus rugulosus</i> (P.W.J. Müller, 1818)	PAL
<i>Scolytus scolytus</i> Eggers, 1910	WPA
<i>Taphrorhynchus bicolor</i> (Herbst, 1794)	WPA
<i>Taphrorhynchus ramicola</i> (Reitter, 1914)	TUE
<i>Taphrorhynchus villifrons</i> (Dufour, 1843)	WPA
<i>Thamnurgus caucasicus</i> Reitter, 1887	TUE
<i>Tomicus destruens</i> (Wollaston, 1865)	TUM
<i>Trypodendron signatum</i> (Fabricius, 1792)	PAL
<i>Xyleborus dryographus</i> (Ratzeburg, 1837)	WPA

The first includes the 129 more or less widespread species (68,26% of the total), the abbreviations of which are AFO (North Africa, Middle East, Arabia and western Oriental Region), AFP (tropical Africa and western Palaearctic), ASE (Asia and Europe), CAE (central Asia and Europe), CAM (central Asia and Mediterranean), CEM (central Asia, Europe and Mediterranean), HOL (Holarctic), PAL (Palaearctic), SIE (Siberian-European), TAR (Turano-Arabian), TEM (Turano-European-Mediterranean), TUE (Turano-European-Mediterranean), TUM (Turano-Mediterranean), and WPA (western Palaearctic). They are comparatively thermophilous and/or euryoecius species able to actively spread and to colonize sometimes habitats of anthropogenic origin, like pastures, cultivated and fallow fields. For example, there are a number of weevils related to nitrophilous plants, like the *Ceratapion*, *Larinus* and *Lixus*, and others to cultivated crops like some of the *Hypera*, *Ceutorhynchus* and *Tychius*. Among this relatively heterogeneous assemblage are included some desert species which were able to spread across large barren areas following the desertification of North Africa, Middle East and Arabian peninsula. Unusual distribution have *Phloeosinus aubei*, a bark beetle occurring from tropical Africa across the western Palaearctic region and living on Cupressaceae some species of which are widely cultivated in gardens, along with *Pseudaplemonus aeneicollis*, an apionine living on Plumbaginaceae and ranging from the Turanian region to the Arabian peninsula. One species, *Sternuchopsis haemoptera*, has a peculiar distribution, being known from tropical Africa and only from Iran in the Palaearctic.

The second group is formed by the 21 Asiatic elements (11,11% of the total) some of which reach the easternmost regions of Europe, combining the species the abbreviations of which are CAS (Central Asiatic) and WAS (Western Asiatic). Most of them are mesophilous weevils associated with steppe vegetation, and several among them are flightless Cleonini and winged Cyphicerini.

Another group of curculionids are the Turanian ones, belonging to the chorological category abbreviated as TUR (Turanian). They are comprised of primarily thermophilous 29 species (15.87%) usually preferring steppe habitats. All the Cleonini are wingless.

Coming to weevils with more restricted range, we can consider the 2 Iranian endemites (1.06%), the abbreviation of which is END (= Iranian endemic). They are *Rhynchites zaitzevi*, probably related with Rosaceae and *Cleonis pigra* ssp. *iranensis*, the nominotypical subspecies of which

is fairly widespread, being known from Siberia to western Europe and North Africa on thistles (Hoffmann 1950).

Seven species (3.70%) have a distribution limited to the Caspian region. Their abbreviation is CSP (Caspian) in table 1, and some of them are only known from the Golestan province: *Brachycerus persicus*, *Borborocoetes squalidus*, *Caulomorplus wittmeri*, *Urometopus ferrugineus*. To achieve a better knowledge on this group of Coleoptera more studies should be conducted on them, not only in the region here considered, but also across the whole of Iran, which is a large country (1,623,779 km²) incorporating various geographical regions and climates, and being placed in a key position at the border of the Palaearctic and Oriental regions. In addition to continuing field surveys, specialized researches on possible host plants and on life cycles of the Curculionoidea are desirable, since a good few of the weevils and bark beetles are pests of cultivated crops, or potential biological control agents.

ACKNOWLEDGEMENTS. The authors appreciate the valuable scientific cooperation and the important role in progress of the project by Dr. A.A. Legalov (Zoological Museum, Novosibirsk, Russia), Dr. G.Y. Arzanov (South Scientific Centre of RAS, Russia), Dr. L. Gültekin (Atatürk University, Erzurum, Turkey), and Dr. A.E. Marvaldi (Harvard University, Cambridge, USA). The research was supported by Shahre Rey Islamic Azad University.

SUMMARY

The 195 species of Curculionoidea (Coleoptera) thus far indicated from Golestan province (northern Iran) according to both literature and original records are listed in this paper. New data for 61 species belonging to 18 genera collected during this research are also given. Besides the 42 species newly reported for the Golestan province, the following additional 15 species are newly recorded from Iran: *Brachypera lunata*, *Ceutorhynchus anatolicus*, *Datonychus urticae*, *Hypera contaminata*, *Hypera viciae*, *Larinus canescens*, *L. adspersus*, *Lixus ascanii*, *Microplontus rugulosus*, *Neoglocianus smyrnensis*, *Otiorhynchus tetrarchus*, *O. scitius*, *Tychius cuprifer*, *T. picirostris*, *T. thoracicus*.

RIASSUNTO

Curculionoidea della provincia del Golestan, Iran settentrionale (Coleoptera).

Le 195 specie di Curculionoidea (Coleoptera) finora indicati della provincia del Golestan province (Iran settentrionale) in base a dati di letteratura ed a raccolte recenti sono elencate in questa nota. Sono segnalati nuovi dati per 61 specie di 18 generi raccolti nel corso di questa ricerca. Oltre alle 42 specie segnalate come nuove per la provincia del Golestan, le seguenti 15 specie in più sono indicate per la prima volta dell'Iran: *Brachypera lunata*, *Ceutorhynchus anatolicus*, *Datonychus urticae*, *Hypera contaminata*, *Hy-*

pera viciae, *Larinus canescens*, *L. adspersus*, *Lixus ascanii*, *Microplontus rugulosus*, *Neglocianus smyrnensis*, *Otiorhynchus tetrarchus*, *O. scitus*, *Tychius cuprifer*, *T. picirostris*, *T. thoracicus*.

REFERENCES

- ABBAZZI, P. & L. MAGGINI. 2009. Elenco sistematico-faunistico dei Curculionoidea italiani, Scolytidae e Platypodidae esclusi (Insecta, Coleoptera). *Aldrovandia*, 5: 29-216.
- ALONSO-ZARAZAGA, M. A. 2011. Rhynchitidae (pp. 109-129). In: I. Löbl and A. Smetana (eds). *Catalogue of Palaearctic Coleoptera*. Volume 7. Curculionoidea 1. Apollo Books, Stenstrup, 373 pp.
- ALONSO-ZARAZAGA, M. A. & C. H. C. LYAL. 1999. A World Catalogue of Families and Genera of Curculionoidea (Insecta: Coleoptera) (Excepting Scolytidae and Platypodidae). *Entomopraxis*, Barcelona, 315 pp.
- ALONSO-ZARAZAGA, M. A. & C. H. C. LYAL. 2002. Addenda and corrigenda to 'A world catalogue of families and genera of Curculionoidea (Insecta: Coleoptera)'. *Zootaxa*, (63): 1-37.
- ALONSO-ZARAZAGA, M. A. & C. H. C. LYAL. 2006. Addenda and corrigenda to 'A world catalogue of families and genera of Curculionoidea (Insecta: Coleoptera)'. 2. *Zootaxa*, (1202): 21-31.
- ALONSO-ZARAZAGA, M. A. & C. H. C. LYAL. 2009. A catalogue of family and genus group names in Scolytinae and Platypodinae with nomenclatural remarks (Coleoptera: Curculionidae). *Zootaxa*, (2258): 1-134.
- ANDERSON, R. S. 1993. Weevils and plants: Phylogenetic versus ecological mediation of evolution of host plant associations in Curculioninae (Coleoptera: Curculionidae). *Memoirs of the Entomological Society of Canada* 165: 197-232.
- ANDERSON, R. S. 1995. An evolutionary perspective of diversity in Curculionoidea. *Memoirs of the Entomological Society of Washington* 14: 103-114.
- BAJTENOV, M. S. 1974. Weevils (Coleoptera: Attelabidae, Curculionidae) of central Asia and Kazakhstan, an illustrated guide to genera and a catalogue of species. Alma-Ata, 287 pp. [in Russian]
- BOLOV, A. P. & A. A. BOLOV. 1997. K faune zhukov-dolgonosikov (Coleoptera, Curculionidae) Kabardino-Balkarii. *Entomologicheskoe Obozrenie*, 76(4): 777-779.
- BORUMAND, H. 1998. Insects of Iran. The list of Coleoptera in the insect collection of Plant Pests & Diseases Research Institute. *Coleoptera* (XXIV): Curculionoidea: Fam. 162, pp. 166-171 (Anthribidae, Attelabidae, Brentidae, Apionidae, Curculionidae, Scolytidae, Platypodidae). Plant Pests & Diseases Research Institute, Insect Taxonomy Research Department. Publ. No. 2, Tehran, 1 unnumbered + iii + 110 + 6 unnumbered [+ 1 errata & corrections] pp.
- CALDARA, R. 1986. Revisione dei *Tychius* precedentemente inclusi in *Lepidotychius* (n. syn.) (Coleoptera Curculionidae). *Atti della Società italiana di Scienze naturali e del Museo civico di Storia Naturale di Milano*, 127(3/4): 141-194.
- CALDARA, R. 1990. Revisione tassonomica delle specie paleartiche del genere *Tychius* Germar (Coleoptera Curculionidae) (con 575 figure). *Memorie della Società italiana di Scienze naturali e del Museo civico di Storia Naturale di Milano*, 25(3): 53-238.
- CALDARA, R. 2009. Note tassonomiche e nomenclatoriali su alcune specie paleartiche di *Sibinia* e *Tychius* (Coleoptera, Curculionidae). *Fragmenta entomologica*, 41(1): 169-125.
- COLONNELLI, E. 2003. A revised checklist of Italian Curculionoidea (Coleoptera). *Zootaxa* (337): 1-142.

- COLONNELLI, E. 2004. Catalogue of Ceutorhynchinae of the world, with a key to genera (Coleoptera: Curculionidae). Argania editio, Barcelona, 124 pp.
- COLONNELLI, E. 2011a. Brachyceridae (pp. 84 and 182-185). In: I. Löbl and A. Smetana (eds). Catalogue of Palaearctic Coleoptera. Volume 7. Curculionoidea 1. Apollo Books, Stenstrup, 373 pp.
- COLONNELLI, E. 2011b. Notes on the taxonomy of *Urometopus* with description of a new species from northern Turkey (Coleoptera: Curculionidae). Acta Entomologica Musei Nationalis Pragae, 51(2): 675-686.
- DESBROCHERS DES LOGES, J. 1873. Notes synonymiques. - Remarques diverses. - Description de coléoptères nouveaux. Annales de la Société entomologique de France, (5)2[1872](4): 420-432.
- DIECKMANN, L. 1981. Die *Hypera dauci*-Gruppe (Coleoptera, Curculionidae). Mit 6 Figuren. Reichenbachia, 19(19): 111-116.
- DIECKMANN, L. 1983. Beiträge zur Insektenfauna der DDR: Coleoptera - Curculionidae (Tanymecinae, Leptopiinae, Cleoninae, Tanyrhynchinae, Cossoninae, Raymondionyminae, Bagoinae, Tanysphyrinae). Mit 164 Textfiguren. Beiträge zur Entomologie, 33(2): 257-381.
- FARRELL, B. D. 1998. "Inordinate fondness" explained: Why are there so many beetles? Science 281: 555-559.
- FAUST, J. 1881. Beiträge zur Kenntniss der Käfer des europäischen und asiatischen Russlands mit Einschluss der Küsten des Kaspischen Meeres (3. Fortsetzung). Horae Societatis Entomologicae Rossicae, 16(3/4): 285-333.
- FORMÁNEK, R. 1904. Ein neuer *Barypithes* und zwei neue *Omi*s. Münchener Koleopterologische Zeitschrift, 2: 297-300.
- FORNASARI, L., C. E. TURNER & L. A. ANDRES. 1991. *Eustenopus villosus* (Coleoptera: Curculionidae) for biological control of yellow starthistle in North America. Environmental Entomology, 20(4): 1187-1194.
- GHAHARI, H., G. YU. ARZANOV, A. A. LEGALOV, M. TABARI & H. OSTOVAN. 2010. Weevils (Coleoptera: Curculionidae) from Iranian rice fields and surrounding grasslands. Munis Entomology & Zoology 5(1): 163-169.
- GHAHARI, H. & A. A. LEGALOV. 2011. Contribution to the knowledge of Curculionidae (Coleoptera) from Kurdistan province (western Iran). Amurian Zoological Journal, 3(4): 345-348.
- GHAHARI, H., A. A. LEGALOV & G. YU. ARZANOV. 2009. An annotated list of the weevils (Coleoptera: Curculionidae) from the Arasbaran Biosphere Reserve and vicinity, northwestern Iran. Baltic Journal of Coleopterology 9(2): 177-182.
- GHAHARI, H., A. A. LEGALOV & G. Y[u]. ARZANOV. 2011. A contribution to the biodiversity of weevils (Coleoptera: Curculionidae) in Iranian cotton fields and surrounding grasslands. Linzer biologische Beiträge, 43(2): 1237-1245.
- GIUSTO, C. 2011. *Aspidapion motschulskyi* (Hochhuth) removed from synonymy with *A. aeneum* (Fabricius) (Coleoptera: Apionidae). Koleopterologische Rundschau, 81: 291-304.
- HOFFMANN, A. 1950. Faune de France. 52. Coléoptères Curculionides (Première partie) (Avec 304 figures). Lechevalier, Paris, pp. 1-486.
- HOFFMANN, A. 1955. Faune de France. 59. Coléoptères Curculionides (Deuxième partie). Avec 438 figures. Lechevalier, Paris, pp. 487-1207.
- INTERNATIONAL COMMISSION ON ZOOLOGICAL NOMENCLATURE. 1999. International Code of Zoological Nomenclature. Fourth edition adopted by the International Union of Biological Sciences. International Trust for Zoological Nomenclature, London, XXIX + 306 pp.
- ISMAILOVA, M. Sh. 1993. Obzor zhukov-dolgonosikov roda *Chlorophanus* Germ. fauny Kavkaza i zamechaniya o sistematike triby Tanymecini (Coleoptera, Curculionidae). Entomologicheskoe Obozrenie, 72(3): 606-625.

- KIPPENBERG, H. 1983. Unterfamilie: Hylobiinae [pp. 121-154]. In: H. Freude, K.W. Harde and G.A. Lohse. Die Käfer Mitteleuropas. Band 11. Goecke & Evers, Krefeld, 345 pp.
- KNÍZEK, M. 2011. Curculionidae subfamily Scolytinae (pp. 86-87 and 204-251). In: I. Löbl and A. Smetana (eds). Catalogue of Palaearctic Coleoptera. Volume 7. Curculionoidea 1. Apollo Books, Stenstrup, 373 pp.
- KOROTYAEV, B. A. 1992. Novye i maloizvestnye vidy dolgonosikov (Coleoptera, Curculionidae) iz Rossii i sopredel'nykh stran. Entomologicheskoe Obozrenie, 71(4): 807-832. [in Russian]
- KUSCHEL, G. 1995. A phylogenetic classification of Curculionoidea to families and sub-families. Memoirs of the Entomological Society of Washington 14: 5-33.
- LEGALOV, A. A. 2002. Novy rod *Tatianaerhynchites* gen. n. (Coleoptera, Rhynchitidae, Rhynchitini) iz Zapadnoj Palearktiki. A new genus *Tatianaerhynchites* gen. n. (Coleoptera, Rhynchitidae, Rhynchitini) from West Palearctic. Evrazijskij entomologicheskij zhurnal, 1(1): 87-90. [in Russian]
- LEGALOV, A. A., H. GHAHARI & G. YU. ARZANOV. 2010. Annotated catalogue of curculionid-beetles (Coleoptera: Anthribidae, Rhynchitidae, Attelabidae, Brentidae, Brachyceridae, Dryophthoridae and Curculionidae) of Iran. Amurian zoological journal 2(3): 191-244.
- LONA, C. 1936. Coleopterorum Catalogus auspiciis et auxilio W. Junk editus a S. Schenckling. Pars 148. Curculionidae: Otiorrhynchinae I. Junk, s Gravenhage, 226 pp.
- LÖBL, I. & A. SMETANA (eds). 2011. Catalogue of Palaearctic Coleoptera. Volume 7. Curculionoidea 1. Apollo Books, Stenstrup, 373 pp.
- LYAL, C. H. C. 2011. Dryophthoridae (pp. 185-192). In: Löbl I. and Smetana A. (eds). Catalogue of Palaearctic Coleoptera. Volume 7. Curculionoidea 1. Apollo Books, Stenstrup, 373 pp.
- MAGNANO, L., E. COLONNELLI & R. CALDARA. 2009. Order Coleoptera, superfamily Curculionoidea. Families Anthribidae, Brentidae, Apionidae, Nanophyidae, Curculionidae and Dryophthoridae. Arthropod fauna of the UAE, 2: 216-266.
- MARVALDI, A. E., A. S. SEQUEIRA, C. W. O'BRIEN & B. D. FARRELL. 2002. Molecular and morphological phylogenetics of weevils (Coleoptera, Curculionoidea): do niche shifts accompany diversification? Systematic Biology 51: 761-785.
- MIFSUD, D. & E. COLONNELLI. 2010. The Curculionoidea of the Maltese Islands (Central Mediterranean) (Coleoptera). Bulletin of the Entomological Society of Malta, 3: 55-143.
- MODARRES AWAL, M. 1997. List of agricultural pests and their natural enemies in Iran (revised edition). Ferdowsi University Press Publication No. 147, Mashhad, 429 pp.
- MODARRES AWAL, M. & F. HOSSEIN POUR. 2010. A contribution to the snout beetles fauna of Khorasan province in Iran (Coleoptera: Curculionidae). Munis Entomology and Zoology, 5(2): 623-626.
- [MYERS, B.]. 2011. *Phyllobius ruscicus*. Site www.globalspecies.org/ntaxa/1969110 accessed August 30, 2011.
- OBERPRIELER, R. G., A. E. MARVALDI & R. S. ANDERSON. 2007. Weevils, weevils, weevils everywhere. Zootaxa, (1668): 481-520.
- OSELLA, G. 1976. Descrizione di una nuova specie di *Caulomorpha* Faust della Persia (Coleoptera, Curculionidae). Verhandlungen der Naturforschenden Gesellschaft in Basel, 85(1/2): 92-94.
- OSELLA, G. 1977. Contributo alla conoscenza della curculionidofauna endogea dell'Iran settentrionale. (XIV Contributo alla conoscenza della Curculionidofauna endogea). Revue suisse de Zoologie, 84(1): 145-171.
- PALLAS, P. S. 1771. Reise durch verschiedene Provinzen des Russischen Reiches. Erster Theil Kaiserlichen Akademie der Wissenschaften, St. Petersburg, V + 504 pp. + 23 pl. + 2 maps

- PELLETIER, J. 1999. Description du genre *Parapholicodes* n. gen. (Entiminae) et de deux espèces nouvelles du Moyen-Orient (Coleoptera, Curculionidae). Bulletin de la Société entomologique de France, 104(3): 257-262.
- PERRIN, H. 1970. Contribution à la faune de l'Iran. 17. Coléoptères curculionides. Annales de la Société entomologique de France, N. S. 6(2): 359-366.
- PESARINI, C. 1973. Nuove specie di curculionidi raccolti in Turchia ed in Persia dal dott. W. Wittmer e descrizione di un nuovo genere (XIV contributo alla conoscenza dei Coleoptera Curculionidae). Bollettino della Società entomologica italiana, 105(4/6): 80-85.
- PESARINI, C. 1981. Le specie paleartiche occidentali della tribù Phyllobiini (Coleoptera, Curculionidae). Bollettino di Zoologia agraria e di Bachicoltura, (2)15[1979/1980]: 49-230.
- PFEFFER, A. 1995. Zentral- und westpaläarktische Borken- und Kernkäfer (Coleoptera: Scolytidae, Platypodidae). Pro Entomologia, Basel, 310 pp.
- PRENA, J. 2011. Curculionidae subfamily Baridinae (pp. 251-261). In: I. Löbl and A. Smetana (eds). Catalogue of Palaearctic Coleoptera. Volume 7. Curculionoidea 1. Apollo Books, Stenstrup, 373 pp.
- RHEINHEIMER, J. & M. HASSLER. 2010. Die Rüsselkäfer Baden-Württembergs. Verlag Regionalkultur, Heidelberg, 944 pp.
- SAKENIN, H., H. GHAHARI, M. TABARI, S. IMANI & H. OSTOVAN. 2009. Fauna of some beetles (Coleoptera) in north rice fields of Iran. Journal of Daneshvar Agronomy Science 2(3): 79-90. [in Iranian]
- SAMIN, N., H. SAKENIN & J. RASTEGAR. 2011. A study of the species composition of Scolytidae (Coleoptera) of north and northwestern Iran. Amurian zoological journal, 3(3): 265-267.
- SCHEDL, K. E. 1948. Bestimmungstabellen der palaearktischen Borkenkäfer. Teil III. Die Gattung *Scolytus* Geoffr. Mit 61 Abbildungen. Monographie Nr. 1 zum Zentralblatt für das Gesamtgebiet der Entomologie, Buchdruckerei "Carinthia", Klagenfurt, 66 [+ 1, unnumbered] pp.
- SCHOENHERR, C. J. 1842. Genera et species curculionidum, cum synonymia hujus familiae. Species novae aut hactenus minus cognitae, descriptionibus a Dom. L. Gyllenhal, C. H. Boheman, O. J. Fahraeus, et entomologiis aliis illustratae. Tomus sextus. Pars secunda. Supplementum continens. Roret, Paris; Fleischer, Lipsiae, [IV] + 495 pp.
- SCHOENHERR, C. J. 1844. Genera et species curculionidum, cum synonymia hujus familiae. Species novae aut hactenus minus cognitae, descriptionibus a Dom. L. Gyllenhal, C. H. Boheman, O. J. Fahraeus, et entomologiis aliis illustratae. Tomus octavus. Pars prima. Supplementum continens. Roret, Paris; Fleischer, Lipsiae, VI + 442 pp.
- SCOPOLI, G. A. 1763. Entomologia carniolica exhibens insecta Carnioliae indigena et distributa in ordines, genera, species, varietates. Methodo Linnaeana. Trattner, Vindobonae, VI + 23 + 421 pp.
- STIERLIN, G. 1883. Bestimmungstabellen europäischen Coleoptern. IX. Curculionidae. Mittheilungen der Schweizerischen entomologischen Gesellschaft, 6(8/9): 403-645.
- TER-MINASSIAN, M. E. 1965. Almond weevil *Rhynchites zaitzevi* Kieser., and allied species (Coleoptera, Attelabidae) from Armenia and Tajikistan. Entomologicheskoe Obozrenie, 44(2): 377-380. [in Russian]
- TER-MINASSIAN, M. E. 1967. Zhuki-dolgonosiki podsemejstva Cleoninae fauny SSSR. Ts-vetozhily i stebledy (triba Lixini). Nauka, Leningrad, 140 [+ 1 unnumbered] pp. (Translated 1978. Weevils of the subfamily Cleoninae in the fauna of the USSR. Tribe Lixini. ARS-USDA and National Science Foundation, Washington. Amerind Publishing Co., New Delhi, vi + 166 pp.)

- TER-MINASSIAN, M. E. 1988. Zhuki-dolgonosiki podsemejstva Cleoninae fauny SSSR. Kornevye dolgonosiki (triba Cleonini). Nauka, Leningrad, 232 [+ 2 unnumbered] pp. [in Russian]
- THOMPSON, R. T. 1992. Observations on the morphology and classification of weevils (Coleoptera, Curculionoidea) with a key to major groups. *Journal of Natural History* 26: 835-891.
- VAURIE, P. 1951. Revision of the genus *Calendra* (formerly *Sphenophorus*) in the United States and Mexico (Coleoptera, Curculionidae). *Bulletin of the American Museum of Natural History*, 98(1): 29-186.
- VELÁZQUEZ DE CASTRO, A. J., M. A. Alonso-Zarazaga & R. Outerelo. 2007. Systematics of Sitonini (Coleoptera: Curculionidae: Entiminae), with a hypothesis on the evolution of feeding habits. *Systematic Entomology* 32: 312-331.
- VOSS, E. 1971. Eine neue Gattung sowie einige neue bemerkenswerte Curculioniden aus Iran (Col. Curc.). *Entomologie et Phytopathologie Appliquées*, 30: 1-6.
- WANAT, M. 1990. Apionidae (Coleoptera, Curculionoidea) of the Arabian Peninsula. *Fauna of Saudi Arabia*, 11: 55-81.
- WANAT, M. 1992. The review of *Metapion gaudiale*- and *oculare* species groups (Coleoptera: Apionidae). *Genus*, 3(1): 39-61.
- WANAT, M. 1995. Systematic and phylogeny of the tribe Ceratapiini (Coleoptera: Curculionoidea: Apionidae). *Genus*, (Supplement), 406 pp.
- WINGELMÜLLER, A. 1914. Monographie der paläarktischen Arten der Tribus Cionini. Mit 35 Textfiguren. München, 73 pp. [Separatum of the unpublished volume 4 of *Münchener Koleopterologische Zeitschrift*]
- ZHERICHIN, V. V. & A. B. EGOROV. 1991. Weevils (Coleoptera, Curculionidae) from Russian Far East (review of subfamilies with description new taxa). Vladivostok, 164 pp. [in Russian]
- ZUMPT, F. 1931. Curculionidenstudien I. Über die Tanymecinen-Genera *Xylinophorus* Fst. und *Eutinopus* Fst. *Coleopterologisches Centralblatt*, 5[1930/1931](2/5): 123-137.
- ZUMPT, F. 1937. Curculioniden-Studien XXVII. Revision der paläarktischen *Brachycerus*-Arten. (Mit 55 Abbildungen und 3 Karten.). *Entomologische Blätter*, 33(5): 348-374.
- ZUMPT, F. 1939. Zur Kenntnis der Gattung *Taenophthalmus* Desbr. (Col. Curc.) (Curculioniden-Studien XXXI.) (Mit 3 Abbildungen). *Mitteilungen der Münchener Entomologischen Gesellschaft*, 29: 416-429.