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INSECTS OF IRAN

The List of Lepidoptera in the Hayk Mirzayans Insect Museum of
Iranian Research Institute of Plant Protection

Family: Cossidae

By:

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In the Name of God

The list of Lepidoptera in Hayk Mirzayans Insect Museum of the
Iranian Research Institute of Plant Protection
Lepidoptera: Cossidae

By:

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The family Cossidae is one of the seven representatives of the superfamily Coccoidea (van Nieukerken *et al.*, 2011). They are among the earliest branches of Apoditrysia having a relatively plesiomorphic wing venation with the M-stem forked in both fore- and hindwings in most cossoids (Edward *et al.* 1998). This family has a worldwide distribution, and many of them are specific to arid areas of the Palaearctic Region (Yakovlev & Dubatolov 2013). They are small to very large-sized, usually robust moths and the adults are exclusively nocturnal in activity (Edward *et al.* 1998). The family currently includes 971 species in 151 genera (van Neukerkin *et al.* 2011). Medially adjacent well projecting parapatagia in prothorax is the only known autapomorphy of this family; although the character is weakly developed in some Cossinae (Edward *et al.* 1998). The family Cossidae is divided into 10 subfamilies namely, Catoptinae, Chilecomadiinae, Cossinae, Cossulinae, Hypoptinae, Mehariinae, Politzariellinae, Pseudocossinae, Stygiinae, and Zeuzerinae (Yakovlev 2014, 2018).

The earliest report of the Cossidae of Iran returns to Christoph (1876) who reported *Cossus cossus* L. from Shahrud. From the late 19th to the early 20th centuries, a

series of original descriptions of Cossidae from Iran and neighboring Turkmenistan and Azerbaijan areas were appeared (Grum-Grshimailo 1893, 1895, 1899, 1902; Christoph 1873, 1876, 1884, 1885, 1887a, b, 1888, 1889a, b, 1893; Staudinger 1891; Röber 1896; Austaut 1897; Püngeler 1898, 1899, 1900; Strand 1911; Rothschild 1912; Schawerda 1913). However, the main investigations on the Cossidae of Iran were conducted by: 1) Dalla-Torre (1923), who published all the references of primary descriptions and brief data on the distribution of the world carpenter moths including Iran; and 2) Daniel (1932a, b, c), through his work on the fauna of southern Turkey which was accompanied with some new records for the Cossidae fauna of Iran. His studies were extended by a number of articles (Daniel 1933, 1937, 1938, 1939, 1940, 1949, 1953, 1956, 1961, 1962, 1963, 1964a, b, 1965b 1969a, b, 1971) and some new records were thereby added to the fauna of Iran. At the same times, several other specialists have carried out some studies on the fauna of Iran and adjacent territories beside those of Daniel's (Wagner, 1937; Brandt, 1938; Schwingenschuss, 1939a, b, c; Wiltshire, 1939, 1946a, b, c, 1949a, 1957; Bryk, 1947; Sutton, 1963; Barou, 1967). Some brief data on the taxonomy of Cossidae of the Palearctic Region, including Iran, were also published by Daniel during 1955 to 1965 (Daniel 1955, 1959, 1960, 1961, 1962, 1963, 1965a, b). In 1990, de Freina and Witt renewed the studies of the Cossidae of Iran in their major work on "Macroheterocera of the western Palaearctic". Later, de Freina (1983, 1994), Witt (1983), Wieser *et al.* (2001), Yakovlev (2004, 2006a, b, 2007, 2008, 2009, 2011), Yakovlev *et al.* (2007), Saldaitis *et al.* (2007) and Yakovlev & Witt (2017a, b) appended some other information on the Cossidae fauna of Iran and adjacent countries. However, the complete and inclusive revision of the family Cossidae in Iran has recently been conducted by Alipanah *et al.* (2019, in press).

Based on the above mentioned literature, a total of 69 species and 17 subspecies belonging to 26 genera and five subfamilies (Catoptinae, Mehariinae, Stygiinae, Cossinae, and Zeuzerinae) are presently known from Iran. Among them, the specimens of 53 species and 15 subspecies in 23 genera are deposited in the Lepidoptera collection of the Hayk Mirzayans Insect Museum (HMIM). There are no specimens available for the following 16 species and two subspecies in the Lepidoptera Collection of HMIM: *Dyspessa derbenti* Daniel, 1964, *D. kabylaria* A. Bang-Haas, 1906, *D. hethitica* Daniel, 1932, *Stygioides colchica colchica* (Herrich-Schäffer, 1851), *Holcocerus nobilis* Staudinger, 1884, *H. witti* Yakovlev, Saldaitis & Ivinskis, 2007, *H. zarudnyi* Grum-Grshimailo, 1902, *Cossulus argentatus* Staudinger, 1887, *C. herzi* (Alpheraky, 1893), *C. kopetdaghi* Yakovlev & Alipanah, 2019 (in press), *C. strioliger* (Alpheraky, 1893), *C. zoroastres* (Grum-Grshimailo, 1902), *Dyspessacossus funkei* (Röber, 1896), *Vartiania drangianica* (Grum-Grshimailo, 1902), *Acossus terebrus* ([Denis & Schiffermüller], [1776]), *Paropta paradoxa paradoxa* (Herrich-Schaffer, [1851]) and *Phragmacossia ariana* (Grum-Grshimailo, 1899). In the present study, a list of the available species as well as the detailed information on their distribution in Iran are provided.

We particularly appreciate to Dr. Thomas Witt (Museum Witt, München, Germany) for giving the opportunity to study some specimens of his private collection and to Hossein Falsafi (Iranian Research Institute of Plant Protection, IRIPP) for preparing the administrative divisions map of Iran. Our sincere regards goes to Mohammad Reza Nematian, Hossein Falsafi, and Abolfazl Hajiesmailian (IRIPP) who spread the collected material carefully. We also thank to all our colleagues in the IRIPP who have collected the material from different parts of Iran during the last 75 years.

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THE LIST OF LEPIDOPTERA FROM IRAN

Order: **Lepidoptera**

Superfamily: **Coccoidea** Leach, [1815]

Family: **Cossidae** Leach, [1815]

Subfamily: **Catoptinae** Yakovlev, 2009

Genus: *Catopta* Staudinger, 1899

Catopta kendevanensis kendevanensis Daniel, 1937

Material examined:

Alborz:

Karaj: Dizin, 2900 m, 12.VII.1981, 8 ♂♂, leg. Hāshemi; Gachsar, Dizin, 3000 m, 10.-12.VIII.1975, 6 ♂♂ 1 ♀, leg. Pāzuki, Abāi; Karaj, Kandovān, 21.IX.1974, 1 ♂, leg. Abāi, Behbahāni; Kandovān, Sarchāl, 2800 m, 4.-8.VII.1977, 1 ♂, leg. Pāzuki, Mortazavīhā.

Tāleghān (6 km. E. Āzādbār): 2350 m, 21.VII.1988, 1 ♂, leg. Mirzāyāns, Badii.

Golestān:

Shāhkuh-e Pāeen: 2600-2800 m, 19.-21.VII.1999, 1 ♂, leg. Hofmann, Meineke, Möllet.

Māzandarān:

Tonekābon: Sefidāb, 18.VII.1979, 1 ♂, leg. Anonymous.
Siāhbisheh- Yush Rd.: 3 km. Kamarbon vill., N 36° 13' 51.7", E 051° 24' 45.3", 2557 m, 21, 22.VII.2007, 1 ♂, leg. Ālipanāh.

Tehrān:

Damāvand: Gardlash, Āro, 2120 m, 29.VII.1988, 1 ♂, leg. Mirzāyāns, Badii; Tār Lake, 2700 m, 25.VII.1988, 5 ♂♂ 1 ♀, leg. Mirzāyāns, Badii; Tār Lake, 2700 m, 24.VIII.1992, 3 ♂♂ 1 ♀, leg. Ebrāhimi, Badii.
Lār: Lār vall., 2420 m, 24.-25.VIII.1992, 3 ♂♂, leg. Ebrāhimi, Badii; Emāmzādeh, 2500 m, 13.VIII.1993, 1 ♂, leg. Parchami-Arāghi, Ebrāhimi.

***Catopta kendevanensis anjumanica* Daniel, 1964**

Material examined.

Hormozgān:

Bandar Abbās: Isin, 50 m, 6.III.1985, 1 ♂ 1 ♀, leg. Borumand, Hāshemi.

***Catopta hyrcanus* (Christoph, 1888)**

Material examined.

Chāhārmahāl va Bakhtiāri:

Kuhrang: 26.VII.1974, 1 ♂, leg. Hāshemi, Zairi.

Esfahān:

Kāshān: 4 km. S. Jāhagh, 2000 m, 14.-15.VI.1984, 1 ♂, leg. Pāzuki, Hāshemi.

Natanz: Abyāneh, 2300 m, 29.VI.1981, 2 ♂♂, leg. Hāshemi; Targh, 2630 m, 8.VIII.2003, 1 ♂, leg. Ghayurfar, Ebert, Trusch, Nematiān.

Gilān:

Rudsar: Eshkevarāt, N 36° 52' 2.03", E 050° 10' 08.1", 1434 m, 16.VIII.2013, 5 ♂♂, leg. Afsariān.

Golestān:

Gonbad Kāvus: Minudasht, Golestān forest, 21.VI.1974, 3 ♂♂, leg. Pāzuki, Rajabi.

Shāhrud (W.): Shāhkuh-e Bālā, 2580 m, 18.VII.2003, 5 ♂♂, leg. Hofmann, Meineke, Tremewan; Shāhkuh-e Pāeen, 1700 m, 18.VII.2003, 4 ♂♂, leg.

Ālipanāh, Ebrāhimi; Kamareh Chehel Dokhtar, 1700 m, 3.VI.1982, 1 ♂, leg. Hāshemi.

Kermān:

Bam: Dehbakri, 2300 m, 23.V.2004, 1 ♂, leg. Rajāei; Dehbakri, 10.VI.1971, 1 ♂, leg. Hāshemi, Naim; SW. Bam, Dehbakri, 2000-2200 m, 18.-21.V.2004, 1 ♀ 1 ♂, leg. Meineke, Hofmann, Tremewan.

Jebāl-e Bārez: Ābtorsh, 12.VI.1971, 1 ♂, leg. Naim, Hāshemi.

Jiroft: Sarbīshān Mt. Pass (NW. Jiroft), Shingerā, 2700-2900 m, 3.-4.VI.2002, 2 ♂♂, leg. Meineke, Hofmann, Kallies; Jiroft- Bāft Rd., 55 km. after Jiroft, Shingerā, 2800 m, 24.V.2004, 1 ♂, leg. Rajāei.

Khorāsān-e Razavi:

Bājgirān (W.): 7 km. W. Gharah Chegheh vill., Gharah Chegheh protected area, N 37° 39' 11.8", E 058° 14' 32.9", 2036 m, 21.VI.2013, 3 ♂♂, leg. Ālipanāh, Falsafi.

Daregaz: Tandoreh National Park, Shekarāb, N 37° 21' 43.0", E 058° 42' 32.0", 2135 m, 30.VI.2014, 1 ♂, leg. Ālipanāh, Falsafi; N. Tandoreh National Park, Chelmir- Bandak Rd., N 37° 23' 54.2", E 058° 47' 02.0", 1383 m, 25.VI.2014, 2 ♂♂, leg. Ālipanāh, Falsafi.

Mashhad: 10 km. after Golmakan vill., Binālud Mt. (Asheghān vall.), N 36° 24' 12.9", E 059° 06' 22.5", 1884 m, 4.VI.2016, 2 ♂♂ and one specimen without abdomen, leg. Ālipanāh, Falsafi.

Neyshābur: Zabarkhān Hesār, 1400 m, 12.VI.1977, 1 ♂, leg. Pāzuki, Abāi.

Shāndiz: Zoshk, Binālud, 2000 m, 19.VI.1974, 1 ♂, leg. Rajabi, Pāzuki.

Torbat-e Heydariyeh: Kadkan, Sorb Mt., 2200- 2400 m, 15.VI.1998, 6 ♂♂, leg. Hofmann, Meineke.

Khorāsān-e Shomāli:

Esfarāyen- Jājarm Rd.: 21 km. W. Esfarāyen, Chāhārmarān, Sāluk protected area, N 37° 12' 23.6", E 057° 15' 25.7", 1463 m, 18.VI.2013, 1 ♂, leg. Ālipanāh, Falsafi.

Golestān National Park: Ālmeh, 1650 m, 17.-18.VIII.1996, 1 ♂, leg. Ebrāhimi, V. Nazari; Yākhti Kālān, 1650 m, 20.VII.1996, 1 ♂, leg. Ebrāhimi, V. Nazari.

Shirvān: Golulsārāni, 2200- 2800 m, 15.-17.VII.1997, 1 ♂, leg. Mirzāyāns, V. Nazari; N. Shirvān, Kopet Dāgh Mt., Sarāni vill., Sarāni protected area, N 37° 48' 22.5", E 057° 56' 29.7", 1500 m, 22.VI.2013, 1 ♂, leg. Ālipanāh, Falsafi.

Semnān:

Shāhrud (W.): Tāsh, Shāhvār Mt., 2900 m, 19.VII.2003, 1 ♀, leg. Hofmann, Meineke, Tremewan.

Sistān va Baluchestān:

Khāsh: Taftān Mt., Jamchin vill., N 28° 35', E 61° 03', 2500 m, 10.IV.2004, 1 ♂, leg. Rajāei.

Tehrān:

Firuzkuh: Chehel Cheshmeh, 2000 m, 24.VI.1998, 3 ♂♂, leg. Mofidi-Neyestānak.

Subfamily: **Styginae** Yakovlev, 2011

Genus: *Stygia* Latreille, [1802]

Stygia mosulensis Daniel, 1965

Material examined.

Āzarbāijān-e Gharbi:

Orumiye: Ghushchi, N 38° 03' 27", E 44° 59' 23", 1700 m, 17.VII.2005, 4 ♀♀, leg. Zahiri, Golmohammadzādeh-Khiābān.

Āzarbāijān-e Sharghi:

Tabriz: 5.IV.1954, 1 ♀, leg. Anonymous; Bāsmenj, 16.VIII.71, 1 ♀, leg. Damanābi; Khalat Pushān, 3.V.1953, 1 ♀, leg. Anonymous; Khalat Pushān, N

38° 01' 25", E 46° 25' 33", 1680 m, 16.VII.2005, 1 ♀, leg. Zahiri,
Golmohammadzādeh-Khiābān.

Fārs:

Mamasani: Chāh Chenār, 8.VIII.1976, 1 ♀, leg. Abāi.

Subfamily: **Mehariinae** Yakovlev, 2011

Genus: **Meharia** Chrétien, 1915

Meharia avicenna Yakovlev, 2011

Material examined:

Fārs:

Fasā: Miāndeh, 1170 m, 15.VIII.2006, 1 ♂, leg. Kuhnvard; Zāhed Shahr, Ghalāt
(Citrus garden), 1190 m, 16.IX.2007, 1 ♂, leg. Kuhnvard.

Kāzerun: Parishān Lake, 900 m, 5.VI.1990, 1 ♂, leg. Ebrāhimi, Badīi.

Ghom:

Ghom Lake: 22.VI.1969, 1 ♂, leg. Mirzāyāns, Abāi, Broumand.

Semnān:

Sabzevār- Meyami Rd.: 3 km. E. Abbās Ābād vill., Khārturān protected area, 6
km. N. Abbās Ābād Ranger Sta., N 36° 23' 18.7", E 056° 19' 06.9", 1089 m,
11.VI.2016, 2 ♂♂, leg. Ālipanāh, Falsafi.

Meharia baluchestana Alipanah & Yakovlev, 2019

Material examined:

Sistān va Baluchestān:

Bampur: 500 m, 8.X.1996, 1 ♂, leg. Barāri, Sarafrāzi, Parchami-Arāghi.

Pishin: 267 m, 2.XI.2001, 1 ♂ 1 ♀, leg. Gilāsiān, Nematiān.

Meharia incurvariella persica (Wiltshire, 1946)

Material examined:

Esfahān:

Nāin: Gonuiyeh, 2100 m, 1.VII.1981, 1 ♀, leg. Hāshemi.

Fārs:

Shirāz: 8.IX.2003, 1 ♀, leg. Hesāmi.

Kermān:

Bāft: Darreh Pahn, 1750 m, 21.V.1977, 1 ♂, leg. Safavi, Pāzuki, Abāi.

Bam: Dehbakri, 10, 11.VI.1971, 6 ♀♀, leg. Naim, Hāshemi.

Jebāl-e Bārez: 12.VI.1971, 1 ♀, leg. Naim, Hāshemi.

Kermānshāh:

Kangāvar (5 km. E.): 29.VI.1972, 1500 m, 2 ♀♀, leg. Mirzāyāns, Abāi.

Kordestān:

Sanandaj: Āriz, 2200 m, 5.VII.1972, 2 ♀♀, leg. Mirzāyāns, Abāi.

Subfamily: **Cossinae** Leach, 1830

Tribe: **Endagriini** Duponchel, [1845]

Genus: **Dyspessa** Hübner, [1820] 1816

Dyspessa albosignata Rothschild, 1912

Material examined:

Khorāsān-e Shomāli:

Golestān National Park: Sulgerd, 1150 m, 8.V.1999, 2 ♂♂, leg. Moghaddam, Barāri, Manzari.

Khosrawiyeh: Ālādāgh, 1600 m, 16.VI.1974, 1 ♂, leg. Rajabi, Pāzuki.

Tehrān:

Damāvand: Tār Lake, 2700 m, 24.VIII.1992, 1 ♂ 1 ♀, leg. Ebrāhimi, Badii.

Dyspessa alipanahae Yakovlev, 2008

Material examined:

Hormozgān:

Bandar Abbās: Isin, 150 m, 6.III.1985, 1 ♀, leg. Borumand, Hāshemi.

***Dyspessa alpherakyi* (Christoph in Romanoff, 1885)**

Material examined:

Āzarbāijān-e Gharbi:

Bāzargān: 1450 m, 5.VI.1975, 1 ♂, leg. Abāi.

***Dyspessa ariadne* Yakovlev, 2008**

Material examined:

Lorestān:

Aznā: Oshtorānkuh, Parcheh Kabud, 2800 m, 1.-2.VIII.1975, 1 ♂, leg. Pāzuki.

***Dyspessa artemis* Yakovlev, 2008**

Material examined:

Esfahān:

Fereydun Shahr: Sibak Mt., 2500 m, 17.-18.VI.2002, 2 ♂♂, leg. Meineke,
Hofmann, Kallies *et al.*

Fārs:

Kāzerun: Tang-e Chogān, 900 m, 9.V.1974, 1 ♂, leg. Abāi, Pāzuki; Gāwkoshak,
1150 m, 18.V.1975, 2 ♂♂, leg. Pāzuki, Borumand.

Mamasani: Chāhtut, 1.-8.VI.1976, 1 ♂, leg. Abāi; Mamasani, Chāhtut, 1.-
8.VI.1976, 1 ♂, leg. Abāi.

Shirāz: 10 km. N. Sivand, 1150 m, 15.V.1974, 1 ♂, leg. Abāi, Pāzuki.

Kohgiluyeh va Boyerahmad:

Sisakht: Khāridun, N 30° 54' 44.07", E 51° 24' 47.16", 1644 m, 9.VII.2011, 1 ♂,
leg. Sarafrāzi, Falsafī.

Kordestān:

Bāneh (23 km. NE.): Saghez- Bāneh Rd., 1750 m, 2.VII.1975, 1 ♂, leg. Pāzuki.

Lorestān:

Aznā: Oshtorānkuh, Parcheh Kabud, 2800 m, 1.-2.VIII.1975, 1 ♂, leg. Pāzuki.

Dyspessa blonda Yakovlev, 2008

Material examined:

Āzarbāijān-e Gharbi:

Orumiye (15 km.): 10.VI.1975, 1 ♀ and one specimen without abdomen, leg.
Abāi.

Fārs:

Jahrom: 1120 m, 11.V.1974, 1 ♀, leg. Abāi, Pāzuki.
Kāzerun: Gāwkoshak, 14.-25.X.1976, 1 ♀, leg. Abāi.

Dyspessa elbursensis Daniel, 1964

Material examined:

Chāhārmahāl va Bakhtiāri:

Borujen: Gandomān, Sabzeh Kuh, 2450 m, 11.-14.VII.1983, 1 ♂, leg. Mirzāyāns,
Borumand.

Fārs:

Kāzerun: Dasht-e Arzhan, 27.V.1977, 1 ♂, leg. Abāi; Gāwkoshak, 16.IV.1975, 4
♂♂, leg. Borumand; Miān Kotal, 1900 m, 11.VI.1972, 2 ♀♀, leg. Ebert,
Pāzuki; Nowdān, 1250 m, 17.V.1975, 5 ♂♂ 1 ♀, leg. Abāi, Pāzuki.

Nur Ābād: Mamasani, Chāh Chenār, 14.V.1976, two specimens without abdomen,
leg. Abāi; Chāh Chenār, 26.V.1976, 1 ♂, leg. Abāi.

Shirāz: Khānezeniān, 2000 m, 18.V.1974, 8 ♂♂, leg. Abāi, Pāzuki; Sivand,
28.V.1976, 1 ♀, leg. Abāi.

Kermān:

Jiroft- Bāft Rd. (55 km. after Jiroft): Shingerā, 2800 m, 24.V.2004, 1 ♂, leg. Rajāei.

Kermānshāh:

Ravānsar: 20.VI.1975, 1 ♂, leg. Abāi.

Khuzestān:

Ahwāz: Albāji, 30 km. N. Ahwāz, 1.V.1976, 1 ♂, leg. Pāzuki, Abāi.

Andimeshk: Bidruyeh, 40 km. N. Andimeshk, 350 m, 3.V.1976, 1 ♂, leg. Pāzuki, Abāi.

Lorestān:

Aligudarz: Oshtorānkuh, Narimān, 2400 m, 4.-5.VIII.1975, 1 ♂, leg. Pāzuki.

Pol Dokhtar, 14.V.1975, 730 m, 1 ♂, leg. Pāzuki, Borumand; Tang-e Malāvi, 720 m, 5.V.1976, 2 ♂♂, leg. Pāzuki; Pol Dokhtar, 10 km. W. Bābāzeyd, 880 m, 9.IV.1977, 5 ♂♂ 1 ♀, leg. Pāzuki, Hāshemi.

***Dyspessa pallidata* Staudinger, 1892**

Material examined:

Alborz:

Karaj: 30.IV.1974, 1 ♂, leg. Anonymous.

Tāleghān: 26.-31.VII.1976, 1 ♂ 2 ♀♀, leg. Kāviān.

Āzarbāijān-e Gharbi:

Khoy: 1000 m, 7.VI.1975, 1 ♂ 2 ♀♀, leg. Abāi.

Māku (15 km. NE.): 6.VI.1975, 1 ♂, leg. Abāi.

Orumiye: 3.VIII.1969, 1 ♂, leg. Anonymous; Orumiye, ?.V.1970, 1 ♀, leg. Javān-Moghaddam; Orumiye, 3.X.1973, 1 ♂, leg. Anonymous; Orumiye, 1410 m, 11.VI.1975, 1 ♂, leg. Abāi; Orumiye, Ghāsemlu, 10.VI.1975, 1 ♂, leg. Abāi; Orumiye, 7 km. Silvānā, Kuhe, 1660 m, 22.VII.1976, 18 ♂♂ 4 ♀♀, leg. Pāzuki, Borumand.

Sardasht: 14.VI.1975, 2 ♂♂, leg. Abāi.

Takāb: Takht-e Soleymān, N $36^{\circ} 35' 40''$, E $47^{\circ} 19' 43.5''$, 2528 m, 1.VII.2013, 7 ♂♂, leg. Afsariān.

Āzarbāijān-e Sharghi:

Bostan Ābād: Chini Bolāgh, 2300 m, 25.VI.1985, 3 ♂♂ 2 ♀♀, leg. Mirzāyāns, Pāzuki.

Tabriz: Gharah Chaman, 1100 m, 23.VI.1985, 11 ♂♂ 1 ♀, leg. Mirzāyāns, Pāzuki.

Chāhārmahāl va Bakhtiāri:

Borujen: S. Gandomān, Gerdbisheh, 2000 m, 12, 13.VI.2002, 1 ♂, leg. Hofmann, Meineke, Kallies.

Kuhrang: Hyregān, N $32^{\circ} 20' 31''$, E $50^{\circ} 26' 56''$, 2305 m, 6.VI.2005, 1 ♂, leg. Ebrāhimi, Hājiesmailiān.

Zardkuh: 10 km. S. Dehno, 2450 m, 9.VII.1982, 1 ♂ 1 ♀, leg. Borumand, Pāzuki; Zardkuh, 2300 m, 7.-8.VII.1982, 9 ♂♂ 1 ♀, leg. Borumand, Pāzuki.

Esfahān:

Anārak (8 km. NE.): N $33^{\circ} 22' 43.5''$, E $53^{\circ} 43' 13.5''$, 1560 m, 31.V.2005, 1 ♂, leg. Fibiger, Zahiri.

Fereydun Shahr: 2200 m, 9.VII.1999, 1 ♂, leg. Hofmann, Meineke; Fereydun Shahr, S. Kamarān Mt. pass, 2900-3200 m, 16, 17.VI.2002, 1 ♂, leg. Hofmann, Meineke, Kallies; Ghaleh Sorkh, 2800 m, 20.VI.2001, 1 ♂, leg. Hofmann, Meineke, Tremewan.

Kāshān: Ghohrud, N $33^{\circ} 39' 40.2''$, E $51^{\circ} 25' 15.7''$, 2380 m, 3.VI.2005, 2 ♂♂, leg. Hājiesmailiān, Ebrāhimi; Kāshān, Niāsar, N $33^{\circ} 58' 10''$, E $51^{\circ} 07' 28''$, 1800 m, 1.VI.2005, 1 ♂ 1 ♀, leg. Ebrāhimi, Hājiesmailiān, Hesāmi.

Fārs:

Firuz Ābād: Ghir, 1160 m, 11.IV.1975, 1 ♀, leg. Borumand; Mehkuyeh, Eshkaft Barm, 1750 m, 21.-22.VI.1993, 3 ♂♂, leg. Mirzāyāns, Badii.

Kāzerun: Dasht-e Arzhan, 1950 m, 13.V.1974, 1 ♂ 1 ♀, leg. Abāi, Pāzuki; Dasht-e Arzhan, 27.V.1977, 2 ♂♂, leg. Abāi; Farāshband, Harāt Ābād, 770 m,

7.V.1985, 1 ♂, leg. Mirzāyāns, Hāshemi; Farāshband, Sarmashhad, N 29° 17' 30.75", E 51° 42' 27.04", 1780 m, 9.IV.1975, 3 ♀♀, leg. Borumand.

Nur Ābād: Mamasani, Chāh Chenār, 25.V.1976, 2 ♀♀, leg. Abāi; Mamasani, Chāh Chenār, 3.-19.VII.1976, 1 ♂, leg. Abāi.

Shirāz: Khānezeniān, 2000 m, 18.V.1974, 1 ♂, leg. Abāi, Pāzuki.

Hamedān:

Lalejin: Soleymān Ābād, 1730 m, 13, 14.VIII.2007, 2 ♂♂, leg. Ebrāhimi, Gilāsiān, Nematiān.

Hormozgān:

Bandar Abbās- Sirjān (km. 40): 300 m, 30.III.1973, 1 ♂ 1 ♀, leg. Abāi.

Kermānshāh:

Ravānsar: 20.VI.1975, one specimen without abdomen, leg. Abāi.

Kohgiluyeh va Boyerahmad:

Kākān: Hoseinkhāni, 2100 m, 26.-27.V.1995, 1 ♂ 1 ♀, leg. Badii, Sarafrazi, Hāshemi.

Kordestān:

Bāneh: 83 km. SE. Bāneh, 1750 m, 5.-6.VII.1975, 3 ♂♂, leg. Pāzuki; 23 km. NE. Bāneh, Saghez- Bāneh Rd., 1750 m, 2.VII.1975, 5 ♂♂, leg. Pāzuki.

Saghez (45 km. SW.): Saghez- Bāneh Rd., 2000 m, 30.VI.1975, 1.VII.1975, 16 ♂♂ 3 ♀♀, leg. Pāzuki.

Lorestān:

Pol Dokhtar: Shāh Ābād, 820 m, 4.V.1976, 1 ♂, leg. Pāzuki, Borumand.

Tehrān:

Kahrizak: Gheysar Ābād, 1000 m, 22.-23.V.1993, 8 ♂♂, leg. Parchami-Arāghi, Badii.

Zanjān:

Zanjān- Gilvān Rd.: Gharāvol Dāgh, 2500 m, 26, 27.VI.2001, 1 ♂, leg. Hofmann, Meineke, Tremewan.

Dyspessa salicicola aschabadensis Daniel, 1953

Material examined:

Alborz:

Āzadbar- Tāleghān Rd. (6 km. E.): 2350 m, 21.VII.1988, 1 ♂, leg. Mirzāyāns, Badii.

Ardebil:

Ardebil: Namin, 1860 m, 20.VI.2002, 1 ♂, leg. Hājiesmailiān, Mofidi-Neyestānak, Deuve, Montreuil.

Neur Lake: 2500 m, 26.VIII.2010, 1 ♂, leg. Khāni, Mofidi-Neyestānak.

Hashtchin- Khalkhāl Rd.: N 37° 26' 54.5", E 048° 24' 50.6", 837 m, 16.VII.2013, 1 ♂, leg. Afsariān, Sarafrazi.

Āzarbāijān-e Gharbi:

Māku: Āvājīgh, Bāshkand, 1400 m, 16.VI.1976, 1 ♂, leg. Pāzuki, Borumand.

Āzarbāijān-e Sharghi:

Kaleybar: Ghaleh Bābak, 1500 m, 5.VII.1997, 1 ♂, leg. Mofidi-Neyestānak, Barāri.

Gilān:

Eshkevar: Gilānchākān, 1820 m, 27.VI.1997, 1 ♂, leg. Barāri, Mofidi-Neyestānak.

Rudbār: Darreh Dasht, 900 m, 25.VI.2002, 1 ♂, leg. Hājiesmailiān, Serri, Mofidi-Neyestānak, Deuve, Monteuil.

Golestān:

Āghghalā: Chinsivly, 0 m, 2.VII.2001, 2 ♂♂, leg. Ebrāhimi, Osten, Mofidi-Neyestānak.

Golestān National Park: Dasht, 960 m, 18.VI.1977, 2 ♂♂, leg. Pāzuki, Abāi; Gush Cheshmeh, 1000 m, 29.VI.2001, 2 ♂♂, leg. Ebrāhimi, Osten, Mofidi-Neyestānak; Koylar, 1250 m, 23.VII.1996, 2 ♂♂, leg. Ebrāhimi, V. Nazari; Koylar, 1350 m, 29.VII.2001, 1 ♂, leg. Gilāsiān, Moghaddam, Ghayurfar;

Mazārli, 350 m, 19.-20.VI.1977, 1 ♂ and two specimens without abdomen, leg. Pāzuki, Abāi; Tang-e Gol, 620 m, 23.-25.V.1986, 5 ♂♂ 1 ♀, leg. Pāzuki; Tange Gol, 700 m, 24.-27.VII.1996, 1 ♂, leg. Ebrāhimi, V. Nazari; Tang-e Rāh, 930 m, 7.V.2000, 1 ♀, leg. Badii, Ebrāhimi, Mofidi-Neyestānak.

Gorgān: Loveh forest, 10.VIII.1967, 3 ♂♂, leg. Abāi.

Khānbebin: Shir Ābād, 80 m, 5.VII.2001, 1 ♂, leg. Mofidi-Neyestānak, Osten, Ebrāhimi.

Tuskāstan: Gorgān- Shāhrud Rd., N 36° 44' 37.6", E 54° 34' 02.6", 660 m, 15.VII.2007, 4 ♂♂, leg. Zahiri, Karimzādeh.

Khorāsān-e Shomāli:

Golestān National Park: Ālmeh, 1600 m, 26.-29.V.1986, 14 ♂♂, leg. Pāzuki; Ālmeh, 1650 m, 17.-25.V.1988, 8 ♂♂, leg. Pāzuki; Ālmeh, 1590 m, 6.V.1999, 3 ♂♂, leg. Mofidi-Neyestānak, Barāri, Manzari; Sulgerd, 1150 m, 8.V.1999, 16 ♂♂, leg. Moghaddam, Barāri, Manzari; Yākhti Kalān, 2.VI.1986, 2 ♂♂ 1 ♀, leg. Pāzuki.

Māzandarān:

Behshahr: Pasand, Pasand Res. Sta., 5.VI.1981, 6.VII.1981, 1 ♂, leg. Anonymous.

Marzan Ābād: 400 m, 6.VII.1995, 1 ♂, leg. Badii, Sarafrāzi, Linnavori.

Siābisheh: 10.VI.1974, 1 ♂, leg. Abāi.

Zanjān:

Zanjān: Armaghān Khāneh, Māri vill., N 36° 59' 52.0", E 48° 28' 39.0", 2300 m, 21.VI.2015, 1 ♂, leg. Nāserzādeh, Hājiesmailiān, Montreuil.

Zanjān- Gilvān Rd.: Gharāvol Dāgh, Elburz Mt., 2500 m, 3, 4.VII.1999, 1 ♂, leg. Hofmann, Meineke; Gharāvol Dāgh, 2500 m, 9, 26, 27.VI.2001, 2 ♂♂, leg. Hofmann, Meineke, Tremewan.

Dyspessa salicicola iranensis Alipanah & Yakovlev, 2019

Material examined:

Fārs:

Firuz Ābād: Ghir, 11.IV.1975, 1160 m, 1 ♂, leg. Borumand.

Khuzestān:

Izeh: Susan, 600 m, 26.IV.1995, 1 ♂, leg. Badii, Ardeh, Parchami-Arāghi.

***Dyspessa serica* Brandt, 1938**

Material examined:

Fārs:

Ābādeh: Shurjestān, 2000 m, 30.IV.1985, 1 ♀, leg. Mirzāyāns, Hāshemi.

Khuzestān:

Izeh: Āzhgil, 950 m, 26.IV.1995, 5 ♂♂, leg. Parchami-Arāghi, Ardeh, Badii;

Susan, 600 m, 26.IV.1995, 1 ♂, leg. Badii, Ardeh, Parchami-Arāghi.

Kohgiluyeh va Boyerahmad:

Kākān: Hoseinkhāni, 2100 m, 26.-27.V.1995, 2 ♀♀, leg. Badii, Sarafrazi, Hāshemi.

Sisakht: N 30° 53' 46", E 51° 25' 10", 2430 m, 22.VI.2005, 1 ♀, leg. Zahiri, Montreuil.

***Dyspessa stroehlei* Yakovlev, 2008**

Material examined:

Āzarbāijān-e Gharbi:

Orumiyyeh: 24.VII.1976, 1 ♂, leg. Anonymous.

***Dyspessa tsvetaevi* Yakovlev, 2008**

Material examined:

Kermānshāh:

Eslāmābād-e Gharb- Kerend Rd.: Gālivand vill., N 34° 13' 1.4", E 46° 32' 5.1", 1740 m, 22.V.2007, 1 ♂, leg. Zahiri, Montreuil.

Lorestān:

Tang-e Malāvi: 720 m, 5.V.1976, 2 ♂♂, leg. Pāzuki.

***Dyspessa ulula kasrii* Daniel, 1964**

Material examined:

Āzarbāijān-e Gharbi:

Orumiye: Ghāsemlu, 10.VI.1975, one specimen without abdomen, leg. Abāi.

Kermānshāh:

Rījāb (5 km. S.): N 34° 27' 9.9", E 46° 00' 51.4", 1300 m, 24.V.2007, 1 ♀, leg.

Zahiri.

Sare Pol-e Zahāb (SE.): Sagān, Navā Mt., N 34° 14' 12.7", E 46° 7' 44", 1270 m,

26.V.2007, 10 ♀♀, leg. Zahiri.

Fārs:

Kāzerun: Gāwkoshak, 1150 m, 18.V.1975, 1 ♀, leg. Pāzuki, Borumand.

Khorāsān-e Shomāli:

Golestān National Park: Ālmeh, 1650 m, 17.-25.V.1988, 1 ♂, leg. Pāzuki.

***Dyspessa wagneri* Schwingenschuss, 1939**

Material examined:

Alborz:

Karaj: Kandovān, Sarchāl, 2800 m, 4.-8.VII.1977, 3 ♂♂, leg. Pāzuki,
Mortazavīhā.

Esfahān:

Fereydun Shahr: 2200 m, 9.VII.1999, 2 ♂♂, leg. Hofmann, Meineke.

Khānsār: Golestān Kuh, 2700 m, 28, 29.VII.1981, 10 ♂♂, leg. Pāzuki, Borumand;

Golestān Kuh, 2750 m, 5.-6.VII.1982, 15 ♂♂, leg. Borumand, Pāzuki;

Golestān Kuh, 2700 m, 3, 4.VII.1983, 8 ♂♂ 5 ♀♀, leg. Mirzāyāns, Borumand.

Semirom: Pashmeh Kuh, 2750 m, 18.VI.2001, 2 ♂♂, leg. Hofmann, Meineke,
Tremewan; W. Semirom, Pashmeh Kuh vall., 2800 m, 31.V.-2.VI.2004, 15

♂♂ 1 ♀, leg. Hofmann, Meineke, Tremewan; W. Semiroom, Pashmeh Kuh,
2800 m, 2.-3.VI.2005, 4 ♂♂, leg. Hofmann, Meineke.

Kermān:

Bāft: Ghanāt-e Marvān, 2800 m, 23.V.1977, 1 ♂, leg. Safavi, Pāzuki, Abāi.

Khorāsān-e Shomāli:

Golestān National Park: Ālmeh, 1600 m, 26.-29.V.1986, 4 ♂♂, leg. Pāzuki;
Ālmeh, 1650 m, 17.-25.VIII.1988, 38 ♂♂, leg. Pāzuki; Ālmeh, 1650 m, 2.-
12.X.1988, 1 ♂, leg. Pāzuki; Ālmeh, 1590 m, 6.V.1999, 1 ♂, leg. Mofidi-
Neyestānak, Barāri, Manzari.

Kordestān:

Bāneh (23 km. NE.): Saghez- Bāneh Rd., 1750 m, 2.VII.1975, 3 ♂♂, leg. Pāzuki.
Saghez (45 km. SW.): Saghez- Bāneh Rd., 2000 m, 30.VI.1975, 1 ♂ 1 ♀, leg.
Pāzuki.

Zanjān:

Zanjān: Gharāvol Dāgh, 2500 m, 3, 4.VII.1999, 1 ♂, leg. Hofmann, Meineke.

Dyspessa wiltshirei Daniel, 1938

Material examined:

Alborz:

Karaj: Āzādbar, 2400 m, 7.-9.V.1995, 5 ♀♀, leg. Sarafrāzi, Badii, Linnavori;
Kandovān, Sarchāl, 2800 m, 4.-8.VII.1977, 4 ♀♀, leg. Pāzuki, Mortazavīhā.

Chāhārmahāl va Bakhtiāri:

Borujen: Gandomān, Sabzeh Kuh, Anchuchak, 2500 m, 15.VII.1982, 1 ♀, leg.
Borumand, Pāzuki; Sabzeh Kuh, 2500 m, 4.-5.VI.1989, 2 ♂♂ 6 ♀♀, leg.
Mirzāyāns, Badii.

Zardkuh: 10 km. S. Dehno, 2450 m, 9.VII.1982, 1 ♀, leg. Borumand, Pāzuki.

Esfahān:

Khānsār: Golestān Kuh, 2700 m, 3, 4.VII.1983, 1 ♂ 1 ♀, leg. Mirzāyāns, Borumand.

Fārs:

Sepidān: Mārgoon fall, 2020 m, 23.-25.VI.1993, 2 ♀♀, leg. Mirzāyāns, Badii.

Kermānshāh:

Rijāb (5 km. S.): N 34° 27' 9.9", E 46° 00' 51.4", 1300 m, 24.V.2007, 1 ♂, leg. Zahiri.

Sare Pol-e Zahāb (SE.): Sagān, Navā Mt., N 34° 14' 12.7", E 46° 7' 44", 1270 m, 26.V.2007, 5 ♀♀, leg. Zahiri.

Khorāsān-e Shomāli:

Āshkhāneh (42 km. W.): 7 km. W. Mehmānak vill., N 37° 29' 36.5", E 056° 52' 27.6", 1040 m, 17.VI.2013, 10 ♂♂ 1 ♀, leg. Ālipanāh, Falsafi.

Khuzestān:

Izeh: 28 km. N. Bāgh Malek, 800 m, 26.V.1973, 1 ♀, leg. Irānshahr.

Kohgiluyeh va Boyerahmad:

Meymand: Meymand Mt. pass, 2450-2800 m, 14, 15.VI.2001, 1 ♂, leg. Hofmann, Meineke, Tremewan.

Sisakht: Khāridun, N 30° 54' 44.07", E 51° 24' 47.16", 1644 m, 9.VII.2011, 1 ♀, leg. Falsafi, Sarafrazi.

Yāsuj: Tang-e Sorkh, 12.-13.VI.1986, 1 ♂ 3 ♀♀, leg. Mirzāyāns, Hāshemi; 15 km. SE. Yāsuj, 2050 m, 15.VI.1972, 1 ♂ 1 ♀, leg. Ebert, Pāzuki.

Kordestān:

Bāneh (83 km. SE.): 1750 m, 5.-6.VII.1975, 1 ♂ 1 ♀, leg. Pāzuki.

Lorestān:

Aznā: Oshtorānkuh, N. Kamandān, 2040 m, 22.-24.VII.1981, 1 ♀, leg. Pāzuki, Borumand.

Markazi:

Arāk: Shāzand, 1950 m, 21.VII.1981, 1 ♀, leg. Pāzuki, Borumand.

Khomein: Nāzi vill., N $33^{\circ} 41' 50''$, E $050^{\circ} 02' 17.7''$, 1872 m, 7.VI.2013, 2 ♂♂,
leg. Afsariān.

Salafchegān: Garnekān, 1570 m, 14.V.1994, 1 ♀, leg. Sarafrāzi, Hāshemi.

Zanjān:

Taham: Tāzehkand, N $36^{\circ} 55' 25.4''$, E $48^{\circ} 42' 51.4''$, 1433 m, 29.VII.2013, 1 ♀,
leg. Afsariān.

***Dyspessa zurvan* Yakovlev, 2008**

Material examined:

Ilām:

Mehrān: 19.III.1970, 1 ♂, leg. Abāi, Hāshemi.

Kordestān:

Saghez- Bāneh Rd.: 21 km. NE. Bāneh, 1950 m, 30.VI.-2.VII.1975, 1 ♂, leg.
Ebert, Falkner.

Genus: ***Isoceras* Turati, 1924**

***Isoceras bipunctatum* (Staudinger, 1887)**

Material examined:

Āzarbāijān-e Gharbi:

Khoy: 30 km. Ghotur, 1480 m, 19.VII.1976, 1 ♂, leg. Pāzuki, Borumand.

Māku (W.): Ghezel Bolāgh, 2220 m, 17.-18.VII.1976, 4 ♂♂, leg. Pāzuki,
Borumand.

Mārmishou: N $37^{\circ} 34' 26''$, E $44^{\circ} 37' 25''$, 1760 m, 18.VII.2005, 1 ♂, leg. Zahiri,
Golmohammadzādeh-Khiābān.

Orumiye: 1410 m, 11.VI.1975, 1 ♂, leg. Abāi; Orumiye, Ghāsemlu,
10.VI.1975, 1 ♂, leg. Abāi; 35 km. Orumiye, Ghāsemlu, 1440 m,
24.VII.1976, 1 ♂, leg. Pāzuki, Borumand; Orumiye, Ghāsemlu, 1440 m,
13.VII.1977, 1 ♂, leg. Abāi, Javān-Moghaddam; Ghāsemlu vall. N $37^{\circ} 16'$

05", E $45^{\circ} 08' 57''$, 1650 m, 19.VII.2005, 1 ♂, leg. Zahiri,
Golmohammadzādeh-Khiābān.

Chāhārmahāl va Bakhtiāri:

Borujen: Gandomān, Sabzeh Kuh, 2450 m, 11.-14.VII.1983, 39 ♂♂, leg.
Mirzāyāns, Borumand; SW. Gandomān, Sabzeh Kuh, Anchuchak, 2500 m,
15.VII.1982, 19 ♂♂, leg. Borumand, Pāzuki; Sabzeh Kuh, 2500 m, 4.-
5.VI.1989, 41 ♂♂, leg. Mirzāyāns, Badii.

Kuhrang: 26.VII.1974, 3 ♂♂, leg. Hāshemi, Zairi; Kuhrang, Cheshmeh Chālak,
29.VII.1974, 26 ♂♂ 1 ♀, leg. Hāshemi, Zairi.

Shalamzār: Tang-e Chezghān (5 km. SW. Shalamzār), 7.-10.VII.1983, 9 ♂♂, leg.
Mirzāyāns, Borumand; S. Shalamzār, Tang-e Chezghān, 2200 m, 11.VII.1982,
1 ♂, leg. Borumand, Pāzuki.

Zardkuh: 2300 m, 7.-8.VII.1982, 4 ♂♂, leg. Borumand, Pāzuki; Zardkuh, 2440 m,
15.VIII.1976, 2 ♂♂, leg. Pāzuki, Borumand; Khoshāb, Zardkuh, 2310 m,
6.VII.1983, 7 ♂♂, leg. Mirzāyāns, Borumand.

Esfahān:

Fereydun Shahr: 2200 m, 9.VII.1999, 6 ♂♂, leg. Hofmann, Meineke.

Fārs:

Kāzerun: Dasht-e Arzhan, Kotal Pirehzan, 18.VI.1972, 1 ♂, leg. Ebert, Pāzuki.

Sepidān: Mārgoon fall, 2020 m, 23.-25.VI.1993, 3 ♂♂, leg. Mirzāyāns, Badii;
Sibkhalaq, Komehr, 29.VI.1963, 1 ♂, leg. Mirzāyāns.

Shirāz: 22.vi.1967, 3 ♂♂, leg. Kashkuli.

Gilān:

Shaft: Ahmad Gurāb, Siāhmezgi vill., N $37^{\circ} 0.00' 56.86''$, E $49^{\circ} 15' 7.95''$, 626 m,
23.VII.2010, 1 ♂, leg. Ālipanāh, Falsafi.

Kermanshah:

Sar-e Pol-e Zahāb (SE.): Sagān, Navā Mt., N $34^{\circ} 14' 12.7''$, E $47^{\circ} 7' 44''$, 1270 m,
26.V.2007, 1 ♂, leg. Zahiri.

Kohgiluyeh va Boyerahmad:

Meymand (5 km. N.): NW. Denā Mt., 2210 m, 18.-20.VIII.1976, 27 ♂♂, leg. Pāzuki, Borumand.

Sisakht: 2250 m, 13.VI.1972, 2 ♂♂, leg. Ebert, Pāzuki; Sisakht, 2100 m, 16.VI.1986, 1 ♂, leg. Mirzāyāns, Hāshemi; Sisakht (15 km. SE. Yāsuj), 2050 m, 15.VI.1972, 12 ♂♂, leg. Ebert, Pāzuki.

Yāsuj: 12.VI.1973, 1 ♂, leg. Hāshemi, Zairi; Yāsuj, Tang-e Sorkh, 12.-15.VI.1975, 1 ♂, leg. Ebert, Falkner; Tang-e Sorkh, 12.-13.VI.1986, 1 ♂, leg. Mirzāyāns, Hāshemi; Tang-e Sorkh, (50 km. NW. Sepidān), 2250 m, 16.VI.1972, 6 ♂♂, leg. Ebert, Pāzuki.

Kordestān:

Bāneh (83 km. SE.): 1750 m, 5.-6.VII.1975, 4 ♂♂, leg. Pāzuki.

Marivān: Miāneh Dāgh, 2000 m, 6.VII.1972, 1 ♂, leg. Mirzāyāns, Abāi; 35 km. NE. Marivān, 1550 m, 8.-9.VII.1975, 1 ♂, leg. Pāzuki.

Sanandaj: Āriz, 2200 m, 5.VII.1972, 2 ♂♂, leg. Mirzāyāns, Abāi.

Sardasht: N 36° 06' 59", E 45° 28' 17", 1500 m, 20.VII.2005, 2 ♂♂, leg. Zahiri, Golmohammadzadeh-Khiābān.

Sarvābād- Marivān Rd.: 29 km. to Marivān, N 35° 18' 51.2", E 046° 20' 32.7", 1100 m, 1.VI.2012, 2 ♂♂, leg. Ālipanāh, Falsafi.

Lorestān:

Aligudarz: Ghālikuh, 2500 m, 21.-22.VIII.1994, 10 ♂♂ 2 ♀♀, leg. Mirzāyāns, Sarafrāzi; Ghālikuh, 2200 m, 20.VII.1994, 1 ♂, leg. Mirzāyāns, Sarafrāzi; 95 km. S. Aligudarz, Ghālikuh, 2360 m, 25.-26.VII.1981, 1 ♂, leg. Pāzuki, Borumand; Oshtorānkuh, Narimān, 2400 m, 4.-5.VIII.1975, 9 ♂♂, leg. Pāzuki; Shāh Ābād, Ghālikuh, 2100 m, 2.VIII.1997, 2 ♂♂, leg. Barāri, Mofidi-Neyestānak.

Aznā: N. Kamandān, 2040 m, 22.-24.VII.1981, 28 ♂♂, leg. Pāzuki, Borumand; Kamandān, 2050 m, 1.-2.VII.1990, 2 ♂♂, leg. Hāshemi, Ebrāhimi; Kamandān, 2050 m, 23.VII.1994, 3 ♂♂, leg. Mirzāyāns, Sarafrāzi; Kamandān, 2000 m,

3.VIII.1997, 2 ♂♂, leg. Barāri, Mofidi-Neyestānak; Kamandān, 2050-2300 m, 23.-24.VIII.1994, 1 ♂, leg. Mirzāyāns, Sarafrāzi; Parcheh Kabud, 2800 m, 1.-2.VII.1975, 5 ♂♂, leg. Pāzuki.

Dorud: Sarcheshmeh, 2300 m, 8.VIII.2002, 1 ♂, leg. Hājiesmailiān, Ghayurfar; 15 km. E. Dorud, Sarāvand, Darbāstāneh, 2000 m, 6.VIII.1975, 1 ♂, leg. Pāzuki; Oshtorānkuh, Gokān, 2350 m, 29.-30.VII.1975, 6 ♂♂, leg. Pāzuki.

Sistān va Baluchestān:

Khāsh: Kusheh, 2000 m, 21.V.1972, 2 ♂♂, leg. Abāi, Ebert.

Isoceras huberi Eitschberger & Ströhle, 1987

Material examined:

Ghom:

Fordu (3 km. S.): 2150 m, 5.VI.1984, 1 ♂, leg. Pāzuki, Hāshemi.

Isoceras saxicola (Christoph, 1885)

Material examined:

Esfahān:

Kāshān: Ghohrud, N 33° 39' 40.2", E 51° 25' 15.7", 2380 m, 3.VI.2005, 2 ♂♂, leg. Hājiesmailiān, Ebrāhimi.

Ghazvin:

Alamut: Gāzorkhan, 2080 m, 19.-21.VI.1995, one specimen without abdomen, leg. Ebrāhimi, Ardeh, Parchami-Arāghi.

Rudbār-e Shahrestān: Daryābak, 2150 m, 12.VI.1995, 1 ♂, leg. Parchami-Arāghi, Ebrāhimi, Ardeh.

Hamedān:

Kabudrāhang: Kuhin, 1965m, 12.VIII.2001, 1 ♂, leg. Ebrāhimi, Gilāsian, Nematiān.

Zanjān:

Zanjān- Ābbar Rd.: 40 km. after Zanjān, N $36^{\circ} 44' 07.8''$, E $048^{\circ} 47' 34.2''$, 1706 m, 5.VI.2012, 2 ♂♂, leg. Ālipanāh, Falsafi.

Isocera

چاپ این نشریه در جلسه مورخ ۹۷/۱۱/۷ شورای انتشارات مؤسسه تحقیقات گیاه‌پزشکی کشور مورد تأیید قرار گرفت.

شناسنامه نشریه:

عنوان نشریه: حشرات ایران: فهرست بال پولکداران موجود در موزه حشرات هایک میرزايانس مؤسسه تحقیقات گیاه‌پزشکی کشور Family: Cossidae

نام کامل نویسندها: هلن عالی پناه (سازمان تحقیقات، آموزش و ترویج کشاورزی، مؤسسه تحقیقات گیاه‌پزشکی کشور)، رومن و . یاکوولو (^aAltai State University, Barnaul, Russia; ^bTomsk State University, Laboratory of Biodiversity and Ecology, Tomsk, Russia; email: yakovlev_asu@mail.ru)

نام ناشر: مؤسسه تحقیقات گیاه‌پزشکی کشور

تاریخ انتشار: دی ماه ۱۳۹۷

تایپ رایانه‌ای: هلن عالی‌پناه- مؤسسه تحقیقات گیاه‌پزشکی کشور طرح روی جلد : Meheria avicenna Yakovlev (Iran: Semnan Prov., Khārturān protected area) از هلن عالی‌پناه

این نشریه تحت شماره ۵۵۰۸۸ در تاریخ ۹۷/۱۱/۳۰ در مرکز فناوری اطلاعات و اطلاع‌رسانی کشاورزی به ثبت رسیده است.

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وزارت جهاد کشاورزی

سازمان تحقیقات، آموزش و ترویج

کشاورزی

مؤسسه تحقیقات گیاه‌پزشکی کشور

بخش تحقیقات رده‌بندی حشرات

نشریه شماره ۲۲

حشرات ایران:

فهرست بالپولکداران موجود در موزه حشرات هایک میرزا یانس

مؤسسه تحقیقات گیاه‌پزشکی کشور

Family: Cossidae

: از

هلن عالی‌پناه و رومن و. یاکوولو

۱۳۹۸