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Studies on the Miridae (Phylinae, addenda to Deraeocorinae and Orthotylinae) of Khuzestan and the adjacent provinces of Iran (Hemiptera: Heteroptera)

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Abstract. A list containing 95 species and one subspecies of the subfamily Phylinae of the family Miridae from Khuzestan and the adjacent provinces is published. Eleven new species of Phylinae are described: *Acrotelus abbaricus* sp. nov., *Campylomma khuzestanicum* sp. nov., *Megalodactylus grandoculus* sp. nov., *Paredrocoris ilamicus* sp. nov., *Plagiognathus marivanensis* sp. nov., *Psallus* (*Psallus*) *shulsangaricus* sp. nov., *Sthenaropsis fedori* sp. nov., *Sthenaropsis zeydoonica* sp. nov., *Tuponia* (*Chlorotuponia*) *shadeganica* sp. nov., *Tuponia* (*Tuponia*) *kurdistanica* sp. nov., and *Yotvata* (*Yotvata*) *farsiana* sp. nov. In addition, one new species of the subfamily Orthotylinae, *Zanchius gurbandicus* sp. nov., is described and one new record each is provided for the subfamilies Deraeocorinae and Orthotylinae. A key to the genus *Sthenaropsis* Poppius, 1912 is provided. *Plagiognathus* (*Plagiognathus*) *bipunctatus albicans* (Reuter, 1901) stat. nov., and *Atomophora maculosa erato* Linnavuori, 1971 stat. restit. are considered valid subspecies. The following 14 species are recorded from Iran for the first time: *Anonychiella subannulata* (Wagner, 1973), *Argyrotelaenus simoni* Reuter & Poppius, 1912, *Camptotylidea flavida* (Nonnaizab & Yang, 1994), *Lepidargyrus seidenstueckeri* (Wagner, 1956), *Lepidargyrus syriacus* (Wagner, 1956), *Macrotylus cruciatus* (R. F. Sahlberg, 1848), *Megalocoleus signoreti* (Reuter, 1879), *Monosynamma bohemanni* (Fallén, 1829), *Psallus* (*Psallus*) *anaemicus* Seidenstücker, 1966, *Psallus* (*Psallus*) *pseudopunctulatus* Linnavuori, 1984, *Tuponia* (*Chlorotuponia*) *brevirostris* (Reuter, 1883), *Tuponia* (*Chlorotuponia*) *hippophaes* (Fieber, 1864), *Tuponia* (*Tuponia*) *macedonica* Wagner, 1957, and *Tuponia* (*Tuponia*) *semele* Linnavuori, 1995.

Key words. Heteroptera, Miridae, faunistics, new species, new records, Iran, Khuzestan

Introduction

This paper is a continuation of the study of the relatively little known heteropteran fauna of the Khuzestan province and related areas in southern Iran. The first part (Linnavuori 2009) dealt with the infraorders Nepomorpha, Gerromorpha, Leptopodomorpha and the family Miridae (except of Phylinae; Cimicomorpha). Linnavuori (2009) also reviewed the recent progress of the study of Iranian true bug fauna. Since then, additional new species have been described (Magnien & Matocq 2009; Moulet 2009, 2010; Namyatova & Konstantinov 2009) and new faunistic records published (e.g., Farzaneh et al. 2009; Ghahari et al. 2009a,b,c, 2010a,b; Khaghaninia et al. 2010a,b; Kment & Baňař 2010; Kment & Kanyukova 2010; Mehneh et al. 2010; Rahimi et al. 2010). In this paper I contribute to the knowledge of the Iranian fauna by 12 new species and 13 new distributional records.

The Khuzestan province (Fig. 1), total area 64,000 km^2, is located in the southwest of Iran and borders the Basra province in Iraq in the west and the Persian Gulf in the south. In the

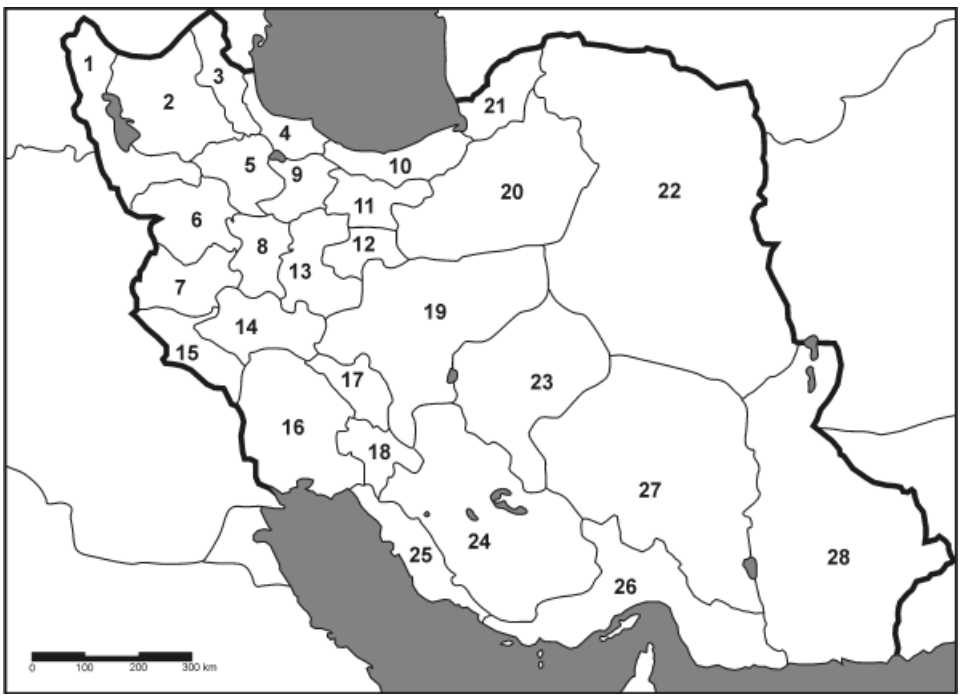

Fig. 1. Provinces of Iran. 1 – West Azerbaijan; 2 – East Azerbaijan; 3 – Ardabil; 4 – Gilan; 5 – Zanjan; 6 – Kurdestan; 7 – Kermanshah; 8 – Hamedan; 9 – Ghazvin; 10 – Mazandaran; 11 – Tehran; 12 – Qom; 13 – Markazi; 14 – Lorestan; 15 – Ilam; 16 – Khuzestan; 17 – Chaharmahal & Bakhtiari; 18 – Kohgiluyeh & Boyerahmad; 19 – Esfahan; 20 – Semnan; 21 – Golestan; 22 – Khorasan; 23 – Yazd; 24 – Fars; 25 – Bushehr; 26 – Hormozgan; 27 – Kerman; 28 – Sistan & Baluchestan (after Alipanah & Ustjuzhanin 2005).

north, east and south-east it is surrounded by the provinces of Ilam, Lorestan, Chaharmahal & Bakhtiari, Kohgiluyeh & Boyerahmad, Fars and Bushehr. Khuzestan is divided into two subregions, plains drained by the Karun, Karkheh and Jarahi rivers in the south and west and the southern part of the Zagros mountain range in the north and east of the province.

The vegetation of Khuzestan consists of the following six zones (Dinarvand 2003):

1. Vegetation of wetlands and tidal flats. The main plant species are *Typha australis* and *Phragmites australis*. Other plants are, e.g., *Ceratophyllum domesticum*, *Nitraria retusa* and *Scirpus lacustris*.

2. Vegetation of low and salt plains is best represented by various dominant species of Chenopodiaceae. Typical plants are, e.g., *Atriplex* spp., *Halocnemum strobilaceum*, *Salsola* spp., *Suaeda* spp. (Chenopodiaceae), as well as *Medicago* spp. and *Prosopis farcta* (Fabaceae).

3. Vegetation of hills and high grounds is dominated by trees and shrubs. Characteristic species are, e.g., *Centaurea* spp., *Echinops dichorus*, *Glycyrrhiza glabra*, *Populus euphratica*, *Prosopis koelziana*, *Teucrium polium*, *Trifolium* spp., *Zizyphus spina-christi* and *Z. nummularia.*

4. Vegetation of sand dunes. Dominant species are *Calligonum intertextum* and *Calotropis procera*. Other species are e.g., *Artemisia scoparia*, *Citrullus colocynthis*, *Cyperus conglomeratus*, *Plantago ovata*, *Stipagrostis* spp. and *Teucrium olivieranum*.

5. Vegetation of arid forests on southern slopes of Zagros Mts. is composed of plants such as *Quercus brantii*, *Cupressus sempervirens*, *Pistacia atlantica*, *P. kinjuk*, *Amygdalus scoparia*, *Crataegus curvisepala*, *C. microphylla*, *Olea europaea*, *Rosa canina*, *Salvia* spp., *Salix acmophylla* and *Satureja khuzestanica*.

6. Vegetation of mountainside country pastures is represented with plants such as *Astragalus* spp., *Prangus* spp., *Daphne* spp. and *Tanacetum* spp.

Material and methods

This paper is mainly based on investigations made together with my wife Sakineh Linnavuori in 2006–2008. The main sampling effort was concentrated to Khuzestan, but we also visited the surrounding provinces of Ilam, Lorestan, Chaharmahal & Bakhtiari, Kohgiluyeh & Boyerahmad, Fars and Bushehr. The collecting trips were also prolonged along the Iraqi border to Kermanshah, Kurdestan, East and West Azerbaijan provinces. A few additional records based on material collected during my earlier trips are given as well.

The specimens are preserved in the Linnavuori collection (Raisio, Finland), the National Museums and Galleries of Wales (Cardiff, United Kingdom) and the College of Agriculture in the Gilan University (Rasht, Iran). When the exact number of specimens is not given, the following approximations are used: several = 5–10, many = 11–20, and numerous = more than 20 specimens. Most of the material was collected at light.

The system and nomenclature follow Kerzhner & Josifov (1999).

Results

Subfamily Deraeocorinae
Tribe Termatophylini

Argyrotelaenus simoni Reuter & Poppius, 1912

Material examined. Fars: Firuzabad, 1 specimen, 15.–16.vi.2008.

Comments. On *Acacia*. Eremian species, known from Egypt, Saudi Arabia, Yemen, Israel and Iraq, extending to tropical Africa (Sudan).

Subfamily Orthotylinae
Tribe Orthotylini

Orthotylus (*Melanotrichus*) *rubidus* (Puton, 1874)

Material examined. **Fars:** Maharlu, 7 specimens, 17.–18.vi.2002.

Comments. In gardens on the shore of a salt lake. Recorded on halophytes such as *Salsola* and *Salicornia*. West-Palaearctic, extending from Central and South Europe to the Middle East, Central Asia and Mongolia.

Zanchius gurbandicus sp. nov.
(Figs. 2A–E, 28C)

Zanchius breviceps (misidentification): Linnavuori (2004: 93), Linnavuori (2009: 27).

Type material. Holotype: ♂, **IRAN: Hormozgan:** Gurband, 26.iii.–2.iv.2001. Paratypes: **IRAN: Hormozgan:** Gurband, 2 ♂♂ 2 ♀♀, 26.iii.–2.iv.2001. **Khuzestan:** Behbahan, 1 ♂, 27.–28.iv.2007; Shadegan, 1 ♀, 9.–10.vi.2008; Zeydoon, 1 ♂, 26.–28.iv.2007. The types will be deposited at the National Museums and Galleries of Wales (Cardiff, United Kingdom).

Description. Length 3.25–3.5 mm (♂♀).

Colouration. Whitish yellow (Fig. 28C). Eyes greyish brown. Antennae yellow, base and apex of antennomere 1 and extreme apex of antennomere 2 often with faint small red spot. Rostrum pale. Pronotum with faint reddish stripes along lateral margins and at middle. Hemelytra either pale yellowish or pale greenish with pale base; membranes pale with somewhat greenish cells. Legs pale yellow, tarsomeres 3 of all pairs darkened.

Structure. Body 4.3–4.5× as long as basal width of pronotum. Upper surface with pale pubescence. Head 0.7–0.82× as broad as base of pronotum. Ocular index 1.30–1.48 (♂), 1.52–1.65 (♀). Antennae gracile, with short adpressed pubescence, length ratios of antennomeres 20 : 90 : 63 : missing (♂), 17 : 72 : 52 : 50 (♀), antennomere 1 0.55× (♂) or 0.45× (♀) as long as diatone, antennomere 2 2.1–2.25× (♂) or 1.92× (♀) as long as diatone and 1.71–1.73× (♂) or 1.6× (♀) as long as basal width of pronotum. Rostrum extending to hind coxae. Pronotum 1.9–2.9× (♂) or 1.73–1.9× (♀) as broad as long at middle. Male genitalia as in Fig. 2A–E. Left side of pygophore with a long gracile process.

Differential diagnosis. The new species resembles *Z. breviceps* (Wagner, 1951) (= *Z. iranicus* Zheng & Liu, 1993, synonymized by Linnavuori (2007)) but is easily distinguished from it

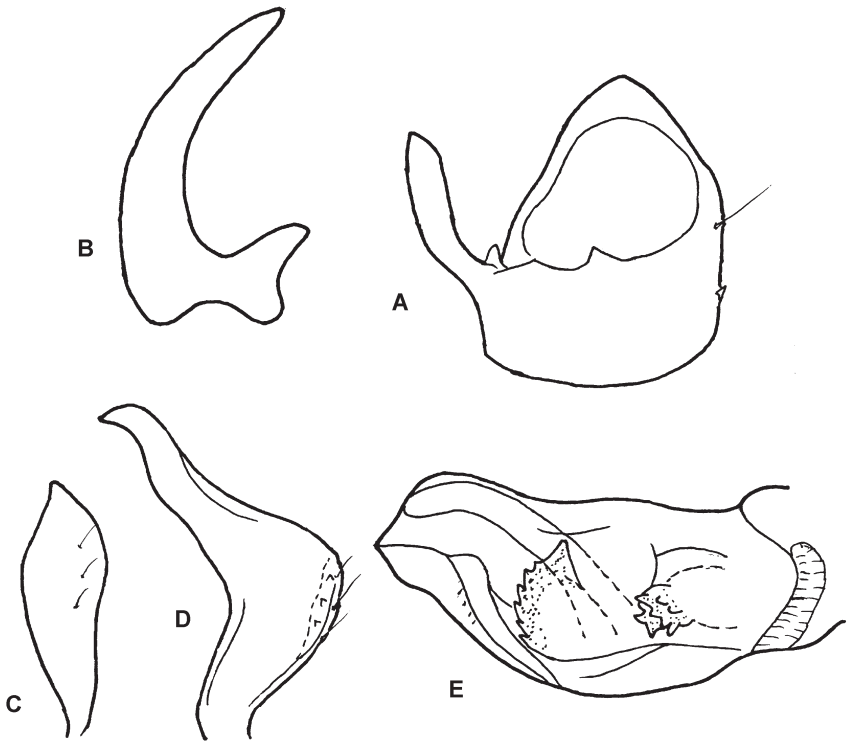

Fig. 2. *Zanchius gurbandicus* sp. nov. A – pygophore; B – lateral process of pygophore; C – right paramere; D – left paramere; E – aedeagus.

and the other species of the genus by the long lateral process of the pygophore. Other genitalic characters are also different.

Habitat. Collected at light in date-palm gardens with rich undergrowth.

Etymology. Named after the type locality.

Distribution. Apparently endemic to the coastal region of the Persian Gulf in Iran. The previous records of *Z. breviceps* (Linnavuori 2004: 93, 2009: 27) belong to this species. The true *Z. breviceps* seems to occur only in inner Iran and includes specimens recorded as *Z. breviceps* from the Fars province (Linnavuori 2004: 93).

Subfamily Phylinae

Tribe Phylini

Acrotelus abbaricus sp. nov.

(Figs. 3A–D, 26A)

Type material. Holotype: ♂, **IRAN: Zanjan:** Abbar, 12.–14.v.2001. Paratype: **Gilan:** Dasht-e-Veel, 1 ♂, 1.–12.v.2001. The types will be deposited at the National Museums and Galleries of Wales (Cardiff, United Kingdom).

Description. Length 5.25 mm (♂).

Colouration. Pale yellowish green (Fig. 26A). Eyes greyish. Antennomere 1 yellowish, with darkened base, antennomere 2 yellowish brown, other antennomeres blackish. Membranes pale greyish brown, veins yellowish. Ventral surface yellowish. Femora and tibiae yellowish, apical parts of femora with small brown dots. Tarsi blackish brown.

Structure. Body 3.5× as long as basal width of pronotum. Dorsal surface, especially hemelytra, with black bristles; head, pronotum, scutellum and basal parts of hemelytra also with pale hairs. Head 0.61× as broad as basal width of pronotum, in apical view 1.43× as broad as high; ocular index 1.73–1.93. Antennae with dense black hairs, length ratios of antennomeres 22 : 70 : 35 : 20, antennomeres 1 and 2 rather incrassate, antennomere 1 0.37–0.39× as long as diatone, antennomere 2 1.1–1.23× as long as diatone and 0.66–0.75× as long as basal width of pronotum, antennomeres 3 and 4 relatively thin. Rostrum extending near middle coxae. Pronotum 2.1–2.2× as broad as long. Tibiae with short black bristles arising from small puncture and dense black hairs. Hind tarsomere 2 1.2× as long as tarsomere 3. Male genitalia as in Fig. 3A–D.

Differential diagnosis. The new species is related to *A. major* Wagner, 1968 from Algeria, which is of similar size (5.3–5.4 mm, ♂; 3.3–3.05 mm, ♀) but differs in the structure of male genitalia. *Acrotelus abbaricus* sp. nov. is further easily distinguished by the presence of pale hairs on the dorsal surface, which in *A. major* has only black bristles. Moreover the antennae

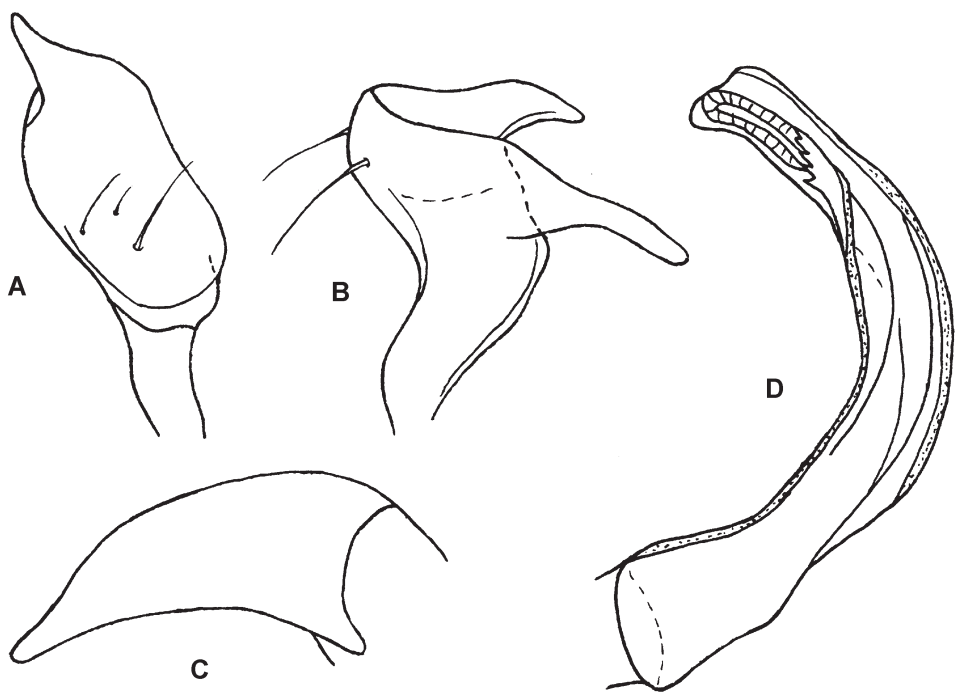

Fig. 3. *Acrotelus abbaricus* sp. nov. A – right paramere; B – left paramere; C – theca; D – vesica.

of males of *A. major* are black, antennomere 2 is more slender and 0.92× (♂) or 0.7× (♀) as long as the basal width of pronotum.
Habitat. Collected at light trap in a garden.
Etymology. Named after the type locality.
Distribution. So far known only from the type locality.

Amblytylus concolor Jakovlev, 1877

Material examined. Khuzestan: Behbahan, 5 specimens, 27.–28.iv.2007.

Comments. On grass in the undergrowth in date-palm gardens. Ponto-Mediterranean species.

Anonychiella alhagicola alhagicola (Drapolyuk, 1982)

Material examined. Khuzestan: Karun river near Ahvaz, 1 specimen, 10.–11.vi.2006; Shadegan, 1 specimen, 13.–14.vi.2006. **Bushehr:** Ab Pakhsh, 9 specimens, 25.–26.iv.2007.

Comments. On *Alhagi*. Irano-Turanian species, known from Iran and Central Asia.

Anonychiella brevicornis (Reuter, 1879)
(Fig. 4A–D)

Material examined. Khuzestan: near Ahvaz, 1 specimen, 29.iv.–1.v.2007; Bandar-e-Mahshar, 2 specimens, 12.–13.vi.2006. **Fars:** Khaneh Kat, 1 specimen, 16.–17.vi.2006. **West Azerbaijan:** Marangalu near Urumiyeh, several specimens, 15.–17.vii.2004; Nushin Sar near Urumiyeh, several specimens, 25.–27.vi.2006.

Comments. Claw and male genitalia as in Fig. 4A–D. On *Tamarix*. Irano-Turanian species, extending to South European Russia and the Ukraine (Konstantinov & Namyatova 2008).

Anonychiella kermanensis (Wagner, 1958)

Material examined. Khuzestan: Ahvaz, Jangieh, 2 specimens, 11.–12.vi.2006; Karun river near Ahvaz, 1 specimen, 10.–11.vi.2006. **Bushehr:** Ab Pakhsh, 6 specimens, 25.–26.iv.2007; near Bandar-e-Genaveh, 1 specimen, 23.–24.iv.2007.

Comments. In low hilly areas with rich vegetation in the coastal area of the Persian Gulf and in river valleys in Khuzestan. Eremian species, extending from North Africa to the Middle East and Sudan.

Anonychiella subannulata (Wagner, 1973)

Material examined. Bushehr: Ab Pakhsh, 5 specimens, 25.–26.iv.2007.

Comments. In low hilly areas with rich vegetation in the coastal area of the Persian Gulf. Eremian species, extending from North Africa to the Middle East as well as to tropical Africa (Sudan, Somalia). **New for Iran.**

Aphaenophyes richteri richteri (Wagner, 1957)

Material examined. Numerous specimens: **Khuzestan:** Abadan, 21.–22.iv.2007; near Ahvaz, 29.iv.–1.v.2007; Ahvaz, Ghazavieh, 7.–8.vi.2005; Ahvaz, Jangieh, 11.–12.vi.2006; Behbahan, 27.–28.iv.2007; near Marivan, 12.–13.vi.2005; Sardasht, 11.–12.vi.2008. **Fars:** Baba Arab 50 km SE of Jahrom, 16.–17.vi.2003; Fasa, Mianjangal,

15.–16.vi.2008; Khaneh Kat, 16.–17.vi.2006; Khaneh Zenyan, 13.–14.vi.2003; Takht-e-Jamshid, 14.–15.vi.2002. **Kohgiluyeh & Boyerahmad:** Samirun, 11.–12.vi.2003. **Kurdestan:** near Sanandai, 11.–12.vi.2005.

Comments. On *Tamarix*. Eremian species, extending from North Africa to the Middle East, Turkmenistan and tropical Africa (Niger to Somalia).

Atomophora maculosa erato Linnavuori, 1971 stat. restit.

Material examined. Fars: Fasa, Mianjangal, 1 ♂, 17.–18.vi.2008.

Comments. Collected at light in an agricultural research station. The nominotypical subspecies is known to live on *Calligonum* sp. *Atomophora maculosa erato* is endemic, known only from Iranshar in Baluchistan. It differs from *A. maculosa maculosa* Reuter, 1903 by a smaller size (length 3.5 mm; nominotypical subspecies 4.0–4.25 mm). The nominotypical subspecies is known from Central Asia as well as from the Khorasan province in Iran (Linnavuori & Modarres 1999). Konstantinov (2000) synonymized *A. maculosa erato* with *A. maculosa maculosa*. However, I have not seen any intermediates in the Iranian material, the specimens from Khorasan being typical for the nominotypical subspecies. The situation should be resolved by a study of many specimens from different areas.

Atomoscelis onusta (Fieber, 1861)

Material examined. Numerous specimens: **Khuzestan:** near Ahvaz, 29.iv.–1.v.2007; Behbahan, 27.–28.iv.2002; Dezful, 5.–7.vi.2008; Zeydoon, 26.–28.iv.2007. **Fars:** Baba Arab 30 km SE of Jahrom, 16.–17.vi.2003; Khaneh Kat, 16.–17.vi.2006; Maharlu, 17.–18.vi.2002. **Kurdestan:** near Marivan, 12.–13.vi.2005; near Sanandai, 11.–12.vi.2006. **West Azerbaijan:** Marangalu near Urumiyeh, 15.–17.vii.2004; Nushin Sar near Urumieh, 25.–27.vi.2008.

Comments. In meadows in hills, river sides and gardens. On *Atriplex*. West-Palaearctic species, extending to East Siberia and northern China.

Auchenocrepis alboscutellata Puton, 1874

Material examined. Khuzestan: Zeydoon, 1 specimen, 26.–28.iv.2007. **Fars:** Baba Arab 30 km SE of Jahrom, 2 specimens, 16.–17.vi.2003.

Comments. On *Tamarix*. Eremian species, extending from North Africa to tropical Africa, Italy, the Middle East and Pakistan.

Auchenocrepis reuteri Jakovlev, 1876

Material examined. Khuzestan: Abadan, 1 specimen, 10.–11.vi. 2008; near Ahvaz, 5 specimens, 20.iv.–1.v.2007; Ahvaz, Ghazavieh, 9 specimens, 7.–8.vi.2005; Shadegan, 1 specimen, 20.–21.iv.2008. **Fars:** Khaneh Kat, 3 specimens, 16.–17.vi.2006; Khaneh Zenyan, 1 specimen, 13.–14.vi.2003. **Kohgiluyeh & Boyerahmad:** Samirun, 1 specimen, 11.–12.vi.2003. **West Azerbaijan:** Bitas 30 km S of Mahabad, 9 specimens, 19.–20.vii.2004.

Comments. On *Tamarix*. Ponto-Mediterranean species.

Badezorus ferdowsii Linnavuori, 1997

(Fig. 4E–F)

Material examined. Numerous specimens: **Khuzestan:** Sadde-e-Dez, 6.–7.vi.2005**. Fars:** 10 km S of Deh Bid, 14.vi.1996; Maharlu, 1.–18.vi.2002; Shul Sangar, 17.–18.vi.2003. **Ilam:** Ilam, 21.–23.vi.2006. **Kermanshah:**

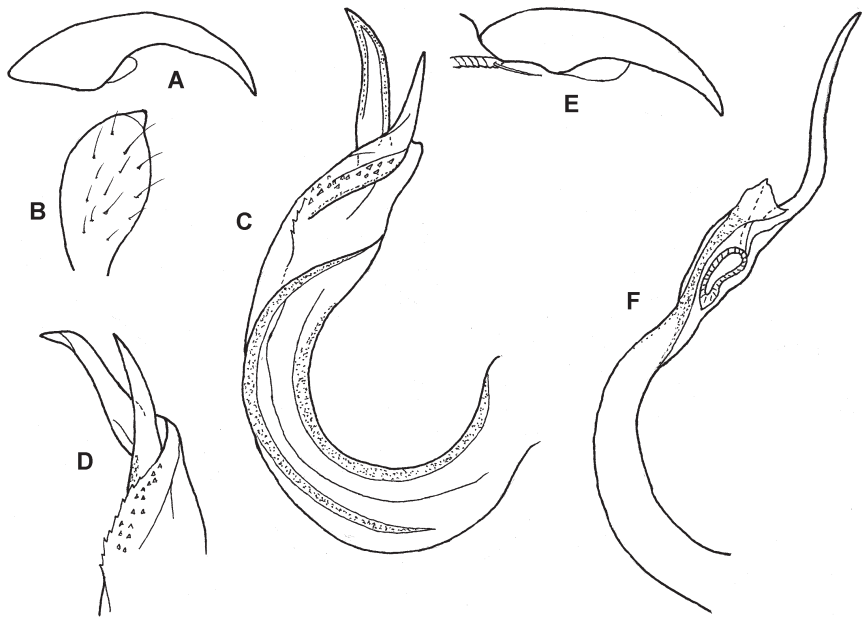

Fig. 4. A–D – *Anonychiella brevicornis* (Reuter, 1879): A – claw; B – right paramere; C – vesica; D – apex of vesica in slide. E–F – *Badezorus ferdowsii* Linnavuori, 1997: E – claw; F – vesica.

Chaharbarolya, 20.–23.vi.2006. **Kohgiluyeh & Boyerahmad:** Tang Sorkh 35 km SE of Yasuj, 18.–19.vi.2003. **Kurdestan:** 20 km NE of Marivan, 24.–25.vi.2006; near Sanandai, 11.–12.vi.2005. **Lorestan:** Kahriz 7 km from Boroujerd, 8.–9.vi.2006.

Comments. Claw and vesica as in Fig. 4E–F. In hilly gardens with rich undergrowth, on river banks with *Populus* and *Salix* and in mountain steppes. In Khorasan found on *Fraxinus*. Endemic to Iran.

Badezorus signaticornis (Reuter, 1904)

Material examined. Numerous specimens: **Khuzestan:** near Ahvaz, 29.iv.–1.v.2007; Andimeshk, 5.–6.vi.2008; Andimeshk – Tangvan, 9.–10.vi.2006; near Lali, 6.–8.v.2007, 6.–7.vi.2008; near Ramhormoz, 7.–9.vi.2008; Sadde-e-Dez, 6.–7.vi.2005; Sardasht, 11.–12.vi.2008. **West Azerbaijan:** Bitas 20 km S of Mahabad, 19.–20.vii.2004. **Bushehr:** Ab Pakhsh, 25.–26.iv.2007; near Bandar-e-Genaveh, 22.–24.iv.2007. **Fars:** Baba Arab 50 km SE of Jahrom, 16.–17.vi.2007; Fasa, Mianjangal, 18.–19.vi.2006; Khaneh Kat, 16.–17.vi.2006. **Ilam:** near Eyvan, 9.–10.vi.2005. **Kurdestan:** near Marivan, 12.–13.vi.2006, Sanandai, 11.–17.vi.2005.

Comments. In steppes on *Aerva*, *Arnebia* and *Heliotropium*. Eremian species, extending from North Africa to Iran; also widely distributed in the Ethiopian and Oriental Regions.

Badezorus tomentosus (Reuter, 1904)

Material examined. Khuzestan: Sadde-e-Dez, 1 specimen, 6.–7.vi.2005. **Bushehr:** Ab Pakhsh, 7 specimens, 26.–26.iv.2007; near Bandar-e-Genaveh, 8 specimens, 23.–24.iv.2007.

Comments. On halophytes such as *Heliotropium* in steppes. Eremian species, extending from North Africa to the Arabian Peninsula and Iran.

Camptotylidea flavida (Nonnaizab & Yang, 1994)

Material examined. Fars: Maharlu, 1 ♂, 17.–18.vi.2002.

Comments. In gardens with *Punica* on the shore of a salt lake. Central Asian species, known from northern and north-eastern China and from Mongolia. **New for Iran.**

Camptotylidea persica Wagner, 1957

Material examined. Fars: Maharlu, 1 specimen, 17.–18.vi.2002; Fasa, Mianjangal, 3 specimens, 18.–19.vi.2006; 15 km E of Sarvestan, 2 specimens, 15.–16.vi.2003.

Comments. Collected at light in hilly steppes and at the Agricultural Research Station in Mianjangal. Endemic to Iran.

Camptotylidea suturalis (Reuter, 1903)

Material examined. Fars: Khaneh Kat, 2 specimens, 16.–17.vi.2006.

Comments. At light in hilly steppes and gardens. Recorded on *Haloxylon*. Irano-Turanian species, known from Iran, Central Asia, Mongolia, northern and north-western China and Tunisia.

Camptotylus gracilis Wagner, 1957

Material examined. Khuzestan: Ahvaz, Ghazavieh, 1 specimen, 7.–8.vi.2005; Ahvaz, Jangieh, several specimens, 11.–12.vi.2006. **Kohgiluyeh & Boyerahmad:** Samirun, 1 specimen, 11.–12.vi.2003.

Comments. On *Tamarix*. Irano-Turanian species, known fom Iran and Afghanistan.

Camptotylus reuteri Jakovlev, 1881

Material examined. Fars: Khaneh Zanyan, 4 specimens, 13.–14.vi.2003. **Kohgiluyeh & Boyerahmad:** Samirun, several specimens, 11.–12.vi.2003; Tang Sorkh, numerous specimens, 18.–19.vi.2003.

Comments. On *Tamarix*. Caspian species, extending from Greece to North China.

Campylomma diversicorne Reuter, 1878

Material examined. Numerous specimens: **Khuzestan:** Abadan, 10.–11.vi.2008; near Ahvaz, 29.iv.–1.v.2007; Ahvaz, Jangieh, 11.–12.vi.2006; Ahvaz – Karun river, 10.–11.vi.2006; Andimeshk – Tangvan, 9.–10.vi.2006; Bagh Malek, 5.–11.v.2007; Lali, 6.8.v.2007, 6.–7.vi.2008; near Ramhormoz, 7.–9.vi.2008; Sadde-e-Dez, 5.–11.v.2007. **Bushehr:** Ab Pakhsh, 25.–26.iv.2007; Bandar-e-Genaveh, 23.–24.iv.2007. **Fars:** Baba Arab 30 km SE of Jahrom, 16.–17.vi.2003; Bavan near Nur Abad, 20.–21.vi.2008; near Fasa, 17.–19.vi.2008; Fasa, Mianjangal, 18.–19.vi.2006; Firuzabad, 15.–16.vi.2008; Kamfiruz, 15.–16.vi.2002; Khaneh Kat, 16.–17.vi.2006; Maharlu, 15.–16.vi.2006, 16.–17.vi.2008; 10 km W of Shiraz, 16.–17.vi.2002; Shul Sangar, 17.–18.vi.2003; Takht-e-Jamshid, 14.–15.vi.2002. **Ilam:** near Eyvan, 9.–10.vi.2005; Ilam, 21.–22.vi.2005. **Kermanshah:** Chaharzabarolya, 22.–23.vi.2006. **Kohgiluyeh & Boyerahmad:** Madvan near Yasuj, 11.–12.vi.2003. **Kurdestan:** near Marivan, 12.–13.vi.2003, 24.–25.vi.2006; 20 km NE of Marivan, 24.–25.vi.2006. **West Azerbaijan:** near Agh Balegh, 19.vii.2004; Bitas 20 km S of Mahabad, 19.–20.vii.2004; Nushin Sar near Urumiyeh, 25.–27.vi.2006.

Comments. In river sides, hilly steppes and gardens. On plants such as *Artemisia* and *Astragalus.* Irano-Turanian species, extending from the Balkan Peninsula to the Middle East, Central Asia, China and Pakistan.

Campylomma incertum Villiers, 1956

Material examined. Khuzestan: near Ramhormoz, 1 specimen, 7.–9.vi.2008. **Fars:** Dasht-e-Arzhan, 3 specimens, 12.–13.vi.2003; Firuzabad, 2 specimens, 15.–16.vi.2008; Kamfiruz, 1 specimen, 15.–16.vi.2002; Maharlu, 1 specimen, 16.–17.vi.2009; 10 km W of Shiraz, 2 specimens, 16.–17.vi.2002; Shul Sangar, 1 specimen, 17.–18.vi.2003. **Ilam:** Ilam, many specimens, 8.–9.vi.2005, 21.–22.vi.2006. **Kermanshah:** Chaharbarolya, 1 specimen, 22.–23.vi.2006. **Kohgiluyeh & Boyerahmad:** Sang Sorkh 35 km SE of Yasuj, 1 specimen, 18.–19.vi.2003; Vasag SE of Yahrom, several specimens, 18.vi.2003. **West Azerbaijan:** Nushin Sar near Urumiyeh, 1 specimen, 25.–27.vi.2006.

Comments. In gardens in hilly habitats. Found on desert plants and shrubs such as *Dipterygium glaucum*, *Lycium* and *Zizyphus*. Eremian species, extending from North Africa to the Middle East and tropical Africa (Niger to Ethiopia).

Campylomma khuzestanicum sp. nov.

(Figs. 5A–F, 26B)

Type material. Holotype: ♂, **IRAN: Khuzestan:** Zeydoon, 26.–28.iv.2007. Paratypes: ♂, **IRAN: Khuzestan:** Zeydoon, 26.–28.iv.2007; ♂, near Ahvaz, 29.iv.–1.v.2007. The types will be deposited at the National Museum and Galleries of Wales (Cardiff, United Kingdom).

Description. Length: 2.75 mm (♂).

Colouration (Fig. 26B). Head black or blackish with basal margin of vertex sometimes paler; tylus always black. Eyes reddish. Antennae yellow, immaculate, antennomere 4 slightly

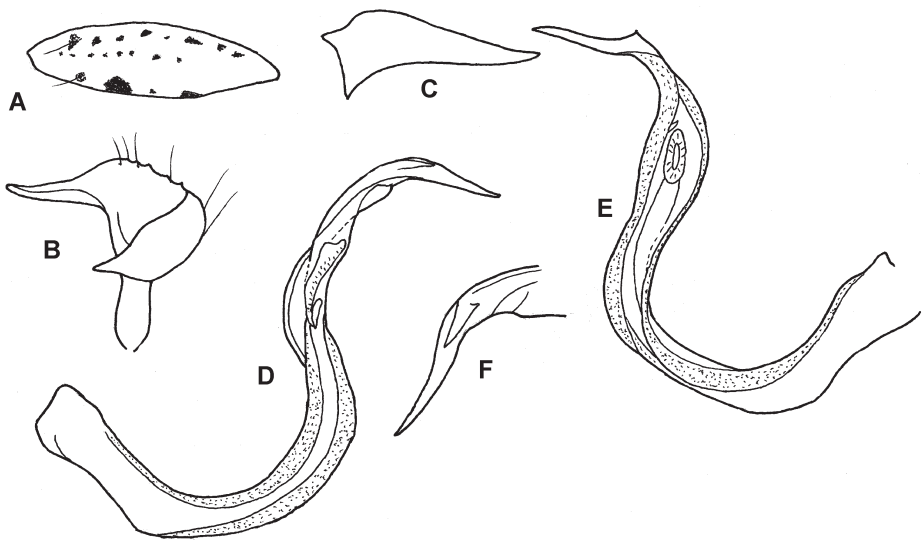

Fig. 5. *Campylomma khuzestanicum* sp. nov. A – ventral surface of hind femur; B – left paramere; C – theca; D – vesica, slide mount, E – vesica, in glycerine; F – apex of vesica.

darker. Pronotum dark yellowish brown, apical margin dark brown. Scutellum black with basal lateral angles yellow-brown. Hemelytra yellowish with dark brown transverse area from apical part of clavus to mesocorium, exocorium and cuneus immaculate, extreme inner margin of clavus sometimes reddish; membrane pale brownish, veins pale. Ventral surface blackish. Rostrum and legs pale yellowish. Femora with black spots, pattern of ventral surface of hind femora as in Fig. 5A. Tibiae with black spines arising from small black dots.

Structure. Body elongately ovate, about 2.8× as long as basal width of pronotum. Dorsal pubescence pale and adpressed. Head 0.70–0.75× as long as basal width of pronotum; ocular index 1.35–1.53. Length ratios of antennomeres 10 : 42 : 21 : 18, antennomere 1 0.22–0.24× as long as diatone, antennomere 2 relatively incrassate, 0.91–1.02× as long as diatone and 0.68–0.72× as long as basal width of pronotum. Rostrum extending to middle coxae. Pronotum 1.9–2.0× as broad as long in middle. Male genitalia as in Fig. 5B–F. Pygophore elongately conical. Vesica gracile with a slender and sharp apical process.

Differential diagnosis. *Campylomma khuzestanicum* sp. nov. belongs to the group of species with uniformly pale antennae. It is easily recognized by the colouration with blackish head, dark pronotum, black scutellum and a dark pattern on the hemelytra.

Habitat. Collected at light on a river bank with *Tamarix* and *Phragmites* and in a date-palm garden with rich undergrowth and a little brook with *Phragmites*.

Etymology. Named after the type locality.

Distribution. So far known only from Iran.

Campylomma nigronasutum Reuter, 1878

Material examined. Khuzestan: near Ahvaz, 2 specimens, 29.iv.–1.v.2007; Ahvaz, Ghazavieh, 4 specimens, 7.–8.vi.2005; Ahvaz, Jangieh, 2 specimens, 11.–12.vi.2006; Zeydoon, 6 specimens, 26.–28.iv.2007.

Comments. Collected at light in date-palm gardens near river banks. Irano-Turanian.

Campylomma simillimum Jakovlev, 1882

Material examined. Fars: 10 km W of Shiraz, 1 specimen, 16.–17.vi.2002. **West Azerbaijan:** Marangalu near Urumiyeh, 1 specimen, 15.–17.vi.2004.

Comments. At light in gardens close to salt marshes. Extending from Hungary and Bulgaria to Central Asia.

Campylomma unicolor Poppius, 1914

Material examined. Numerous specimens: **Khuzestan:** Abadan, 10.–11.vi.2008; Ahvaz, Ghazavieh, 7.–8.vi.2006; Ahvaz, Jangieh, 11.–12.vi.2006; near Ahvaz, Karun river, 10.–11.vi.2006; Andimeshk, 9.–10.vi.2006, 5.–6.vi.2008; Andimeshk – Tangvan, 9.–10.vi.2006; Bagh Malek, 9.–11.v.2007; Behbahan, 27.–28.iv.2007; Farrahsband, 14.–15.vi.2008; Lali, 6.–8.v.2007, 6.–7.vi.2008; Sadd-e-Dez, 5.–7.vi.2005; Zeydoon, 26.–28.iv.2007. **Bushehr:** Ab Pakhsh, 25.–26.iv.2007, 13.–14.vi.2008; near Bandar-e-Genaveh, 23.–24.iv.2007. **Fars:** Baba Arab 50 km SE of Jahrom, 15.–17.vi.2003; Bavan near Nur Abad, 20.–21.vi.2008; near Fasa, 17.–19.vi.2008; Firuzabad, 15.–16.vi.2008; Kamfiruz, 15.–16.viii.2002; Maharlu, 17.–18.vi.2002, 16.–17.vi.2008; near Nur Abad, 21.–22.vi.2008; Sardasht, 11.–12.vi.2008; 10 km W of Shiraz, 16.–17.vi.2002; Shul – Sangar, 17.–18.vi.2003; 15 km E of Sarvestan, 15.–16.vi.2003; Takht-e-Jamshid, 14.–15.vi.2002.

Comments. On cultivated plants such as cotton and on natural vegetation (*Acacia*, *Artemisia*, *Suaeda* and *Zizyphus*) at river sides, in hilly steppes and in gardens. Eremian species, extending from North Africa to the Middle East and tropical Africa (Cabo Verde to Sudan).

Campylomma verbasci (Meyer-Dür, 1843)

Material examined. Numerous specimens: **Esfahan:** Shahreza – Semirom, 14.vi.2003. **Fars:** Kamfiruz, 15.–18.vi.2002; Maharlu, 14.–15.vi.2003; 10 km W of Shiraz, 16.–17.vi.2002. **Ilam:** Ilam, 8.–9.vi.2003. **Kermanshah:** Chaharzabarolya, 22.–23.vi.2006. **Kurdestan:** 20 km NE of Marivan, 24.–25.vi.2008; near Sanandai, 23.–24.vi.2006; Zeydoon, 26.–28.iv.2007. **Lorestan:** Kahriz 7 km from Boroujerd, 8.–9.vi.2006. **West Azerbaijan:** near Agh Bolagh, 19.vii.2004; Bitas 20 km S of Mahabad, 19.–20.vii.2004; Kitkeh 30 km S of Mahabad, 19.–20.vii.2004; Marangalu near Urumiyeh, 15.–17.vii.2004; Maregheh, 20.–21.vii.2004; Nushin Sar near Urumiyeh, 15.–17.vi.2005, 25.–27.vi.2008.

Comments. In steppes, mountain meadows and gardens on herbs such as *Verbascum*. Also at light. Holarctic species.

Chlamydatus sarafrazii Linnavuori, 1998

Material examined. Fars: Dasht-e-Arzhan, numerous specimens, 12.–13.vi.2003.

Comments. At slopes of hills and brook sides. On *Phlomis olivieri*. Endemic to Iran.

Compsidolon (*Compsidolon*) *elegantulum* (Reuter, 1899)

Material examined. Fars: Shul – Sangar, 1 ♂, 17.–18.vi.2003.

Comments. In a hilly garden. Recorded on *Parietaria*. Syrio-Anatolian species.

Compsidolon (*Compsidolon*) *nebulosum* (Reuter, 1878)

Material examined. Esfahan: Esfahan, 1 specimen, 9.–10.ii.2003. **Fars:** Kamfiruz, 1 specimen, 15.–16.vi.2002; Takht-e-Jamshid, 9 specimens, 14.–15.vi.2002. **Kermanshah:** Chaharzabarolya, 8 specimens, 22.–23.vi.2006. **Kohgiluyeh & Boyerahmad:** Madvan near Yasuj, 1 specimen, 11.–12.vi.2003; Samirun, 1 specimen, 11.–12.vi.2003; Tang Sorkh 35 km SE of Yasuj, 1 specimen, 18.–19.viii.2003. **Semnan:** Rowyan, 1 specimen, 16.–17.vii.2003. **West Azerbaijan:** Maregheh, 2 specimens, 20.–21.vii.2004; Nushin Sar near Urumiyeh, 2 specimens, 25.–27.vi.2006.

Comments. Collected at light. On undergrowth in gardens near small rivers and on mountain slopes. Irano-Turanian species.

Ectagela aspera Linnavuori, 1984

Material examined. Fars: 10 km W of Shiraz, 1 specimen, 16.–17.vi.2002; Takht-e-Jamshid, 1 specimen, 14.–15.vi.2002.

Comments. Collected at light in hilly gardens. In Tunisia found on *Populus alba*. Eremian species, known from Tunisia, Iraq and Iran.

Ectagela guttata Schmidt, 1939

Material examined. Khuzestan: Ahvaz, Ghazavieh, 1 specimen, 3.–8.vi.2005; near Andimeshk, 3 specimens, 5.–6.v.2007, 5.–6.vi.2008; near Lali, 6.–8.v.2007; near Ramhormoz, 2 specimens, 7.–9.vi.2008; Sadde-e-Daz, 3

specimens, 6.–7.vi.2005. **Fars:** Baba Arab 30 km SE of Jahrom, 1 specimen, 18.–17.vi.2003; Bavan near Nur Abad, 3 specimens, 20.–21.vi.2008; Firuzabad, 4 specimens, 15.–18.vi.2008; Maharlu, 8 specimens, 17.–18.vi.2002, 16.–17.vi.2008. **Kurdestan:** near Sanandai, 1 specimen, 23.–24.vi.2006.

Comments. On *Zizyphus*. In hilly steppes and gardens; also in gardens on shores of a salt lake. Eremian species, known from Spain, North Africa, Middle East (Iran, Iraq, Yemen) and tropical Africa.

Ephippiocoris lunatus Poppius, 1912

Material examined. Fars: Tang-e-Bostanak, many specimens, 8.–9.vi.1996. **Kurdestan:** near Sanandai, 1 specimen, 11.–12.vi.2005.

Comments. On river banks with *Populus*, *Salix* etc. Recorded on *Populus niger*. Irano-Turanian species, recorded from Turkey, Caucasus, Iran and Central Asia.

Eurycranella geocoriceps Reuter, 1904

Material examined. Fars: Baba Arab 50 km SE of Jahrom, 6 specimens, 16.–17.vi.2003.

Comments. On *Tamarix*. Eremian species, known from North Africa, Middle East and tropical Africa (from Niger to Eritrea).

Farsiana pistaciae Linnavuori, 1998

Material examined. Fars: Maharlu, 1 specimen, 14.–15.vi.2003.

Comments. In hilly valleys. On *Pistacia mutica*. Endemic to Iran.

Lepidargyrus iranicus Muminov, 1962

Material examined. Khuzestan: near Lali, 3 specimens, 6.–8.v.2007.

Comments. In mountain meadows. Polyphagous, found on *Asperula*, *Hedysarum*, *Scutellaria* and *Stachys*. Irano-Turanian species, known from Azerbaijan, Iran and Turkmenistan.

Lepidargyrus nigerrimus Linnavuori, 1998

Material examined. Fars: Dasht-e-Arzhan, 3 specimens, 12.–13.vi.2003. **Kohgiluyeh & Boyerahmad:** Vazag SE of Yahrom, 7 specimens, 18.vi.2003.

Comments. In slopes of hills and river sides. On *Astragalus*. Endemic to Iran.

Lepidargyrus seidenstueckeri (Wagner, 1956)

Material examined. Kurdestan: Saqqez, 1 specimen, 13.–14.vi.2006.

Comments. At light on hilly slopes. Previously known from Turkey, Israel and Syria. **New for Iran.**

Lepidargyrus syriacus (Wagner, 1956)

Material examined. Numerous specimens: **Khuzestan:** near Andimeshk, 5.–6.v.2007; Behbahan, 27.–28.iv.2007; near Lali, 6.–8.v.2007; Zeydoon, 26.–28.iv.2007.

Comments. In hilly steppes and on undergrowth in gardens. Syrio-Anatolian species. **New for Iran.**

Macrotylus cruciatus (R. F. Sahlberg, 1848)

Material examined. **Tehran:** Azad Bar 70 km W of Karaj, 2410 m a.s.l., 6 specimens, 10.vii.1995; Kandovan, 2550 m a.s.l., 1 specimen, 3.–4.vii.1995.

Comments. The specimens are somewhat smaller and darker than most *M. cruciatus*, but the structure of the vesica is very similar. Found in mountain meadows, known to live on *Filipendula ulmaria*. Eastern Palaearctic species. **New for Iran.**

Macrotylus talhouki Wagner, 1976

Material examined. **Khuzestan:** Bagh Malek, 2 specimens, 9.–12.v.2007; Zeydoon, 2 specimens, 26.–28.iv.2007. **Fars:** Deh Bid, 2000 m a.s.l., 1 specimen, 14.vi.1996.

Comments. In mountain steppes. Known from Lebanon and Iran.

Maurodactylus albidus (Kolenati, 1845)

Material examined. **West Azerbaijan:** 25 km S of Urumiyeh, 1 ♂, 17.vi.2005.

Comments. Recorded on *Poa viviparens*. Central Asian species extending to Eastern Europe.

Maurodactylus nigrigenis (Reuter, 1890)

Material examined. **Khuzestan:** near Andimeshk, 2 specimens, 5.–6.v.2007; Bagh Malek, 1 specimen, 9.–11.v.2007; Behbahan, 1 specimen, 27.–28.iv.2007; near Lali, 5 specimens, 6.–8.v.2007; Sadde-e-Dez, 1 specimen, 6.–7.vi.2005; Zeydoon, several specimens, 26.–28.iv.2007. **Bushehr:** Ab Pakhsh, 3 specimens, 25.–26.iv.2007; near Bandar-e-Genaveh, 1 specimen, 23.–24.iv.2007.

Comments. On *Artemisia* in steppes. At light in gardens and river valleys with *Phragmites* and other herbs. Eremian species, extending from North Africa to Central Asia.

Megalodactylus grandoculus sp. nov.

(Figs. 6A–G, 26D)

Type material. Holotype: ♂, **IRAN: Khuzestan:** near Ahvaz, 29.iv.–1.v.2007. The type will be deposited at the National Museum and Galleries of Wales (Cardiff, United Kingdom).

Description. Length 4.5 mm (♂).

Colouration. Pale yellowish (Fig. 26D). Eyes dark brown. Antennae yellowish. Base of scutellum yellow with two faint dark spots, apical part whitish. Hemelytra pale yellowish with faint dark markings along apical part of claval commissure and across apical part of corium, membranes with cells somewhat darkened. Ventral surface of body pale. Legs yellowish, femora slightly embrowned basally, ventral surface of hind femora with a row of small brownish dots along anterior margin; fore and middle tibiae darkened apically, tibial spines black; tarsi blackish brown.

Structure. Body 3.44× as long as basal width of pronotum. Dorsal surface with long semierect pale hairs. Head 0.8× as broad as basal width of pronotum, in apical view 0.2× as broad as high; eyes large, ocular index 0.82. Antennae long, length ratios of antennomeres 9 : 34 : 25 : 12, antennomere 1 1.32× as long as diatone, antennomere 2 1.37× as long as diatone and 1.1× as long as basal width of pronotum. Rostrum extending to middle coxae. Pronotum twice as broad basally as long in middle, lateral margins strongly diverging anteriorly, disk

weakly convex, densely and finely punctate. Apical part of scutellum convex, finely punctate. Hind tibia 1.9× as long as basal width of pronotum. Length ratios of hind tarsomeres 10 : 20 : 20. Male genitalia in Fig. 6A–G.

Differential diagnosis. The only other species of the genus *Megalodactylus*, *M. macularubra* (Mulsant & Rey, 1852; synonym *M. bicolor* Wagner, 1963) is easily distinguished from the

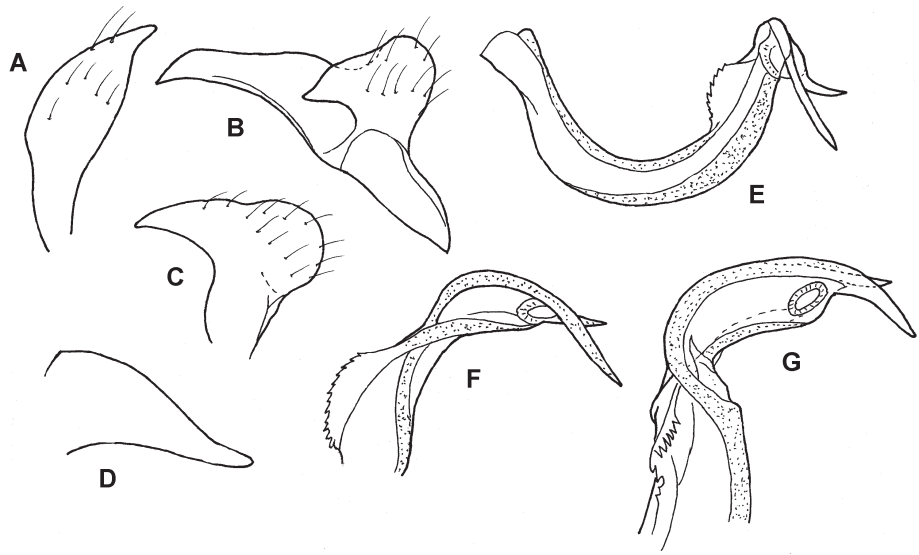

Fig. 6. *Megalodactylus grandoculus* sp. nov. A – right paramere; B – left paramere; C – sensory lobe of same; D – theca; E – vesica, in glycerine; F – apical part of vesica, in glycerine, G – vesica, slide mount.

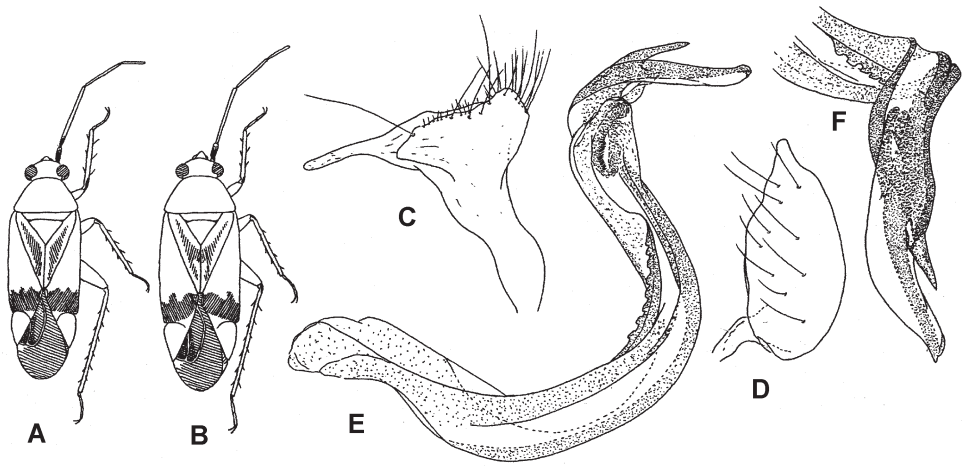

Fig. 7. *Megalodactylus macularubra* (Mulsant & Rey, 1852): A – male; B – female; C – left paramere; D – right paramere; E – vesica; F – apex of vesica (A–B after Wagner (1975), C–F after Carapezza (1997)).

new species by: i) different colouration of the hemelytra (Fig. 7A–B) with distinct red or dark brown pattern and antennomere 1, base of antennomere 2 and bases of tibiae with blackish spots; ii) short hairs on the dorsal surface of the body; iii) much smaller eyes; iv) narrower and more convex pronotum with stronger and sparser punctation; v) lower apical part of scutellum; and vi) different shape of male genitalia (Fig. 7C–F).

Habitat. At light in a date-palm garden with a small brook with *Phragmites.*

Etymology. *Grandoculus*, Latin, a noun in apposition referring to the large eyes.

Distribution. So far known only from the type locality.

Megalocoleus mellae (Reuter, 1876)

Material examined. Ilam: Ilam, 3 specimens, 8.–9.vi.2005. **Kermanshah:** near Javanrud, 1 specimen, 10.–11.vi.2005. **Kurdestan:** Sanandai, 2 specimens, 11.–12.vi.2005.

Comments. At light in mountain forests and river sides with *Populus* and *Salix.* Ponto-Mediterranean species, extending from Italy and Greece to Iran (Matocq 2004).

Megalocoleus signoreti (Reuter, 1879)

Material examined. Khuzestan: near Andimeshk, 1 ♂, 19.–20.iv.2007.

Comments. At light in gardens with a small brook. Recorded on *Helianthemum guttatum*. Holomediterranean species. **New for Iran.**

Monosynamma bohemanni (Fallén, 1829)

Material examined. Kurdestan: near Marivan, 2 specimens, 12.–13.vi.2005. **Lorestan:** Kahriz 7 km from Boroujerd, 1 specimen, 8.–9.vi.2006.

Comments. In hilly gardens. Recorded on *Salix*. Holarctic species. **New for Iran.**

Nanopsallus carduellus (Horváth, 1888)

Material examined. Numerous specimens: **Fars:** Khaneh Zenyan, 13.–14.vi.2003; 10 km W of Shiraz, 16.–17.vi.2002; Shul – Sangar, 17.–18.vi.2003. **Ilam:** Eyvan, 9.–10.vi.2005; Ilam, 8.–9.vi.2005. **Kermanshah:** Chaharzabarolya, 22.–23.vi.2006; near Javanrud, 10.–11.vi.2005. **Kohgiluyeh & Boyerahmad:** Medvan near Yasuj, 11.–12.vi.2003; Samirun, 11.–12.vi.2003; Tang Sorkh 35 km SE of Yasuj, 18.–19.vi.2003. **Kurdestan:** near Marivan, 12.–13.vi.2005. **Lorestan:** Kahriz 7 km from Boroujerd, 8.–9.vi.2006. **West Azerbaijan:** Bitas 20 km S of Mahabad, 19.–20.vii.2004; Marangalu near Urumiyeh, 15.–17.vii.2004; Nushin Sar, 15.–17.vi.2005; near Sardasht, 14.–15.vi.2005.

Comments. Collected at light in mountain meadows and hilly gardens. Recorded on *Cirsium acarna.* Ponto-Mediterranean species.

Nasocoris argyrotrichus Reuter, 1879

Material examined. East Azerbaijan: Agh Gonbad, 1 specimen, 14.–15.vii.2004; Saray, 2 specimens, 14.–15.vii.2004. **Fars:** Maharlu, 1 specimen, 17.–18.vi.2002.

Comments. On *Ephedra procera* in hilly steppes. Collected at light in a garden near the Urmiyeh salt lake. Irano-Turanian species, extending from South European Territory of Russia to Iran, Central Asia, Mongolia and China.

Nasocoris desertorum Kerzhner, 1970

Material examined. **Fars:** Fasa, Mianjangal, 1 specimen, 18.–19.vi.2006; 14 km E of Sa'adatshar, 1600 m a.s.l., 1 specimen, 6.–7.vi.1996.

Comments. Collected at light in an agricultural research station. Irano-Turanian species, also known from Tajikistan, Turkmenistan and Uzbekistan.

Omocoris cunealis (Reuter, 1899)

Material examined. **Bushehr:** near Bandar-e-Genaveh, 7 specimens, 23.–24.iv.2007.

Comments. In low hills with rich growth of herbaceous plants and low trees like *Acacia* in the coastal areas of the Persian Gulf. Irano-Turanian species, known from Iran, Tajikistan, Turkmenistan and Uzbekistan.

Oncotylus (*Cylindromelus*) *setulosus* (Herrich-Schaeffer, 1837)

Material examined. Numerous specimens: **Khuzestan:** near Ahvaz, 29.iv.–1.v.2007; near Andimeshk, 5.–6.v.2007; Bagh Malek, 9.–11.v.2007; near Lali, 6.–8.v.2007; Zeydoon, 26.–28.iv.2007. **Fars:** Kamfiruz, 15.–16.vi.2002; Takht-e-Jamshid, 14.–15.vi.2002. **Ilam:** near Eyvan, 9.–10.vi.2005; Ilam, 8.–9.vi. 2003. **Kermanshah:** Chaharzabarolya, 22.–23.vi.2006; near Javanrud, 10.–11.vi.2005. **Kurdestan:** near Marivan, 12.–13.vi.2005; 20 km NE of Marivan, 24.–25.vi.2006; near Sanandai, 11.–12.vi.2005. **West Azerbaijan:** near Agh Balagh, 19.vii.2004; Marangalu near Urumiyeh, 13.–17.vii.2004; Nushin Sar near Urumiyeh, 13.–17.vii.2004.

Comments. In gardens, mountain steppes and on river banks. Recorded on *Centaurea*. Ponto-Mediterranean species, extending to Central Asia.

Oncotylus (*Oncotylus*) *viridiflavus longiceps* Wagner, 1954

Material examined. **Ardabil:** Gaveh Ghaslagh, 1 specimen, 27.–28.vii.2004. **West Azerbaijan:** near Agh Bolagh, many specimens, 19.vii.2004.

Comments. In hilly steppes. Known from southern Turkey and Iran.

Oncotylus (*Oncotylus*) *vitticeps* Reuter, 1879

Material examined. **West Azerbaijan:** near Agh Bolagh, 1 specimen, 19.vii.2004.

Comments. In hilly steppe with *Astragalus* and *Alhagi*. Recorded on Asteraceae. Known from southern Russia, Ukraine, Iran, Central Asia and China.

Paredrocoris ilamicus sp. nov.

(Figs. 8A–G, 26C)

Type material. Holotype: ♂, **IRAN: Ilam:** Ilam, 21.–22.vi.2006. The type will be deposited in the National Museums and Galleries of Wales (Cardiff, United Kingdom).

Description. Length 4.25 mm (♂).

Colouration. Bright yellow. Antennae uniformly yellow. Eyes dark grey. Membrane of hemelytra greyish with yellow veins. Legs yellow. Tibiae with black spines.

Structure. Body 3.2× as long as broad at base of pronotum. Dorsal surface with yellow hairs. Head 0.65× as broad as basal width of pronotum. Ocular index 1.53. Length ratios of

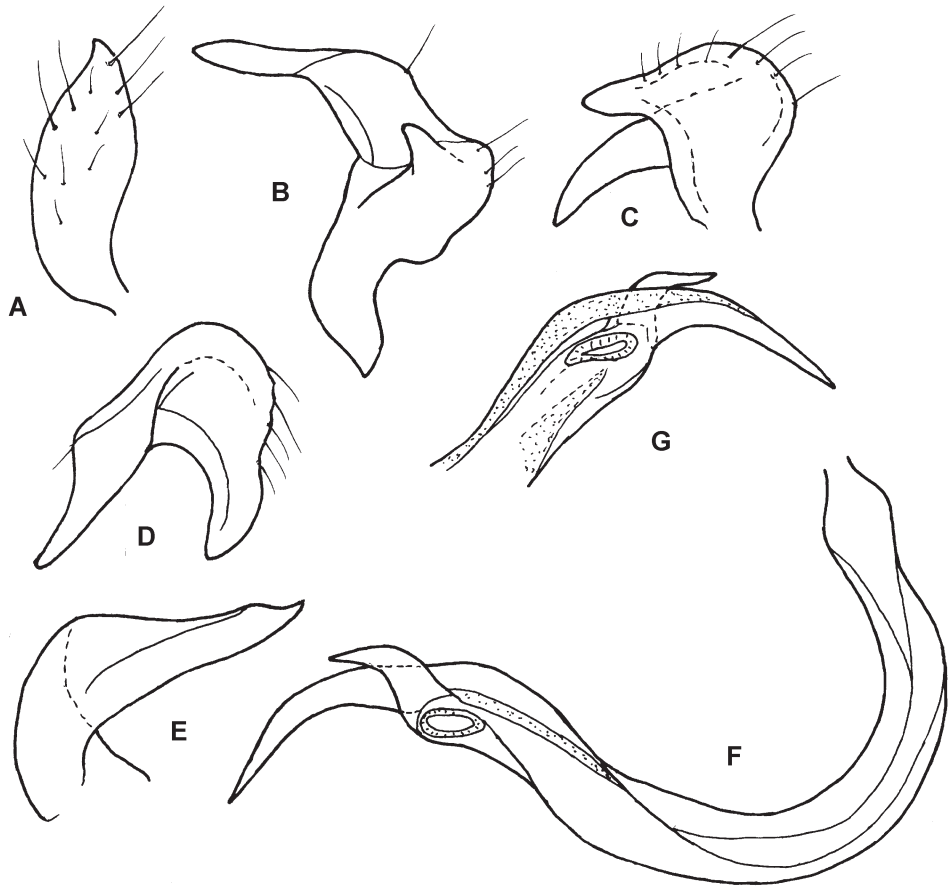

Fig. 8. *Paredrocoris ilamicus* sp. nov. A – right paramere; B–D – left paramere in different aspects; E – theca; F – vesica; G – apex of vesica in slide.

antennomeres 8 : 29 : 18 : 9, antennomere 2 1.38× as long as diatone and 0.94× as long as basal width of pronotum. Rostrum extending to hind coxae. Pronotum 2.13× as broad as long in middle. Hemelytra longer than abdomen. Male genitalia as in Fig. 8A–G.

Differential diagnosis. The genus *Paredrocoris* Reuter, 1878 was revised by Linnavuori (1997a). *Paredrocoris ilamicus* sp. nov. is related to the Ponto-Mediterranean *P. pectoralis* Reuter, 1878. *Paredrocoris ilamicus* sp. nov. differs in the somewhat larger size (length of *P. pectoralis*: 3.3–3.8 mm (♂), 3.0–3.5 mm (♀)), larger eyes (ocular index in *P. pectoralis*: 1.9–2.0 (♂), 2.0–2.22 (♀)), longer antennae (antennomere 2 in *P. pectoralis* 0.7–0.8× as long as basal width of pronotum) and in the structure of male genitalia – right paramere narrower, theca narrow and vesica more robust with the apical process longer and straight (male genitalia of *P. pectoralis* as in Fig. 9B–F, apical process of vesica shorter and distinctly curved). *Paredrocoris seidenstueckeri* Josifov, 1965 (Bulgaria, Greece, Macedonia) is smaller with

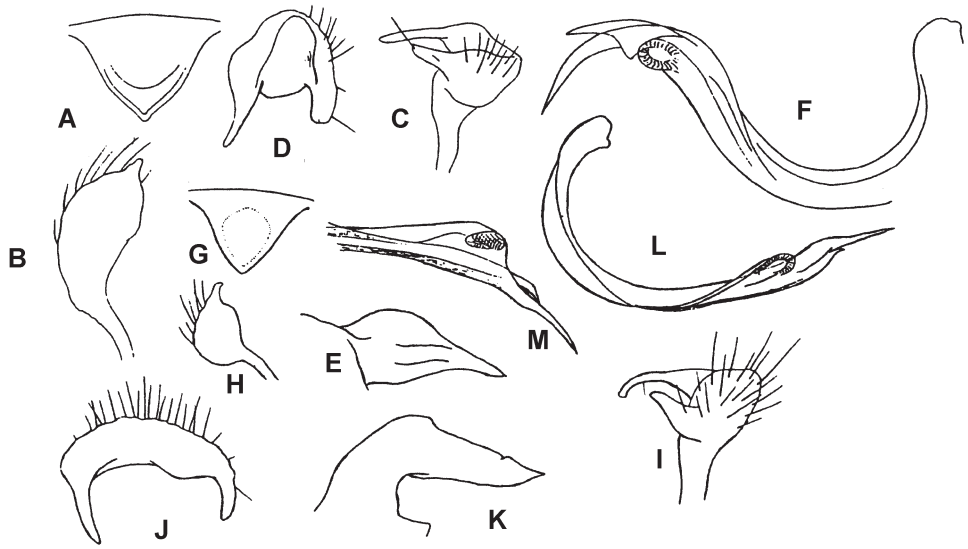

Fig. 9. A–F – *Paredrocoris pectoralis* Reuter, 1878: A – prosternal xyphus; B – right paramere; C–D – left paramere; E – theca; F – vesica. G–M – *P. seidenstueckeri* Josifov, 1965: G – prosternal xyphus; H – right paramere; I–J – left paramere; K – theca; L – vesica; M – apex of vesica (after Josifov 1965).

the lengths of 3.4–4.2 mm (♂) and 3.5–3.8 mm (♀), larger ocular index of 1.9–2.1 (♂) in males (2.3–2.6 in females), and slightly longer antennomere 2 (1.2× (♂) to 1.0–1.1× (♀) as long as basal width of pronotum) and the male genitalia have a shorter and straighter vesica (Fig. 9H–M).

Habitat. Collected at light on the slopes of the Zagros mountains.

Etymology. Named after the type locality.

Distribution. So far known only from the type locality.

Plagiognathus (*Plagiognathus*) *bipunctatus bipunctatus* Reuter, 1883

Material examined. Khuzestan: Bagh Malek, several specimens, 9.–11.v.2007; Behbahan, 3 specimens, 27.–28.iv.2007; near Lali, 4 specimens, 6.–8.v.2007. **Bushehr:** near Bandar-e-Genaveh, 1 specimen, 23.–24.iv.2007. **West Azerbaijan:** near Sardasht, 1 specimen, 14.–15.vi.2005.

Comments. On undergrowth in gardens, meadows and steppes. Ponto-Mediterranean species.

Plagiognathus (*Plagiognathus*) *bipunctatus albicans* (Reuter, 1901), stat. nov.

(Fig. 27A)

Material examined. Numerous specimens: **Khuzestan:** Abadan, 21.–22.iv.2007; Andimeshk, 5.–6.vi.2008; Andimeshk – Tangvan, 9.–10.vi.2006; Bagh Malek, 9.–11.v.2007; Dezful, 6.–7.vi.2005; near Lali, 6.–7.vi.2008; Sadde-e-Dez, 6.–7.vi.2005; Zeydoon, 26.–28.iv.2007. **Bushehr:** Ab Pakhsh, 25.–26.iv.2007; near Bandar-e-Genaveh, 21.–22.iv.2007. **Ilam:** near Eyvan, 9.–10.vi.2006. **Kurdestan:** Marivan, 24.–25.vi.2006; 20 km NE of Marivan, 24.–25.vi.2006. **West Azerbaijan:** 20 km S of Mahabad, 19.–30.vii.2004; near Sadasht, 14.–15.vi.2003.

Comments. *Plagiognathus bipunctatus bipunctatus* is generally pale greenish. Antennomeres 1 and 2 are often blackish (var. *picticornis* Horváth, 1898) and the extreme base of the hind tibiae is also dark and dorsal pubescence blackish. A pale form, originally described as *P. albicans* Reuter, 1901, was synonymized with *P. bipunctatus* by KERZHNER (1970: 644). It is pale whitish yellow with uniformly pale antennae and hind tibiae and mostly to entirely pale yellowish dorsal pubescence. Specimens collected in northern Iran belong to the nominotypical form. In Khuzestan and the adjacent areas, the majority represents the form *albicans*. As no intermediate forms were found, *P. albicans* apparently represents a separate subspecies.

Known from Central Asia and Iran.

Plagiognathus (*Plagiognathus*) *fulvipennis* (Kirschbaum, 1856)

Material examined. KHUZESTAN: Bagh Malek, 14 specimens, 9.–11.v.2007; Behbahan, 1 specimen, 27.–28.iv.2007; near Lali, 10 specimens, 6.–8.v.2007. **WEST AZERBAIJAN:** near Sardasht, 4 specimens, 14.–15.vi.2005. **KOHGILUYEH & BOYERAHMAD:** Yazag SE of Yahrom, 6 specimens, 18.viii.2003. **KURDESTAN:** Marivan, 1 specimen, 12.–13.vi.2005. **LORESTAN:** Kahriz 7 km from Boroujerd, 1 specimen, 8.–9.vi.2006.

Comments. In hilly steppes and meadows. On Asteraceae, recorded on *Achillea*, *Heteropappus* and *Centaurea*. Ponto-Mediterranean species.

Plagiognathus (*Plagiognathus*) *marivanensis* sp. nov.

(Figs. 10A–H, 27B)

Type material. HOLOTYPE: ♂, **IRAN: WEST AZERBAIJAN:** near Sardasht, 14.–15.vi.2003. PARATYPES: **KOHGILUYEH & BOYERAHMAD:** Madvan near Yasuj, 4 paratypes, 11.–12.vi.2003; Samirun, 1 paratype, 11.–12.vi.2003. **KURDESTAN:** near Marivan, 9 paratypes, 12.–13.vi.2005. The types will be deposited at the National Museums and Galleries of Wales (Cardiff, United Kingdom).

Description. Length 3.75–4.0 mm (♂♂), 3.5–3.75 mm (♀♀).

Colouration. Uniformly whitish yellow, immaculate (Fig. 27B). Eyes dark brown. Antennae pale yellow, immaculate. Apex of rostrum dark. Membranes of hemelytra pale greyish, veins pale yellow. Ventral surface of body pale yellowish, extreme tip of ovipositor dark. Legs pale yellowish; hind femora with faint brownish dots. Tibiae immaculate, tibial spines black. Hind tarsomere 3 dark.

Structure. Body about 3.2× as long as basal width of pronotum. Dorsal pubescence yellow. Head 0.65–0.67× (♂) or 0.61–0.66× (♀) as broad as basal width of pronotum; eyes in male large, ocular index 1.07–1.21 (♂) and 1.67–1.74 (♀). Length ratios of antennomeres 15 : 60 : 45 : 22 (♂), 12 : 50 : 30 : 20 (♀), antennomere 2 1.26–1.33× (♂) or 1.16× (♀) as long as diatone and 0.86–0.9× (♂) or 0.71–0.77× (♀) as long as basal width of pronotum. Rostrum extending to hind coxae. Pronotum 2.0× (♂) or 2.03–2.33× (♀) as broad as long in middle. Hind tibiae in ♂ about 1.7×, in ♀ 1.4× as long as basal width of pronotum. Length ratios of hind tarsomeres 8 : 15 : 13. Claws as in Fig. 10A. Male genitalia: pygophore elongately conical, other characters of genitalia in Fig. 10B–H.

Differential diagnosis. *Plagiognathus marivanensis* sp. nov. belongs to the *P. bipunctatus* group. *Plagiognathus bipunctatus albicans* differs, e.g., in the presence of a dark spot beyond the apex of the cells of membrane, broader body and smaller eyes (ocular index about 1.7 (♂) and 1.95–2.1 (♀)). In *P. zuvandiensis* V. G. Putshkov, 1978 known from Azerbaijan and

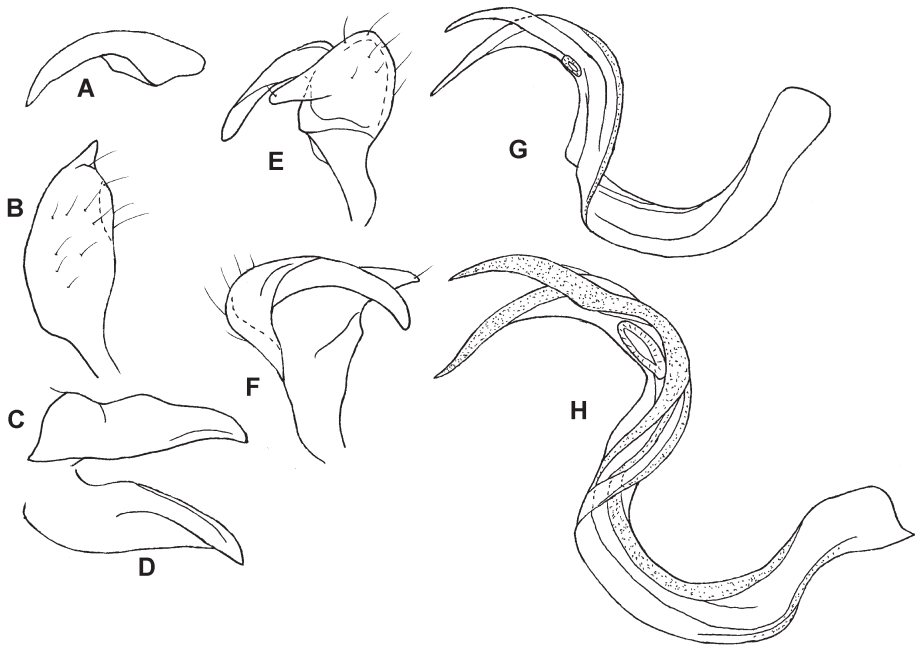

Fig. 10. *Plagiognathus marivanensis* sp. nov. A – claw; B – right paramere; C–D – theca; E–F – left paramere; G–H – vesica in dry mount and in slide.

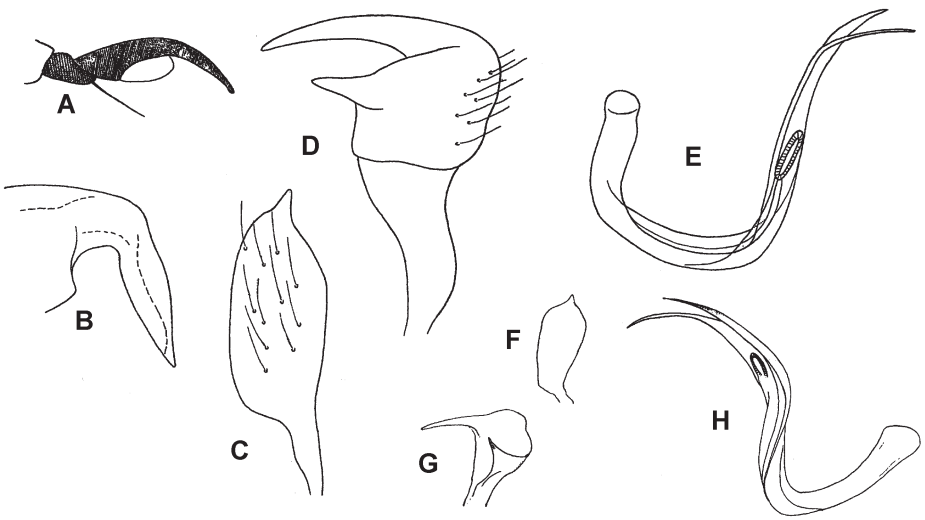

Fig. 11. A–E – *Plagiognathus albus* Reuter, 1900: A – claw; B – theca; C – right paramere; D – left paramere; E – vesica. F–H – *P. zuvandiensis* V. G. Putshkov, 1978: F – right paramere, G – left paramere; H – vesica (after Put shkov 1978 and Ribes 1978).

northern Iran, the general colouring is more brownish, the ocular index in ♂ is about 1.3 and in ♀ 1.75 and the male genitalia are different with a long and slender vesica and sharp sensory lobe of the left style (Fig. 11F–H). *Plagiognathus albus* Reuter, 1894 (Spain) is smaller, only 3.4 mm (♂) to 3.3 mm (♀) long, antennomere 2 of ♂ is 1.13× as long as width of head and 0.75× as long as basal width of pronotum and the male genitalia are different (Fig. 11B–E). *Plagiognathus pallidus* Reuter, 1900 (Algeria) is according to WAGNER (1975: 19–20) larger with ♂♂ 3.7–4.2 mm long, antennomere 1 has two and the base of antennomere 2 one faint dark ring, antennomere 2 is 1.3× as long as the width of head and 0.8× as long as the basal width of pronotum and ocular index equals 1.9. In the other species of the group, the dorsal pubescence is dark, antennomere 1 and the base of antennomere 2 have at least faint dark rings, the hind femora have more distinct dark spots, the extreme base of hind tibia is dark and wing membranes have a dark spot beyond the apex of the cells.

Habitat. Collected at light on mountain slopes with gardens and little forests.

Etymology. Named after the type locality.

Distribution. So far known only from Iran.

Psallopsis caspia Konstantinov, 1997

Material examined. WEST AZERBAIJAN: Nushin Sar near Urumiyeh, 5 specimens, 25.–27.vi.2006. **FARS:** Khaneh Kat, 1 specimen, 16.–17.vi.2008; Maharlu, many specimens, 17.–18.vi.2002.

Comments. Collected at light in gardens near a salt lake. On halophytes such as *Salsola laricina* and *Kochia* sp. Ranging from Caucasus to Iran and Central Asia.

Psallopsis kirgisica (Becker, 1864)

Material examined. FARS: Maharlu, 2 specimens, 17.–18.vi.2002. **GAZVIN:** Gazvin, 1 specimen, 21.vi.2003. **WEST AZERBAIJAN:** Marangalu near Urumiyeh, 6 specimens, 15.–17.vi.2004; Nushin Sar near Urumiyeh, 1 specimen, 15.–17.vi.2005.

Comments. At light in gardens near a salt lake. Known on *Artemisia* and *Atriplex*. Ponto-Mediterranean species, extending to Central Asia.

Psallopsis rufifemur Wagner, 1958

Material examined. KHUZESTAN: Abadan, 6 specimens, 21.–22.iv.2007; Shadegan, several specimens, 20.–21.iv.2007.

Comments. Collected at light in date-palm gardens in moist localities with *Phragmites*, *Scirpus* and *Tamarix*. Eremian species, known from Iran, Iraq and Saudi Arabia.

Psallopsis similis Wagner, 1958

Material examined. KHUZESTAN: near Ahvaz, 2 specimens, 29.iv.–1.v.2007; Bandar-e-Masher, 1 specimen, 12.–13.vi.2008; Shadegan, 1 specimen, 13.–14.vi.2006. **FARS:** Farrahsband, 1 specimen, 14.–15.vi.2008; Khaneh Kat, 7 specimens, 16.–17.vi.2006; Maharlu, 7 specimens, 16.–17.vi.2008.

Comments. On *Suaeda*. In date-palm gardens at shores of a brook with *Phragmites* and near a salty lake. Eremian species, extending from Saudi Arabia to South Russia, Caucasus and Central Asia.

Psallus (*Psallus*) *anaemicus* Seidenstücker, 1966

Material examined. Ilam: Ilam, 2 males, 8.–9.vi.2005.

Comments. At light in a forest on the slopes of the Zagros mountains. Recorded on *Acer*. Ponto-Mediterranean species, known from Italy, the Czech Republic, Slovakia, Austria, Hungary, Bulgaria, Greece and Turkey. **New for Iran.**

Psallus (*Psallus*) *pseudopunctulatus* Linnavuori, 1984

Material examined. Ilam: near Eyvan, 2 specimens, 9.–10.vi.2005; Ilam, 19 specimens, 8.–9.vi.2005. **Kurdestan:** near Marivan, 3 specimens, 12.–13.vi.2005. **West Azerbaijan:** near Sardasht, 2 specimens, 14.–15.vi.2005.

Comments. Collected at light in mountain forests, steppes and gardens. Known from Iraq. **New for Iran.**

Psallus (*Psallus*) *shulsangaricus* sp. nov.

(Figs. 12A–G, 27C)

Type material. Holotype: ♂, **IRAN: Fars:** Shul – Sangar, 17.–18.vi.2003. Paratype: ♂, same locality and date as holotype. The types will be deposited at the National Museums and Galleries of Wales (Cardiff, United Kingdom).

Description. Length 3.0–3.5 mm (♂).

Colouration. Head and pronotum pale brownish (Fig. 27C); eyes greyish brown. Antennae pale yellow. Rostrum yellowish. Scutellum brownish, basal angles slightly paler. Clavus and corium yellowish brown with reddish tinge, apical part of corium and cuneus red, basal margin of cuneus white; membranes grey, veins pale. Ventral surface brown. Ostioles of metathoracic scent gland pale. Legs pale yellowish, femora with numerous brown spots, tibial spines black, arising from small dark dots; tarsi pale.

Structure. Body 2.9× as long as basal width of pronotum. Upper surface with yellow pubescence. Head about 0.7× as long as broad basally, in anterior view 1.45× as broad as high, ocular index 1.60–1.67. Antennae gracile, length ratios of antennomeres 11 : 52 : 32 : 24, antennomere 2 1.13–1.16× as long as width of head, 0.8× as long as basal width of pronotum. Rostrum extending to hind coxae. Pronotum 2.23× as broad as long in middle. Hind tibia 1.55× as long as basal width of pronotum; length ratios of hind tarsomeres 7 : 13 : 12; claws (Fig. 12A) gracile with small pulvilli. Male genitalia (Fig. 12B–G): pygophore conical; sensory lobe of left paramere with small tooth-like process; apical process of vesica slender and straight, entire lower margin with numerous teeth; subapical process short.

Differential diagnosis. Closely related to *P. corsicus* Puton, 1875 (= *P. ericetorum* Reuter, 1899) (Figs. 13A–H, 27D), redescribed by Carapezza (1997: 147–151) and known from Corsica and Greece including Crete. *Psallus corsicus* differs from the new species in the red colouring, brown tibial spines and the male genitalia: the apical process of the vesica is curved and apically edentate, the subapical process is longer and the sensory lobe of left paramere has a longer process. *Psallus siculus* Reuter, 1878, known from Italy and North West Africa, is also similar to *P. corsicus* and differs in the structure of male genitalia (Fig. 14A–D).

Habitat. Collected at light in hilly gardens with undergrowth of *Amygdalus*, *Astragalus* and *Artemisia*.

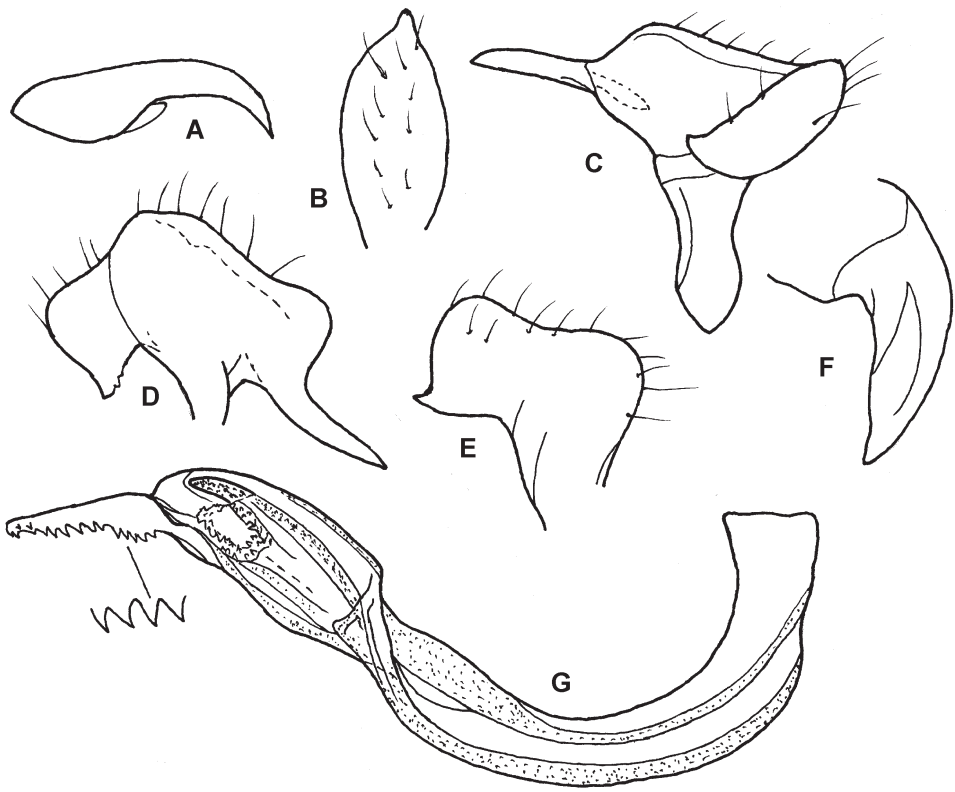

Fig. 12. *Psallus shulsangaricus* sp. nov. A – claw; B – right paramere; C–E – left paramere in different positions; F – theca; G – vesica.

Etymology. Named after the type locality.
Distribution. So far known only from the type locality.

Solenoxyphus adspersus (Reuter, 1904)

Material examined. Fars: Baba Arab 50 km SE of Jahrom; 1 specimen, 16.–17.vi.2003; Maharlu, many specimens, 17.–18.vi.2002.

Comments. Collected at light in gardens with *Punica* at the shore of a salt lake and in hilly steppes. Irano-Turanian.

The genus *Solenoxyphus* Reuter, 1875 was recently reviewed by Konstantinov (2008).

Solenoxyphus fuscovenosus (Fieber, 1864)

Material examined. Fars: Maharlu, 16 specimens, 17.–18.vi.2002. **Qazvin:** Qazvin, 12 specimens, 21.vi.2003.

Comments. On undergrowth with *Punica* in gardens on the shore of a salt lake and in hilly steppes. Ponto-Mediterranean.

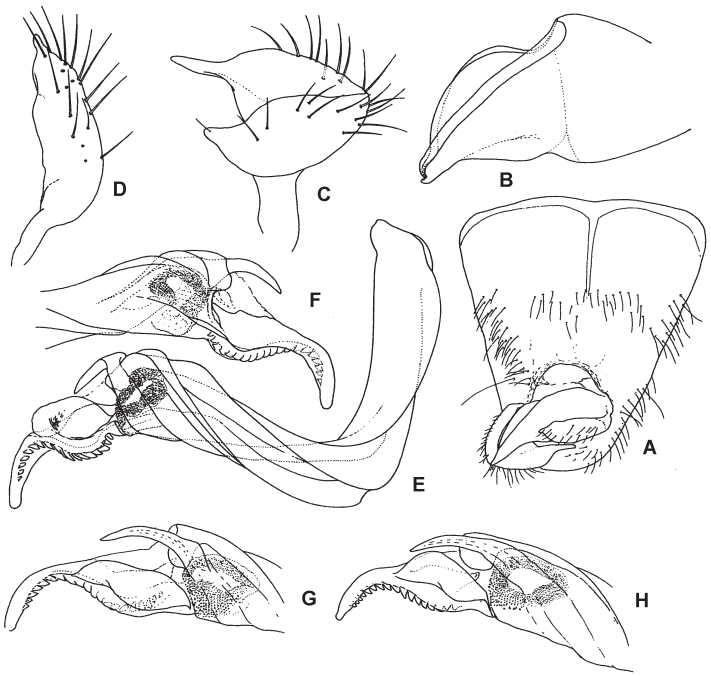

Fig. 13. *Psallus corsicus* Puton, 1875: A – pygophore; B – theca; C – left paramere; D – right paramere; E – vesica; F–H – apex of vesica in different positions (after Carapezza 1997).

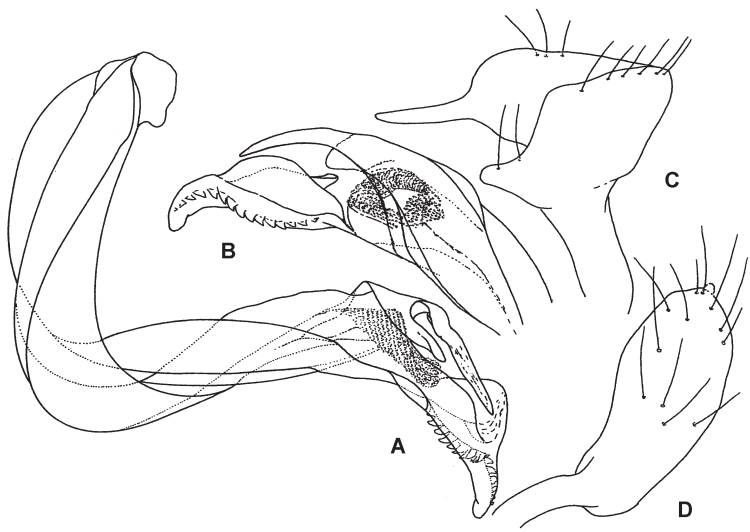

Fig. 14. *Psallus siculus* Reuter, 1875: A – vesica; B – apex of vesica; C – left paramere; D – right paramere (after Carapezza 1997).

Solenoxyphus punctipennis (Reuter, 1879)

Material examined. **Khuzestan:** near Ahvaz, several specimens, 29.iv.–1.v.2007; Bandar – Mashahr, 1 specimen, 12.–13.vi.2006; Shadegan, 1 specimen, 20.–21.iv.2007; Zeydoon, several specimens, 26.–28.iv.2007. **Bushehr:** Ab Pakhsh, several specimens, 25.–26.iv.2007; near Bandar-e-Genaveh, several specimens, 23.–24.iv.2003. **Fars:** Maharlu, several specimens, 17.–18.vi.2002. **Markazi:** Saveh, 1 specimen, 8.–9.vi.2002. **West Azerbaijan:** Bitas 20 km S of Mahaba, 2 specimens, 19.–20.vii.2004; Nushin Sar near Urumiyeh, many specimens, 25.–26.vii.2006.

Comments. In gardens, steppes and meadows in the coastal area of the Persian Gulf in Bushehr, in date-palm gardens and river valleys with *Phragmites* and other grasses, *Artemisia* and *Astragalus* spp. Irano-Turanian species.

Stenoparia putoni Fieber, 1870

Material examined. **Khuzestan:** Bagh Malek, 2 specimens, 9.–11.v.2007; Zeydoon, 1 specimen, 26.–28.iv.2007. **Bushehr:** near Bandar-e-Genaveh, 2 specimens, 23.–24.iv.2007. **Fars:** Maharlu, 1 specimen, 17.–18.vi.2002.

Comments. In hilly steppes. Recorded on *Artemisia* and *Matthiola*. Holomediterranean species.

Sthenaropsis fedori sp. nov.

(Figs. 15A–E, 29A–B)

Type material. Holotype: ♂, **IRAN: Khuzestan:** Zeydoon, 26.–28.iv.2007. Paratypes: 2 ♂♂, same locality and date as holotype. The types will be deposited in the National Museums and Galleries of Wales (Cardiff, United Kingdom).

Description. Length 3.5–3.75 mm (♂).

Colouration. Shiny. Blackish brown with pale pattern on basal part of hemelytra (Fig. 29A). Head black with genae, lorae and bucculae yellowish brown (Fig. 29B). Eyes dark brown. Antennae pale yellow. Rostrum yellowish. Pronotum and scutellum blackish. Hemelytra blackish with basal part of corium and the adjacent areas of clavus yellowish; cuneus dark brown; membranes with veins also dark brown. Ventral surface of thorax yellowish with reddish tinge, middle and entire abdomen blackish. Legs yellow, femora with reddish tinge, tibiae with short dark spines, claws dark.

Structure. Body 2.6–3.2× as long as basal width of pronotum. Upper surface of body, especially of hemelytra, covered by adpressed pale pubescence. Head about 0.9× as broad as basal width of pronotum, in anterior view about 1.6× as broad as high; basal margin of vertex carinate; ocular index about 1.83. Antennae long and gracile, with short adpressed pubescence, length ratios of antennomeres 15 : 60 : 42 : 30, antennomere 2 0.95× as long as basal width of head, 0.82–0.88× as long as basal width of pronotum. Rostrum extending to hind coxae. Pronotum 2.21–2.45× as broad as long in middle, lateral margins slightly curved, disk finely and sparsely punctate. Punctation on hemelytra fine and dense. Hind femur about 1.47× as long as basal width of pronotum. Length ratios of hind tarsomeres 9 : 15 : 16. Male genitalia as in Fig. 15A–E, pygophore conical.

Differential diagnosis. Related to *S. gracilicornis* Linnavuori, 1954 from Central Asia, but readily distinguished by the unique colouring (*S. gracilicornis* is uniformly dark brown).

Habitat. Collected at light at a river bank with *Tamarix* and *Phragmites* and in a date-palm garden with rich undergrowth and little brook with *Phragmites*.

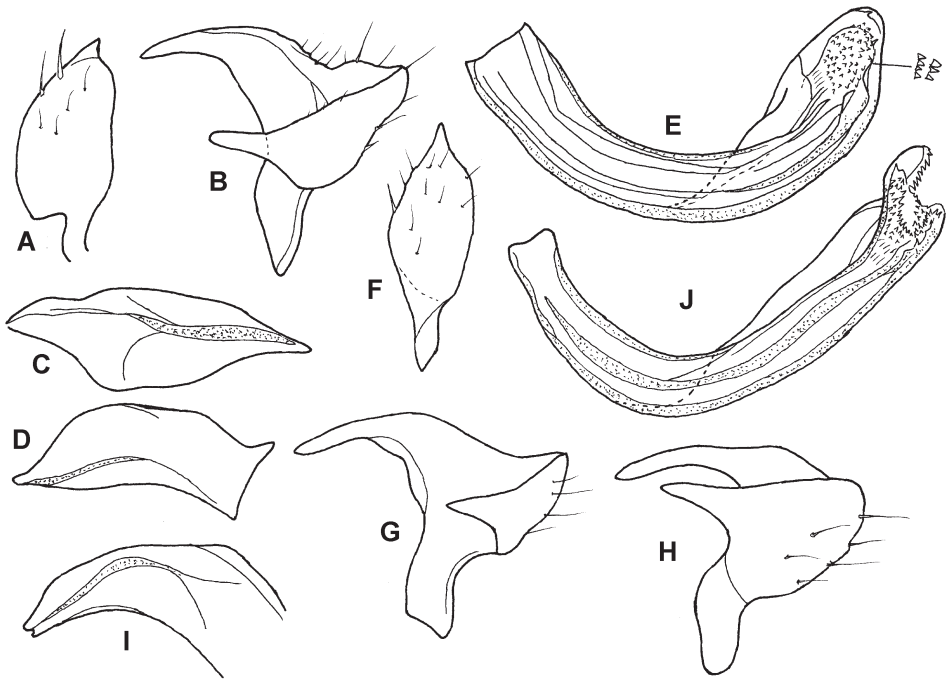

Fig. 15. A–E – *Sthenaropsis fedori* sp. nov. A – right paramere; B – left paramere; C–D – theca in two aspects; E – vesica, slide mount. F–B – *S. zeydoonicus* sp. nov. F – right paramere; G–H – left paramere in two aspects; I – theca; J – vesica, slide mount.

Etymology. Dedicated to Feodor V. Konstantinov of the St. Petersburg State University, a renowned specialist in Palaearctic Miridae.
Distribution. So far known only from the type locality.

Sthenaropsis zeydoonica sp. nov.

(Figs. 15F–J, 29C–D)

Type material. HOLOTYPE: ♂, **IRAN: KHUZESTAN:** Zeydoon, 26.–28.iv.2007. PARATYPES: 2 ♂♂, same locality and date as holotype. The types will be deposited at the National Museums and Galleries of Wales (Cardiff, United Kingdom).

Description. Length 3.5–3.75 mm (♂).

Colouration. Relatively shiny, black (Fig. 29C). Head shiny black (Fig. 29D); eyes greyish brown. Antennae yellow, extreme base of antennomere 1 dark. Rostrum black. Membranes of hemelytra dark blackish grey. Ventral surface of body black. Femora black with extreme apex yellow, other parts of legs yellow; tibial spines pale, those of hind tibia arising from very small dark dots.

Structure. Body 2.9–3.4× as long as basal width of pronotum. Upper surface of body with dense adpressed pale pubescence. Head about 0.8× as broad as basal width of pronotum, in

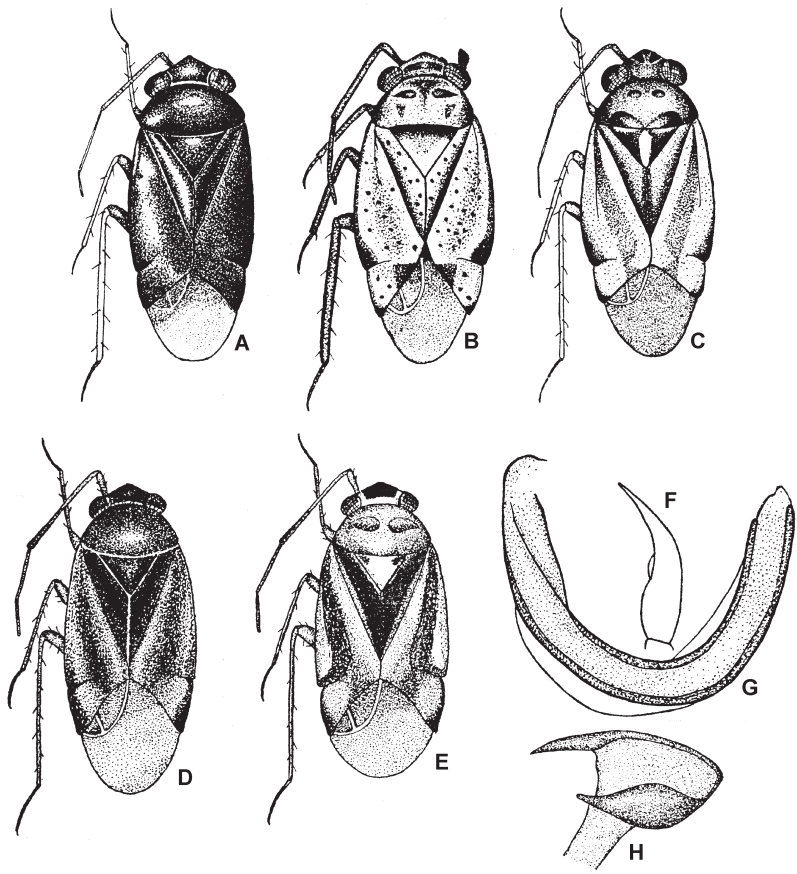

Fig. 16. A – *Sthenaropsis gracilicornis* Linnavuori, 1964. B – *S. piperata* Linnavuori, 1964. C – *S. variegata* Poppius, 1912. D–H – *S. gobica* V. G. Putshkov, 1977: D – male; E – female; F – claw; G – vesica; H – left paramere (after Put shkov 1977).

anterior view about 1.4× as broad as high; basal margin of vertex carinate; ocular index 1.8–2.0. Antennae gracile, with short adpressed pale pubescence; length ratios of antennomeres 15 : 61 : 34 : 25, antennomere 2 1.02–1.09× as long as basal width of head and 0.77–0.87× as long as basal width of pronotum. Rostrum extending to base of venter. Pronotum 2.1–2.2× as broad as long in middle, lateral margins slightly sinuous; pronotal disk, scutellum and hemelytra with dense fine punctation. Hind femur 1.33× as long as basal width of pronotum. Length ratios of hind tarsomeres 9 : 11 : 10. Pygophore conical, male genitalia as in Fig. 15F–J.

Differential diagnosis. The new species is near to *Sthenaropsis gobica* V. G. Putshkov, 1977, in which the males (Fig. 16D) are black with the hemelytra with a wide stripe along the middle, and the outer apical margin and outer apex of the corium and the apex of the cuneus are blackish brown. Females of *S. gobica* (Figs. 16E, 17C) with paler colouration. Male genitalia of *S. gobica* as in Fig. 16G–H.

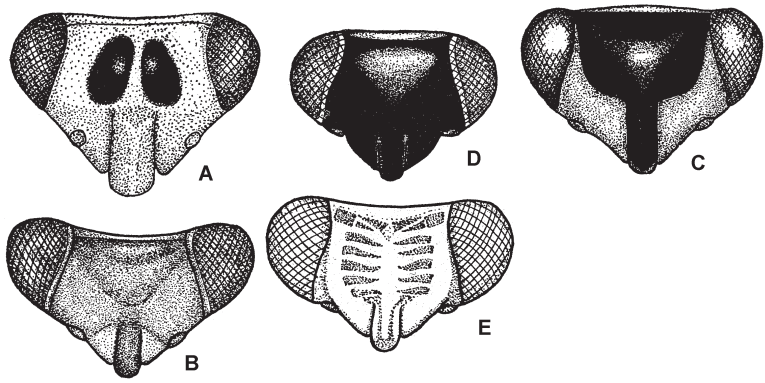

Fig.17. Head in frontal aspect: A – *Sthenaropsis variegata* Poppius, 1912 (♂); B – *S. gracilicornis* Linnavuori, 1964 (♂); C – *S. gobica* V. G. Putshkov, 1977 (♀); D – *S. obscura* Poppius, 1912 (♀); E – *S. piperata* Linnavuori, 1964 (♂) (after Put shkov 1977).

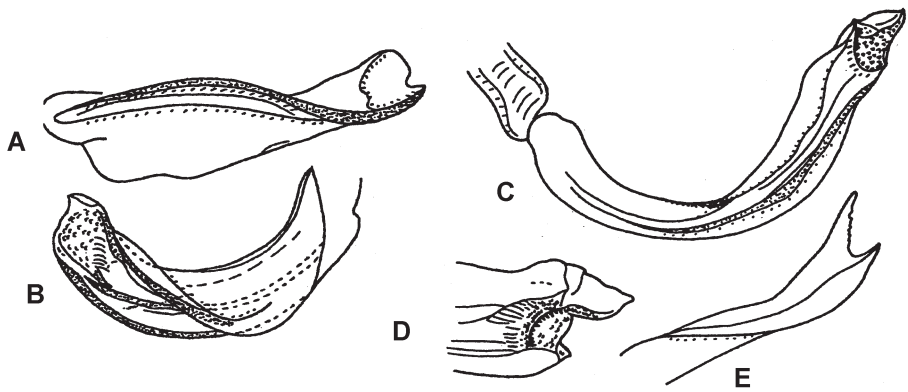

Fig. 18. A–B – *Sthenaropsis lamellaris* Linnavuori, 1986, vesica. C–E – *S. convolvuli* Linnavuori, 1984: C – vesica; D–E – apex of vesica (after Linnavuori 1984, 1986).

Moreover, *Sthenaropsis convolvuli* Linnavuori, 1984 has antennae more incrassate, with antennomeres 3 and 4 apically somewhat infuscated; body broader, 2.7× as long as basal width of pronotum; upper surface of body, especially hemelytra, densely covered with long adpressed scale-like silvery hairs; vesica as in Fig. 18C–E.

Sthenaropsis schachrudica Linnavuori, 1964 has ocular index (♂) 2.17–2.37; antennae dark ochraceous, antennomere 2 short, 0.67× as long as basal width of pronotum; pubescence of dorsal body surface short; pronotum, scutellum and hemelytra shiny, finely punctate; vesica as in Fig. 20B–C.

Habitat. Collected at light at a river bank with *Tamarix* and *Phragmites* and in a date-palm garden with rich undergrowth and brook with *Phragmites*.

Etymology. Named after the type locality.

Distribution. So far known only from the type locality.

Key to species of *Sthenaropsis* Poppius, 1912

1. Totally or largely black to dark brown species. 2
– Yellow or greenish species with fulvous or dark markings. 10
2. Upper surface totally black to blackish brown. 3
– Upper surface also with pale areas. 8
3. Head in apical view about 1.4–1.5× as broad as high. 4
– Head in apical view broader, 1.6–1.7× as broad as high. 6
4. Dorsal surface with dense adpressed long scale-like silvery hairs. Ocular index 1.78–1.90 (♂), 2.13.–2.26 (♀). Vesica as in Fig. 18C–E. Iraq. ..... ***S. convolvuli*** Linnavuori, 1984
– Dorsal surface with short adpressed yellowish pubescence. 5
5. Body more elongate, 2.9–3.4× as long as basal width of pronotum. Ocular index smaller: 1.8–2.0 (♂). Antennae gracile, antennomere 2 0.77–0.87× as long as basal width of pronotum. Vesica as in Fig. 15J. Iran. ..... ***S. zeydoonica* sp. nov.**
– Body broa der, about 2.55× as long as basal width of pronotum. Ocular index larger: 2.17–2.3 (♂), 2.3–2.5 (♀). Antennomere 2 only about 0.67× as long as basal width of pronotum. Vesica as in Fig. 20B–C. Iran. ..... ***S. schachrudica*** Linnavuori, 1964
6. Antennae remarkably gracile, uniformly pale yellow. Vesica as in Fig. 19D–E. Central Asia. ..... ***S. gracilicornis*** Linnavuori, 1964
– Antennae yellowish brown, more incrassate. 7

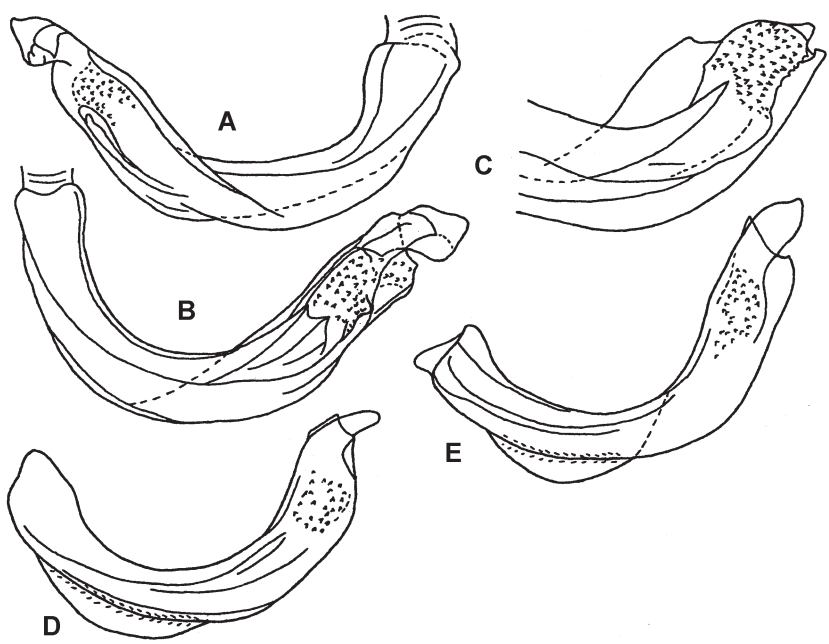

Fig.19. A–B – *Sthenaropsis kuhestak* Linnavuori, 2004, vesica. C – *S. lamellaris* Linnavuori, 1986, apex of vesica. D–E – *S. gracilicornis* Linnavuori, 1964, vesica (after Linnavuori 2004).

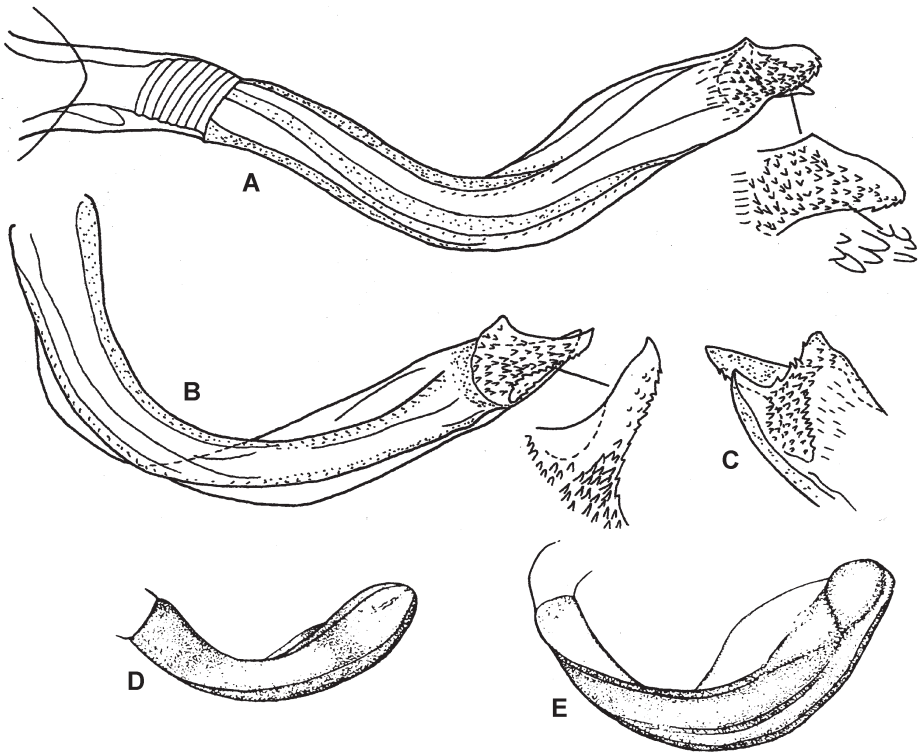

Fig. 20. A – *Sthenaropsis obscura* Poppius, 1912, vesica (specimen from Parvand, Khorasan). B–C – *S. schachrudica* Linnavuori, 1964: B – vesica; C – apex of vesica. D – *S. variegata* Poppius, 1912, vesica. E – *S. piperata* Linnavuori, 1964, vesica (after Linnavuori & Modarres 1999 (A–C) and Putshkov 1977 (D–E)).

7. Vesica (Fig. 18A–B) very robust, provided with broad lateral lamella. Saudi Arabia. ... . ***S. lamellaris*** Linnavuori, 1986
– Vesica (Fig. 19A–B) much longer and more gracile with narrow lateral lamella. Iran. .. .. ***S. kuhestak*** Linnavuori, 2004
8. Blackish brown with base of corium and margin of clavus yellowish (Fig. 29A). Vesica as in Fig. 15E. Iran. ..... ***S. fedori*** **sp. nov.**
– Colouration different. 9
9. Males and females pale brown with silvery scales. Clavus not dark. Ocular index larger: 1.9–2.3 (♂), 2.2–2.4 (♀). Vesica (Fig. 20A) long and weakly curved. Female as in Fig. 17D. Central Asia, Iran. ..... ***S. obscura*** Poppius, 1912
– Head, pronotum and scutellum in males usually entirely black, in females yellow with black spots and stripes, scales golden. Claws in both sexes black. Ocular index smaller: 1.8–2.0 (♂), 2.1–2.3 (♀). Vesica (Fig. 16G) strongly curved. See also Figs. 16D–H, 17C. China, Mongolia. ..... ***S. gobica*** V. G. Putshkov, 1977

10. Body yellow with large paired black spots on head and pronotum, hemelytra impunctate. Antennomere 2 distinctly thinner than fore tibia. Vesica (Fig. 20D) short. See also Fig. 16C. Central Asia. ..... ***S. variegata*** Poppius, 1912
– Body greenish grey without black spots. Antennomere 2 somewhat thicker than fore tibia. Vesica (Fig. 19E) short and thick. See also Fig. 17E. Central Asia. .... ***S. piperata*** Linnavuori, 1964

Tuponia (*Chlorotuponia*) *brevirostris* (Reuter, 1883)

(Fig. 21A–B)

Material examined. **Khuzestan:** Ahvaz, Jangieh, several specimens, 11.–12.vi.2006; Ghazavieh, 1 specimen, 7.–8.vi.2005; Shadegan, 2 specimens, 20.–21.iv.2007. **Bushehr:** Ab Pakhsh, 1 specimen, 25.–26.iv.2007.

Comments. Length of rostrum somewhat variable, sometimes extending to middle coxae. Vesica as in Fig. 21A–B. On *Tamarix*. Holomediterranean species. **New for Iran.**

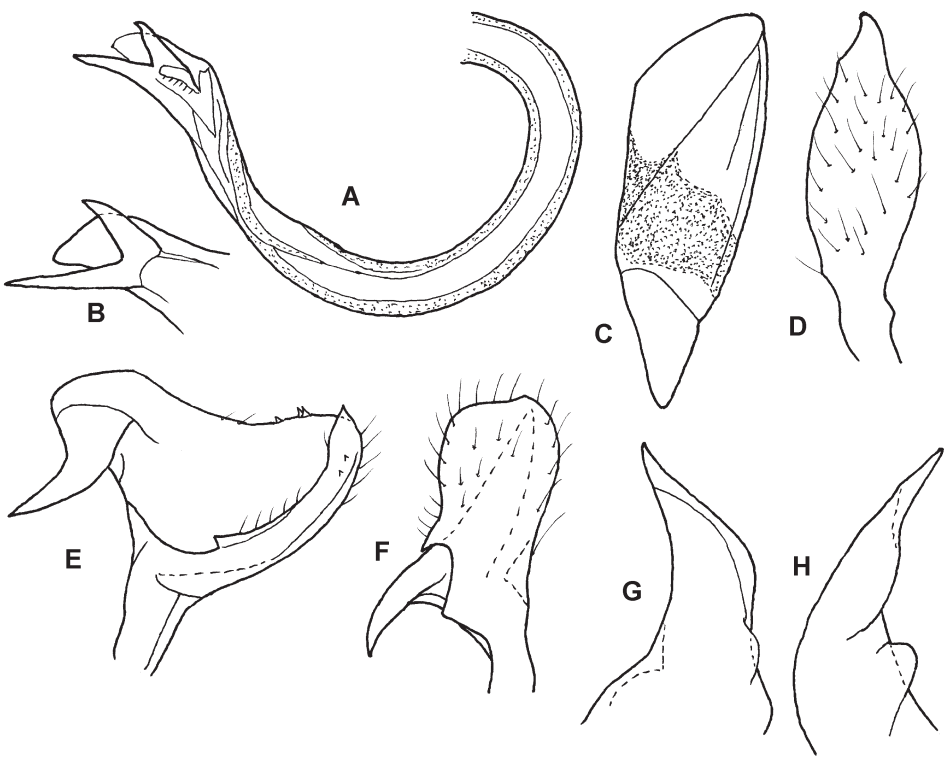

Fig. 21. A–B – *Tuponia* (*Chlorotuponia*) *brevirostris* (Reuter, 1883): A – vesica, B – apex of vesica. C–H – *T.* (*Tuponia*) *kurdestanica* sp. nov. C – hemelytron; D – right paramere; E–F – left paramere; G–H – theca.

Tuponia (*Chlorotuponia*) *concinna* (Reuter, 1875)

Material examined. **Khuzestan:** Abadan, 7 specimens, 10.–11.vi.2008; Ahvaz, Ghazavieh, many specimens, 7.–8.vi.2005; near Bandar-e-Mahshahr, 1 specimen, 11.vi.2008; near Ramhormoz, 4 specimens, 7.–9.vi.2008; Sadde-e-Dez, 1 specimen, 6.–7.vi.2005; Sardasht, 6 specimens, 11.–12.vi.2008. **Fars:** Khaneh Kat, 1 specimen, 16.–17.vi.2006. **Kohgiluyeh & Boyerahmad:** Tang Sorkh 35 km SE of Yasuj, 2 specimens, 18.–19.vi.2003.

Comments. On *Tamarix*. Eremian species, extending from North Africa to Central Asia and tropical Africa (Sudan).

Tuponia (*Chlorotuponia*) *guttata* Wagner, 1950

Material examined. **Khuzestan:** Many specimens: Ahvaz, Ghazavieh, 7.–8.vi.2005; Ahvaz, Jangieh, 11.–12.vi.2006; Andimeshk – Tangvan, 9.–10.vi.2006; Lali, 6.–7.vi.2008; near Ramhormoz, 7.–9.vi.2008; Shadegan, 20.–21.iv.2007; Zeydoon, 26.–28.iv.2007. **Bushehr:** Ab Pakhsh, 2 specimens, 25.–26.iv.2007. **West Azerbaijan:** Bitas 20 km S of Mahabad, 6 specimens, 19.–20.vii.2004.

Comments. On *Tamarix*. Eremian species, extending from Egypt to Iran and tropical Africa (Sudan, Eritrea).

Tuponia (*Chlorotuponia*) *hippophaes* (Fieber, 1861)

Material examined. **Khuzestan:** near Ahvaz, 2 specimens, 29.iv.–1.v.2007; near Ahvaz, Karun river, several specimens, 10.–11.vi.2006; Shadegan, 1 specimen, 20.–21.iv.2007. **West Azerbaijan:** Ditas 20 km S of Mahabad, 8 specimens, 19.–20.vii.2004; Nushin Sar near Urumiyeh, 5 specimens, 25.–27.vi.2006.

Comments. On *Tamarix*. Holomediterranean species. **New for Iran.**

Tuponia (*Chlorotuponia*) *prasina* (Fieber, 1864)

Material examined. **Khuzestan:** Abadan, 3 specimens, 21.–22.iv.2007; near Ahvaz, 1 specimen, 30.iv.–1.v.2007; Ahvaz, Jangieh, 2 specimens, 11.–12.vi.2008; near Ahvaz, Karun river, several specimens, 10.–11.viii.2006; Shadegan, 3 specimens, 20.–21.iv.2007. **Bushehr:** Ab Pakhsh, 1 specimen, 25.–26.iv.2007. **West Azerbaijan:** Marangalu near Urumiyeh, 1 specimen, 16.–17.vii.2004.

Comments. On *Tamarix*. Ponto-Mediterranean species extending to Central Asia.

Tuponia (*Chlorotuponia*) *shadeganica* sp. nov.

(Fig. 22B–G).

Type material. Holotype: ♂, **IRAN: Khuzestan:** Shadegan, 20.–21.iv.2007. Paratype: ♂, Shadegan, 20.–21.iv.2007. The types will be deposited at the National Museums and Galleries of Wales (Cardiff, United Kingdom).

Description. Length 2.75–3.0 mm (♂).

Colouration. Pale yellowish green. Eyes pale greyish brown. Antennae yellowish, antennomeres 3 and 4 slightly darker. Hemelytra pale greenish, membranes with veins dark brownish. Under surface yellowish. Femora pale yellowish, tibiae and tarsi whitish, tibial spines black arising from minute black spots.

Structure. Body gracile, about 3.5× as long as basal width of pronotum. Head 0.81–0.83× as broad as basal width of pronotum. Ocular index 1.25–1.39. Length ratios of antennomeres 11 : 50 : 36 : 15, antennomere 1 0.28× as long as width of head, antennomere 2 1.18–1.28× as long as diatone and 0.96–1.1× as long as basal width of pronotum. Rostrum extending to

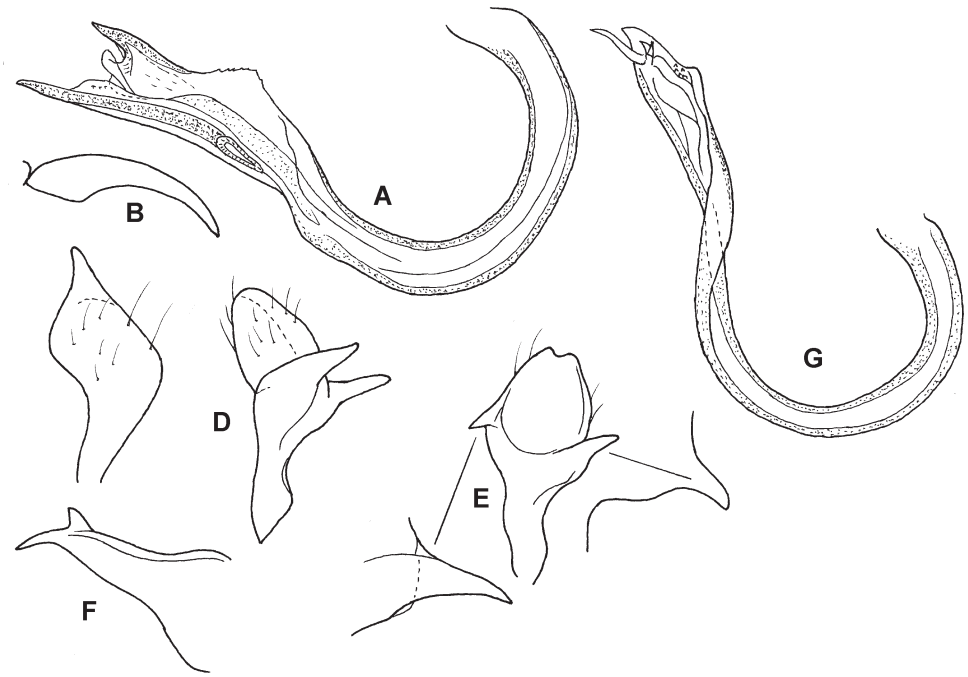

Fig. 22. A – *Tuponia* (*Tuponia*) *kurdestanica* sp. nov., vesica. B–G – *T.* (*Chlorotuponia*) *shadeganica* sp. nov. B – claw; C – right paramere; D–E – left paramere in different positions; F – theca; G – vesica.

hind coxae. Pronotum 2.3–2.35× as broad as long in middle. Hind tibia 1.7× as long as basal width of pronotum. Length ratios of hind tarsomeres 6 : 11 : 12. Claw as in Fig. 22B. Male genitalia as in Fig. 22C–G; pygophore conical, without tubercles; theca with subapical tooth; vesica gracile with one short and slender apical process.

Differential diagnosis. Resembling other species of the subgenus *Chlorotuponia* Wagner, 1964 such as *T. prasina*, but easily distinguished by the male genitalia**.**

Habitat. On *Tamarix*.

Etymology. Named after the type locality.

Distribution. So far known only from the type locality.

Tuponia (*Tuponia*) *algirica* Wagner, 1965

Material examined. Many specimens: **Khuzestan:** Abadan, 21.–22.iv.2007; near Ahvaz, 29.iv.–1.v.2007; Behbahan, 27.–28.iv.2007; near Lali, 6.–8.v.2007; Zeydoon, 26.–28.iv.2007.

Comments. On *Tamarix*. Eremian species, extending from North Africa to Iran.

Tuponia (*Tuponia*) *arcufera* Reuter, 1879

Material examined. Many specimens: **Khuzestan:** near Ahvaz, 29.iv.–1.v.2007; Behbahan, 27.–28.iv.2007; near Lali, 6.–8.v.2007; Zeydoon, 26.–28.iv.2007. **Bushehr:** near Bandar-e-Genaveh, 23.–24.iv.2007. **Fars:** Khaneh Kat,

16.–17.vi.2006; Khaneh Zanyan, 13.–14.vi.2003; Takht-e-Jamshid, 14.–15.vi.2002. **Kohgiluyeh & Boyerahmad:** Tang Sarkh 35 km SE of Yasuj, 18.–19.vi.2003; Vazag SE of Yasuj, 18.vi.2003. **Kurdestan:** near Marivan, 12.–13.vi.2005; near Sanandai, 11.–12.vi.2005 . **Lorestan:** Kahriz 7 km of Boroujerd, 8.–9.vi.2006. **West Azerbaijan:** Marangalu near Urumiyeh, 15.–17.vii.2004; 25 km S of Urumiyeh, 17.vi.2003.

Comments. On *Tamarix.* Ponto-Mediterranean species, extending to Central Asia.

Tuponia (*Tuponia*) *ayasensis* Wagner, 1963

Material examined. Khuzestan: near Ahvaz, 4 specimens, 29.iv.–1.v.2007; Ahvaz, Ghazavieh, 2 specimens, 7.–8.vi.2005; Khaneh Kat, 1 specimen, 16.–17.vi.2006; near Lali, 2 specimens, 6.–8.v.2007. **Bushehr:** near Bandar-e-Genaveh, 3 specimens, 23.–24.iv.2007. **Fars:** Kamfiruz, 1 specimen, 15.–16.vi.2002. **Zanjan:** Abbar, 1 specimen, 12.–14.vi.2001; near Mamalan, 1 specimen, 12.–14.vi.2001.

Comments. On *Tamarix*. Syrio-Anatolian species.

Tuponia (*Tuponia*) *dehshorana* Linnavuori, 1997

Material examined. Numerous specimens: **Khuzestan:** near Ahvaz, 29.iv.–1.v.2007; Andimeshk, 5.–6.v.2007; Behbahan, 27.–28.iv.2007; near Lali, 6.–8.v.2007; Shadegan, 20.–21.iv.2007; Zeydoon, 26.–28.iv.2007. **Bushehr:** near Bandar-e-Genaveh, 23.–24.iv.2007. **Fars:** Khaneh Zenyan, 13.–14.vi.2003. **Kohgiluyeh & Boyerahmad:** Tang Sorkh 35 km SE of Yasuj, 18.–19.vi.2003; Vazag SE of Yahrom, 18.vi.2003. **Kurdestan:** near Sanandai, 11.–12.vi.2005. **West Azerbaijan:** Nushin Sar near Urumiyeh, 25.–27.vi.2007.

Comments. On *Tamarix*. Endemic to Iran.

Tuponia (*Tuponia*) *elegans* (Jakovlev, 1881)

Material examined. Kurdestan: Sanandai, 3 specimens, 11.–12.vi.2005.

Comments. On *Tamarix*. Irano-Turanian species.

Tuponia (*Tuponia*) *kurdestanica* sp. nov.

(Figs. 21C–H, 22A)

Type material. Holotype: ♂, **IRAN: Kurdestan:** near Sanandai, 11.–12.vi.2005. The holotype will be deposited at the National Museums and Galleries of Wales (Cardiff, United Kingdom).

Description. Length 3.75 mm (♂).

Colouration. Whitish yellow. Eyes pale greyish brown. Antennae and rostrum pale yellow; apex of rostrum black. Basal part of pronotum and hemelytra with pale greenish tinge. Base of scutellum reddish, apical part yellow. Hemelytra (Fig. 21C) with faint reddish subapical transverse band; cuneus pale; membranes smoky brownish, veins pale. Ventral surface of body and legs pale yellow. Hind femora apically infuscate, tibial spines black, last tarsomere apically darkened.

Structure. Body 2.8× as long as broad at base of pronotum. Dorsal pubescence pale, dark only on the transverse reddish band on hemelytra. Head 0.71× as broad as basal width of pronotum; ocular index 1.23. Length ratios of antennomeres 14 : 70 : 54 : [missing], antennomere 1 0.27× as long as diatone, antennomere 2 1.4× as long as diatone and 1.0× as long as basal width of pronotum. Rostrum extending to hind coxae. Pronotum twice as broad as long in middle. Male genitalia as in Figs. 21D–H and 22A; pygophore truncate apically, provided with a blunt tubercle on left side of base of genital opening as in *T. dehshorana*.

Differential diagnosis. Member of a group of species with a blunt tubercle on the left side of the genital opening of the pygophore (LINNAVUORI 1997a: 317–320), easily distinguished by the shape of the vesica.
Habitat. On *Tamarix*.
Etymology. Named after the type locality.
Distribution. So far known only from the type locality.

Tuponia (*Tuponia*) *macedonica* Wagner, 1957

Material examined. KOHGILUYEH & BOYERAHMAD: Tang Sorkh 35 km SE of Yasuj, 2 specimens, 18.–19.vi.2003. **KURDESTAN:** Sanandai, 3 specimens, 11.–12.vi.2005.

Comments. On *Tamarix*. Ponto-Mediterranean species, extending to Turkey and Cyprus. **New for Iran.**

Tuponia (*Tuponia*) *mixticolor* (A. Costa, 1862)

Material examined. Many specimens: **KHUZESTAN:** Abadan, 21.–22.iv.2007; near Ahvaz, 29.iv.–1.v.2007; near Andimeshk, 19.–20.iv.2007; near Lali, 6.–8.v.2007; Shadegan, 20.–21.iv.2007; Zeydoon, 16.–18.iv.2007. **BUSHEHR:** near Bandar-e-Genaveh, 23.–24.iv.2007. **WEST AZERBAIJAN:** Marangalu near Urumiyeh, 13.–17.vii.2004.

Comments. On *Tamarix*. Holomediterranean species.

Tuponia (*Tuponia*) *mujiba* Wagner, 1971

Material examined. KHUZESTAN: near Ahvaz, 11 specimens, 29.iv.–1.v.2007; Shadegan, 2 specimens, 20.–21.iv.2007.

Comments. On *Tamarix*. Eremian species, known from Israel, Jordan and Iran.

Tuponia (*Tuponia*) *persica* Wagner, 1957

Material examined. Numerous specimens: **KHUZESTAN:** Abadan, 21.–22.iv.2004, 10.–11.vi.2008; near Ahvaz, 29.iv.–1.v.2007; Ahvaz, Ghazavieh, 7.–8.vi.2005; Ahvaz, Jangieh, 11.–12.vi.2006; near Ahvaz, Karun river, 10.–11.vi.2006; Andimeshk – Tangvan, 9.–10.vi.2006; Shadegan, 13.–14.vi.2006; Zeydoon, 26.–28.iv.2007. **FARS:** Khaneh Kat, 16.–17.vi.2006.

Comments. On *Tamarix*. Eremian species, extending from Yemen and Saudi Arabia to Central Asia.

Tuponia (*Tuponia*) *semele* Linnavuori, 1995

(Fig. 23A–E)

Material examined. KHUZESTAN: Shadegan, 8 specimens, 20.–21.iv.2007; Zeydoon, 11 specimens, 26.–28.iv.2007.

Comments. On *Tamarix*. Previously known only from Israel and Jordan. **New for Iran.**

Tuponia (*Tuponia*) *subaltera* Drapolyuk, 1980

Material examined. KHUZESTAN: near Ahvaz, 6 specimens, 29.iv.–1.v.2007; near Andimeshk, 2 specimens, 19.–20.iv.2007, 5.–6.v.2007; Shadegan, 1 specimen, 20.–21.iv.2007; Zeydoon, 1 specimen, 26.–28.iv.2007. **FARS:** Khaneh Zenyan, 1 specimen, 13.–14.vi.2003; Takht-e-Jamshid, 1 specimen, 14.–15.vi.2002. **KOHGILUYEH &**

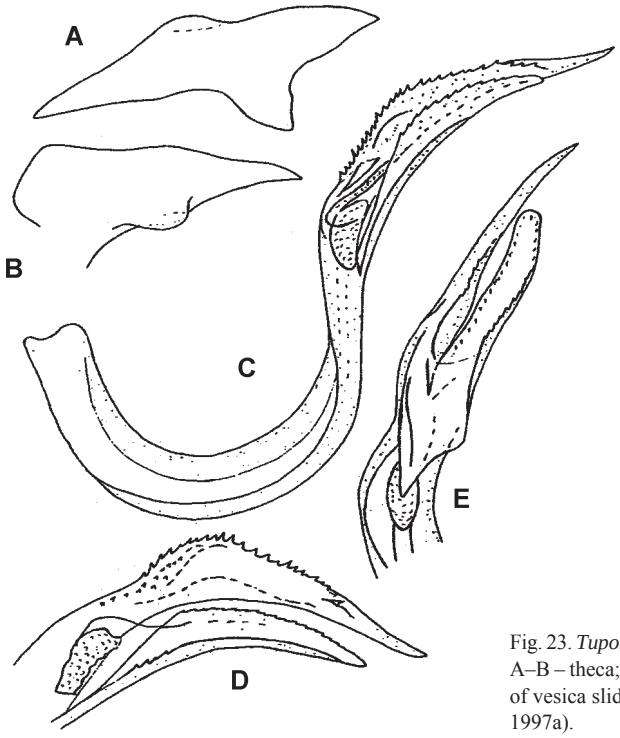

Fig. 23. *Tuponia* (*Tuponia*) *semele* Linnavuori, 1995. A–B – theca; C – vesica in slide mount; D–E – apex of vesica slide- and dry-mounted (after Linnavuori 1997a).

Boyerahmad: Semirun, 1 specimen, 11.–12.vi.2003. **Kurdestan:** Saqqez, 1 specimen, 13.–14.vi.2005. **Zanjan:** near Mamalan, 1 specimen, 12.–14.v.2001.

Comments. On *Tamarix*. Known from Iran and Turkmenistan.

Tytthus parviceps (Reuter, 1890)

Material examined. Khuzestan: near Ahvaz, 1 specimen, 29.iv.–1.v.2007; near Ahvaz, Karun river, 2 specimens, 10.–11.vi.2006; Bagh Malek, 1 specimen, 9.–11.v.2007; Behbahan, 2 specimens, 27.–28.iv.2007; Lali, 1 specimen, 6.–7.vi.2008; near Ramhormoz, 1 specimen, 7.–9.vi.2008; Zeydoon, 6 specimens, 26.–30.iv.2007; Shadegan, 1 specimen, 20.–21.iv.2007. **Bushehr:** near Bandar-e-Genaveh, many specimens, 23.–24.iv.2007. **Kerman:** Shahdad Hammat-Abad, 1 specimen, 21.v.1996.

Comments. On grasses and Cyperaceae in moist localities. Cosmotropical.

Yotvata (*Godataira*) *pulcherrima* Linnavuori, 1984

Material examined. Khuzestan: Andimeshk, 1 specimen, 5.–6.vi.2008; Lali, several specimens, 6.–7.vi.2008; Sadde-e-Dez, 3 specimens, 6.–7.vi.2003. **Fars:** Bavan near Nur Abad, 1 specimen, 20.–21.vi.2008; Fasa – Mian Jangal, 1 specimen, 17.–18.vi.2008; Firuzabad, several specimens, 15.–16.vi.2008. **Ilam:** Ilam, 4 specimens, 21.–22.vi.2006. **Kermanshah:** Chaharzabarolya, 1 specimen, 22.–23.vi.2006.

Comments. In gardens on the slopes of hills close to rivers. In Iraq found on *Quercus aegilops* and *Vitex agnus-castus*. Eremian species, known from Iraq and Iran, recently recorded also from Turkey (MATOCQ & ÖZGEN 2010).

Yotvata (*Yotvata*) *farsiana* sp. nov.

(Figs. 28A, 24A–J)

Type material. HOLOTYPE: ♂, **IRAN: FARS:** Fasa, Mianjangal, 17.–18.vi.2008. PARATYPES: **IRAN: FARS:** ♂, Fasa, Mianjangal, 17.–18.vi.2008; ♂, Maharlu, 17.–18.vi.2002. The types will be deposited at the National Museums and Galleries of Wales (Cardiff, United Kingdom).

Description. Length 2.75–3.0 mm (♂).

Colouration. Whitish grey with relatively sparse and faint dark dotting (Fig. 28A). Tylus with a few dots, lateral margins of vertex with transverse red stripes, base of vertex with red spot close to eyes; eyes greyish brown. Antennae whitish yellow, reddish apical spot on antennomere 1 and subbasal and subapical spots on antennomere 2 faint. Rostrum yellowish, apically darkened. Pronotum with a few dark spots. Base of scutellum black with

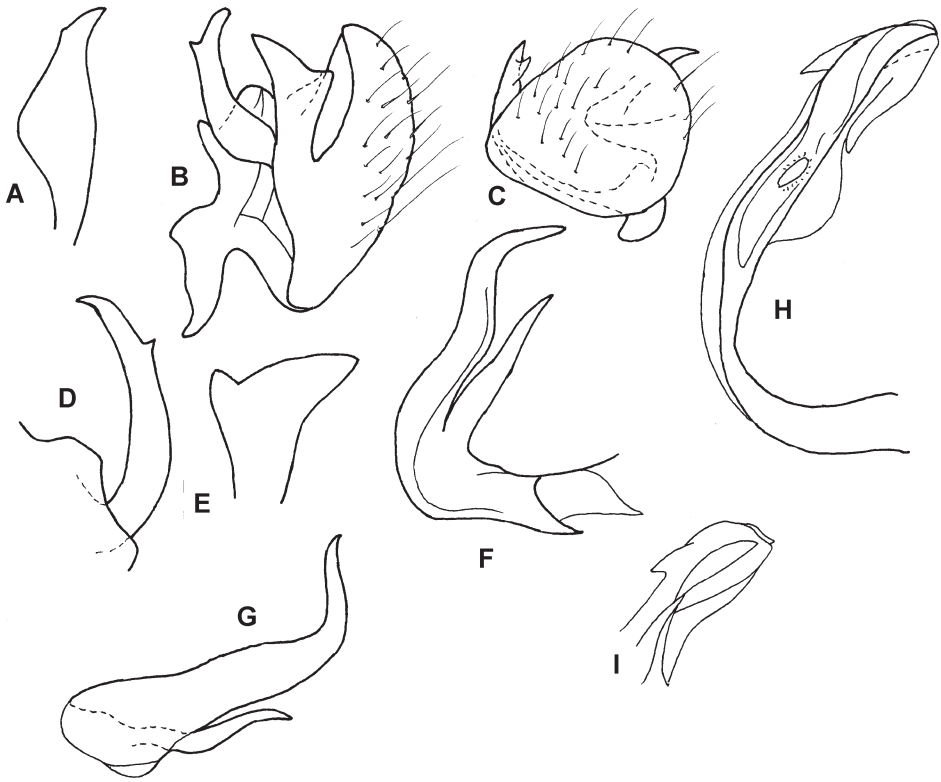

Fig. 24. *Yotvata farsiana* sp. nov. A – right paramere; B–C – left paramere in different aspects; D – inner process; E – process of sensory lobe of fama; F–G – theca; H – vesica; I – apex of vesica.

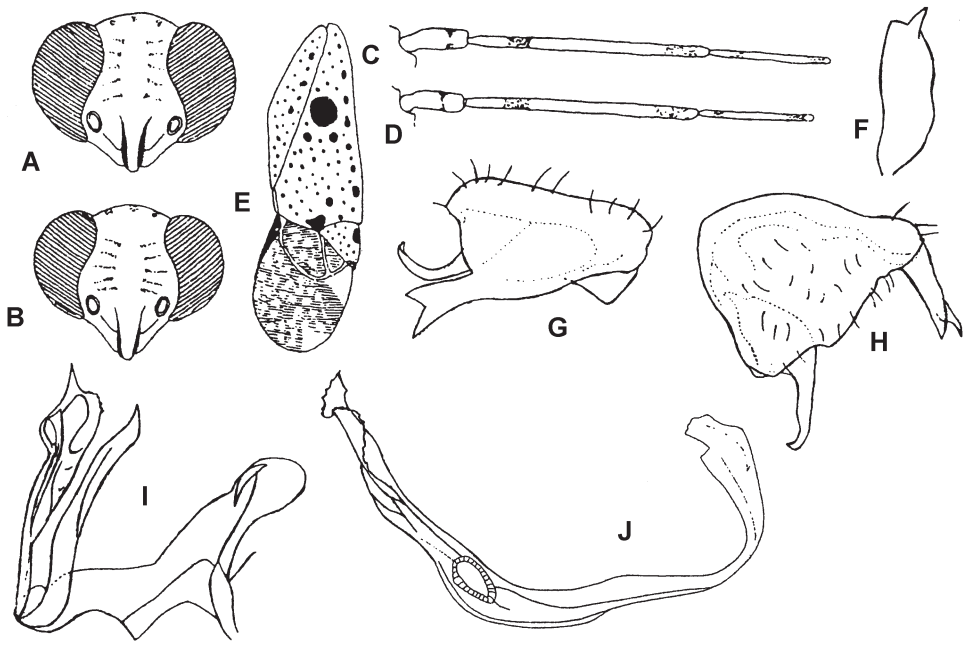

Fig. 25. *Yotvata picticornis* (Horváth, 1913): A–B – male and female head in apical view; C–D – male and female antenna; E – hemelytron; F – right paramere; G–H – left paramere in lateral and dorsal view; I – theca; J – vesica (after Linnavuori 1961 and Wagner 1975).

narrow pale median stripe, apical part with a few minute dark dots. Hemelytra pale, clavus and corium with only a few minute dark dots, lateral margins of corium with some minute red dots, interoapical angle of corium with a black spot; cuneus immaculate, only middle of inner margin with a small black dot; membranes dark greyish brown. Ventral body surface largely greyish. Thorax with brown or red dots. Lateral margins of venter also with reddish stripes. Legs whitish yellow, margins of femora with round black spots, black bristles of tibiae arising from small black dots; tarsi somewhat darkened.

Structure. Body about 3× as long as basal width of pronotum. Upper surface with long white pubescence. Head 0.65–0.72× as broad as basal width of pronotum; ocular index 1.17–1.43. Antennae long and gracile, length ratios of antennomeres 6 : 24 : 12 : 10, antennomere 2 1.44–1.61× as long as diatone and 1.04–1.07× as long as basal width of pronotum. Rostrum extending to base of venter. Pronotum 2.3–2.5× as broad as long. Hind tibia about 1.75× as long as basal width of pronotum. Male genitalia as in Fig. 24A–J.

Differential diagnosis. *Yotvata farsiana* sp. nov. is related to *Y. picticornis* (Horváth, 1913). *Yotvata picticornis* (Fig. 28B) differs from the new species in the following characters: more abundant red pattern on the dorsal surface; antennomeres 1 and 2 with clear red spots; basal part of scutellum red; clavus, corium and cuneus with red spots, middle of corium sometimes with a larger red spot; eyes larger, ocular index 0.8–0.9 (♂), 1.33–1.90 (♀); antennae shorter,

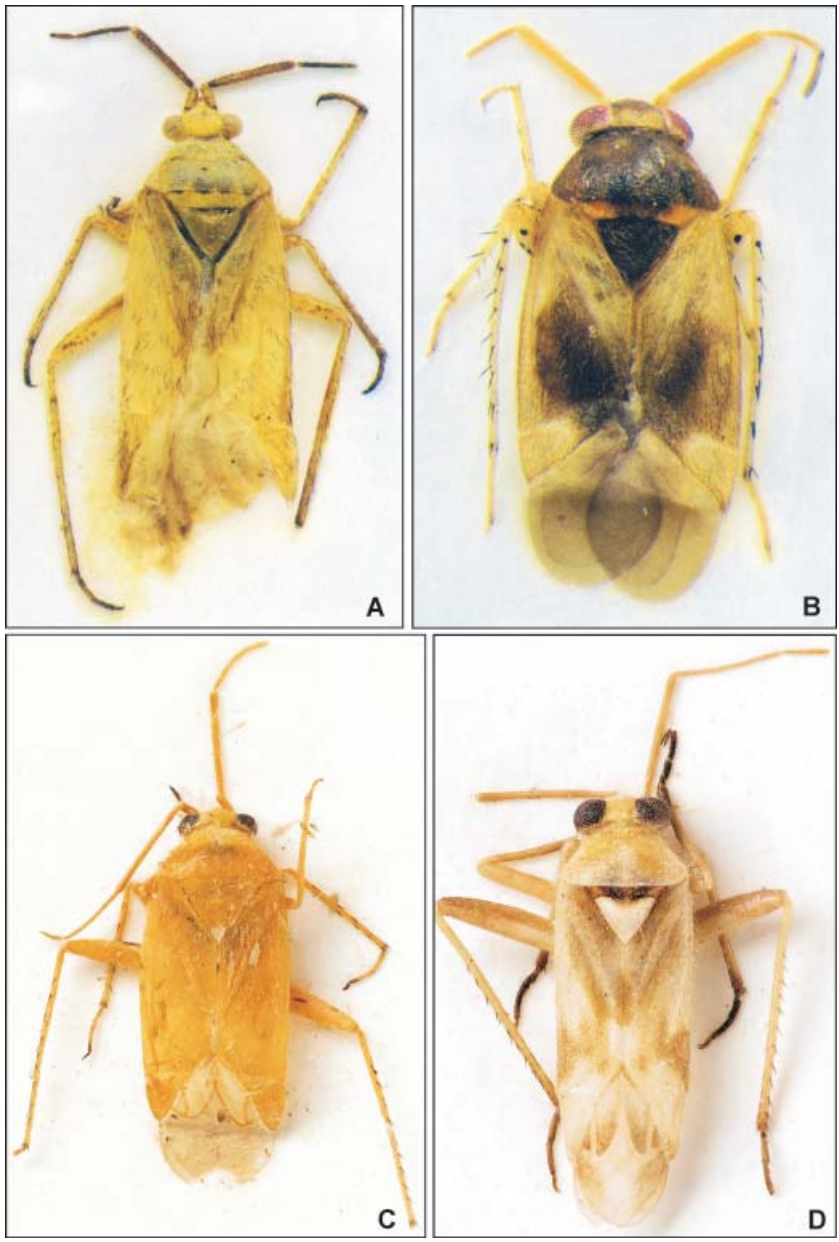

Fig. 26. A – *Acrotelus abbaricus* sp. nov., male paratype; B – *Campylomma khuzestanicum* sp. nov., male paratype; C – *Paredrocoris ilamicus* sp. nov., holotype; D – *Megalodactylus grandoculus* sp. nov., holotype.

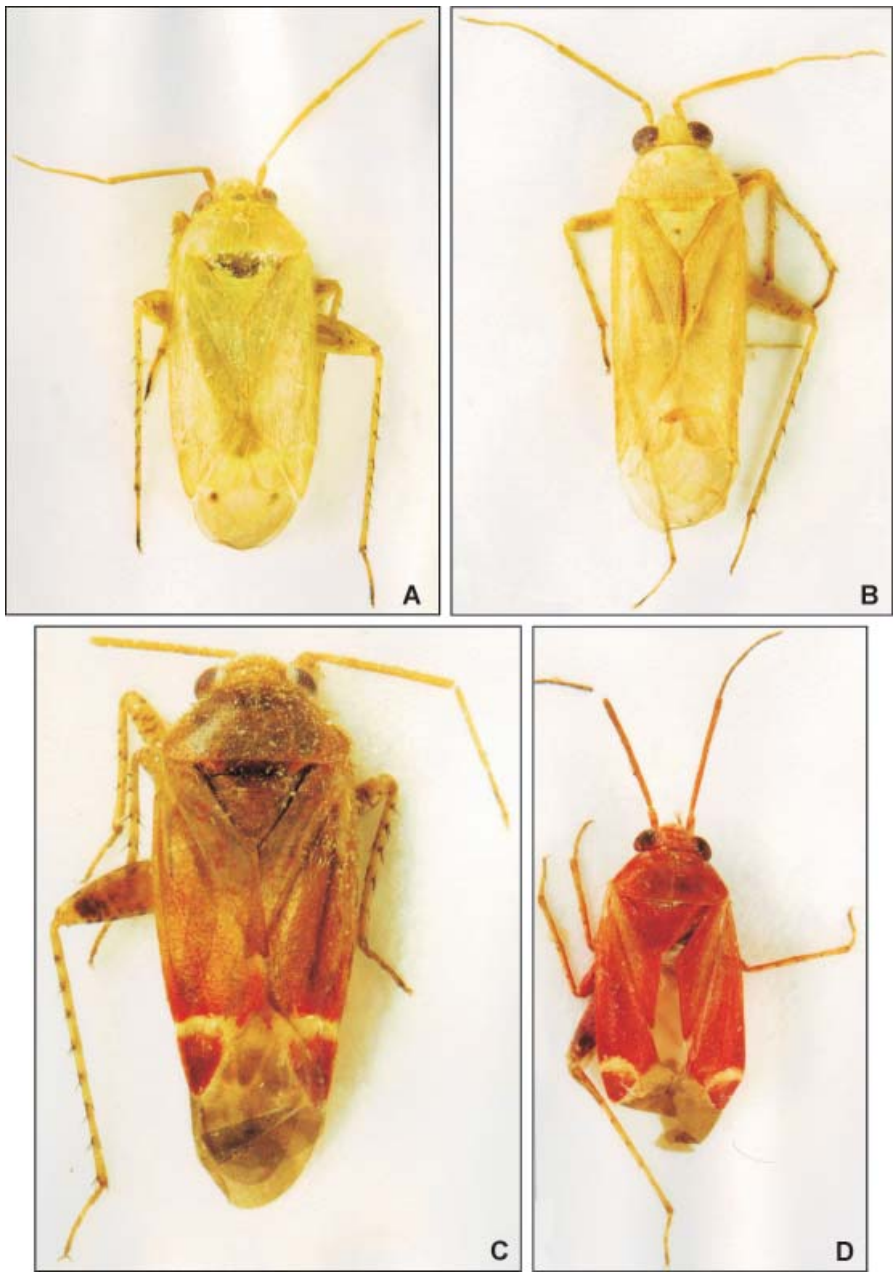

Fig. 27. A – *Plagiognathus bipunctatus albicans* Reuter, 1901; B – *Plagiognathus marivanensis* sp. nov., paratype; C – *Psallus shulsangaricus* sp. nov., male holotype; D – *Psallus corsicus* Puton, 1875, specimen from Greece, Corfu Island.

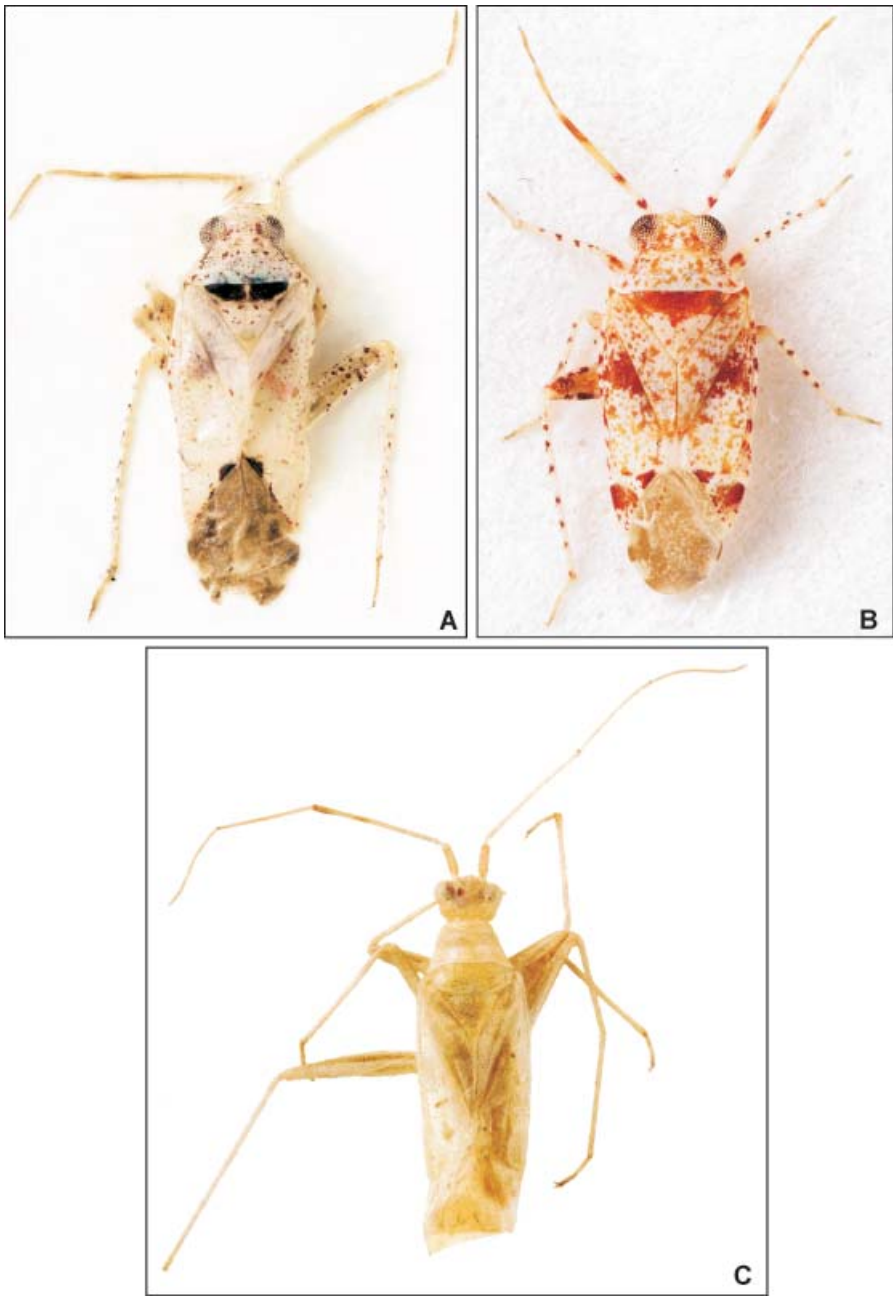

Fig. 28. A – *Yotvata farsiana* sp. nov.; B – *Y. picticornis* (Horváth, 1913); C – *Zanchius gurbandicus* sp. nov.

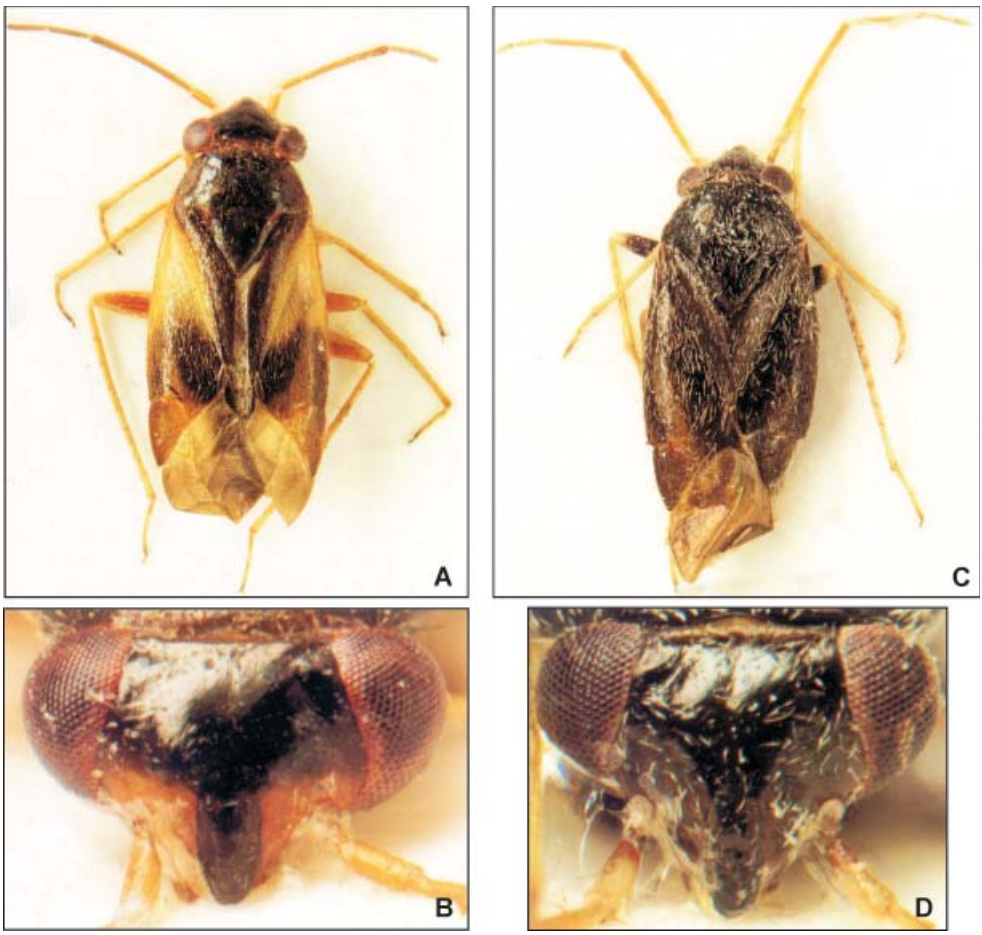

Fig. 29. A–B – *Sthenaropsis fedori* sp. nov. A – dorsal aspect; B – head in frontal aspect. C–D – *S. zeydoonicus* sp. nov. C – dorsal aspect; D – head in frontal aspect.

antennomere 2 0.8–0.9× as long as basal width of pronotum; male genitalia as in Fig. 25F–J. A key to the genus *Yotvata* Linnavuori, 1964 was published by Linnavuori (1993: 197–206).
Habitat. In gardens on the shore of a salt lake.
Etymology. Named after the Fars province.
Distribution. So far known only from two localities in the Fars province in Iran.

Zakanocoris aceri V. G. Putshkov, 1970

Material examined. Ilam: Ilam, 1 male, 8.–9.vi.2005.

Comments. In a forest on the slopes of the Zagros mountains. Recorded on *Acer*. Known from Caucasus, Turkmenistan and Iran.

Discussion

Of the 99 identified species, 34 species (34.7 %) represent Anatolian, Caucasian, Central-Asiatic, Irano-Turanian and Syrio-Anatolian elements, 24 species (23.4 %) belong to Eremian, Palaeotropical and Cosmopolitan elements, 19 species (19.4 %) are endemic to Iran or so far known only from Iran, 18 species (18.4 %) represent Mediterranean elements and four species (4.1 %) are West-Palaearctic and Holarctic elements.

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