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Checklists of Iranian Eurytomidae and Torymidae (Hymenoptera, Chalcidoidea)

A. STOJANOVA & H. GHAHARI

A b s t r a c t : Checklists of Iranian Eurytomidae and Torymidae (Hymenoptera, Chalcidoidea). Checklists of Iranian Eurytomidae and Torymidae (Hymenoptera, Chalcidoidea) are presented. The lists are based on detail study of all available published data, as well as on new records. Thirty-seven eurytomid species from six genera and 36 torymid species from 13 genera are currently recognized as occurring in Iran. *Eurytoma asiatica* ZEROVA & SERYOGINA 1999, *Eurytoma baldingerae* ERDŐS 1961, *Podagrion splendens* SPINOLA 1811, *Pseudotorymus arvernicus* (WALKER 1833), *Torymoides kiesenwetteri* (MAYR 1874) and *Ecdamua nambui* KAMIJO 1979 are herein presented as a new to the Iranian fauna.

K e y w o r d s : Eurytomidae, Torymidae, Iran, distribution, province.

Introduction

Chalcid wasps of the family Eurytomidae WALKER 1832 are over 1400 species in about 23 genera; Torymidae WALKER 1833 includes over 960 species and about 70 genera. The species of the both families have worldwide distribution (NOYES 2003) and many of them are primary parasitoids or hyperparasitoids on gall-inducing hymenopteran and dipteran insects, but some are phytophagous (gallinducers, inquilines or seed-feeders).

The Eurytomid and Torymid faunas in Iran have not been a subject of special investigations only since the last few years. Only 35 eurytomid and 32 torymid species have been published in chalcidological papers till present investigation.

HEDICKE (1921), with description of a new taxa, was the first author who mentioned Iranian eurytomids. Later, BOUČEK (1952, 1977), NIKOLSKAYA (1952) and BURKS (1971) recorded another 3 species of the family. MODARES AWAL (1997) gave a list of agricultural pests and their enemies in Iran and summarized published data till then on 8 eurytomids. Recently, many authors published information for new species described from Iran (NARENDRAN & LOTFALIZADEH 1999; ZEROVA et al. 2004, 2007; MADJDZADEH et. al. 2005; LOTFALIZADEH & DELVARE 2007) or established new to the Iranian fauna species.

The first record of Torymidae from Iran is given of PECK (1963). The faunistic and taxonomic papers treated the family in Iran accumulated rapidly through last years (MODARES AWAL 1997; EBRAHIMI & AHMADIAN 2002; RAKHSHANI et al. 2003a,b; GHARALI & ZEROVA 2004; AZIZKHANI et al. 2005; BAUR 2005; DELVARE 2005;

LOTFALIZADEH & GHARALI 2005; ASKEW et al. 2006a; FALLAHZADEH et al. 2008; HESAMI et al. 2008; NIEVES-ALDREY et al. 2008). A few torymids have been included in catalogues and revisional works (GRISSELL 1979; ROQUES & SKRZYP CZYNSKA 2003).

The orographic and climatic conditions in Iran, as well as a great variety of habitats give bases to presume existing of rich entomofauna there, including many endemic and relict forms. The future studies on eurytomids and torymids occurring the region will increase considerably our information about species diversity of families in Iran and Palaearctic.

The aim of the present paper is to summarize all accessible published data on Eurytomidae and Torymidae of Iran, as well as to present new original faunistic records. Furthermore, these results will provide a base for future investigations on eurytomids and torymids in Iran.

Material and methods

The published data on Eurytomidae and Torymidae family in Iran was summarized. The original material was collected between 2001 and 2006 in different regions of the country, mainly by sweeping. One torymid species was reared at laboratory conditions from mantid egg capsule. The checklists comprise the following data: the valid taxa name, published records with provincial distribution, or where this information is not available – only "Iran" is given, synonyms in records; original data: province and locality, altitude (m), month and year of collecting, number and sex of specimens, name of the collector, host (in case of rearing); general distribution.

Iranian provinces are given in alphabetical order in the lists.

Studied material was identified using insect manipulator (BOYADZHIEV & BOZHINOVA 2006) and it is preserved in collection of A. Stojanova, University of Plovdiv.

Results

The present work includes 37 eurytomid species from 6 genera and 36 torymid species from 13 genera. Two eurytomids and 4 torymids are herein newly recorded to the fauna of Iran.

The species are arranged in alphabetic order.

Family E u r y t o m i d a e WALKER 1832

Genus *B r u c h o p h a g u s* ASHMEAD 1888

***Bruchophagus astragali* FEDOSEEVA 1954**

D i s t r i b u t i o n i n I r a n : Chaharmahal-Bakhtiari province (HAGHIGHIAN 2004).

G e n e r a l d i s t r i b u t i o n : Palaearctic (Bulgaria, Georgia, Germany, Hungary, Iran, Kazakhstan, Mongolia, Romania, Russia, Sweden, Turkmenistan).

***Bruchophagus gibbus* (BOHEMAN 1836)**

Distribution in Iran: Khuzestan province (ESLAMIZADEH & EBRAHIMI 2002; ESLAMIZADEH et al. 2008).

General distribution: Palaearctic (Austria, Azerbaijan, Bulgaria, Finland, Germany, Hungary, Iran, Iraq, Italy, Netherlands, Peoples' Republic of China, Romania, Russia, Sweden, Ukraine, United Kingdom); Nearctic (Canada, United States of America); Neotropical (Argentina, Chile, Peru); Oriental (India); Australian (Australia, New Zealand).

***Bruchophagus glycyrrhizae* NIKOLSKAYA 1952**

Distribution in Iran: Qazvin province (ARBAB et al. 2004).

General distribution: Palaearctic (Iran, Iraq, Kazakhstan); Oriental (India).

***Bruchophagus mutabilis* NIKOLSKAYA 1952**

Distribution in Iran: Qazvin province (ARBAB et al. 2004); Iran (NIKOLSKAYA 1952; NOYES 2003).

General distribution: Palaearctic (Bulgaria, France, Iran, Kazakhstan).

***Bruchophagus nikolskajae* ZEROVA 1975**

Distribution in Iran: Khorasan province (DASHTI & LOTFALIZADEH 2008).

General distribution: Palaearctic (Iran, Kyrgyzstan).

***Bruchophagus robiniae* ZEROVA 1970**

Distribution in Iran: Tehran province (RAKHSHANI et al. 2005).

General distribution: Palaearctic (Armenia, Bulgaria, Iran, Ukraine, Uzbekistan).

***Bruchophagus rodди* GUSSAKOVSKY 1933**

Distribution in Iran: East and West Azerbaijan, Hamadan, Kermanshah, Kurdestan, Tehran and Zanjan provinces (MODARES AWAL 1997); Iran (NOYES 2003).

General distribution: Palaearctic (Austria, Bulgaria, Czech Republic, France, Germany, Hungary, Iran, Iraq, Israel, Kazakhstan, Moldova, Netherlands, Poland, Romania, Russia, Slovakia, Turkey, Ukraine, Uzbekistan, Yugoslavia (former)); Nearctic (Canada, United States of America); Neotropical (Argentina, Chile, Mexico, Peru); Oriental (India); Australian (Australia, New Zealand).

Genus *Eurytomia* ILLIGER 1807

***Eurytoma acropilae* ZEROVA 1986**

Distribution in Iran: Ilam province (GHARALI 2004; GHARALI & ZEROVA 2004a).

General distribution: Palaearctic (Azerbaijan, Iran, Kazakhstan, Tadzhikistan, Ukraine, Uzbekistan).

***Eurytoma amygdali* ENDERLEIN 1907**

Distribution in Iran: Yazd province (MOHAMMADI KORAMABADI & AMIN 2006); most almonds planting areas (MODARES AWAL 1997).

General distribution: Palaearctic (Armenia, Azerbaijan, Bosnia and Herzegovina, Bulgaria, Cyprus, France, Georgia, Greece, Hungary, Iran, Israel, Jordan, Lebanon, Republic of Macedonia, Russia, Syria, Turkey, Ukraine).

***Eurytoma arctica* THOMSON 1875**

Distribution in Iran: Markazi province (EBRAHIMI 1993; MODARES AWAL 1997); Iran (NOYES 2003).

General distribution: Palaearctic (Austria, Belgium, Croatia, Czech Republic, Denmark, Finland, Germany, Hungary, Iran, Norway, Poland, Russia, Slovakia, Sweden, Switzerland, United Kingdom).

***Eurytoma asiatica* ZEROVA & SERYOGINA 1999**

Material examined: Isfahan province: Najaf-Abad (1588 m), VII. 2003, 1♀ (H. Rakhshani). **The species is new to Iranian fauna.**

General distribution: Palaearctic (Turkmenistan).

***Eurytoma baldingerae* ERDÖS 1961**

Material examined: Chaharmahal-Bakhtiari province: Shahrekord (2050 m), IX. 2003, 1♀ (H. Ghahari); Semnan province: Damghan (1170 m), IV. 2005, 1♀ (H. Sakenin); Tehran province: Karaj (1261 m), VII. 2006, 1♀ (H. Ghahari). **The species is new to Iranian fauna.**

General distribution: Palaearctic (Azerbaijan, Bulgaria, Germany, Hungary, Sweden, Turkmenistan).

***Eurytoma brunniventris* RATZEBURG 1852**

Distribution in Iran: West Azerbaijan province (ZARGARAN et al. 2008).

General distribution: Palaearctic (Austria, Bosnia and Herzegovina, Bulgaria, Croatia, Czech Republic, France, Germany, Hungary, Iran, Italy, Japan, Korea-South, Netherlands, Romania, Russia, Serbia, Spain, Sweden, Ukraine, United Kingdom).

***Eurytoma caninae* LOTFALIZADEH & DELVARE 2007**

Distribution in Iran: East Azerbaijan province (LOTFALIZADEH & DELVARE 2007); West Azerbaijan, and Tehran provinces (LOTFALIZADEH et al. 2006).

General distribution: Palaearctic (France, Iran, Morocco).

***Eurytoma collina* ZEROVA 1984**

Distribution in Iran: East Azerbaijan and Tehran provinces (LOTFALIZADEH et al. 2006: *Aximopsis collina* (ZEROVA 1977)).

General distribution: Palaearctic (Iran, Tadzhikistan, Turkmenistan, Uzbekistan).

***Eurytoma curculionum* MAYR 1878**

Distribution in Iran: Markazi province (EBRAHIMI 1993; MODARES AWAL 1997); Iran (NOYES 2003).

General distribution: Palaearctic (Austria, Bosnia and Herzegovina, Finland, France, Germany, Hungary, Iran, Italy, Morocco, Norway, Poland, Republic of Macedonia, Sweden, Turkey, United Kingdom); Oriental (India).

***Eurytoma ghazvini* ZEROVA 2004**

Distribution in Iran: Qazvin province (ZEROVA et al. 2004); Iran (NOYES 2003; ZEROVA & SERYOGINA 2006).

General distribution: Palaearctic (Iran).

***Eurytoma goidanichi* BOUČEK 1970**

Distribution in Iran: Iran (HAESELBARTH 1983; NOYES 2003).

General distribution: Palaearctic (Croatia, former Czechoslovakia, Germany, Iran, Italy, Moldova, Republic of Macedonia, Russia, Slovakia, Turkmenistan, Ukraine, Serbia).

***Eurytoma iranica* NARENDRAN & LOTFALIZADEH 1999**

Distribution in Iran: Fars province (NARENDRAN & LOTFALIZADEH 1999); Iran (NOYES 2003).

General distribution: Palaearctic (Iran).

***Eurytoma iranicola* ZEROVA 2007**

Distribution in Iran: Kerman province (ZEROVA et al. 2004: *Eurytoma iranica* ZEROVA 2004); Iran (NOYES 2003, ZEROVA & SERYOGINA 2006).

Material examined: West Azerbaijan province: Ourmieh (1416 m), IX.2002, 1♀ (H. Ghahari).

General distribution: Palaearctic (Iran).

***Eurytoma morio* BOHEMAN 1836**

Distribution in Iran: East Azerbaijan, Isfahan, Tehran and Zanjan provinces (MODARES AWAL 1997).

General distribution: Palaearctic (Austria, Belgium, Croatia, Czech Republic, Denmark, Finland, France, Germany, Hungary, Iran, Israel, Italy, Kazakhstan, Lebanon, Lithuania, Moldova, Mongolia, Morocco, Netherlands, Norway, Peoples' Republic of China, Poland, Romania, Russia, Serbia, Slovakia, Spain, Sweden, Switzerland, Turkmenistan, Ukraine, United Kingdom, Yemen); Oriental (India).

***Eurytoma pistaciae* RONDANI 1877**

Distribution in Iran: Tehran province (RAKHSHANI et al. 2003b); West Azerbaijan province (ZARGARAN et al. 2008); Iran (NOYES 2003; ASKEW et al. 2006a,b).

General distribution: Palaearctic (Austria, Bulgaria, Croatia, Germany, Hungary, Iran, Italy, Japan, Korea-South, Peoples' Republic of China, Romania, Russia, Spain, Switzerland, Turkey, Ukraine, United Kingdom).

***Eurytoma plotnikovi* NIKOLSKAYA 1934**

Distribution in Iran: East Azerbaijan, Fars, Isfahan, Kerman; Khorasan, Markazi, Semnan and Zanjan provinces (MODARES AWAL 1997); Isfahan province (BASIRAT & SEYEDOLESAMI 1998, 2000); Iran (NOYES 2003).

General distribution: Palaearctic (Greece, Iran, Israel, Kirgizia, Peoples' Republic of China, Tadzhikistan, Tunisia, Turkmenistan).

***Eurytoma rosae* NEES 1834**

Distribution in Iran: East Azerbaijan, and Tehran provinces (LOTFALIZADEH et al. 2006); Tehran province (RAKHSHANI et al. 2003b); Iran (NOYES 2003; ASKEW et al. 2006a,b).

General distribution: Palaearctic (Andorra, Armenia, Austria, Belgium, Bulgaria, Czech Republic, Finland, France, Germany, Greece, Hungary, Iran, Italy, Kazakhstan, Netherlands, North Africa, Peoples' Republic of China, Poland, Romania, Serbia, Slovakia, Spain, Sweden, Switzerland, Turkey, United Kingdom, Yugoslavia (former)); Neotropical (Argentina); Oriental (Malaysia).

Genus *Exeurytoma* BURKS 1971

***Exeurytoma caraganae* BURKS 1971**

Distribution in Iran: Tehran province (BURKS 1971); Iran (NOYES 2003).

General distribution: Palaearctic (Iran, Turkmenistan).

Genus *Sycophila* WALKER 1871

***Sycophila biguttata* (SWEDERUS 1795)**

Distribution in Iran: East Azerbaijan and Tehran provinces (LOTFALIZADEH et al. 2006); East Azerbaijan, Ilam, and Lurestan provinces (LOTFALIZADEH & GHARALI 2007); Lurestan province (AZIZKHANI et al. 2005); West Azerbaijan province (ZARGARAN et al. 2008).

General distribution: Palaearctic (Austria, Belgium, Bosnia and Herzegovina, Bulgaria, Croatia, France, Germany, Hungary, Italy, Iran, Kazakhstan, Moldova, Montenegro, Netherlands, North Africa, Poland, Republic of Macedonia, Romania, Russia, Serbia, Slovenia, Spain, Sweden, Turkey, Ukraine, United Kingdom).

***Sycophila binotata* (FONSCOLOMBE 1832)**

Distribution in Iran: East Azerbaijan province (LOTFALIZADEH & GHARALI 2007).

General distribution: Palaearctic (Bulgaria, Croatia, France, Italy, Iran, Montenegro, Spain, Russia).

***Sycophila iracemae* NIEVES ALDREY 1984**

Distribution in Iran: Iran (NOYES 2003; ASKEW et al. 2006b).

General distribution: Palaearctic (France, Iran, Spain).

***Sycophila submutica* (THOMSON 1875)**

Distribution in Iran: Ilam province (GHARALI & ZEROVA 2004b; *Eudecatoma submutica* (THOMSON 1876), LOTFALIZADEH & GHARALI 2007).

General distribution: Palaearctic (Andorra, Austria, Belgium, Bosnia and Herzegovina, Bulgaria, Croatia, Czech Republic, Denmark, Finland, France, Germany, Greece, Hungary, Iran, Iraq, Kazakhstan, Moldova, Montenegro, Netherlands, Republic of Macedonia, Romania, Serbia, Spain, Sweden, Switzerland, Turkey, United Kingdom).

***Sycophila variegata* (CURTIS 1831)**

Distribution in Iran: Ilam and Lurestan provinces (LOTFALIZADEH & GHARALI 2007); Lurestan province (AZIZKHANI et al. 2005); West Azerbaijan province (ZARGARAN et al. 2008).

General distribution: Palaearctic (Bulgaria, Croatia, Czech Republic, France, Hungary, Iran, Iraq, Italy, Japan, Korea-South, Peoples' Republic of China, Romania, Slovakia, Sweden, Turkey, United Kingdom).

Genus *Systole* WALKER 1832

***Systole albipennis* WALKER 1832**

Distribution in Iran: Iran (BOUČEK 1952, 1977; PECK 1963; NOYES 2003).

General distribution: Palaearctic (Bulgaria, Croatia, Czech Republic, France, Germany, Hungary, Iran, Italy, Moldova, Montenegro, Netherlands, Romania, Sweden, Switzerland, Ukraine, United Kingdom); Nearctic (Canada); Neotropical (Chile); Oriental (India).

***Systole coriandri* GUSSAKOVSKY 1933**

Distribution in Iran: Iran (ZEROVA 1978; NOYES 2003).

General distribution: Palaearctic (Afghanistan, Bulgaria, Iran, Japan, Moldova, North Africa, Peoples' Republic of China, Romania, Russia, Uzbekistan); Nearctic (United States of America); Neotropical (Argentina, Brazil, Caribbean, Chile, Central America); Oriental (India, Malaysia).

***Systole foeniculi* OTTEN 1941**

Distribution in Iran: Iran (OTTEN 1941; BOUČEK 1952, 1988; ZEROVA 1978; NOYES 2003).

General distribution: Palaearctic (Afghanistan, Bulgaria, Iran, Central Asia); Australian (New Caledonia, New Zealand).

Genus *Tetraramesa* WALKER 1848

***Tetramesa leucospae* ZEROVA & MADJDZADEH 2005**

Distribution in Iran: Mazandaran province (MADJDZADEH et al. 2005); Iran (NOYES 2003).

General distribution: Palaearctic (Iran).

Tetramesa maderae (WALKER 1849)

Distribution in Iran: Fars province (DOUSTI 2006); Tehran province (MODARES AWAL 1997: *Harmolita aptera* (PORTSCHINSKY 1881)).

Material examined: Golestan province: National park (134 m), XI.2005, 1♀ (H. Ghahari).

General distribution: Palaearctic (Iran, Italy, Madeira, Turkey, Ukraine, United Kingdom, Central Asia); Nearctic (Canada, United States of America); Neotropical (Mexico).

Tetramesa persica (HEDICKE 1921)

Distribution in Iran: Hamadan province (HEDICKE 1921); Iran (NOYES 2003).

General distribution: Palaearctic (Iran).

Tetramesa tritici (FITCH 1859)

Distribution in Iran: Tehran province (MODARES AWAL 1997: *Harmolita tritici* (FITCH 1859)).

General distribution: Palaearctic (Iran, Russia, Spain), Nearctic (Canada, United States of America); Neotropical (Brazil).

Family T or y m i d a e WALKER 1833

Genus *A d o n t o m e r u s* NIKOLSKAYA 1955

***Adontomerus confusus* ASKEW 2000**

Distribution in Iran: Hormozghan province (LOTFALIZADEH & GHARALI 2005).

General distribution: Palaearctic (Canari Islands, Iran).

***Adontomerus crassipes* (BOUČEK 1982)**

Distribution in Iran: Ilam province (GHARALI & ZEROVA 2004: *Microdontomerus crassipes* (BOUČEK 1982), LOTFALIZADEH & GHARALI 2005: *Microdontomerus crassipes* (BOUČEK 1982)).

General distribution: Palaearctic (Algeria, Iran, Spain).

Genus *E c d a m u a* WALKER 1862

***Ecdamua nambui* KAMIJO 1979**

Material examined: Lurestan province: Khoram-Abad (1045 m), VII. 2003, 1♀ (H. Ghahari). **The species is new to Iranian fauna.**

General distribution: Palaearctic (Japan, Ukraine).

Genus *Glyphomerus* *mercurius* FÖRSTER 1856

***Glyphomerus stigma* (FABRICIUS 1793)**

Distribution in Iran: East Azerbaijan province (LOTFALIZADEH & GHARALI 2005); Azerbaijan-e-Sharghi and Tehran provinces (LOTFALIZADEH et al. 2006); Tehran province (RAKHSHANI et al. 2003b); Iran (NOYES 2003).

General distribution: Palaearctic (Andorra, Austria, Bulgaria, Croatia, Czech Republic, France, Germany, Greece, Hungary, Iran, Italy, Japan, Kyrgyzstan, Netherlands, Romania, Russia, Serbia, Slovakia, Spain, Sweden, Switzerland, Turkey, United Kingdom); Nearctic (Canada, United States of America).

Genus *Idiomacromerus* *croesus* CRAWFORD 1914

***Idiomacromerus papaveris* (FÖRSTER 1856)**

Distribution in Iran: Ilam and Qazvin provinces (LOTFALIZADEH & GHARALI 2005); Qazvin province (ARBAB et al. 2004).

General distribution: Palaearctic (Andorra, Austria, Bulgaria, Croatia, Czech Republic, France, Germany, Hungary, Iran, Israel, Italy, Moldova, Republic of Macedonia, Spain, Turkey).

***Idiomacromerus perplexus* (GAHAN 1914)**

Distribution in Iran: Ardabil and Qazvin provinces (LOTFALIZADEH & GHARALI 2005).

General distribution: Palaearctic (Armenia, Hungary, Iran, Romania, Russia, Serbia, Uzbekistan, Yugoslavia (former)); Nearctic (Canada, United States of America); Neotropical (Argentina, Chile, Mexico, Uruguay).

***Idiomacromarus terebrator* (MASI 1916)**

Distribution in Iran: East Azerbaijan province (LOTFALIZADEH & GHARALI 2005).

General distribution: Palaearctic (Armenia, Bulgaria, Croatia, Czech Republic, France, Germany, Hungary, Iran, Italy, Moldova, Republic of Macedonia, Romania, Russia, Slovakia, Ukraine, Uzbekistan); Nearctic (United States of America); Australian (New Zealand).

Genus *Megastigmus* *aculeatus* DALMAN 1820

***Megastigmus aculeatus* (SWEDERUS 1795)**

Distribution in Iran: Tehran province (RAKHSHANI et al. 2003a,b); Iran (PECK 1963; GRISSELL 1979; XU & HE 1995; NOYES 2003; O'CONNOR 2003; ROQUES & SKRZYP CZYNSKA 2003).

General distribution: Palaearctic (Armenia, Austria, Bosnia and Herzegovina, Bulgaria, Croatia, Czech Republic, Denmark, Finland, France, Germany, Greece, Hungary, Iran, Iraq, Italy, Japan, Kazakhstan, Moldova, Montenegro, Morocco, Netherlands, Peoples' Republic of China, Poland, Romania, Russia, Serbia, Slovakia, Spain, Sweden, Switzerland, Tadzhikistan,

Turkmenistan, Ukraine, United Kingdom), Nearctic (United States of America); Afrotropical (Ethiopia, Somalia, South Africa); Australian (New Zealand).

***Megastigmus almusiensis* DOĞANLAR 1989**

Distribution in Iran: Iran (NIEVES-ALDREY et al. 2008).

General distribution: Palaearctic (Iran, Turkey).

***Megastigmus bipunctatus* (SWEDERUS 1795)**

Distribution in Iran: Ghazvin province (ZARNEGAR et al. 2008).

General distribution: Palaearctic (Austria, Bulgaria, Czech Republic, Denmark, Estonia, Finland, France, Germany, Hungary, Iran, Italy, Kazakhstan, Montenegro, Morocco, Netherlands, Poland, Romania, Russia, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Ukraine, United Kingdom, Uzbekistan).

***Megastigmus dorsalis* (FABRICIUS 1798)**

Distribution in Iran: Lurestan province (AZIZKHANI et al. 2005, LOTFALIZADEH & GHARALI 2005); West Azerbaijan province (ZARGARAN et al. 2008); Iran (NOYES 2003).

General distribution: Palaearctic (Bulgaria, Bosnia and Herzegovina, Croatia, Czech Republic, Denmark, France, Germany, Hungary, Iran, Italy, Moldova, Netherlands, Peoples' Republic of China, Republic of Macedonia, Romania, Russia, Serbia, Slovakia, Sweden, Turkey, Ukraine, United Kingdom); Oriental (India).

***Megastigmus pistaciae* WALKER 1871**

Distribution in Iran: East Azerbaijan, Fars, Hamadan, Isfahan, Khorasan, Markazi, Simnan, Tehran and Zanjan provinces (ABAI & ADELI 1984; MODARES AWAL 1997; MEHRNEJAD 2001; JALILVAND & GHOLIPOUR 2002); Isfahan province (BASIRAT & SEYEDOLESAMI 2000); Qazvin province (LOTFALIZADEH & GHARALI 2005); Iran (ZOEBELEN 1966; NIKOLSKAYA & ZEROVA 1978; RICE & MICHAELIDES 1988; GRISSELL & PRINSLOO 2001; NOYES 2003; ROQUES & SKRZYP CZYNSKA 2003).

General distribution: Palaearctic (Afghanistan, Algeria, Bulgaria, Croatia, Cyprus, France, Greece, Iran, Israel, Italy, Montenegro, Morocco, Peoples' Republic of China, Portugal, Tunisia, Turkey, Turkmenistan, Ukraine, Uzbekistan); Nearctic (United States of America); Neotropical (Mexico); Australian (Australia).

***Megastigmus rosae* BOUČEK 1971**

Distribution in Iran: East Azerbaijan province (LOTFALIZADEH & GHARALI 2005).

General distribution: Palaearctic (Armenia, Austria, Azerbaijan, Bulgaria, Czech Republic, Georgia, Germany, Iran, Kazakhstan, Russia, Switzerland, Tadzhikistan, Turkey, Turkmenistan, Ukraine).

***Megastigmus stigmatizans* (FABRICIUS 1798)**

Distribution in Iran: Lurestan province (AZIZKHANI et al. 2005).

General distribution: Palaearctic (Austria, Bosnia and Herzegovina, Bulgaria, Croatia, Czech Republic, France, Germany, Hungary, Iran, Italy, Russia, Serbia, Slovakia, Slovenia, Sweden, Ukraine, United Kingdom).

Genus *Microdontomerus* *annulatus* CRAWFORD 1907

***Microdontomerus annulatus* (SPINOLA 1808)**

Distribution in Iran: Ilam province (GHARALI 2004: *Antistrophoplex cothurnatus* (MASI 1921), LOTFALIZADEH & GHARALI 2005); Tehran province (MODARES AWAL 1997: *Paraholaspis cothurnata* MASI 1921); Iran (NOYES 2003).

Material examined: Guilan province: Rasht (39 m), VIII.2004, 1♀ (H. Ghahari); Mazandaran province: Behshahr (57 m), VIII. 2005, 1♀ (H. Ghahari).

General distribution: Palaearctic (Austria, Bulgaria, Croatia, Czech Republic, Egypt, Germany, Hungary, Iran, Italy, Libya, Moldova, Montenegro, Pakistan, Romania, Serbia, Slovakia, Spain, Sweden, Turkey, United Kingdom).

Genus *Monodontomerus* WESTWOOD 1833

***Monodontomerus aereus* WALKER 1834**

Distribution in Iran: East Azarbaijan province (NIKDEL et al. 2004); Qazvin province (GHARALI et al. 2005; LOTFALIZADEH & GHARALI 2005).

Material examined: Isfahan province: Najaf-Abad (1547 m), IX.2002, 1♀ (H. Ghahari); Lurestan province: Khoram-Abad (1045 m), VII. 2003, 2♀♀ (H. Ghahari).

General distribution: Palaearctic (Armenia, Austria, Bosnia and Herzegovina, Bulgaria, Croatia, Czech Republic, France, Georgia, Germany, Greece, Hungary, Iran, Italy, Japan, Kazakhstan, Kirgizia, Moldova, Netherlands, North Africa, Poland, Republic of Macedonia, Romania, Russia, Serbia, Slovakia, Spain, Switzerland, Turkey, Ukraine, United Kingdom); Nearctic (Canada, United States of America); Oriental (India).

***Monodontomerus aeneus* (FONSCOLOMBE 1832)**

Distribution in Iran: Iran (NOYES 2003; BAUR 2005).

General distribution: Palaearctic (Austria, Azerbaijan, Croatia, Czech Republic, France, Georgia, Germany, Hungary, Iran, Italy, Kazakhstan, Kirgizia, Romania, Russia, Spain, Sweden, Ukraine, United Kingdom, Central Asia); Nearctic (Canada, United States of America); Neotropical (Chile).

***Monodontomerus obscurus* WESTWOOD 1833**

Distribution in Iran: Ardabil province (LOTFALIZADEH & GHARALI 2005).

Material examined: Fars province: Shiraz (1573), XI.2005, 1♀ (H. Sakenin); Hamadan province: Nahavand (1691 m), IX.2004, 2♀♀ (H. Solgi); Isfahan province: Shahreza (1828 m), VIII.2001, 10♀♀ (H. Ghahari); Isfahan province: Isfahan (1572 m), VI.2005, 2♀♀ (H. Rakhshani); Khorasan province: Bojnord (1084 m), IX.2004, 1♀ (M. Hamidi); Khorasan province: Birjand (1434 m), XI.2005, 2♀♀ (R. Safari); Mazandaran province: Savadkooch (623 m), IX.2006, 3♀♀ (M. Tabari).

General distribution: Palaearctic (Azores, Bulgaria, Croatia, Czech Republic, Denmark, Egypt, France, Germany, Hungary, Iran, Israel, Italy, Kazakhstan, Lebanon, Moldova, Netherlands, Pakistan, Republic of Macedonia, Romania, Russia, Slovakia, Spain, Sweden, Switzerland, Turkey, Turkmenistan, Ukraine, United Kingdom, Central Asia); Nearctic (Canada, United States of America); Neotropical (Chile); Oriental (India).

***Monodontomerus vicicellae* (WALKER 1847)**

Distribution in Iran: Mazandaran and Tehran provinces (TREMEWAN 1976, 1977); Iran (NOYES 2003).

General distribution: Palaearctic (Austria, Croatia, Czech Republic, Finland, France, Germany, Hungary, Iran, Italy, Moldova, Mongolia, Netherlands, Republic of Macedonia, Russia, Serbia, Slovakia, Spain, Ukraine, United Kingdom).

Genus *Ooprists* STEFFAN 1968

***Oopristus turkestanicus* (SKRIPTSHINSKY 1929)**

Distribution in Iran: Tehran province (STEFFAN 1968; MODARES AWAL 1997; *Oopristus safavii* STEFFAN 1968); Iran (FAROOQI 1986; NOYES 2003).

General distribution: Palaearctic (Iran, Iraq, Pakistan, Uzbekistan).

Genus *Podagrion* SPINOLA 1811

***Podagrion bouceki* DELVARE 2005**

Distribution in Iran: Kerman province (DELVARE 2005); Iran (NOYES 2003).

General distribution: Palaearctic (France, Iran, Morocco, Oman, Portugal, Spain); Afrotropical (Benin, Burkina Faso, Cameroon, Gambia, Guinea, Ivory Coast, Senegal, Somalia, South Africa).

***Podagrion pachymerum* (WALKER 1833)**

Distribution in Iran: Yazd province (EBRAHIMI & AHMADIAN 2002).

General distribution: Palaearctic (Algeria, Austria, Bulgaria, Croatia, Czech Republic, France, Germany, Hungary, Iran, Italy, Madeira, Moldova, Poland, Romania, Slovakia, Spain, Syria, Ukraine); Oriental (India).

***Podagrion splendens* SPINOLA 1811**

Material examined: Mazandaran province: Sari (24 m), VII.2006, 5♀, 1♂ (H. Ghahari). Reared from the egg capsule of *Mantis religiosa* L. 1758 (Mantodea). **The species is new to Iranian fauna.**

General distribution: Palaearctic (Bosnia and Herzegovina, Bulgaria, Croatia, Czech Republic, France, Greece, Hungary, Italy, Morocco, Slovakia, Spain, Turkey).

Genus *Podagrioneilla* GIRAUT 1914

***Podagrionella caudata* NARENDRAN 1994**

Distribution in Iran: Sistan-Baluchestan province (TATOGH et al. 2008).

General distribution: Palaearctic (Iran), Oriental (India).

***Podagrionella lichtensteini* (Picard 1933)**

Distribution in Iran: East Azerbaijan province (LOTFALIZADEH & GHARALI 2005: *Iridophaga lichtensteini* PICARD 1933).

General distribution: Palaearctic (Canary Islands, France, Iran, Kazakhstan, Spain).

Genus *Pseudotorymus* MASI 1921

***Pseudotorymus arvernicus* (WALKER 1833)**

Material examined: Guilan province: Lahijan (8 m), VI.2003, 1♀ (M. Tabari); Kerman province: Jiroft (1176 m), XII.2005, 1♀ (H. Ghahari); Khorasan province: Mashhad (1146 m), VII.2005, 1♀ (H. Ghahari). **The species is new to Iranian fauna.**

General distribution: Palaearctic (Austria, Croatia, Czech Republic, France, Germany, Hungary, Italy, Mongolia, Montenegro, Netherlands, Romania, Serbia, Slovakia, Sweden, Ukraine, United Kingdom).

***Pseudotorymus euphorbiae* ZEROVA & SERYOGINA 1999**

Distribution in Iran: Ilam province (LOTFALIZADEH & GHARALI 2005).

General distribution: Palaearctic (Iran, Ukraine).

***Pseudotorymus medicaginis* (MAYR 1874)**

Distribution in Iran: East Azerbaijan province (LOTFALIZADEH & GHARALI 2005).

General distribution: Palaearctic (Austria, Czech Republic, Iran, Mongolia, Romania, Sweden, Ukraine, United Kingdom).

***Pseudotorymus regalis* ASKEW 2006**

Distribution in Iran: Lurestan province (ASKEW et al. 2006a); Iran (NOYES 2003, ASKEW et al. 2006b).

General distribution: Palaearctic (Iran).

***Pseudotorymus stachidis* (MAYR 1874)**

Distribution in Iran: Fars province (FALLAHZADEH et al. 2008).

General distribution: Palaearctic (Austria, Hungary, Iran, Sweden).

Genus *Torymoides* WALKER 1871

***Torymoides kiesenwetteri* (MAYR 1874)**

Material examined: Mazandaran province: Behshahr (57 m), VIII.2005, 1♀ (H. Sakenin). **The species is new to Iranian fauna.**

General distribution: Palaearctic (Andorra, Bulgaria, Canary Islands, Croatia, Czech Republic, Egypt, France, Germany, Greece, Hungary, Italy, Madeira, Moldova, Poland, Republic of Macedonia, Romania, Serbia, Slovakia, Spain, Switzerland, Turkey, United Kingdom); Oriental (India, Nepal).

Genus *Torymus* DALMAN 1820

Torymus auratus (MÜLLER 1764)

Distribution in Iran: East Azerbaijan province (LOTFALIZADEH & GHARALI 2005, LOTFALIZADEH et al. 2006); Kordestan province (MODARES AWAL 1997: *Torymus nigricornis* (FABRICIUS 1793)).

General distribution: Palaearctic (Austria, Bulgaria, Czech Republic, France, Georgia, Germany, Hungary, Iran, Moldova, Netherlands, Romania, Slovakia, Sweden, Ukraine, United Kingdom); Nearctic (United States of America).

Torymus bedeguaris (LINNAEUS 1758)

Distribution in Iran: East Azerbaijan and Tehran provinces (LOTFALIZADEH & GHARALI 2005; LOTFALIZADEH et al. 2006); East Azerbaijan, Isfahan and Tehran provinces (MODARES AWAL 1997); Tehran province (RAKHSHANI et al. 2003b); Iran (NOYES 2003; ASKEW et al. 2006a,b).

General distribution: Palaearctic (Andorra, Armenia, Austria, Azerbaijan, Belgium, Bulgaria, Canada, Croatia, Czech Republic, Denmark, France, Georgia, Germany, Greece, Hungary, Iran, Italy, Kazakhstan, Kyrgyzstan, Moldova, Netherlands, Romania, Russia, Serbia, Slovakia, Spain, Sweden, Switzerland, Tadzhikistan, Turkey, Turkmenistan, Ukraine, United Kingdom); Nearctic (United States of America).

Torymus erucarum (SCHRANK 1781)

Distribution in Iran: West Azerbaijan province (ZARGARAN et al. 2008).

General distribution: Palaearctic (Austria, Croatia, Czech Republic, France, Germany, Hungary, Iran, Italy, Republic of Macedonia, Moldova, Netherlands, Poland, Portugal, Russia, Serbia, Slovakia, Spain, Sweden, Ukraine, United Kingdom).

Torymus geranii (WALKER 1833)

Distribution in Iran: Ilam province (LOTFALIZADEH & GHARALI 2005); Lurestan province (AZIZKHANI et al. 2005).

General distribution: Palaearctic (Azerbaijan, Belgium, Croatia, France, Germany, Iran, Japan, Korea-South, Netherlands, Peoples' Republic of China, Poland, Portugal, Russia, Serbia, Slovakia, Sweden, Ukraine, United Kingdom).

Torymus lapsanae (HOFFMEYER 1930)

Distribution in Iran: Fars and Tehran provinces (HESAMI et al. 2008).

General distribution: Palaearctic (France, Hungary, Iran, Sweden, Ukraine).

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Zusammenfassung

Checklisten von iranischem Eurytomidae und Torymidae (Hymenoptera: Chalcidoidea) werden präsentiert. Die Listen beruhen auf der Detail-Studie aller verfügbaren veröffentlichten Daten, sowie auf neuen Aufzeichnungen. Siebenunddreißig Eurytomiden-Arten aus sechs Gattungen und 36 Torymiden-Arten aus 13 Gattungen sind derzeit aus dem Iran bekannt. *Eurytoma asiatica* ZEROVA & SERYOGINA 1999, *Eurytoma baldingerae* ERDÖS 1961, *Podagrion splendens* SPINOLA 1811, *Pseudotorymus arvernicus* (WALKER 1833), *Torymoides kiesenwetteri* (MAYR 1874) und *Ecdamia nambui* KAMIJO 1979 werden hier als neu für die iranische Fauna vorgestellt.

References

- ABAI M. & E. ADELI (1984): List of pest of forest trees and shrubs of Iran. — Ministry of Agriculture and Rural development, Tehran, 147 pp.
- ARBAB A., GHARALI B. & M. ZEROVA (2004): Report of three species of Chalcidoidea from Iran. — J. Entomol. Soc. Iran **24**: 129-130.
- ASKEW R.R., SADEGHI S.E. & M. TAVAKOLI (2006a): Chalcidoidea (Hym.) in galls of *Diplolepis mayri* (SCHLECHTENDAL) (Hym., Cynipidae) in Iran, with the description of a new species of *Pseudotorymus* MASI (Hym., Torymidae). — Entomol. Mon. Mag. 142: 1-6.
- ASKEW R.R., PLANTARD O., GÓMEZ J.F., HERNANDEZ NIEVES M. & J.L. NIEVES-ALDREY (2006b): Catalogue of parasitoids and inquilines in galls of Aylacini, Diplolepiini and Pediaspidini (Hym., Cynipidae) in West Palaearctic. — Zootaxa **1301**: 1-60.
- AZIZKHANI E., RASULIAN G.R., KHARAZI-PAKDEL A., SADEGHI S.E., TAVAKOLI M. & G. MELIKA (2005): Report of eight species of parasitoid wasps belonging to Chalcidoidea from Cynipid galls on oak trees. — J. Entomol. Soc. Iran **25** (1): 79-80.
- BASIRAT M. & H. SEYDOLESLAMI (1998): Distribution, importance and biology of univoltine pistachio seed wasp *Eurytoma plotnikovi* NIKOLSKAYA (Hym.: Eurytomidae) in Isfahan province. — Proceedings of 13th Iranian Plant Protection Congress: 114.
- BASIRAT M. & H. SEYDOLESLAMI (2000): Biology of pistachio seed wasp in Isfahan province, Iran. — Journal of Science and Technology of Agriculture and Natural Resources **4** (1): 137-148.
- BAUR H. (2005): Determination list of entomophagous insects nr 14. — Bulletin. Section Regionale Ouest Palaearctique, Organisation Internationale de Lutte Biologique **28** (11): 1-71.
- BOUČEK Z. (1952): A new pest of cumin, *Systole albipennis* WALK. (Eurytomidae, Chalc., Hym.). — Folia Zool. Entomol. **1**: 4-9.
- BOUČEK Z. (1977): A faunistic review of the Yugoslavian Chalcidoidea (Parasitic Hymenoptera). — Acta Entomol. Jugoslavica, Suppl. **13**: 1-145.
- BOUČEK Z. (1988): Australasian Chalcidoidea (Hymenoptera). A biosystematic revision of genera of fourteen families, with a reclassification of species. — CAB International Institute of Entomology, Wallingford, Oxon, U.K., Cambrian News Ltd, Aberystwyth, Wales, 832 pp.
- BOYADZHIEV P. & R. BOZHINOVA (2006): New mechanical manipulator for studies of mounted insects using stereo microscopes. — Infocus Magazine **4**: 28-34.
- BURKS B.D. (1971): A synopsis of the genera of the family Eurytomidae (Hym., Chalcidoidea). — Trans. Am. Entomol. Soc. **97**: 1-89.
- DASHTI M. & H. LOTFALIZADEH (2008): On the occurrence of *Bruchophagus nikolskajae* ZEROVA, 1975 (Hym.: Erytromidae): a seed-eater wasp of *Ermurus spectabilis* in Iran. — Proceedings of 18th Iranian Plant Protection Congress: 106.

- DELVARE G. (2005): A revision of the West-Palearctic *Podagrion* (Hymenoptera: Torymidae), with the description of *Podagrion bouceki* sp.nov. — Acta Societatis Zoologicae Bohemoslovenicae **69**: 65-88.
- DOUSTI A.F. (2006): The first record of *Tetramesa maderae* (Hym.: Eurytomidae) from Iran. — Proceedings of 17th Iranian Plant Protection Congress: 66.
- EBRAHIMI E. (1993): An introduction to the new six parasitoid wasps for the fauna of Iran. — J. Entomol. Soc. Iran **12/13**: 25.
- EBRAHIMI E. & H.A. AHMADIAN (2002): Report of *Podagrion pachymerum* (Hym.; Torymidae) from Iran. — Proceedings of 15th Iranian Plant Protection Congress: 166.
- ESLAMIZADEH R. & E. EBRAHIMI (2002): Biology and damage level of alfalfa seed wasp *Bruchophagus gibbus* (BOHEMAN) (Eurytomidae) in Khuzestan province. — Proceedings of 15th Iranian Plant Protection Congress: 28.
- ESLAMIZADEH R., BARZKAR M., SHOOSHIDEZFULI A.A. & M. KARAMI NEJAD (2008): Investigation on the effect of last cutting time on damage rate of *Bruchophagus gibbus* on Baghadi alfalfa seed yield in Khuzestan. — Proceedings of 18th Iranian Plant Protection Congress: 388.
- FALLAHZADEH M., SHOJAI M., OSTOVAN H. & K. KAMALI (2008): The first report of *Pseudotorymus stachidis* (Hym.: Torymidae) from Iran. — J. Entomol. Soc. Iran **27** (2): 17-18.
- FAROOQI S.I. (1986): Family Torymidae. — In: SUBBA RAO B.R. & M. HAYAT (eds), The Chalcidoidea (Insecta: Hymenoptera) of India and the adjacent countries. Part II, Oriental Insects, Associated Publishers, USA, 20: 1-430.
- GHARALI B. (2004): Study of natural enemies of safflower shoot flies in Ilam province. — Proceedings of 16th Iranian Plant Protection Congress: 54.
- GHARALI B. & M. ZEROVA (2004a): The first report on *Eurytoma acropitiae* ZEROVA, 1986, parasitoid of safflower shoot flies from Iran. — App. Entomol. Phytopath. **71**: 32-33.
- GHARALI B. & M. ZEROVA (2004b): Natural enemies of safflower gall wasp, *Isocolus* sp. (Cynipidae: Aylacini) in Ilam province. — Proceedings of 16th Iranian Plant Protection Congress: 55.
- GHARALI B., LOTFALIZADEH H.A., EBRAHIMI E. & M. ZEROVA (2005): Record of *Monodontomerus aereus* (Hym.: Torymidae) from Iran. — J. Entomol. Soc. Iran **25** (1): 66.
- GRISSELL E.E. (1979): Family Torymidae. — In: KROMBEIN K.V., HURD P.D., SMITH D.R. & B.D. BURKS (eds), Catalog of Hymenoptera in America North of Mexico 1, Smithsonian Institution Press, Washington, D.C.: 748-769.
- GRISSELL E.E. & G.L. PRINSLOO (2001): Seed-feeding species of *Megastigmus* (Hymenoptera: Torymidae) associated with Anacardiaceae. — Journal of Hymenoptera Research **10** (2): 271-279.
- HAESELBARTH E. (1983): Determination list of entomophagous insects Nr. 9. — Bulletin. Section Regionale Ouest Palaearctique, Organisation Internationale de Lutte Biologique **6** (1): 1-49.
- HAGHIGHIAN F. (2004): *Bruchophagus astragali* (Hymenoptera: Eurytomidae) as a pest of rangeland legumes in Chaharmahal and Bakhtiari province. — Proceedings of 16th Iranian Plant Protection Congress: 135.
- HEDICKE H. (1921): Beiträge zu einer Monographie der paläarktischen Isosominen (Hym., Chalc.). — Archiv für Naturgeschichte (A) **86**: 1-167.
- HESAMI S., BEHZADI M.R., EBRAHIMI E., MIRESMAILI S.S. & M. DOĞANLAR (2008): Report of *Torymus lapsanae* (Hym.: Torymidae), a parasitoid of *Diplolepis rosae* (Hym.: Cynipidae) from Iran. — J. Entomol. Soc. Iran, Suppl. **27**: 17-18.
- LOTFALIZADEH H. & B. GHARALI (2005): Introduction to the Torymidae fauna (Hymenoptera: Chalcidoidea) of Iran. — Zool. Middle East **36**: 67-72.

- LOTFALIZADEH H. & GHARALI B. (2007): Some notes on the genus *Sycophila* WALKER, 1871 (Hymenoptera: Eurytomidae) in the west of Iran. — Zool. Middle East **40**: 77-84.
- LOTFALIZADEH H., DELVARE G. & J.-Y.RASPLUS (2007): *Eurytoma caninae* sp.n. (Hymenoptera, Eurytomidae), a common species previously overlooked with *E. rosae*. — Zootaxa **1640**: 55-68.
- LOTFALIZADEH H., RASPLUS J.-Y. & G. DELVARE (2006): Rose gall wasps and their associated fauna (Hymenoptera) in Iran. — Redia **89**: 73-85.
- JALILVAND N. & Y. GHOLIPOUR (2002): Pistachio production in Iran: II. Main Iranian pistachio pests. — NUCIS Newsletter 2002, **11**: 23-25.
- MADJDZADEH M., ZEROVA M. & H. DAWAH (2005): A new species of *Tetramesa* (Hymenoptera, Eurytomidae) from Iran. — Vestn. Zool. **39**: 65-66.
- MEHRNEJAD M.R. (2001): The current status of pistachio pests in Iran. — Cahiers Options Méditerranéennes **56**: 315-322.
- MODARES AWAL M. (1997): List of agricultural pests and their natural enemies in Iran. (Revised edition). — Ferdowsi University Press, 429 pp.
- MOHAMMADI KORAMABADI A. & H. AMIN (2006): Preliminary screening of several varieties of almonds to almond seed wasp *Eurytoma amygdali* ENDERLEIN in Mehriz of Yazd province. — Proceedings of 17th Iranian Plant Protection Congress: 314.
- NARENDRAN T.C. & H. LOTFALIZADEH (1999): A new species of *Eurytoma* ILLIGER (Hymenoptera: Eurytomidae) parasitic on *Eulecanium rugulosum* ARCH. (Homoptera: Coccoidea) from Iran. — Iran Agricultural Research **18**: 197-204.
- NIKDEL M., SADAGHIAN B. & A. DORDAEI (2004): Collection and identification of brown-tail moth's natural enemies in Arasbaran forest. — The Joint Agriculture and Natural Resouces Symposium, Tabriz – Ganja: 1-5.
- NIEVES-ALDREY J.L., HERNANDEZ NIEVES M. & J.F. GÓMEZ (2008): Larval morphology and biology of three European species of *Megastigmus* (Hymenoptera, Torymidae, Megastigminae) parasitoids of gall wasps, including a comparison with the larvae of two seed-infesting species. — Zootaxa **1746**: 46-60.
- NIKOLSKAYA M.N. (1952): Chalcids of the fauna of the USSR (Chalcidoidea). — Opredelitel po Faune SSSR, Zoologicheskim Institutom Akademii Nauk SSSR. Moscow and Leningrad, 575 pp.
- NIKOLSKAYA M.N. & M.D. ZEROVA (1978): Torymidae (Callimomidae). — In: MEDEVDEV G.S. (ed.), Opredelitel Nasekomah Evropeyskoy Chasti SSSR, vol. III, Hymenoptera II. Nauka, Leningrad: 358-374.
- NOYES J. (2003): Universal Chalcidoidea Database. World Wide Web electronic publication. Available from <http://www.nhm.ac.uk/entomology/chalcidoids/> (accessed 10 September 2008).
- O'CONNOR J.P. (2003): *Megastigmus aculeatus* (SWEDERUS) (Hym., Torymidae), new to Ireland. — Entomol. Mon. Mag. **139**: 124.
- OTTEN E. (1941): Gezogene Chalcidiiden und ihre Wirte. II. — Arbeiten über Morphologische und Taxonomische Entomologie **8**: 255-266.
- PECK O. (1963): A catalogue of the Nearctic Chalcidoidea (Insecta; Hymenoptera). — The Canadian Entomologist, Suppl. **30**: 1-1092.
- RAKHSHANI E., TALEBI A. & T.C. NARENDRAN (2005): Report of *Bruchophagus robiniae* (Hym.: Eurytomidae) from Iran. — J. Entomol. Soc. Iran **25** (1): 81-82.
- RAKHSHANI E., TALEBI A., FATHIPOUR Y., & S. MOHARRAMIPOUR (2003a): The first report of rose seed gall wasp, *Megastigmus aculeatus* SWEDERUS (Hymenoptera: Torymidae) from Iran. — Proceedings of the 2nd Applied-Scientific Seminar on Flowers and Ornamental Plants: 9.

- RAKHSHANI E., TALEBI A., SADEGHİ S.E., EBRAHAMI E. & C. THUROCZY (2003b): Report of five wasps species associated with dog rose galls in Iran. — J. Entomol. Soc. Iran **23** (1): 107-108.
- RICE R.E. & T.J. MICHAELIDES (1988): Pistachio seed chalcid *Megastigmus pistaciae* WALKER (Hymenoptera, Torymidae) in California, USA. — J. Econ. Entomol. **81**: 1446-1449.
- ROQUES A. & M. SKRZYP CZYNSKA (2003): Seed-infesting chalcids of the genus *Megastigmus* DALMAN, 1820 (Hymenoptera: Torymidae) native and introduced to the west Palaearctic region: taxonomy, host specificity and distribution. — Journal of Natural History **37**: 127-238.
- STEFFAN J.R. (1968): Observations sur *Chalcedectus sinaiticus* (Ms.) et descriptions de *C. balachowskyi* sp.n. (Hym. Chalcedectidae) et d'*Oopristus safavii* gen.n., sp.n. (Hym. Torymidae), deux parasites d'importance économique en Iran. — Entomophaga **13** (3): 209-216.
- TATOOGH A., LOTFALIZAGEH H. & E. RAKSHANI (2008): Occurrence of *Podagrionella caudata* NARENDRAN, 1994 (Hym.: Torymidae), an oothecal parasitoid of the mantids in Iran. — Proceedings of 18th Iranian Plant Protection Congress: 64.
- TREMEWAN W.G. (1976): Further notes on *Zygaena* FABRICIUS (Lep., Zygaenidae) from Iran. — Entomol. Gaz. **27**: 215-220.
- TREMEWAN W.G. (1977): On *Zygaena* FABRICIUS (Lep., Zygaenidae) collected in Iran in 1976. — Entomol. Gaz. **28**: 223-227.
- XU Z.H. & HE J.H. (1995): Note on species of the phytophagous group of *Megastigmus* (Hymenoptera: Torymidae) from China. — Entomotaxonomia **17**: 243-253.
- ZARGARAN M.R., SADEGHİ S.E., BAKHSHALI SAATLO V. & G. MELIKA (2008): Identification of oak gallwasps parasitoids in West Azarbaijan. — Proceedings of 18th Iranian Plant Protection Congress: 83.
- ZARNEGAR A., LOTFALIZADEH H. & B. GHARALI (2008): The first report of *Megastigmus bipunctatus* (SWEDERUS, 1795) (Hymenoptera: Torymidae) from Iran. — Proceedings of 18th Iranian Plant Protection Congress: 95.
- ZEROVA M.D. (1978): Eurytomidae. — In: MEDEVDEV G.S. (ed.), Opredelitel Nasekomah Evropeyskoy Chasti SSSR, vol. III, Hymenoptera II. Nauka, Leningrad: 328-358.
- ZEROVA M.D. & L.Y. SERYOGINA (2006): A review of Paearctic species of the genus *Eurytoma* of robusta species group (Hymenoptera, Eurytomidae) with a description of two new species. — Zool. Zh. **85**: 1196-1106.
- ZEROVA M.D., MEHRNEJAD M.R., GHARALI B. & L.Y. SERYOGINA (2004): Two new species of the genus *Eurytoma* (Hymenoptera, Eurytomidae) from Iran. — Vestn. Zool. **38**: 81-84.
- ZOEBELEIN G. (1966): Probleme der Bekämpfung schädlicher Insekten in der Landwirtschaft im Iran. — Anzeiger für Schädlingskunde **39**: 3-8.

Addresses of the authors: Dr. Anelia STOJANOVA
Department of Zoology
Faculty of Biology, University of Plovdiv
24 Tsar Assen Str.
BG - 4000 Plovdiv, Bulgaria
E-mail: stanelia@uni-plovdiv.bg

Dr. Hassan GHAHARI
Department of Agriculture
Islamic Azad University, Science and Research Branch
P.O.Box 14515/775, Tehran, Iran
E-mail: h_ghahhari@yahoo.com

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