

A taxonomic review of recorded species of Caelifera (Orthoptera) in Iran

Seyed Hossein HODJAT¹, Mehdi TORK², Marjan SEIEDY³ & Bernard DEFAUT⁴

1, 2: Department of Plant Protection, College of Agriculture and Natural Resources, Karaj.

3: School of Biology, College of Science, University of Tehran, Iran.

4: Quartier Babi, 09400 Bédailhac-et-Aynat, France

e-mails: 1: seyedhossein.hodjat@yahoo.com, 2: mehdi.tork@ut.ac.ir, 3: mseyyedi@ut.ac.ir, 4: bdefaut@orange.fr

Summary. The goal of this study is to provide a taxonomic list for more than 350 species of Iranian **Caelifera**, with indication of their type locality, of the nature of their name-bearing type, and of their known distribution in Iran. They are classified in near 110 genera, 37 tribes, 20 subfamilies, 6 families, 4 superfamilies and 3 infraorders (**Acrididea**, **Tetrigidea** and **Tridactylidae**). Families present in Iran are **Acrididae** MacLeay 1821, **Pyrgomorphidae** Brunner von Wattenwyl 1893, **Dericorythidae** Jacobson & Bianchi 1902, **Pamphagidae** Burmeister 1840, **Tetrigidae** Rambur 1838 and **Tridactylidae** Brullé, 1836. The subfamily **Hemiacridinae** Dirsh 1956 (**Acrididae**) is represented only by *Hieroglyphus* (= *Miramia*) *perpolita* Uvarov 1933, in the South-East of Iran. The tribe **Parapleurini** Brunner von Wattenwyl 1893 has been added to this list; **Mecostethini** Hebard 1924 and **Epacromiini** Brunner von Wattenwyl 1893 are considered here as younger synonyms of **Parapleurini**. **Chorthippini** Shumakov 1963 is younger synonym of **Gomphocerini** Fieber 1853. Genus *Gomphocerippus* Roberts 1941 (junior synonym: *Glyptobothrus* Chopard 1952), whose species have angular prozonal carinas, is a separate genus **Gomphocerini**. Endemism is high: 24 genus are endemic in Iran (**Acrididae**: 15, **Dericorythidae**: 5, **Pamphagidae**: 4).

A key is proposed to identify upper taxa of Iranian **Acrididea**.

Key words. Iran; keys at tribal level; list of **Caelifera**.

Résumé. Le but de cette étude est de fournir une liste taxinomique des plus de 350 **Caelifera** recensés en Iran, avec indication de leur Localité type, de la nature de leur type porte-nom, et de leur répartition connue en Iran. Ils sont classés en près de 110 genres, 33 tribus, 20 sous-familles, 6 familles, 4 superfamilles et 3 infraordres (**Acrididea**, **Tetrigidea** and **Tridactylidae**). Les familles présentes en Iran sont les **Acrididae** MacLeay 1821, les **Pyrgomorphidae** Brunner von Wattenwyl 1893, les **Dericorythidae** Jacobson & Bianchi 1902, les **Pamphagidae** Burmeister 1840, et les **Tetrigidae** Rambur 1838. La sous-famille **Hemiacridinae** Dirsh 1956 (**Acrididae**) est représentée seulement par *Hieroglyphus* (= *Miramia*) *perpolita* Uvarov 1933, dans le Sud-Est de l'Iran. La tribu **Parapleurini** Brunner von Wattenwyl 1893 a été ajoutée à cette liste ; les **Mecostethini** Hebard 1924 et les **Epacromiini** Brunner von Wattenwyl 1893 sont considérés ici comme des synonymes plus jeunes des **Parapleurini**. Le vocable **Chorthippini** Shumakov 1963 est un synonyme plus jeune de **Gomphocerini** Fieber 1853. Le genre *Gomphocerippus* Roberts 1941 (synonyme plus récent : *Glyptobothrus* Chopard 1952), dont les espèces ont les carène prozonales anguleuses, est un genre à part entière au sein des **Gomphocerini**. L'endémisme est fort : 24 genres sont endémiques en Iran (**Acrididae** : 15, **Dericorythidae** : 5, **Pamphagidae** : 4).

Une clef est proposée pour identifier les taxons de rang supérieur.

Mots clefs. Clef au niveau tribu ; Iran ; liste de Caelifères.

–oOo–

INTRODUCTION

Orthoptera order is divided into 23 families in text books (BORROR & DELONG, 1970). Most text books divide Orthoptera into two suborders: **Ensifera** (long antennae) and **Caelifera** (short antennae). Taxonomy of Orthoptera has been dealt with by UVAROV (1925, 1966), DIRSH (1961) and various other authors as indicated in Orthoptera species file (OSF: EADES & al. 2011). Each taxon is dealt with in detail by various specialists. Suborder **Caelifera** is divided into three infraorders: **Acrididea**, **Tetrigidea** and **Tridactylidea**. **Tridactylidea** are living in moist land shores

of rivers, lakes, and jump rapidly. They are less than 10 mm long with robust hind femurs and active jumpers. Three species of **Tridactylidae** are recorded from Northwest and South of Iran (MIRZAYANS, 1959). They can be identified by having one segmented front and middle tarsi (BORROR & DELONG, 1970; IMMS, 1960).

List of French Orthoptera is published and updated by DEFAUT (1999a and b) and DEFAUT & MORICHON (2015). Classification of **Caelifera** suborder is continuously updated in Orthoptera species file (OSF) website, from published data by a group of scientists. No key is available for identifying **Ac-**

rididea recorded in Iran. Lists of **Acrididea** species in Iran were published by UVAROV, (1921), ALEXANDROV (1947), MIRZAYANS (1959), SHUMAKOV (1963), BEY-BIENKO & MISTSHENKO (1951) and GARAI (2010). POPOV (1951) described *Khayyamia* (= *Dinaria*), *Esfandiarina* and *Wiltshirella* genera. DESCAMPS (1967), introduced a new genera (*Zagrosia*), 12 species and 10 sub-species of Iranian Pamphagidae and Acrididea. DIRSH (1961) revised the families and subfamilies of **Acrididea**, and ÜNAL (2016) revised the Palearctic **Pamphagidae**.

Acrididea of Iran can be divided into two groups: (a) with prosternal process and (b) without such process. *Calliptamus* Serville, 1831 and many species of **Acrididae** with prosternal process have characteristic plate-like epiphallus (LI & *al.*, 2012). They usually have two or four motionless spines on posterior parts. The epiphallus in **Acrididea** without prosternal process is with a distinct lateral plates joining together by a narrow arced bridge. Each of the lateral plates is bearing a hook-like anterior process on their anterior margin with smooth surrounding surface. In posterior parts there is a projecting comb shaped process covered by spinules (BEY-BIENKO & MISTSHENKO, 1963). Male epiphallus of **Teratodinae** such as *Esfandiarina obesa* Popov, 1951 is also without a distinct lateral plate (RITCHIE, 1987). Other species of **Acridoidea** have variably shaped epiphallus (SONG & *al.*, 2008) which cannot be a distinguishing character of the two groups. Keys to subfamilies and genera of **Acridoidea** based on Indian specimen of **Oxyinae**, **Calliptaminae**, **Hemiacridinae**, **Tropidopolinae**, **Cyrtacanthacridinae**, **Catantopinae**, **Acridinae**, **Truxalinae**, **Oedipodinae**, and **Gomphocerinae** is published by NAYEEM & USMANI (2012). Characters of **Trilophidini** are taken from KUMAR & USMANI (2016) keys. Recently the phylogeny of **Catantopinae** at tribal level is published by LI, LIU & ZHANG (2011).

SHUMAKOV (1963) introduced 111 genera for Iran and Afghanistan. The regional species were classified into 28 tribes. SHUMAKOV (1963) classification of species to tribes is changed to current classification of **Acrididea** species provided by Orthoptera species file (OSF). DEFAUT (2012) divided **Gomphocerini** into two subtribes **Stenobothrina** Harz, 1975 and **Gomphocerina** Fieber, 1853. According to the law of priority in publications, **Oedipodinae** Walker, 1871 should change to **Locustinae** Kirby, 1825 (DEFAUT, 2014). The Iranian grasshoppers were classified in 96 genera (MIRZAYANS, 1959). Valuable morphological keys for **Acrididea** species identification of Iran is published by BEY-BIENKO and MISTSHENKO (1951), MISTSHENKO (1974), AZMAYESH FARD (1974), HODJAT (2012, 2013, 2015 and 2016), HODJAT and TORK (2014), ÜNAL (2016). *Sphingonotus* Fieber, 1852, a

common grasshopper of Iran, is studied by BENEDIKTOV (1997), HUSEMANN (2008, 2011), HUSEMANN et al (2012), and DAY & *al* (2017).

The distribution of Caelifera species in Iran is published by MIRZAYANS (1959) and SHUMAKOV (1963). SHUMAKOV (1963) divided Iran map into 20 regions and gave the distribution of Acrididea species by numbers in the map divisions. The name of the districts and accurate collection data is missing in his publication. We only referred to locality data of this author by indicating the name of important towns in his map. MIRZAYANS (1959) gave the name of areas or districts for collection data. His records are general without the date and place of collection. GARAI (2010) collection data includes distribution and locality information. Beside the information on the general distribution of species, such as Alborz or Zagros mounts, detail geographical information such as altitude, latitude, height, the number of males and females collected in the samples is given. HAVASKARY & *al.* (2017) and JABBARI & *al.* (2015) have listed the locality collection accurately. AZMAYESH FARD (1974) listed grasshoppers collected in Karaj districts by travelling to the North, Northwest and South of the town. HODJAT (2012, 2013, 2015 and 2016) studies do not include new locality collection except for those referenced. The names of provinces such as Khorasan, Baluchistan, Azerbaijan, Khuzestan, etc., are written differently by various authors. We use a uniform spelling for these names, according to the map of Figure 1.

MATERIALS AND METHODS

Scattered specimen in the collection of Tehran University Museums with those collected by various specialists and students were examined, identified and rearranged in 24 boxes. The boxes were arranged in two cabinets with 12 boxes in each cabinet by families, subfamilies tribes and species. Keys provided by BEY-BIENKO & MISTSHENKO (1951) were mainly used to identify collected specimen. A preliminary table of Iranian taxa and their morphological characters were compiled by referring to various publications using the reference list and pictures provided by the Orthoptera Species File online (OSF). Keys for identifying tribes were tabulated, constructed and tested. Consequently lists of tribes, genera and species recorded in Iran were produced.

The locality distribution of Iranian species in MIRZAYANS (1959) and SHUMAKOV (1963) does not indicate exact time and place of collection. The distribution recordings of specimen from various other authors are added to the list of species.

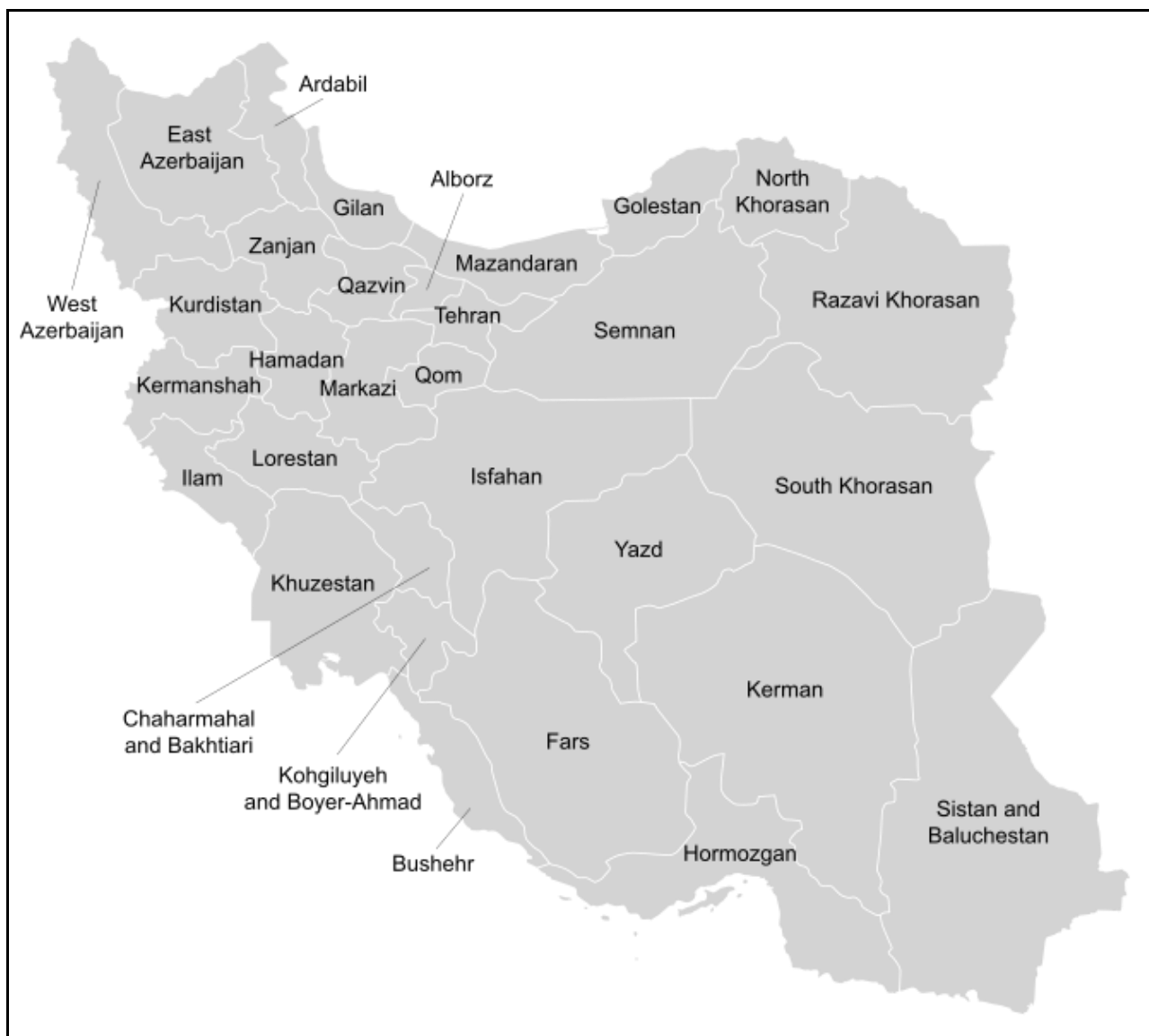


Figure 1. Main administrative divisions of Iran (thirty-one provinces)

Region “Azerbaijan” includes the provinces Ardabil, Zanjan, East Azerbaijan and West Azerbaijan.

Region “Kurdistan” includes entirely or partially the provinces West Azerbaijan, Kurdistan, Hamadan, Kermanshah, Ilam, Lorestan and Khuzestan

LIST OF TAXONS FROM SUBORDER CAELIFERA ANDER 1939 RECORDED IN IRAN

A. Infraorder ACRIDIDEA MacLeay, 1821

A-A. Superfamily ACRIDOIDEA MacLeay, 1821

A-A-A. Family ACRIDIDAE MacLeay, 1821

1. ACRIDINAE MacLeay, 1821

1-1. Acridini MacLeay, 1821

1-1-1. *Acrida* Linnaeus, 1758. Southern Europe and Asia, Africa, Australia.

In Iran: in the North and the South (Azerbaijan; Chaharmahal & Bakhtiari; Fars; Gilan; Golestan; Hormozgan; Isfahan; Kerman; Razavi Khorasan; Kurdistan; Mazandaran; Sistan & Baluchestan; Tehran).

Acrida bicolor (Thunberg, 1815). Type locality (holotype ♂): Southern Africa.

Mashhad (Razavi Khorasan) (JABBARI & *al*, 2015).

Acrida exaltata (Walker, 1859). Type locality: Sri Lanka.

South Iran (MIRZAYANS, 1959). Hormozgan province, Khash (Sistan & Baluchestan), Jaz-Moorian (Kerman) (SHUMAKOV, 1963). Firuzabad (Fars) (HASHEMI, 1976).

Acrida oxycephala (Pallas, 1771). Type locality: North coast of Caspian sea, in Russia

Neighbour of Sharif Khaneh: 1 220 m (Azerbaijan); Teheran province: 900 - 2 200 m; Saffiabad near Behshahr (Golestan) (UVAROV & DIRSH, 1952, as *Acrida turca* Dirsh, *Acrida persa* Dirsh and *Acrida caspica* Dirsh). In most parts of Iran; it can damage pasture and agricultural plants (MIRZAYANS, 1959). Caspian districts, Azerbaijan (SHUMAKOV, 1963). Tabriz region (East Azerbaijan) (DESCAMPS & DONSKOFF, 1965). Darab, Shiraz (Fars) (HASHEMI, 1976). Rice fields of Mazandaran and Azerbaijan provinces (GHAHARI & al. 2009). Natanz, (Isfahan); Binaloud mount (Razavi Khorasan) (GARAI, 2010). Shahr Rey, Varamin (Tehran) (SIANAKI, 2012). Kurdistan (HOSSEINI & MOFIDI-NEYESTANAK, 2014).

Acrida turrata (Linnaeus, 1758). Type locality (lectotype ♀): Africa [*Habitat in Africa*].

Chaharmahal & Bakhtiari, Gilan and Mazandaran provinces (GHAHARI & al. 2009).

1-2. Truxalini Serville, 1838.

1-1-2. *Truxalis* Fabricius, 1775. Southern Asia, Africa.

In Iran: known in West (East Azerbaijan, Kermanshah), North (Semnan), Centre (Isfahan) and South (Fars, Sistan & Baluchestan).

Truxalis eximia Eichwald, 1830, ssp. *eximia*. Type locality: Western and Eastern shores of Caspian Sea [*Habit. in ora occidentali et orientali caspii maris, Baenae*]

At 90 km East of Teheran (UVAROV & DIRSH, 1952). South of Iran (MIRZAYANS, 1959). Zahedan (Sistan & Baluchestan) (DESCAMPS & DONSKOFF, 1965). Kazerun, Shiraz (Fars) (GARAI, 2010).

Truxalis fitzgeraldi Dirsh, 1951. Type locality: Iran.

Truxalis mesopotamica Dirsh, 1951. Type locality: Iraq

Garmzar (Semnan); Dasht-Kavir desert (Semnan, or Isfahan) (MIRZAYANS, 1959). Bostan-Abad (East Azerbaijan); Kashan (Isfahan); Shiraz (Fars) (GARAI, 2010).

Truxalis obesa Bey-Bienko, 1960. Type locality (holotype ♀): Iran.

Truxalis robusta (Uvarov, 1916) ssp. *citrina* Dirsh, 1951. Type locality: Iran.

Mianjangal, Firuzabad, Mehkuh (Fars) (HASHEMI, 1976).

Truxalis robusta (Uvarov, 1916) ssp. *uniformis* Dirsh, 1951. Type locality (holotype): Kou Sefid (Kermanshah, Iran).

Almost in most parts of Iran damaging pasture and agricultural crops (MIRZAYANS, 1959).

1-3. Phlaeobini Brunner von Wattenwyl, 1893

1-3-1. *Duroniella* Bolivar, 1908. Northern Africa, Arabia, Western Asia.

In Iran : almost in the whole territory (Alborz, Azerbaijan, Fars, Gilan, Golestan, Hormozgan, Kerman, Kurdistan, Khuzestan, Markazi, Mazandaran, Razavi Khorasan, Sistan & Baluchestan, Zanjan).

Duroniella gracilis Uvarov, 1926. Type locality (holotype ♂): Golodnaya steppe (Nadezhdinsky, Uzbekistan).

Alborz, Kurdistan, Azerbaijan, Gilan, Mazandaran, Golestan and Khorasan provinces.

Duroniella iranica Bey-Bienko, 1948. Type locality: South Iran.

Khuzestan, Fars, Hormozgan, Kerman, Sistan and Baluchestan provinces.

Duroniella kalmyka (Adelung, 1906). Type locality: region of Turgay (Kazakhstan).

Azerbaijan (SHUMAKOV, 1963).

Duroniella kostylevi Bey-Bienko, 1948. Type locality (holotype ♀): Chusdar (Sistan & Baluchestan, Iran)

Khuzestan, Fars, Hormozgan, Kerman and Sistan & Baluchestan provinces.

Duroniella laticornis (Krauss, 1909). Type locality (syntypes ♂♀): Jerusalem (Palestine).

Arak (Markazi); Moghan (Razavi Khorasan); Tabriz (East Azerbaijan); Azerbaijan; Ilam, (DESCAMPS, 1967).

Duroniella laeviceps Uvarov, 1938. Type locality (holotype ♂): Masjid-i-Sulaiman (Khuzestan, Iran).

South-West Iran (MIRZAYANS, 1959). Near Ahwaz (Khuzestan) (MACHÁČKOVÁ & FIKÁČEK, 2014).

Duroniella lucasii (Bolívar, 1881). Type locality (holotype ♂): Oran (Algeria).

South Iran (MIRZAYANS, 1959). Kurdistan (GARAI, 2010).

Duroniella parallella Uvarov, 1950. Type locality (holotype ♂): Kalba (exclave of Sharjah Emirate).

Khuzestan; Bandar-Abbas (Hormozgan); Minan (Zanjan) (DESCAMPS, 1967).

Duroniella volucris Uvarov, 1938. Type locality: Iraq.

South-West Iran (MIRZAYANS, 1959). Ahwaz, Abadan (Khuzestan); Khuzestan region (SHUMAKOV, 1963).

2. CALLIPTAMINAE Jacobson, 1905;

- 2-1. *Calliptamus* Serville, 1823. Southern Eurasia, Northern Africa, Angola.
In Iran: almost in the whole territory (lacking in South-West?) (Alborz; Ardabil; East and West Azerbaijan; Fars; Golestan; Hamadan; Isfahan; Kohgiluyeh & Boyer-Ahmad; Kerman; North and South Khorasan; Razavi Khorasan; Kurdistan; Mazandaran; Qazvin; Semnan; Sistan & Baluchestan; Tehran; Zanjan).
- Calliptamus balucha* Uvarov, 1938. The type localities of the two subspecies are in Pakistan: that of the nominative one (Ziarat, Balochistan, Pakistan) and that of *C. b. brachypterus* (Dirsh 1957) (Pakistan). Sistan & Baluchestan (MIRZAYANS, 1959). Azerbaijan, Zanjan and Mazandaran provinces (GHAHARI & *al.*, 2009).
- Calliptamus barbarus* (Costa, 1836) [cf.] ssp. *barbarus*. Type locality (neotype ♂): Maglie (Lecce, Italia). Kuduk, near Khoy: 2 000 m (West Azerbaijan); Mardabat (Tehran); between Khash and Iranshahr (Sistan & Baluchestan) (DESCAMPS & DONSKOFF, 1965). (*Nota*: the presence of the nominative ssp. has to be confirmed).
- Calliptamus barbarus* (Costa, 1836) ssp. *cephalotes* Fischer von Waldheim, 1846. Type locality: Transbaikalia (Siberia, Russia). Ardekan, Fasa, Firuzabad, Kakan, Shiraz, Beyza, Abadeh, Bavanat, Estahban, Parishan (Fars); Yasuj (Kohgiluyeh & Boyer-Ahmad); Sang-mang (Fars) (HASHEMI, 1976). Mazandaran and Alborz provinces (GARAI, 2010). Arasbaran, Khomarloo, Kaleybar, Miandoab (Azerbaijan) (HAVASKARY & *al.*, 2012). Kurdistan (HOSSEINI & MOFIDI-NEYESTANAK, 2014). Mashhad (Razavi Khorasan) (JABBARI & *al.*, 2015). Bojnord (North Khorasan) (Afshar Museum specimen).
- Calliptamus barbarus* (Costa, 1836) [no subspecies indicated]. Shahrud, Sar Lash (Semnan); Behshahr (Golestan); Aji-Chay, at North of Tabriz: 1 600 m (East Azerbaijan); Sharif Khaneh: 1 220 m (Azerbaijan); and various localities in Tehran province (UVAROV & DIRSH, 1952).
- Calliptamus deserticola* (Vosseler, 1902). Type locality (syntypes ♂♀): Laghouat (Algeria), Hammam-Lif Gafsa and Gabès (Tunisia). [This taxon has been erected at specific level by DEFAUT (2017b); its exact Iranian distribution is not known.]
Tehran; Takht-i-Jamshid [Persepolis] (Fars) (UVAROV, 1938).
- Calliptamus coelesyriensis* Giglio-Tos, 1893. Type locality (syntypes): Lebanon and Syria. Sabzevar (Razavi Khorasan); Shahrud: 1 110 m (Semnan); between Rudhend and Delidjai: 1 800 m, Mahmudieh, Varzan: 1 300 - 2 200 m (Tehran); Demavend (Mazandaran) (UVAROV & DIRSH, 1952, as *Metromerus coelesyriensis* Giglio Tos). Pest of cereals in Iran (MIRZAYANS, 1959). 25 km South-East of Sanandaj, 2 200 m (Kurdistan); region of Tabriz (East Azerbaijan); Rafsanjan (Kerman); Mardabat (Tehran) (DESCAMPS & DONSKOFF, 1965, as *C. coelesyriensis coelesyriensis*). Isfahan; Ardekan, Firuzabad, Kakan, Shiraz, Sibkhalaj, Abadeh, Beyza, Juytorki (Fars); (HASHEMI, 1976). Kazerun (Fars) (GARAI, 2010). Arasbaran (East Azerbaijan); Aslandoz (Ardabil) (HAVASKARY & *al.*, 2012). Mashhad (Razavi Khorasan) (JABBARI & *al.*, 2015). Hamadan (Hamadan); Birjand (South Khorasan); Zahedan (Sistan & Baluchestan) (Afshar Museum specimen).
- Calliptamus italicus* (Linnaeus, 1758). Type locality (neotype ♂): Venosa (Potenza, Italia). Gorgan: 200 m (Golestan); Mahmudieh, Maranak, Varzan: 1 300 - 2 200 m (Tehran); Behshahr (Golestan) (UVAROV & DIRSH, 1952). Rezaieh (West Azerbaijan); region of Tabriz (East Azerbaijan) (DESCAMPS & DONSKOFF, 1965). Lar dam (Mazandaran); Zagros mounts; Bostan-Abad (East Azerbaijan); Shah-Reza (Isfahan) (GARAI, 2010). Arasbaran, Kaleybar (East Azerbaijan); Avanloo (East Azerbaijan); Aslandoz (Ardabil); Miandoab (West Azerbaijan) (HAVASKARY & *al.*, 2012). Kurdistan (HOSSEINI & MOFIDI-NEYESTANAK, 2014). Mashhad (Razavi Khorasan) (JABBARI & *al.*, 2015).
- Calliptamus tenuicercis* Tarbinsky, 193. Type locality (holotype ♂): Gandzha (Iran). (OSF points out Gandzha is in "Chararom province", but this province doesn't exist. A town named "Gandzha" (= Ganjeh, Gunja, Gunjeh) exists in the Gilan province).
Between Rudhend and Delidjai: 1 800 m (Tehran); Mishu Dagh: 1 700 m (East Azerbaijan) (UVAROV & DIRSH, 1952). Qazvin (MIRZAYANS, 1959). Between Khash and Iranshahr (Sistan & Baluchestan); region of Tabriz (East Azerbaijan) (DESCAMPS & DONSKOFF, 1965). Shiraz, Estahban, Kazerun, Dashte-arjan, Ardekan, Kakan (Fars) (HASHEMI, 1976). Damawand mount (Alborz range, Mazandaran) (GARAI, 2010). Khash (Sistan & Baluchestan) (Afshar museum specimen).
- Calliptamus turanicus* Tarbinsky, 1930. Type locality (holotype ♂): Golodnaya steppe (Nadezhdinsky, Uzbekistan).
Central parts of Iran (MIRZAYANS, 1959). Azerbaijan and Gilan provinces (GHAHARI & *al.*, 2009). North Karaj (Alborz); Bojnord (North Khorasan); Mazandaran; Behshahr (Golestan) (Afshar Museum specimen).

- 2-2. *Acorypha* Krauss, 1877. Africa and Arabian Peninsula (South of Sahara), Pakistan and India, South-Easter Asia.
In Iran: in the South (Fars; Hormozgan).
Acorypha insignis (Walker, 1870). Type locality (holotype ♀): India.
Bandar-Abbas (Hormozgan), Lar (Fars) (MIRZAYANS, 1959).
- 2-3. *Sphodromerus* Stål, 1873. Africa, Arabian Peninsula, Syria, Middle East, India.
In Iran known in the Easter half (Fars; Isfahan; Kerman; Mazandaran; Razavi Khorasan; Semnan; Tehran).
Sphodromerus luteipes Uvarov, 1933, ssp. *rubripes* Uvarov, 1943. Type locality (syntypes ♂♀): Makran region (Baluchistan, Pakistan).
Razan (Mazandaran) (GARAI, 2010). Sabsevaran (Kerman) (Afshar Museum specimen).
Sphodromerus luteipes Uvarov, 1933, ssp. *luteipes*. Type locality (holotype ♂): near Isfahan and Dzhulfā [= Djoulfa] (Iran).
Khorasan, Semnan and Tehran provinces (MIRZAYANS, 1959). Abadeh, Kazerun (Fars) (HASHEMI, 1976). Natanz-Kashan (Isfahan) (GARAI, 2010). Bardesir (Kerman) (Afshar Museum specimen).
- 2-4. *Sphodronotus* Uvarov, 1938. Genus endemic to Southern Iran (Khuzestan, Hormozgan; Sistan & Baluchestan).
Sphodronotus cyclopterus (Uvarov, 1933). Type locality (holotype ♂): Dezful (Khuzestan, Iran).
Sistan & Baluchestan (MIRZAYANS, 1959)
Sphodronotus grandis Popov, 1951. Type locality (holotype ♀): Saravan, Bampusht (Sistan & Baluchestan, Iran).
Bandar-Abbas, Kuh-Kinan (Hormozgan) (POPOV, 1951; MIRZAYANS, 1959).

3. CATANTOPINAE Brunner von Wattenwyl, 1893

3-1. Catantopini Brunner von Wattenwyl, 1893;

- 3-1-1. *Diabolocatantops* Jago, 1984. Tropical Africa, Yemen and Southern Asia.
In Iran: in South-Eastern (Fars; Hormozgan; South Kerman).
Diabolocatantops axillaris (Thunberg, 1815), ssp. *axillaris*. Type locality (holotype ♀): Cape Verde South Kerman; Bandar Abbas (Hormozgan) (MIRZAYANS, 1959).
Diabolocatantops axillaris (Thunberg, 1815), ssp. *saucius* (Burmeister, 1838). Type locality (probably syntypes ♂♀ [after the original description]: Comoros.
Lar (Fars) (MIRZAYANS, 1959; HASHEMI, 1976).

3-2. Diexiini Mistshenko, 1945

- 3-2-1. *Diexis* Zubovski, 1899. Kazakhstan, Uzbekistan, Turkmenistan and North Iran (Azerbaijan; Golestan; North Khorasan).
Diexis uvarovi Tarbinsky, 1932. Type locality (holotype ♂): Solo-Tübe (Kzil-Orda, Kazakhstan).
Azerbaijan, Golestan and North Khorasan provinces (MIRZAYANS, 1959).

3-3. Paraconophymatini Otte, 1995

- 3-3-1. *Paraconophyma* Uvarov, 1921. India, Pakistan, Afghanistan and Centre and South-West Iran (Fars; Isfahan, Kohgiluyeh & Boyer-Ahmad).
Paraconophyma nana Popov, 1951. Type locality (holotype ♂): Sia-Sakht (Kohgiluyeh & Boyer-Ahmad) and Sitchani (Fars, Iran).
Sia-Sakht (Kohgiluyeh & Boyer-Ahmad); Sitchani, Kahan (Fars) (POPOV, 1951; MIRZAYANS, 1959).
Ardekan, Bonrud, Chehel-Cheshme, Dashte-arjan, Kakan, Kazerun, Komehr, Sibkhalaj (Fars); Isfahan; Sang-mang (Fars) (HASHEMI, 1976). Yasuj (Kohgiluyeh & Boyer-Ahmad) (GARAI, 2010).

3-5. Uvaroviini Mistshenko, 1952

- 3-4-1 *Uvarovium* Dirsh, 1927. Uzbekistan, Turkmenistan and East Iran (Khorasan; Sistan & Baluchestan).
Uvarovium dirshi Uvarov, 1933. Type locality (holotype ♀): Bampur (Sistan & Baluchestan, Iran) South and East of Iran (MIRZAYANS, 1951).
Uvarovium femorale Mistshenko, 1945. Type locality (holotype ♀): « *Bushana, near Rui* » in OSF. (not in Iran; perhaps near to the frontier with another country).
Khorasan province (MIRZAYANS, 1951).

3-6. Wiltshirellini Shumakov, 1963

3-5-1 *Wiltshirella* Popov, 1951. This monospecific genus is endemic to Fars province (Iran).

Wiltshirella fusiformis Popov, 1951. Type locality (holotype ♀): Sineh-Sepid, near Shiraz (Fars, Iran). Kazerun, Dashte-arjan (Fars) (HASHEMI, 1976).

4. TERATODINAE Brunner von Wattenwyl, 1893

4-1. *Lyrotylus* Uvarov, 1923. This genus is endemic to Centre and South Iran (Fars; Isfahan; Kerman; Yazd).

Lyrotylus kermanicus Shumakov, 1956. Type locality: Bardesir, near Kerman (Kerman, Iran).

Lalezar (Kerman) (MIRZAYANS, 1959). Kazerun, Dashte-arjan, Zangian, Chehel-Cheshme, Shiraz (Fars) (HASHEMI, 1976). Yazd and Isfahan provinces (GARAI, 2010). Bardesir (Kerman) (Afshar Museum specimen).

Lyrotylus modestus Bey-Bienko, 1956. Type locality (holotype ♂): Fars province (Iran).

Taft (Yazd) (GARAI, 2010).

Lyrotylus persicus Uvarov, 1923. Type locality: Iran.

Shiraz, Kakan (Fars) (MIRZAYANS, 1959).

4-2. *Lyrotylodes* Bey-Bienko, 1956. This monospecific genus is endemic to South and South-East Iran (Fars; Kerman).

Lyrotylodes viridis Bey-Bienko, 1956. Type locality (holotype ♀): between Bam and Sabsevaran (Kerman, Iran).

South and South-East Iran (MIRZAYANS, 1959). Kerman and Fars provinces (SHUMAKOV, 1963). Deh Bakri (Kerman) (DESCAMPS & DONSKOFF, 1965).

4-3. *Esfandiarina* Popov, 1951. This monospecific genus is endemic to South Iran (Fars, Kohgiluyeh & Boyer-Ahmad).

Esfandiarina obesa Popov, 1951. Type locality (holotype ♀): Yasuj (Kohgiluyeh & Boyer-Ahmad [not Fars!], Iran).

Kazerun, Gav-koshak, Dashte-arjan (Fars) (HASHEMI, 1976).

5. CYRTACANTHACRIDINAE Kirby, 1910**5-1. Cyrtacanthacridini Kirby, 1910**

5-1-1. *Anacridium* Uvarov, 1923. Southern Eurasia, Northern Africa and Arabian Peninsula.

In Iran: Almost in the whole territory (Alborz; Bushehr; East Azerbaijan; Fars; Golestan; Kerman; Razavi Khorasan; Kohgiluyeh and Boyer-Ahmad; Khuzestan; Semnan; Sistan & Baluchestan; Tehran).

Anacridium aegyptium (Linnaeus, 1764), ssp. *aegyptium*. Tehran (UVAROV, 1938). Type locality (holotype ♂): Egypt.

Hadjabad, between Khash and Iranshahr (Sistan & Baluchestan); Garmsar (Semnan); Mahmudieh, Bone-e Kuh, Ain-ar-Rashid (Tehran) (UVAROV & DIRSH, 1952). Road of Bushehr (Bushehr); Estahban (Fars); Orzuhieh (Kerman) (DESCAMPS & DONSKOFF, 1965). Fasa (Fars) (HASHEMI, 1976). Golestan and Azerbaijan provinces (GHAHARI & al. 2009). Borazjan (Bushehr) (GARAI, 2010). Arasbaran, Mardanaghum, Khomarloo, Varzeghan (East Azerbaijan) (HAVASKARY & al., 2012). Shahr-Rey, Varamin (Tehran) (SIANAKI, 2012). Mashhad (Razavi Khorasan) (JABBARI & al., 2015). Golestan and Azerbaijan provinces (GHAHARI & al. 2009).

Anacridium rubrispinum Bey-Bienko, 1948. Type locality (holotype ♀): Chusdar (Sistan & Baluchestan, Iran).

Azerbaijan and Kohgiluyeh & Boyer-Ahmad provinces (GARAI, 2010). Alborz, Kerman, Khuzestan and Sistan & Baluchestan provinces (Afshar museum specimen)

5-1-2. *Schistocerca* Stål, 1873. Principally distributed in South and Central America; one species (*S. gregaria*) in Africa, Arabia and Southern Asia.

In Iran: known in Eastern half of the territory (Fars; Golestan; Kerman; Razavi Khorasan; Sistan & Baluchestan).

Schistocerca gregaria (Forskål, 1775), ssp. *gregaria*. Type locality (holotype ♂): Cairo (Egypt).

Persian Gulf region and Khuzestan (DAVATCHI, 1954). Drowned specimen were frequently washed up on the shore of Caspian (UVAROV, 1925). Gonbad (Golestan); Mashhad, Khaf, Golestan (Razavi Khorasan) (JABBARI & al., 2015). Midjan (Fars); Kerman, Sabsevaran (Kerman); Sistan & Baluchestan (Afshar Museum specimen).

6-EGNATIINAE Bey Bienko & Mistshenko, 1951**6-1. Egnatiini Bey Bienko & Mistshenko, 1951**

- 6-1-1. *Charora* Saussure, 1888. Caucasia, Near and Middle East.
In Iran : principally in Northern territory (Alborz; West Azerbaijan; Isfahan; Mazandaran; Qom; Semnan; Tehran).
Charora crassivenosa Saussure, 1888. Type locality (syntypes ♂♂): Mount Elbrus (Southern Russia [near Georgia]).
Alborz mountains (MIRZAYANS, 1959).
Charora persa Uvarov, 1933, ssp. *persa*. Type locality (holotype ♂): Karaj (= *Kiredzh*) (Alborz, Iran).
Tehran and Alborz mountains (MIRZAYANS, 1959).
Charora persa Uvarov, 1933, ssp. *rugosa* Bey-Bienko, 1951. Type locality (holotype ♀): Qom (= *Kum*) (Iran).
Qom (MIRZAYANS, 1959).
Charora persa Uvarov, 1933 [no subspecies indicated].
Mamavend (Mazandaran); Shahrud: 1 110 m (Semnan); Varzan: 1 300 - 2 200 m (Tehran) (UVAROV & DIRSH, 1952). Between Salmas (= Shahpur) and Rezaieh (West Azerbaijan) (DESCAMPS & DONSKOFF, 1965).
Charora similis Bey-Bienko, 1951. Type locality (syntypes): Tehran province (Iran).
Tehran, Alborz mountains (MIRZAYANS, 1959). Isfahan province and Zagros mounts (GARAI, 2010).
- 6-1-2. *Egnatioides* Vosseler, 1902. Northern Africa and Southern Asia.
In Iran: in North and South (Kermanshah; Fars; Golestan; Hamadan; Isfahan; Khorasan; Mazandaran; Semnan).
Egnatioides farsistanicus Uvarov, 1933. Type locality (holotype ♂): from Shiraz to Kazerun (Fars, Iran).
Ghasr-chirin (Kermanshah) (MIRZAYANS, 1959). Abadeh, Darab, Izadkhast, Kazerun, Famur, Parishan lake, Shiraz, Juytorki, Mamasani, Jahrom, Pahnaphan, Nojin, Khun-Khoreh (Fars); Baladeh (Mazandaran); Ghare-Shahpur (Fars) (HASHEMI, 1976).
Egnatioides coeruleans (Krauss, 1893). Type locality (syntypes ♂♀): Mecheria (Algeria).
Semirom (Isfahan); Aliabad (Golestan) (GARAI, 2010).
Egnatioides kiritshenkoi Uvarov, 1933. Type locality: Iran.
Khorasan province; Shahrood (Semnan) (MIRZAYANS, 1959).
Egnatioides sphaerifer Bey-Bienko, 1951. Type locality (holotype ♀): Gul-mirun (Khorasan, Iran).
Khorasan province; Shahrood (Semnan) (MIRZAYANS, 1959). Nahavand (Hamadan) (GARAI, 2010).
- 6-1-3. *Egnatius* Stål, 1846. From Iran up to Kazakhstan and Western China (monospecific genus).
In Iran : principally at North (Ardabil; Gilan; Golestan; Mazandaran; North Khorasan; Semnan; Zagros mounts), but also Fars.
Egnatius apicalis Stål, 1876. Type locality (syntypes): Krasnoarmeysk (= *Sarepta*) (Volgograd oblast, Russia).
Safashahr (Fars); Semnan; Zagros mounts (GARAI, 2010). Ardabil, Gilan, Golestan, Mazandaran and North Khorasan provinces (MIRZAYANS, 1959).
- 6-1-4. *Leptoscirtus* Saussure, 1888. Africa, Near East, Iran, Afghanistan.
In Iran: known in West, Centre and South (Hormozgan; Isfahan; Kerman; Kermanshah, Yazd).
Leptoscirtus dubius Fishelson, 1993. Type locality: Palestine-Israel.
Yazd; Kerman; Bandar Abbas (Hormozgan), Haji Abad (Kermanshah) (FISHELSON, 1933).
Leptoscirtus isphahanicus Uvarov, 1933. Type locality (holotype ♂): Isfahan (Iran).
- 6-1-5. *Paracharora* Fishelson, 1993. Monospecific genus, endemic to North Iran (Gilan; Golestan).
Paracharora popovi Fishelson, 1993. Type locality: Iran.
Aliabad (Golestan); Rasht (Gilan) (FISHELSON, 1993).
- 6-1-6. *Paregnatius* Uvarov, 1933. Genus endemic to Iran (Fars; Isfahan; Kerman; Khorasan; Kohgiluyeh & Boyer-Ahmad).
Paregnatius kermanicus Descamps, 1967. Type locality (holotype ♂): Kerman province (Iran).
Paregnatius moritzi Uvarov, 1933, ssp. *moritzi*. Type locality (holotype ♀): Turbit-i Khaidari (Khorasan, Iran).
Paregnatius moritzi Uvarov, 1933, ssp. *farsistanicus* (Descamps, 1967). Type locality (holotype ♂): between Shiraz and Abadeh (Fars, Iran).
Abadeh, Khun-Khoreh (Fars) (HASHEMI, 1976).
Paregnatius salavatiani Popov, 1951. Type locality (holotype ♀): Kahan (Dinar mounts, Fars province, Iran).

Kahan, Komehr (Fars) (POPOV, 1951). Shiraz, Kazerun, Sibe Khaladj between Shiraz and Kakan (Fars) (DESCAMPS, 1967). Ardekan, Dashte-arjan, Kakan, Komehr, Sibkhalaj, Kazerun (Fars); Isfahan; Yasuj (Kohgiluyeh & Boyer-Ahmad); Sang-mang (HASHEMI, 1976).

Paregnatius saltator Bey-Bienko, 1951. Type locality (syntypes): in Khorasan province (Iran).

6-1-7. *Bienkonkia* Dirsh, 1970. This monospecific genus is endemic to South-West Iran (Fars; Kohgiluyeh & Boyer-Ahmad).

Bienkonkia pusilla (Bey-Bienko, 1957). Type locality (holotype ♀): Kahan, Komehr (Dinar mounts, Fars province, Iran).

7. EYPREPOCNEMIDINAE Brunner von Wattenwyl, 1893

7-1. *Eyprepocnemidini* Brunner von Wattenwyl, 1892

7-1-1. *Eyprepocnemis* Fieber, 1853. Mediterranean region, Africa, Middle and Southern Asia.

In Iran: at North and Centre-West (East and West Azerbaijan; Gilan; Golestan; Isfahan; Khorasan).

Eyprepocnemis alacris (Serville, 1838), ssp. *alacris*. Type locality (holotype ♀): South India.

South-East Iran (MIRZAYANS, 1959).

Eyprepocnemis alacris (Serville, 1838), ssp. *impictus* Uvarov, 1933. Type locality (holotype ♂): Shustar (Khuzestan [*Arabistan*], Iran).

South-West Iran (MIRZAYANS, 1959).

Eyprepocnemis plorans (Charpentier, 1825), ssp. *plorans*. Type locality: Portugal [*Lusitania*].

Remark: the neotypes ♂♀ designated by HARZ (1975: 371) are invalid according to articles 75.1, 75.2 and 75.3.6 of ICZN (cf. DEFAUT & MORICHON, 2015: 340).

Behshahr (Golestan); Salmas (= Shahpur): 1 250 m (West Azerbaijan) (UVAROV & DIRSH, 1952).

North Iran (MIRZAYANS, 1959). Rezaieh, and between Salmas (= Shahpur) and Rezaieh (West

Azerbaijan) (DESCAMPS & DONSKOFF, 1965). Isfahan, Azerbaijan and Gilan provinces (GHA-

HARI & *al.*, 2009). Khorasan, Gharet (Khorasan) (GARAI, 2010). Arasbaran, Kaleybar (East

Azerbaijan) (HAVASKARY & *al.*, 2012).

7-1-2. *Heteracris* Walker, 1870. South-Western Europe, Africa, Asia.

In Iran: at North and South (East and West Azerbaijan; Alborz; Fars; Gilan; Isfahan; Qazvin; Kerman; Kurdistan; Mazandaran; Semnan; Sistan & Baluchestan; Tehran).

Heteracris attenuata (Uvarov, 1921). Type locality (holotype ♂): Fwambo (Northern Zambia).

Agricultural pest in most parts of Iran (MIRZAYANS, 1959)

Heteracris pterosticha (Fischer von Waldheim, 1833). Type locality (holotype ♂): ex-URSS (Russia).

Takht-I-Jamshid (Fars) (UVAROV, 1938, as *Thisoicetrinus pterostichus* (Fischer-Waldheim)).

Garmsar (Semnan); Maranak (Tehran); Bone-e Kuh (Tehran); Sharif Khaneh: 1 220 m (Azerbaijan);

Shahpur: 1 250 m (West Azerbaijan) (UVAROV & DIRSH, 1952, as *Thisoicetrinus dorsatus*

Fischer Waldheim). Dunhee: 20 km South Chiraz (Fars); Kuduk, near Khoy: 2 000 m (West

Azerbaijan) (DESCAMPS & DONSKOFF, 1965, as *Thisoicetrinus pterostichus*). Darab, Estahban,

Shiraz, Jahrom, Banaruyeh, Parishan, Firuzabad, Farrashband, Juytorki (Fars); (HASHEMI, 1976).

Arasbaran, Vinag, Varzeghan (East Azerbaijan) (HAVASKARY & *al.*, 2012).

[*Heteracris buxtoni* (Uvarov, 1921). Type locality (holotype ♂): Amarah (Iraq [*Mesopotamia*]).

Remark: Amarah is in Iraq, but at only 50 km from Iranian frontier (Bushehr province).

7-1-2a. *Heteracris* group *adpersa* (Redtenbacher, 1889).

Heteracris adpersa (Redtenbacher, 1889), ssp. *adpersa*. Type locality (lectotype ♂): Ashgabat [*Askhabad*] and Dushak [*Duschak*] (Turkmenistan); Ganja [*Elisabetpol*] (Azerbaijan republic).

Karaj (= Keredj): 1 330 m (Alborz); Moradabad (Tehran); Gurmeh Khanah (Azerbaijan) (UVA-

ROV & DIRSH, 1952, as *Thisoicetrus adpersus*). Tabriz region (East Azerbaijan) (DESCAMPS &

DONSKOFF, 1965, as *Heteracris adpersus*). Alborz province; Gheshlagh (Qazvin) (GARAI,

2010). Fasa (Fars) (HASHEMI, 1976).

7-1-2b. *Heteracris* group *morbosa* (Serville, 1838).

Heteracris iranica (Bey-Bienko, 1960). Type locality (holotype ♂): Haman-Kuh (Sistan & Baluchestan).

7-1-2c. *Heteracris* group *littoralis* (Rambur, 1838).

Heteracris littoralis (Rambur, 1838). Type locality (neotype ♂): Malaga neighbours (Spain).

Garmsar (Semnan); Mahmudieh, Bahram (20 km East of Teheran), Bone-e Kuh, Karaj (=

Keredj) (Tehran) (UVAROV & DIRSH, 1952, as *Thisoicetrus littoralis similis* Brunner v. W.).

Jahrom, Bavanat, Shiraz, Fasa (Fars) (HASHEMI, 1976). Shahr-Rey, Varamin (Tehran) (SIANAKI,

2012). Kurdistan province (HOSSEINI & MOFIDI-NEYESTANAK, 2014).

Heteracris persa (Uvarov, 1933). Type locality (holotype ♂): Iran.

South-East Iran (MIRZAYANS, 1959). Deh Bakri (Jebal Barrez, Kerman); Darab (Fars) (DESCAMPS & DONSKOFF, 1965). Azerbaijan, Gilan, Isfahan and Mazandaran provinces (GHAHARI & al., 2009).

Heteracris theodori (Uvarov, 1929). Type locality (holotype ♂): Wadi Feiran (Sinai, Egypt).

North of Iran (MIRZAYANS, 1959).

8. GOMPHOCERINAE Fieber, 1853

8-1. Arcypterini Shumakov, 1963

8-1-1. *Arcyptera* (*Pararcyptera*) Tarbinsky, 1930. Eurasia and Northern Africa.

In Iran: in North and South-West (Alborz; Azerbaijan; Gilan; Golestan; Isfahan; Mazandaran; Semnan; Zagros mounts).

Arcyptera (*Pararcyptera*) *microptera* Fischer von Waldheim, 1833, ssp. *elbursiana* Bey-Bienko, 1948. Type locality: North Iran.

Damawand mount (Alborz range, Mazandaran) (GARAI, 2010). North Iran (HODJAT, 2015).

Arcyptera (*Pararcyptera*) *microptera* Fischer von Waldheim, 1833, ssp. *transcaucasica* Uvarov, 1917. Type locality (syntypes ♂♀): Azerbaijan republic and Armenia.

30 km East of Shahrud (Semnan) (UVAROV & DIRSH, 1952). Isfahan, Zagros mounts (GARAI, 2010). North Alborz regions (HODJAT, 2015).

Arcyptera (*Pararcyptera*) *microptera* Fischer von Waldheim, 1833, ssp. *turanica* Uvarov, 1925. Type locality: "Turkestan".

Caspian sea regions, Alborz mountains and Azerbaijan province (SHUMAKOV, 1963). Gilan, Mazandaran and Golestan provinces (HODJAT, 2015).

8-2. Chrysochraontini Brunner von Wattenwyl, 1893

8-2-1. *Euchorthippus* Tarbinsky, 1925. Eurasia and Maghreb.

In Iran: everywhere, except in Central deserts (Alborz; Ardabil; Golestan; Hormozgan; Sistan & Baluchestan).

Euchorthippus transcausicus Tarbinsky, 1930. Type locality: Transcaucasia (= South Caucasia).

Northern Iran (MIRZAYANS, 1959). 60 km West of Ardabil: 2 000 m (Ardabil) (DESCAMPS & DONSKOFF, 1965). Gorgan (Golestan); Bandar Lengeh (Hormozgan); Mokran (Sistan & Baluchestan); Alborz province (HODJAT, 2015).

8-3. Dociostaurini Mistshenko, 1974

8-3-1. *Dociostaurus* Fieber, 1852. Eurasia, Northern Africa and Angola.

In Iran: present in the whole territory (Ardabil; Azerbaijan; Bushehr; Chaharmahal & Bakhtiari; Fars; Golestan; Hormozgan; Ilam; Isfahan; Kerman; Kermanshah; North Khorasan; Razavi Khorasan; Khuzestan; Kohgiluyeh & Boyer-Ahmad; Kurdistan; Markazi; Mazandaran; Qazvin; Semnan; Sistan & Baluchestan; Tehran; Yazd; Zanjan).

8-3-1a. Subgenus *Dociostaurus* Fieber, 1852. Eurasia, Northern Africa and Angola.

In Iran: in North, West and South (East Azerbaijan; Bushehr; Fars; Golestan; Isfahan; Kurdistan; Zanjan, Sistan & Baluchestan).

Dociostaurus (*Dociostaurus*) *diamesus* Bey-Bienko, 1948. Type locality: Iran.

Damawand (Alborz range); Khash, Zabol, Zahedan (Sistan & Baluchestan) (HODJAT, 2015).

Dociostaurus (*Dociostaurus*) *maroccanus* (Thunberg, 1815). Type locality (neotype ♂): Aguelman Sidi Ali (Middle Atlas, Morocco).

Fars (MIRZAYANS, 1959, HOSSEINI & MOFIDI-NEYESTANAK, 2014). Firuzabad, Farrashband, Darab, Izadkhast, Kazerun, Dadin, Parishan, Jahrom, Ab-barik, Lar, Juytorki, Ghir-kareezin (Fars) (HASHEMI, 1976). Golestan (GHAHARI & al., 2009). Natanz (Isfahan), and Kurdistan. Bushehr, Zanjan provinces (GARAI, 2010). Arasbaran, Daghlo, Ahar (East Azerbaijan) (HAVASKARY & al., 2012). Khorasan, Fars, Azerbaijan, Kurdistan, Khuzestan and Semnan provinces (HODJAT, 2015).

Dociostaurus (*Dociostaurus*) *plotnikovi* Uvarov, 1921. Type locality (syntypes): Golodnaya steppe, Bukhara and Karatag river (Uzbekistan).

North-East Iran (HODJAT, 2015).

8-3-1b. Subgenus *Kazakia* Bey-Bienko, 1933. Eurasia and Northern Africa.

In Iran: everywhere, except in South-East (Ardabil; Azerbaijan; Fars; Golestan; Ilam; Kermanshah; Khorasan; Khuzestan; Kurdistan; Mazandaran; Tehran; Zanjan).

Dociostaurus (*Kazakia*) *brevicollis* (Eversmann, 1848). Type locality: Western Asia.

Azerbaijan (HODJAT, 2015). Zanjan (GHAHARI & al. 2009).

Dociostaurus (*Kazakia*) *jagoi* Soltani, 1978, ssp. *jagoi*. Type locality (holotype ♂): Chalab, near Mehran (Ilam province [not Kermanshah, in spite of SOLTANI, 1978], Iran).

Kermanshah; Mehran (Ilam); Chalab (Kurdistan), 350 m (type locality). Mehran (Ilam), Naft-Shahr (Kermanshah) (HODJAT, 2015).

Dociostaurus (Kazakia) tartarus Stshelkanovtzev, 1921. Type locality: Astrakhan (South Russia).

Tehran province, 1 300 - 2 200 m (UVAROV & DIRSH, 1952). Abadeh, Neyriz, Khun-Khoreh, Khaneh-ket, Khorameh (Fars) (HASHEMI, 1976). Mazandaran and Azerbaijan provinces (GHAHARI & al., 2009). Fars; Saffiabad (Golestan) (GARAI, 2010). Ardabil; Arasbaran, Aslandoz, Jolfa (Fars) (HAVASKARY & al., 2012). Khuzestan and Khorasan provinces (HODJAT, 2015).

8-3-1c. Subgenus *Stauronotulus* Tarbinsky, 1940. Eurasia and Northern Africa.

In Iran: present in the whole territory (Fars; (HASHEMI, 1976). Alborz; Ardabil; East Azerbaijan; Chaharmahal & Bakhtiari; Golestan; Hamadan; Hormozgan; Isfahan; Kerman; Kermanshah; North Khorasan; Razavi Khorasan; Kohgiluyeh & Boyer-Ahmad; Kurdistan; Markazi; Qazvin; Sistan & Baluchestan).

Dociostaurus (Stauronotulus) cappadocicus (Azam, 1913). Type locality (syntypes ♀♀): Cappadocia (Turkey).

North Iran (HODJAT, 2015).

Dociostaurus (Stauronotulus) crassiusculus (Pantel, 1886), ssp. *nigrogeniculatus* Tarbinsky, 1928. Type locality: Bukhara (Uzbekistan).

North and South-East Iran (SOLTANI, 1978). Alborz region; Khorasan and Azerbaijan provinces; Zahedan (Sistan & Baluchestan) (HODJAT, 2015).

Dociostaurus (Stauronotulus) hauensteini (Bolívar, 1893), ssp. *elbursianus* Uvarov, 1933. Type locality (holotype ♂): Shahkuh, in the Elburz range (Isfahan, Iran)

Arak (Markazi); Avej (Qazvin); Natanz, Semirom (Isfahan) (GARAI, 2010).

Dociostaurus (Stauronotulus) hauensteini (Bolivar, 1893), ssp. *farsistanicus* Uvarov, 1943. Type locality: Kakan (Fars, Iran).

Ardabil; Kakan (Fars) (DESCAMPS, 1967). Arasbaran (East Azerbaijan); Aslandoz (Ardabil), Janaloo (East Azerbaijan) (HAVASKARY & al., 2012). Fars and Khorasan provinces (HODJAT, 2015).

Dociostaurus (Stauronotulus) hauensteini (Bolivar, 1893), ssp. *hauensteini* (Bolivar, 1893). Type locality (holotype): Lebanon, Syria.

Jahrom, Darab, Lar, Firuz-abad, Ardekan, Estahban, Shiraz, Abadeh, Kazerun, Neyriz (Fars); Yasuj (Kohgiluyeh & Boyer-Ahmad) (HASHEMI, 1976). Azerbaijan province; Moghan (Razavi Khorasan); Bojnord (North Khorasan) (HODJAT, 2015).

Dociostaurus (Stauronotulus) hauensteini (Bolívar, 1893) [no subspecies indicated].

Bandar-Abbas (Hormozgan); Sabzewar (Razavi Khorasan); Kerman province; Tehran province (UVAROV & DIRSH, 1952). Chaharmahal & Bakhtiari and Golestan provinces (GHAHARI & al. 2009).

Dociostaurus (Stauronotulus) kraussi Ingenitskii, 1897. Type locality (syntypes ♂♀): Semey [*Semipalatinsk*] (Akmolinsk oblast, Kazakhstan).

Arasbaran (East Azerbaijan); Avanloo (East Azerbaijan) (HAVASKARY & al. 2012).

Dociostaurus (Stauronotulus) kurdus Uvarov, 1921. Type locality: Kurdistan (Iran).

Kurdistan (SHUMAKOV, 1963; HOSSEINI & MOFIDI-NEYESTANAK, 2014). Kermanshah and Kurdistan provinces (HODJAT, 2015).

8-3-2. *Leva* Bolivar, 1909. Africa, Middle East, and towards East up to Burma.

In Iran: in North (Alborz; Mazandaran).

Leva hemiptera (Uvarov, 1952). Type locality (holotype ♂): Suda (Asir, Saudi Arabia).

Mazandaran and Minac in Alborz province (GARAI, 2010). Damawand mount (Mazandaran): 2 000 m (Alborz) (HODJAT, 2015)

8-3-3. *Notostaurus* Bey-Bienko, 1933. Northern Africa, Eastern Europe, Asia.

In Iran: almost the whole territory (Ardabil; Alborz; East Azerbaijan; Fars; Gilan; Isfahan; Kerman; Khorasan; Kohgiluyeh & Boyer-Ahmad; Kurdistan; Mazandaran; Qazvin; Semnan; Sistan & Baluchestan; Tehran; Zanjan).

Notostaurus albicornis (Eversmann, 1848), ssp. *albicornis*. Type locality: Krasnoarmeysk [= *Sarepta*] (Volgograd oblast, Russia).

Shiraz, Ardekan, Kakan, Kazerun, Dashte-arjan, Fasa, Mianjangan, Firuzabad, Farrashband, Sarmashad (Fars); (HASHEMI, 1967). Isfahan and Azerbaijan provinces (GHAHARI & al. 2009). Semnan; East Alborz; Khosh-Yeylagh (Fars) (GARAI, 2010). Arasbaran (East Azerbaijan) (HAVASKARY & al., 2012).

Notostaurus albicornis (Eversmann, 1848), ssp. *turcmenus* (Uvarov, 1926). Type locality (holotype ♂): Tedzhen (Turkmenistan).

Arasbaran, Kaleybar (East Azerbaijan); Parsabad (Ardabil) (HAVASKARY & al, 2012).

Notostaurus anaticus (Krauss, 1896). Qazvin (Uvarov, 1925). Type locality (syntypes ♂♀?): Ankara (Turkey).

Tehran (UVAROV, 1938). Kuh-i-Djamal Bariz (Kerman); Nasratabad (Sistan & Baluchestan); Tehran province, 1 300 - 2 200 m; Mishu Dagh (East Azerbaijan) (UVAROV & DIRSH, 1952). 25 km South-East of Sanandaj: 2 200 m (Kurdistan) (DESCAMPS & DONSKOFF (1965). Shiraz, Beyza, Maharlu, Kazerun, Dashte-arjan (Fars); Sisakht, Yasuj (Kohgiluyeh & Boyer-Ahmad) (HASHEMI, 1976). Zagros mounts, Natanz (Isfahan); Zanjan (GARAI, 2010). Arasbaran, Mardanaghum (East Azerbaijan); Larijan (Mazandaran) (HAVASKARY & al., 2012). Kurdistan (HOSSEINI & MOFIDI-NEYESTANAK, 2014). Alborz region; Khorasan province; Zagros mounts; Azerbaijan province; Qazvin; Bam (Kerman); Iranshahr (Sistan & Baluchestan) (HODJAT, 2015).

Notostaurus larensis Soltani, 1978. Bandar-Abbas (Hormozgan). Type locality (holotype): Iran.

Fars, Mansoor-Abad, Firuz-Abad, Kish, Jahrom. Kazerun (Fars) (SOLTANI, 1978; HODJAT, 2016). South Iran (HODJAT, 2015).

8-3-4. *Mizonocara* Uvarov, 1912. Iran, Turkmenistan, Uzbekistan, Kazakhstan.

In Iran: at North (Ardabil; Khorasan).

Mizonocara inornata Mistshenko, 1947, ssp. *inornata*. Type locality (holotype ♂): Atrek River (North Khorasan, Iran).

Caspian sea coasts, Khorasan and Ardabil provinces (Shumakov, 1963). North Iran (Hodjat, 2015).

8-3-5. *Eremippus* Uvarov, 1920. European Russia, Western and South-Western Asia.

In Iran: almost the whole territory (West Azerbaijan; Bushehr; Fars; Gilan; Isfahan; Kerman; South Khorasan; Khuzestan; Lorestan; Qazvin; Semnan; Sistan & Baluchestan).

Eremippus aserbeidshanicus Ramme, 1951. Shah-Abad (Lorestan); Type locality (holotype ♂): Ordubat (Azerbaijan republic).

Makou, Orumieh (West Azerbaijan) (DESCAMPS, 1967).

Eremippus guttatus Mistshenko, 1951, ssp. *guttatus*. Type locality (holotype ♂): Iran.

Qazvin; Semnan (MIRZAYANS, 1959).

Eremippus guttatus Mistshenko, 1951, ssp. *notius* Mistshenko, 1951. Type locality (holotype ♂): Iran.

Khorasan province (HODJAT, 2015).

Eremippus haghghii Descamps, 1967. Type locality (holotype ♂): Khash, near Gusheh (Sistan & Baluchestan, Iran)..

Khash (Sistan & Baluchestan) (DESCAMPS, 1967). Bushehr (HODJAT, 2015).

Eremippus kermanicus Mistshenko, 1976. Type locality (holotype ♀): North Kerman (Iran).

Eremippus onerosus Mistshenko, 1951. Type locality: Turkmenistan.

Khorasan region (HODJAT, 2015).

Eremippus persicus Uvarov, 1929. Type locality (holotype ♂): Serachs (Khorasan, Iran)..

Khorasan; Kashan (Isfahan) (HODJAT, 2015).

Eremippus robustus Mistshenko, 1976. Type locality (holotype ♀): Western Quhistan (into South Khorasan province, Iran).

Khuzestan, West Iran (HODJAT, 2015).

Eremippus simplex (Eversmann, 1859). The type locality of the nominative subspecies is the Southern steppes of Kyrgyzstan; that of *E. s. maculatus* Mistshenko 1951 is Kazakhstan.

Hossein-Abad (Fars); Birjand (South Khorasan) (DESCAMPS, 1967).

Eremippus tenellus Mistshenko, 1951. Type locality (holotype ♂): Armenia republic.

Azerbaijan and Gilan provinces (GARAI, 2010).

8-4. Hypernephini Mistshenko, 1973

8-4-1. *Grigorija* Mistshenko, 1976. Monospecific genus, endemic to South-East Iran (Kerman province).

Grigorija beybienkoi Mistshenko, 1976. Type locality (holotype ♀): vicinity of Kerman (Iran).

8-5. Gomphocerini Fieber, 1853;

8-5-1. *Gomphocerippus* Roberts 1941 (junior synonym: *Glyptobothrus* Chopard, 1952). Maghreb and Eurasia.

In Iran: Western half of territory (Alborz; East and West Azerbaijan; Fars; Golestan; Khorasan; Kohgiluyeh & Boyer-Ahmad; Kurdistan; Mazandaran; Tehran; Yazd).

Gomphocerippus apricarius (Linnaeus, 1758). The type locality of nominative subspecies is the plains of Europe [*Habitat in Europae campis*]; that of *G. a. major* (Pylnov, 1914) is Batumi (Georgia). The type locality of the two other subspecies (*G. a. caucasicus* Mistshenko 1951 and *G. a. cis-caucasicus* Mistshenko 1951) is in Transcaucasia (= North Caucasia). Is the Iranian taxon *G. a. major*?

Sabalan (Azerbaijan); Ab-e-Ali (Tehran) (DESCAMPS, 1967).

Gomphocerippus brunneus (Thunberg, 1815). The type locality of the nominative subspecies is Sweden, that of *G. b. brevis* Klingstedt 1939 is Snappertuna (Southern Finland), and that of *G. b. raggei* (La Greca & al., 2000) is the mouth of river Simeto, near Catania (Sicilia, Italia). What is the Iranian taxon?

Kurdistan (SHUMAKOV, 1963; HOSSEINI & MOFIDI-NEYESTANAK, 2014). Ardekan, Kakan, Sibkhalaj, Bavanat, Kazerun, Dashte-arjan, Firuzabad (Fars); Abarghu (Yazd); Yasuj, Sisakht (Kohgiluyeh & Boyer-Ahmad), Sang-mang (Fars) (HASHEMI, 1976). Gorgan (Golestan); Azerbaijan and Khorasan provinces; Alborz region (HODJAT, 2015).

Gomphocerippus macrocerus (Fischer von Waldheim, 1846) ssp. *macrocerus*. Type locality (holotype ♂): Tbilisi [*Tiflis*] (Georgia).

Between Salmas (= Shahpur) and Rezaieh (West Azerbaijan) (DESCAMPS & DONSKOFF, 1965)

Gomphocerippus macrocerus (Fischer von Waldheim, 1846) ssp. *assimilis* Mistshenko, 1951. Type locality (holotype ♂): Tumanovsky, near Ashgabat (Turkmenistan).

Bostan-Abad (East Azerbaijan,) (GARAI, 2010). Alborz mountains; Azerbaijan province; Caspian sea area (HODJAT, 2015).

Gomphocerippus macrocerus (Fischer-Waldheim, 1946) [no subspecies specified].

Saffiabad, near Behshahr (Golestan); neighboring of Sharif Khan: 1 220 m (Azerbaijan) (UVAROV & DIRSH, 1952, as *Chorthippus macrocerus*). Kurdistan (SHUMAKOV, 1963; HOSSEINI & MOFIDI-NEYESTANAK, 2014). Fasa, Ardekan, Kakan, Shiraz (Fars) (HASHEMI, 1976). Alborz mountains; Azerbaijan province; Caspian sea area (HODJAT, 2015).

Gomphocerippus mollis (Charpentier, 1825), ssp. *mollis*. Locality type (lectotype ♂): Silesia (Poland/Czechia).

Golestan and Mazandaran provinces (GHAHARI & al., 2009). Alborz mountains (HODJAT, 2015).

8-5-2. *Chorthippus* Fieber, 1852. Eurasia and Northern Africa.

In Iran: known on the Western half of territory (East Azerbaijan; Fars; Gilan; Golestan; Ilam; Isfahan; Kurdistan; Mazandaran; Qazvin; Tehran).

Chorthippus albomarginatus ssp. *karelini* (Uvarov, 1910). Type locality: Ural region (Russia).

Remark: some authors consider this taxon as an independent species.

Shiraz (Fars) (HASHEMI, 1976, as *Ch. albomarginatus*). Isfahan, Gilan and Mazandaran provinces (GHAHARI & al., 2009). Bostan-Abad (East Azerbaijan), Avej (Qazvin) (GARAI, 2010). Gorgan (Golestan); Azerbaijan, Khorasan and Ilam provinces (HODJAT, 2015).

Chorthippus dichrous (Eversmann, 1859). Type locality: Orenburg region (South-Western Russia).

25 km South-East of Sanandaj, 2 200 m (Kurdistan); (DESCAMPS & DONSKOFF (1965). Alborz mountains; Azerbaijan (HODJAT, 2015, as *Chorthippus longicornis* Latreille, 1804).

Chorthippus loratus (Fischer von Waldheim, 1846). Type locality: Temperate Asia.

Arasbaran, Kaleybar (East Azerbaijan) (HAVASKARY & al., 2012). Kurdistan and Azerbaijan provinces; Alborz mounts (HODJAT, 2015).

Chorthippus brauneri Znojko, 1928. Type locality: South Russia.

Tehran province, up to 1 330 m; Azerbaijan province, up to 1 250 m (UVAROV & DIRSH, 1952).

8-5-3. **Gomphocerinae** species still not assigned to genus *Chorthippus* or *Gomphocerippus*

“*Chorthippus*” *davatchi* Descamps, 1967. Type locality (holotype ♂): between Shiraz and Kakan (Fars, Iran).

Fars, Shiraz, Kakan (Fars) (DESCAMPS, 1967).

“*Chorthippus*” *giganteus* Mistshenko, 1951. Type locality (syntypes): Kurdistan (Iran).

Zagros mounts; Kurdistan region (HODJAT, 2015).

“*Chorthippus*” *hyrcanus* Bey-Bienko, 1960. Type locality (holotype ♂): Shahrood [*Scharoud i Tasch*], 2 500-3 000m (Semnan, Iran).

Shahrood: 3 000 m (Semnan). DORSA museum, August 1952.

“*Chorthippus*” *savalanicus* Uvarov, 1933. Type locality (holotype ♂): Sabalan mount [*Savalan*] (Ardabil, Iran).

Azerbaijan province (HODJAT, 2015). Afshar Museum collection records from north Iran.

“*Chorthippus*” *mistshenkoi* Avakyan, 1956. (Type locality: ?)

Azerbaijan province (HODJAT, 2015).

8-5-4. *Stauroderus* Bolivar. 1897. Eurasia (and one species in Brazil).

In Iran: at North (Alborz; Gilan; Tehran).

Stauroderus scalaris (Fischer von Waldheim, 1846), ssp. *demavendi* Popov, 1951. Type locality (holotype ♂): Alborz mountains, 40 km North-East Tehran (Teheran province), 2 500m.

Stauroderus scalaris (Fischer von Waldheim, 1846), ssp. *znojkoii* (Miram, 1938). Type locality: Nakhichevan republic (Transcaucasia). North Iran (HODJAT, 2015).

Stauroderus yunnaneus (Uvarov, 1925). Type locality (holotype ♂): Yangtsien (Yunnan, South-Central China). Menjil, Sefid-Rud (Gilan) (UVAROV, 1925).

8-6. Ochrilidiini Brunner von Wattenwyl, 1893

8-6-1. *Gonista* Bolivar, 1898. Africa and Southern Asia.

Present in Iran (Azerbaijan; Gilan; Isfahan; Kerman; Sistan & Baluchestan).

Gonista rotundata Uvarov, 1933. Type locality (holotype ♂): From Tazman to Tagab (Eastern Kerman, Iran).

Zagros mounts; Isfahan; Iranshahr, Taftan mount (Sistan & Baluchestan) (HODJAT, 2015).

Gonista sagitta (Uvarov, 1912). Type locality: Farab (Turkmenistan).

Gilan province (GARAI, 2012). Azerbaijan province (HODJAT, 2015).

8-6-2. *Ochrilidia* Stål, 1873. Southern Europe, Africa, Asia.

In Iran: almost the whole territory (Alborz; Azerbaijan; Bushehr; Fars; Hormozgan; Isfahan; Kerman; Kermanshah; South Khorasan; Khuzestan; Kurdistan; Semnan; Sistan & Baluchestan; Tehran).

Ochrilidia curta Bey-Bienko, 1960. Type locality (holotype ♀): Iranshahr (Sistan & Baluchestan, Iran). Iranshahr (Sistan & Baluchestan) (HODJAT, 2015)

Ochrilidia geniculata (Bolivar, 1913). Type locality (lectotype ♂): El Goléa (Algeria).

Kashan (Isfahan), Haji-Abad (Kermanshah) (GARAI, 2010). Mokran (Sistan & Baluchestan); Isfahan; Bushehr; Kerman (HODJAT, 2015).

Ochrilidia gracilis (Kraus, 1902), ssp. *gracilis*. Type locality (holotype ♂): Ghardaia (M'Zab, Algerian Sahara).

Tehran (UVAROV, 1938, as *Platypterna obtusa* Salfi). South-Western Iran (UVAROV, 1938, as *Platypterna acuta* Bolívar). Zahedan (Sistan and Baluchestan); between Keredj (Alborz) and Tehran (UVAROV & DIRSH, 1952, as *Ochrilidia acuta* (Bolívar)). Ahwaz, Shustar, Dezful (Khuzestan) (SHUMAKOV, 1963). Darab (Fars) (DESCAMPS & DONSKOFF, 1965, as *Ochrilidia obtusa* (Salfi, 1931)).

Ochrilidia orientalis Salfi, 1931. Type locality (holotype ♂): Sarbaz (Sistan & Baluchistan, Iran).

Khuzestan, Alborz and Sistan & Baluchestan provinces; Zagros mounts (SHUMAKOV, 1963).

Ochrilidia persica (Salfi, 1931). Type locality (holotype ♀): Shahrud (Semnan, Iran).

Mokran (Sistan & Baluchestan); Birjand (South Khorasan); Alborz province; Bushehr; Isfahan; Kerman, (HODJAT, 2015).

Ochrilidia tibialis (Fieber, 1853). Type locality (holotype ♀): Kriti.

Kurdistan (HOSSEINI & MOFIDI-NEYESTANAK, 2014).

Ochrilidia filicornis (Krauss, 1902). Type locality (syntypes ♂♀): Oued N'Sa (Algerian Sahara).

Mokran and Iranshahr (Sistan & Baluchestan) (HODJAT, 2015; referenced to SHUMAKOV, 1963).

Ochrilidia hebetata (Uvarov, 1926). Type locality of ssp. *kazaka* Tarbinsky, 1926 (holotype ♂): Uralsk (Kazakhstan); type locality of nominates ssp. (holotype ♀): Turkmenistan and Kazakhstan [*Transcapia*].

Azerbaijan province; Jask, Bandar-Abbas (Hormozgan) (HODJAT, 2015).

Ochrilidia richteri Bey-Bienko, 1960. Type locality (holotype ♀): pass at North of Karwanda (Baluchistan, Pakistan).

Iranshahr, Khash (Sistan & Baluchestan) (HODJAT, 2015; referenced to SHUMAKOV, 1963).

8-6-3. *Oxypterna* Ramme, 1952. Afghanistan and Iran (Sistan & Baluchestan).

Oxypterna afghana Ramme, 1952. Type locality (holotype ♀): Farah (Afghanistan).

Zabol (Sistan & Baluchestan) (MIRZAYANS, 1959).

8-6-4. *Kirmania* Uvarov, 1933. Monospecific genus, endemic to South-East Iran (Kerman; Sistan & Baluchestan).

Kirmania exilis Uvarov, 1933. Type locality (holotype ♂), after OSF: between Podatchi and Kuimurgak (Kerman, Iran). Type locality after the label of a type ♀: South-East of Iranshahr (Sistan & Baluchestan, Iran).

Sistan & Baluchestan and Kerman provinces (MIRZAYANS, 1959).

8-7. Ramburiellini Defaut, 2012

8-7-1. *Ramburiella* (Bolívar, 1906), subgenus *Palaeocesa* Koçak & Kemal, 2010. South Italia, Balkans, Western and Central Asia.

In Iran: at North, West and South-West (Alborz; East and West Azerbaijan; Fars; Golestan; Isfahan; Kohgiluyeh & Boyer-Ahmad; Razavi Khorasan; Kurdistan; Lorestan; Markazi; Tehran).

Ramburiella (Palaeocesa) bolivari (Kuthy, 1907). Type locality: Turkey.

Maranak (Tehran) (UVAROV & DIRSH, 1952). Fars province and North Iran (MIRZAYANS, 1959). Shiraz, Sivand, Abadeh, Khun-Khoreh (Fars) (HASHEMI, 1976). Chenaran (Razavi Khorasan); Kerengan (East Azerbaijan) (JABBARI & *al.* (2015); Kazerun (Fars); Mashhad (Razavi Khorasan); Alborz province; Shiraz (Fars); Zagros mounts (HODJAT, 2015).

Ramburiella (Palaeocesa) foveolata Tarbinsky, 1931. (Type locality:?).

Zahedan-Khash (Sistan & Baluchestan) (UVAROV & DIRSH, 1952). Yasuj, Sisakht (Kohgiluyeh & Boyer-Ahmad) (HASHEMI, 1976). Fars province; Khorambid (Lorestan); Natanz (Isfahan) (GARAI, 2010). Khash (Sistan & Baluchestan); Azerbaijan, Alborz and Khorasan provinces (HODJAT, 2015).

Ramburiella (Palaeocesa) turcomana (Fischer von Waldheim, 1833). Type locality: North-East Iran and Russian "Turkestan". [*Turcomania*].

Pest of cereals in most parts of Iran (MIRZAYANS, 1959). Rezaieh, Kuduk (near Khoy): 2 000 m (West Azerbaijan); 25 km South-East of Sanandaj: 2 200 m (Kurdistan); Akinlu (Kurdistan) (DESCAMPS & DONSKOFF (1965). Shiraz (Fars) (HASHEMI, 1976). Isfahan and Mazandaran provinces (GHAHARI & *al.*, 2009). Mianeh (East Azerbaijan); Arak (Markazi) (GARAI, 2010, HOSSEINI & MOFIDI-NEYESTANAK, 2014). Gorgan (Golestan); Kurdistan, Alborz and Azerbaijan provinces; Zagros mounts (HODJAT, 2015).

8-9. Stenobothrini Harz, 1975

8-9-1. *Stenobothrus* Fischer, 1853. Eurasia and Northern Africa.

In Iran: at North (Mazandaran; Zanjan).

Stenobothrus weneri Adelung, 1907, ssp. *weneri*. Type locality (syntypes ♂♂: Caucasia. North Iran (HODJAT, 2015).

Stenobothrus weneri Adelung, 1907, ssp. *iranicus* Ramme, 1951. Type locality (syntypes): plateau between Bart and Suchede, 2 000 m (Elburz range, Iran).

Damawand mount (Mazandaran) (GARAI, 2010). North Iran (HODJAT, 2015).

Stenobothrus weneri Adelung, 1907 [no subspecies indicated].

Mazandaran province (GHAHARI & *al.*, 2009).

Stenobothrus zubowskyi Bolivar, 1899. Type locality (syntypes ♂♀): Turkey.

Zanjan (GARAI, 2010).

8-9-2. *Omocestus* Bolívar, 1878. Palearctic Eurasia and North Africa.

In Iran, at North-West: Azerbaijan.

Omocestus haemorrhoidalis (Charpentier, 1825). Type locality (holotype ♂): Silesia (Poland/Czechia) [*Habitat in Silesia*].

Remark: maybe it is the ssp. *ciscaucasicus* Mistshenko, 1951 (type locality: Ciscaucasia [= North Caucasia], Southern Russia).

Mahabad, Orumieh (West Azerbaijan) (DESCAMPS, 1967).

Omocestus znojko Mistshenko, 1951. Type locality (syntypes): Tatoni (South-Eastern Azerbaijan republic).

Azerbaijan province (SHUMAKOV, 1963).

8-10. Gomphocerinae genus not assigned to any tribe

8-10-1. *Mesopsis* Bolívar, 1906. Africa, Southern Asia.

In Iran: at Centre and South-East (Isfahan; Kerman; Sistan and Baluchestan).

Mesopsis iranicus (Uvarov, 1933). Type locality (holotype ♂): From Bazman mount (Sistan & Baluchestan, not Kerman) to Tagab ([Kerman?], Iran).

Kerman (MIRZAYANS, 1959). Iranshahr, Khash (Sistan & Baluchestan); Isfahan; Kerman, (HODJAT, 2015)

8-10-2. *Stenohippus* Uvarov, 1926. Africa, Southern Asia.

In Iran: known in West, Centre and South (Fars; Hormozgan; Isfahan; Kerman; Khuzestan; Kurdistan; Qom; Yazd).

Stenohippus mundus (Walker, 1871). Type locality (holotype ♂): Bombay (Maharashtra, India).

Khuzestan and Hormozgan provinces; Central Iran (HODJAT, 2015).

Stenohippus xanthus (Karny, 1907). Type locality (holotype ♂): Gondokoro (Southern Sudan)..

Lar (Fars) (HASHEMI, 1976). Kashan (Isfahan); Kohnooj (Kerman); Kurdistan; Qom; Yazd (HODJAT, 2015).

8-10-3. *Xenocheila* Uvarov, 1833. Monospecific genus, endemic to Iran: in North (Qazvin; Zanjan), Centre (Isfahan) and South-East (Fars; South Khorasan; Sistan & Baluchestan).

Xenocheila zarudnyi Uvarov, 1933. Type locality (holotype ♂): Bundan (South Khorasan, Iran).

Birjand (South Khorasan); Shiraz (Fars); Zanjan, Qazvin, Khorasan, Isfahan and Sistan & Baluchestan provinces (HODJAT, 2015).

9. HEMIACRIDINAE Dirsh, 1956

9-1. Hieroglyphini Bolivar, 1912

9-1-1. *Hieroglyphus* Krauss, 1877 (= *Miramia*, Uvarov, 1933). North Tropical Africa, and Southern Asia.
In Iran: at South-East (Hormozgan; Kerman).

Hieroglyphus perpolita (Uvarov, 1933). Type locality: ? (no indication on OSF)..
Bandar-Abbas (Hormozgan); Kerman (MIRZAYANS, 1959).

10. LOCUSTINAE Kirby, 1825

10-1. Locustini, Kirby, 1825

10-1-1. Locustina Kirby, 1825

10-1-1-1. *Locusta* Linnaeus, 1758. Eurasia, Africa, Australia.

In Iran: at North and South (Alborz; East Azerbaijan; Fars; Razavi Khorasan; Khuzestan; Tehran).

Locusta cinerascens (Fabricius, 1781). Type locality (type lost): Italia [*Habitat in Italia*]. According to CAPRA (1946), vicinity of Turin.

Bahram (near Teheran): 900 m, (UVAROV & DIRSH, 1952, as *Locusta m. migratoria*). North Karaj (Alborz) to Kandovan (East Azerbaijan); South-West Karaj to Eshtehard (Alborz); North-West Karaj to Taleghan (Alborz) (AZMAYESH FARD, 1974, as *Locusta m. migratoria*). Shiraz, Kazerun, Dadin (Fars) (HASHEMI, 1976). Mashhad (Razavi Khorasan) (JABBARI & al., 2015, as *Locusta m. migratoria*). Khuzestan (Hodjat, personal observation).

10-1-1-2. *Oedaleus* Fieber, 1853. Tropical and subtropical parts of Africa, Eurasia and Australia.

In Iran: at North-West, North and South (Alborz; East and West Azerbaijan; Fars; Gilan; Hamadan; Hormozgan; Isfahan; Kurdistan; Mazandaran; Qazvin; Razavi Khorasan; Semnan; Tehran. Zagros mounts).

Oedaleus decorus (Germar, 1825), ssp. *decorus*. Type locality (neotype ♂): Chodz-Tau (Dagestan, South-Western Russia).

Sabzewar (Razavi Khorasan); Tehran province, 900 - 2 200 m; Rudbar (Gilan) (UVAROV & DIRSH, 1952). Mardabat (Tehran); Rezaieh (West Azerbaijan); 25 km South-East of Sanandaj: 2 200 m (Kurdistan); Hosein Abad, Sangar (Gilan) (DESCAMPS & DONSKOFF, 1965). Karaj districts (Alborz) to Malard (Tehran); Kandovan (East Azerbaijan); Taleghan and Eshtehard (Alborz) (AZMAYESH FARD, 1974). Kazerun, Dashte-arjan (Fars) (HASHEMI, 1976). Isfahan and Gilan provinces (GHAHARI & al. 2009). Mashhad (Razavi Khorasan); Natanz (Isfahan); Reineh: in Damawand mount (Mazandaran); Nahavand (Hamadan); Nosrat (Hormozgan); Zagros mounts (GARAI, 2010). Arasbaran, Khomarloo (East Azerbaijan); Janaloo (East Azerbaijan) (HAVASKARY & al., 2012). Chenaran, Kerengan (Khorasan) (JABBARI & al., 2015).

Oedaleus nigrofasciatus (De Geer, 1773). Type locality (holotype ♀): Cape of Good Hope (Cape, South Africa)..

Qazvin (UVAROV, 1925).

Oedaleus senegalensis (Krauss, 1877). Type locality (neotype ♂): Dakar (Senegal).

Bandar-Abbas (Hormozgan); Mashhad, Sabzewar (Razavi Khorasan) (UVAROV & DIRSH, 1952). Mardabat (Tehran) (DESCAMPS & DONSKOFF, 1965). North Karaj (Semnan) to Kandovan East Azerbaijan) (AZMAYESH FARD, 1974). Farrashband, Sarmashad, Juytorki (Fars) (HASHEMI, 1976). Mazandaran and Isfahan provinces (GHAHARI & al., 2009). Mahlaken (Fars) (GARAI, 2012). Kurdistan (HOSSEINI & MOFIDI-NEYESTANAK, 2014).

10-1-1-3. *Brunnerella* Saussure, 1888. Genus endemic to Transcaucasia [= South Caucasia] and Iran.

In Iran: at West, North and South (Alborz; East Azerbaijan; Fars; Isfahan; Khorasan; Kohgiluyeh & Boyer-Ahmad; Kurdistan; Lorestan; Semnan).

Brunnerella mirabilis Saussure, 1888, ssp. *mirabilis*. Type locality (holotype ♂): Ordubad (Azerbaijan republic). [*Armenia* ; *Ordubat*].

North Karaj (Alborz) to Kandovan (East Azerbaijan); North-West Karaj to Taleghan (Alborz) (AZMAYESH FARD, 1974). Ardekan (Fars); Sisakht (Kohgiluyeh & Boyer-Ahmad); Isfahan (HASHEMI, 1976). Lorestan province; Zagros mounts (GARAI, 2010).

Brunnerella mirabilis Saussure, 1888, ssp. *siasovi* Moritz, 1928. Type locality: Turbati Haidari [*Turbet-i-Kheidari*] (North Khorasan, Iran).

Khorasan, Kurdistan and Semnan provinces (SHUMAKOV, 1963).

10-1-1-4. *Scintharista* Saussure, 1884. Africa and Southern Asia.

In Iran: principally known in North-West and South-East Iran (Alborz; East Azerbaijan; Fars; Kerman; South Khorasan; Mazandaran; Semnan; Sistan & Baluchestan).

Scintharista notabilis (Walker, 1870), ssp. *brunneri* Saussure, 1884. Type locality (syntypes): Shahrood (Semnan, Iran) and Ordubad (Azerbaijan republic) [*Persia*; *Shahrud*; *Armenia*; *Ordubad*].

Demavend (Mazandaran) (UVAROV & DIRSH, 1952). Between Khash and Iranshahr (Sistan & Baluchestan) (DESCAMPS & DONSKOFF, 1965). North Karaj (Alborz) to Kandovan (East Azerbaijan); and South-West Karaj to Eshtehard (Alborz) (AZMAYESH FARD, 1974). Ardekan, Kakan (Fars) (HASHEMI, 1976).

Scintharista notabilis (Walker, 1870), ssp. *pallipes* Uvarov, 1941. Type locality: Iran.

Khorasan and Baluchestan provinces (MIRZAYANS, 1959).

Scintharista notabilis (Walker, 1870) [no subspecies indicated].

Khorasan province; Khash (Sistan & Baluchestan), Rafsanjan, Jiroft (Kerman); Zahedan, Zabol (Sistan & Baluchestan); Birjand (South Khorasan) (SHUMAKOV, 1963).

10-1-1-5. *Pyrgodera* Fischer von Waldheim, 1846. Near East, and South-West Asia.

In Iran: at West, North and South (Alborz; Ardabil; East and West Azerbaijan; Chaharmahal & Bakhtiari; Fars (or Bushehr); Gilan; Kerman; Razavi Khorasan; Kohgiluyeh & Boyer-Ahmad; Kurdistan; Mazandaran; Tehran; Zanjan).

Pyrgodera armata Fischer von Waldheim, 1846. Type locality: ex-URSS

Between Rudhend and Delidjai: 1 800 m (Tehran) (UVAROV & DIRSH, 1952). Zanjan; Zagros mounts (MIRZAYANS, 1959). Road of Chemchak: 2 000 m (Alborz); Kuh-e Lalezar, Deh Bakri (*Jebal Barrez*) (Kerman); between Kazerun and Bushehr (Fars, or Bushehr); Akinlu (Kurdistan) (DESCAMPS & DONSKOFF, 1965). Karaj to Taleghan, Kandovan and Eshtehard (Alborz) (AZMAYESH FARD, 1974). Yasuj (Kohgiluyeh & Boyer-Ahmad), Sisakht, Ardekan, Sibkhalaj, Kakan, Shiraz, Darab, Firuzabad, Sargar, Kazerun, Dashte-arjan, Zanganeh, Yasuj, Sisakht (Kohgiluyeh & Boyer-Ahmad) (HASHEMI, 1976). Mazandaran, Gilan, Chaharmahal & Bakhtiari provinces (GHAHARI & *al.*, 2009). Arasbaran, Khomarloo, Mardanaghum, Jolfa (East Azerbaijan); Miandoab (West Azerbaijan); Aslandoz (Ardabil) (HAVASKARY & *al.*, 2012). Kurdistan (HOSSEINI & MOFIDI-NEYESTANAK, 2014). Mashhad (Razavi Khorasan) (JABBARI & *al.* (2015)).

10-1-2. *Acrotylina* Shumakov, 196310-1-2-1. *Acrotylus* Fieber, 1853. Eurasia, Africa and Australia.

In Iran: known at North and South-East (Alborz; East and West Azerbaijan; Gilan; Golestan; Kerman; Qazvin; Mazandaran; Qazvin; Sistan & Baluchestan; Tehran; Zanjan).

Acrotylus insubricus (Scopoli, 1786), ssp. *insubricus*. Type locality (type lost): vicinity of Pavia (Italia).

Karaj (AZMAYESH FARD, 1974). Zagros range; Azerbaijan and Gilan provinces (GARAI, 2010). Shahr-Rey, Varamin (Tehran) (SIANAKI, 2012).

Acrotylus insubricus (Scopoli, 1786), ssp. *inficitus* (Walker, 1870). Type locality (holotype ♀): Egypt.

Iranshahr (Sistan & Baluchestan) (DESCAMPS & DONSKOFF, 1965). [*Nota*: according LA GRECA (1990, in DEFAUT & MORICHON, 2015: 520) this subspecies is typically present in Middle East: Arabia, Iran, Iraq, Kurdistan, Kazakhstan].

Acrotylus insubricus (Scopoli, 1786) [no subspecies indicated].

Enzeli, Menjil (Gilan); Qazvin; (UVAROV, 1925). Various localities in East and West Azerbaijan, Golestan, Kerman, Mazandaran and Tehran provinces (UVAROV & DIRSH, 1952). North-West Karaj to Taleghan (Alborz); South-West Karaj to Eshtehard (Alborz); South Karaj (Alborz) to Malard (Tehran) (AZMAYESH FARD, 1974). Mazandaran, Gilan and Zanjan provinces (GHAHARI & *al.* 2009).

Acrotylus humbertianus Saussure, 1884. Type locality (syntypes ♂♀): Sri Lanka.

Arasbaran, Khomarloo, Mardanaghum, Khomarloo, Marzabad (East Azerbaijan); Janaloo (East Azerbaijan), (HAVASKARY & *al.*, 2012).

Acrotylus longipes (Charpentier, 1845), ssp. *subfasciatus* Bey-Bienko, 1948. Type locality (holotype ♂): Chudzar (Sistan & Baluchestan, Iran).

Mazandaran, Gilan and Zanjan provinces (GHAHARI & *al.* 2009).

Acrotylus patruelis (Herrich-Schäffer, 1838). Type locality (type lost): Dalmatia (Croatia).

Arasbaran, Vinag (East Azerbaijan) (HAVASKARY & *al.*, 2012).

10-1-3. *Oedipodina* Walker, 1871

10-1-3-1. *Oedipoda* Latreille, 1829. Eurasia and Northern Africa.

In Iran: known in North, Centre and South-East (Alborz; East and West Azerbaijan; Fars; Gilan; Golestan; Isfahan; Kerman; Kermanshah; Razavi Khorasan; Kohgiluyeh & Boyer-Ahmad; Kurdistan; Mazandaran; Qazvin; Semnan; Sistan & Baluchestan; Tehran; Zanjan).

Oedipoda aurea Uvarov, 1923. Type locality: Palestine.

Zanjan, Isfahan and Gilan provinces (GHAHARI & *al.*, 2009).

Oedipoda caerulescens (Linnaeus, 1758), ssp. *caerulescens*. Type locality (holotype ♀): South Europe [*Habitat in Meridionalibus*].

Near Behshahr: 10 m (Golestan); Mahmudieh (Tehran) (UVAROV & DIRSH, 1952). Rezaieh, and between Salmas (= Shahpur) and Rezaieh (West Azerbaijan) (DESCAMPS & DONSKOFF, 1965). North Karaj (Alborz) to Kandovan (East Azerbaijan) and Taleghan (Alborz) (AZMAYESH FARD, 1974). Mazandaran and Gilan provinces (GHAHARI & *al.*, 2009). Zagros mounts (GARAI, 2010). Arasbaran, Khomarloo (East Azerbaijan); Janaloo (East Azerbaijan) (HAVASKARY & *al.*, 2012). West Iran (HODJAT & TORK, 2014).

Oedipoda germanica meridionalis Ramme, 1913. Type locality: Sinj, and Peljesac island (Dalmatia).

Known in Iran from Mazandaran and Gilan provinces (GHAHARI & *al.*, 2009).

Oedipoda kurda Descamps, 1967. Type locality (holotype ♂): Karand (Kermanshah, Iran).

Oedipoda miniata (Pallas, 1771), ssp. *miniata*. Type locality (type lost): South of European Russia.

Tehran; Yeزد-i-Khast (Fars); Isfahan (UVAROV, 1938). Gouché (Sistan & Baluchestan) (DESCAMPS & DONSKOFF, 1965). Karaj districts (Alborz) to Taleghan (Alborz), Kandovan (East Azerbaijan), Eshtehard (Alborz) and Malard (Tehran) (AZMAYESH FARD, 1974). Arasbaran, Marzabad, Mardanaghum, Eskinlo, Asheegloo, Kaleybar (East Azerbaijan) (HAVASKARY & *al.*, 2012). Kermanshah (HODJAT & TORK, 2014). Kurdistan province (HOSSEINI & MOFIDI-NEYESTANAK, 2014). Mashhad, Chenaran, Golmakan (Razavi Khorasan); Kerengan (East Azerbaijan) (JABBARI & *al.*, 2015).

Oedipoda miniata (Pallas, 1771), ssp. *atripes* Bey-Bienko, 1951. Type locality (holotype ♂): Parkhar (Tadzhikistan).

Qazvin (UVAROV, 1925). Karaj (Alborz); Azerbaijan province (HODJAT & TORK, 2014).

Oedipoda miniata (Pallas, 1771) [ssp. not indicated].

Mountain at North of Sabzawaran (Kerman); 30 km East from Shahrud (Semnan); Gorgan (Golestan); Tehran province, up to 1 800 m; defile on Aji-Chay, at North of Tabriz (East Azerbaijan); neighbour of Gurmeh Khaneh, Marabad, Miyanduab (West Azerbaijan); neighbour of Sharif Khaneh: 1 220 m (Azerbaijan); (UVAROV & DIRSH, 1952). Ardekan, Kakan, Kazerun, Nowdan, Dashte-arjan, Firuzabad, Farrashband, Sarma-shad, Dehpagan, Sar-gar, Shiraz, Tadun, Arsanjan, Yasuj, Abnahr (Kohgiluyeh & Boyer-Ahmad), Sang mang (Fars); Jahrom, Darab, Bavanat (Fars) (HASHEMI, 1976).

Oedipoda schochii Brunner von Wattenwyl, 1884, ssp. *schochii*. Type locality (syntypes ♂♀): vicinity of Aleppo (Syria) [*Syria, circum Aleppo a Dom Schoch tigurino lecta*].

Kazvin (Uvarov, 1925). Safi-Abad (Golestan); Zagros mounts; Fars, Kurdistan and Qazvin provinces (GARAI, 2010; JABBARI & *al.*, 2015). Arasbaran, Asheegloo (East Azerbaijan). Kurdistan (HOSSEINI & MOFIDI-NEYESTANAK, 2014).

Oedipoda schochii Brunner von Wattenwyl, 1884 [subspecies no indicated]. Mazandaran, Azerbaijan and Tehran provinces (UVAROV & DIRSH, 1952). Rezaieh (West Azerbaijan) (DESCAMPS & DONSKOFF, 1965). North Karaj to Kandovan, and South Karaj to Eshtehard (Alborz) (AZMAYESH FARD, 1974).

10-2. *Parapleurini* Brunner von Wattenwyl, 1893

10-2-1. *Aiolopus* Fieber, 1853. Africa and Eurasia.

In Iran: at West, North Centre and South (Alborz; East and West Azerbaijan; Fars; Golestan; Isfahan; Kerman; Kermanshah; Qom; Sistan & Baluchestan; Tehran; Yazd).

Aiolopus simulatrix (Walker, 1870), ssp. *simulatrix*. Type locality (holotype ♂): Southern Hindustan (India).

Tehran province ; Urmia (= Rezaieh), neighbour of Gurmeh Khaneh (West Azerbaijan); Kadich (Isfahan) (UVAROV & DIRSH, 1952, as *Aiolopus savignyi* (Krauss)). Rafsanjan (Kerman) (DESCAMPS & DONSKOFF, 1965, as *Aiolopus savignyi* (Krauss)). Tehran; Namak-Lake (Qom) (HODJAT & TORK, 2014).

Aiolopus strepens (Latreille, 1804), ssp. *strepens*. Type locality (type lost¹): Bordeaux vicinity (Gironde, France).

¹ DEFAUT & MORICHON (2015:421): the neotype ♀ designated by HOLLIS (1968: 327) is invalid according to article 75.3.6 of ICZN

Near Behshahr: 20 m (Golestan) (UVAROV & DIRSH, 1952). North Karaj (Alborz) to Kandovan (East Azerbaijan); North-West Karaj to Taleghan (Alborz); South-West Karaj to Eshtehard (Alborz) (AZMAYESH FARD, 1974). Arasbaran, Varzeghan (East Azerbaijan) (HAVASKARY & *al.*, 2012).

Aiolopus puissantii Defaut, 2005. Type locality (holotype ♂): Sidi-bou-Knadel (North-West Morocco). Tehran province, 1 300 - 2 200 m); near Behshahr (Golestan); Shahpur (= Salmias): 1 250 m (West Azerbaijan); Kadich: 950 m, and neighbour of Kashan (Isfahan) (UVAROV & DIRSH, 1952, as *Aiolopus thalassinus*). Between Khash and Iranshahr, Zahedan (Sistan & Baluchestan) (DESCAMPS & DONSKOFF, 1965, as *Aiolopus thalassinus*). North Karaj (Alborz) to Kandovan (East Azerbaijan); North-West Karaj to Taleghan (Alborz); South-West Karaj to Eshtehard (Alborz); South Karaj (Alborz) to Malard (Tehran) (AZMAYESH FARD, 1974, as *Aiolopus t. thalassinus*). Fasa, Jahrom, Arsanjan, Mamasani, Nowdan, Abadeh, Khun-Khoreh, Firuzabad, Darab (Fars); Abarghu (Yazd) (HASHEMI, 1976, as *Aiolopus t. thalassinus*). Natanz (Isfahan); Mianeh (East Azerbaijan); Haji-Abad (Kermanshah) (GARAI, 2010, as *Aiolopus t. thalassinus*). Shahr Rey, Varamin (Tehran) (SIANAHI, 2012, as *Aiolopus t. thalassinus*).

10-2-2. *Hilethera* Uvarov, 1923. Africa and Southern Asia.

In Iran: at North and South (Alborz; East Azerbaijan; Bushehr; Fars).

Hilethera aeolopoides (Uvarov, 1922). Type locality (holotype ♂): Muscat (Oman).

Darab, Jahrom, Fasa (Fars) (HASHEMI, 1976).

Hilethera hierichonica Uvarov, 1923. Type locality (holotype ♂): Jericho (Palestine).

Bushehr, Zagros mounts (GARAI, 2010).

Hilethera maculate (Karny, 1907). Type locality: Iran.

North Karaj (Alborz) to Kandovan (East Azerbaijan) (AZMAYESH FARD, 1974). Darab (Fars) (HASHEMI, 1976). Arasbaran (East Azerbaijan); Avandloo (East Azerbaijan) (HAVASKARY & *al.*, 2012).

Hilethera turanica Uvarov, 1925. Type locality: *Turkestan*.

Arasbaran, Varzeghan (East Azerbaijan) (HAVASKARY & *al.*, 2012).

10-2-3. *Mecostethus* Fieber 1852. Eurasia.

In Iran: at North and West (Alborz; East Azerbaijan). Caspian Sea coasts

Mecostethus parapleurus (Hagenbach, 1822), ssp. *parapleurus*. Type locality (type lost): Basel (Switzerland) [*Habitat Basileae*].

North Alborz (MIRZAYANS, 1959). Arasbaran, Khomarloo, Varzeghan, Janaloo (East Azerbaijan) (HAVASKARY & *al.*, 2012).

10-2-4. *Paracinema* Fischer 1853. Africa, Europe, Western Asia.

In Iran: at North-West (West Azerbaijan).

Paracinema tricolor (Thunberg, 1815), ssp. *bisignata* (Charpentier, 1825). Type locality: Portugal, and South France [*Habitat in Lusitania et in Gallia meridionali*].

Rezaieh (West Azerbaijan) (DESCAMPS & DONSKOFF, 1965: 510) [*Nota*: this French paper was the first signalling for Iran of the genus and species; it has been forgotten later].

10-3. Trilophidini Shumakov, 1963

10-4-1. *Trilophidia* Stål, 1873. Africa and South Asia.

In Iran: at South (Hormozgan).

Trilophidia annulata (Thunberg, 1815). Type locality (syntypes ♂♀): China, Japan, Java.

Hormozgan province (GARAI, 2010).

10-4. Bryodemini Bey-Bienko, 1930

10-4-1. *Bryodemina* Bey-Bienko, 1930

10-4-1-1. *Celes* Saussure, 1884. Europe and Asia.

In Iran: at North-West Iran (West Azerbaijan).

Celes variabilis (Pallas, 1771), ssp. *carbonaria* Uvarov, 1917. Type locality: Mtschet, Borzom (Tiflis province, Georgia).

Azerbaijan province (MIRZAYANS, 1959).

10-4-1-2. *Mioscirtus* Saussure, 1888. Iberia, Maghreb, Asia.

In Iran: at West, North-West and South (Alborz; East and West Azerbaijan; Bushehr; Fars; Kermanshah; Tehran).

Mioscirtus wagneri (Eversmann, 1859), ssp. *rogenhoferi* (Saussure, 1884). Type locality (holotype ♀): Bagdad (Iraq) *Bagdad*.

Borazjan (Bushehr); Haji-Abad (Kermanshah); Fars province (GARAI, 2010).

Mioscirtus wagneri (Eversmann, 1859), ssp. *wagneri*. Type locality (holotype ♀): Steppes of Southern Russia.

Tabriz region (East Azerbaijan) (DESCAMPS & DONSKOFF, 1965). North-West Karaj to Taleghan, and South-West Karaj to Eshtehard (Alborz) (AZMAYESH FARD, 1974). Darab (Fars) (HASHEMI, 1976). *Mioscirtus wagneri* (Eversmann, 1859) [no subspecies indicated]. Tehran (UVAROV, 1925). Neighbour of Gurmeh Khaneh (West Azerbaijan) (UVAROV & DIRSH, 1952).

10-4-2. *Sphingonotina* Johnston, 1956

10-4-2-1. *Sphingonotus* Fieber, 1852. South America, Europe, Africa, Asia, Australia.

In Iran: in the whole territory (Alborz; East and West Azerbaijan; Bushehr; Fars; Gilan; Golestan; Hamadan; Isfahan; Kerman; Razavi Khorasan; Kohgiluyeh & Boyer-Ahmad; Kurdistan; Hormozgan; Markazi; Mazandaran; Sistan and Baluchestan; Tehran; Yazd; Zanjan).

Sphingonotus (*Neosphingonotus*) *dentatus* Predtechenskii, 1937. Type locality (holotype ♀): South part of Fars province (Iran) [*Laristan*].

South and East of Iran (MIRZAYANS, 1959).

Sphingonotus (*Neosphingonotus*) *paradoxus* Bey-Bienko, 1948. Type locality (holotype ♂): Chudzar (Sistan & Baluchestan, Iran).

South and East of Iran (MIRZAYANS, 1959).

Sphingonotus (*Neosphingonotus*) *pictus* Werner, 1905, ssp. *onerousus* Mistshenko, 1937. Type locality (holotype ♀): Or-mara (Balochistan, Pakistan) [label of holotype: *Ormara, Brit. Baluch.*].

Tehran and Isfahan provinces (DEY & *al.*, 2018)

Sphingonotus (*Parasphingonotus*) *femoralis* Uvarov, 1933. Type locality (holotype ♂): South Arabian desert. East Iran (DEY & *al.*, 2018).

Sphingonotus (*Sphingonotus*) *barrizensis* Descamps, 1967. Type locality (holotype ♀): *Djebel Barriz, entre Sabzabavar et Deh Bakri* (in Kerman province) (DESCAMPS, 1967).

Sphingonotus (*Sphingonotus*) *caerulans caspicus* Mistshenko, 1937. Type locality (holotype ♀): Lankaran [*Lenkoran*] (Southern Azerbaijan republic).

Babolsar (Mazandaran); neighbour of Sharif Khaneh and Urmia-See: 1 220 m (Azerbaijan) (UVAROV & DIRSH, 1952). Mazandaran and Zanjan provinces (GHAHARI & *al.*, 2009).

Sphingonotus (*Sphingonotus*) *coerulipes* Uvarov, 1922, ssp. *coerulipes*. Type locality (holotype ♂): Qazvin (Iran) [written on label holotype: *Kazvin, N.W. Persia*].

Rezaieh (West Azerbaijan); Akinlu (Kurdistan) (DESCAMPS & DONSKOFF, 1965). North Karaj (Alborz) to Kandovan (East Azerbaijan); South-West Karaj to Taleghan (Alborz) (AZMAYESH FARD, 1974). Isfahan; Zagros mounts; Makou (West Azerbaijan); Zanjan (GARAI, 2010).

Sphingonotus (*Sphingonotus*) *coerulipes* Uvarov, 1922, ssp. *kermanicus* Predtechenskii, 1937. Type locality (holotype ♂): Northern Kerman (Iran).

Ali-Abad, Semrom, Yasuj (Kohgiluyeh & Boyer-Ahmad) (GARAI, 2010). Karaj (Alborz) (AZMAYESH FARD, 1990).

Sphingonotus (*Sphingonotus*) *coerulipes* Uvarov, 1922 [no subspecies indicated].

Various localities in Tehran province; neighbours of Sharif Khaneh and Urmia-See, 1 220 m (Azerbaijan); Aji-Chay, at North of Tabriz: 1 600 m (East Azerbaijan) (UVAROV & DIRSH, 1952).

Sphingonotus (*Sphingonotus*) *eurasius* Mistshenko, 1937, ssp. *eurasius*. Type locality (syntypes): Tedjen (Southern Turkmenistan).

North Karaj (Alborz) to Kandovan (East Azerbaijan); South-West Karaj to Taleghan (Alborz) (AZMAYESH FARD, 1974, 1990).

Sphingonotus (*Sphingonotus*) *fuscus* Predtechenskii, 1937, ssp. *fuscus*. Type locality (holotype): Kurdistan (Iran).

West Iran; Kurdistan (MIRZAYANS, 1959).

Sphingonotus (*Sphingonotus*) *fuscus* Predtechenskii, 1937, ssp. *mistshenkoi*. Type locality (holotype ♂): Hamadan [not *Khamadan*, in spite of OSF] (Iran).

North and East of Iran (MIRZAYANS, 1959). Natanz, Yasuj (Kohgiluyeh & Boyer-Ahmad), Azerbaijan (GARAI, 2010). Karaj (Alborz) (AZMAYESH FARD, 1990).

Sphingonotus (*Sphingonotus*) *intutus* Saussure, 1888. Type locality: Semnan province (Iran). [*Persia*; *Shahrud*].

Sphingonotus (*Sphingonotus*) *isfaghanicus* Predtechenskii, 1937. Type locality (holotype ♀): Isfahan (Iran) [*Isfaghan*].

Ardekan, Kakan, Bavanat (Fars) (HASHEMI, 1976). Shiraz (Fars); Isfahan (DESCAMPS, 1967).

Sphingonotus (*Sphingonotus*) *maculatus* Uvarov, 1925, ssp. *externus* Bey-Bienko, 1960. Type locality (holotype ♂): Iranshahr (Sistan & Baluchestan).

Sphingonotus (*Sphingonotus*) *maculatus* Uvarov, 1925, ssp. *maculatus*. Type locality (holotype): Kazakhstan. North and East of Iran (MIRZAYANS, 1959).

- Sphingonotus (Sphingonotus) minutus* Mistshenko, 1939. Type locality (holotype ♂): Turbati Haidari [Turbet-i-Kheidari] (North Khorasan, Iran). Khorasan province (MIRZAYANS, 1959).
- Sphingonotus (Sphingonotus) nebulosus* (Fischer von Waldheim, 1846) ssp. *discolor* Uvarov 1933. Type locality (holotype ♂): Ziarat valley (Balochistan, Pakistan). Deh Bakri (*Jebal Barrez*), Maskun (*Jebal Barrez*) (Kerman) DESCAMPS & DONSKOFF (1965). Alborz, Khorasan and Mazandaran provinces (GARAI, 2010).
- Sphingonotus (Sphingonotus) nebulosus* (Fischer von Waldheim, 1846), ssp. *persa* Saussure, 1884. Type locality (syntypes): Shahrud (Semnan, Iran) and Ordubad (Azerbaijan republic) [*Persia*; *Shahrud*; *Ordubad*]. Tehran; Yezd-i-Khast (Fars) (UVAROV, 1938). Mountain at North from Sabzawaran (Kerman); mountain near Shahrud: 1 110 m (Semnan); various localities from 1 300 up to 1 800 m in province of Tehran (UVAROV & DIRSH, 1952). Mardabat (Tehran); Lalezar: 2 800 m (Kerman) DESCAMPS & DONSKOFF (1965). North Karaj (Alborz) to Kandovan (East Azerbaijan); South-West Karaj to Taleghan (Alborz) (AZMAYESH FARD, 1974). Gilan and Azerbaijan provinces (GHAHARI & al. 2009). Reineh (Mazandaran); Khorasan province (GARAI, 2010).
- Sphingonotus (Sphingonotus) nebulosus* (Fischer von Waldheim, 1846) [no subspecies specified]. Karaj (Alborz); Chalus road (Mazandaran) (AZMAYESH FARD, 1990).
- Sphingonotus (Sphingonotus) obscuratus* (Walker, 1870), ssp. *brunneri* Saussure, 1884. Type locality (holotype ♀): *Asian Turkey?* [= Asia minor]. Tehran, Province; Markazi province; Houz-Soltan (Tehran) (GARAI, 2010). Karaj (Alborz) (AZMAYESH FARD, 1990).
- Sphingonotus (Sphingonotus) obscuratus* (Walker, 1870), ssp. *apicalis* Saussure, 1884. Type locality (syntypes ♂♀): Shahrood (Semnan, Iran) [*Persia*; *Shahrud*]. Rafsanjan (Kerman) (DESCAMPS & DONSKOFF (1965).
- Sphingonotus (Sphingonotus) octofasciatus* (Serville, 1838). Type locality (holotype ♀): Egypt. At North to Haj Abad, 900 m (Razavi Khorasan); Bandar-Abbas (Hormozgan); Bam (Kerman); Mechhed (Razavi Khorasan); East of Sabzewar (Razavi Khorasan) (UVAROV & DIRSH, 1952). Minab (Hormozgan) DESCAMPS & DONSKOFF (1965) Firuzabad, Farrashband, Darab, Shiraz (Fars) (HASHEMI, 1976). Karaj (Alborz); Kandor (Fars) (AZMAYESH FARD, 1990).
- Sphingonotus (Sphingonotus) pictipes* Uvarov & Dirsh, 1952. Type locality (holotype ♀): Yazd [Yezd] (Central Iran). Maranak (East of Tehran) and Rud Shur (South-West of Tehran) : type locality; (OSF indicates erroneously “Yezd” for type locality: confusion with the type locality of *S. rufipes* Predtechenskii). Tehran; Damavand mountains (Mazandaran); Marounak (Khorasan) (MIRZAYANS, 1959).
- Sphingonotus (Sphingonotus) pilosus* Saussure, 1884. Type locality (holotype ♀): Shahrud (Semnan, Iran). Aji-Chay (at North of Tabriz): 1 600 m (East Azerbaijan); Demavend mountains (Mazandaran) (UVAROV & DIRSH, 1952). North Karaj (Alborz) to Kandovan (East Azerbaijan); North-West Karaj to Taleghan, and South-West Karaj to Eshtehard (Alborz) (AZMAYESH FARD, 1974). Golestan province (GHAHARI & al. 2009). Natanz, Khansar (Isfahan); Zagros mounts (GARAI, 2010). Mashhad, Golmakan, Akhlamad (Razavi Khorasan); Mohsen abad (Isfahan) (JABBARI & al., 2015).
- Sphingonotus (Sphingonotus) rubescens* (Walker, 1870), ssp. *rubescens*. Type locality (holotype ♀): Wâdy Gehneh (Sinai, Egypt). Tehran (UVAROV, 1938). Zahedan, Gouché (Sistan & Baluchestan); Orzuhieh (Kerman); Tehran (DESCAMPS & DONSKOFF (1965). Karaj (Alborz) to Taleghan (Alborz), Kandovan (East Azerbaijan), Eshtehard (Alborz) and Malard (Tehran) (AZMAYESH FARD, 1974). Shiraz, Maharlu, Fasa, Darab, Firuzabad, Sarma-Shad, Farrashband, Kazerun, Nowdan, Dashte-arjan, Dadin, Ardekan, Kakan (Fars); Yasuj, Sisakht (Kohgiluyeh & Boyer-Ahmad) (HASHEMI, 1976). Gilan province (GHAHARI & al. 2009). Natanz (Isfahan); Zagros mounts; Nahavand (Hamadan) (GARAI, 2010).
- Sphingonotus (Sphingonotus) rubescens* (Walker, 1870), ssp. *fasciatus* Mistshenko, 1937. Type locality (holotype ♀): Nono-Voskresenovka (South-Eastern Kazakhstan). Kurdistan (MIRZAYANS, 1959; HOSSEINI & MOFIDI-NEYESTANAK, 2014). Kerman; Mehriz (Yazd) (GARAI, 2010).
- Sphingonotus (Sphingonotus) rubescens* (Walker, 1870) [no subspecies indicated]. Said Abad, Bam, Djamal Bariz (Kerman); Haj Abad, Turbat-i-Haidari, Sabzewar (Razavi Khorasan); Bandar-Abbas (Hormozgan); Aliabad (Golestan); Zahedan (Sistan & Baluchestan); Mahmudieh, Siah-Kuh, Ain-ar-Rashid, rail-station of Kavir (88 km East Tehran) (Tehran) (UVAROV & DIRSH, 1952).

- Sphingonotus (Sphingonotus) rufipes* Predtechenskii, 1937. Type locality (holotype ♀): Yazd [Yezd] (Central Iran).
Yazd (type locality). Damghan (Semnan) (MIRZAYANS, 1959).
- Sphingonotus (Sphingonotus) salinus* (Pallas, 1773). Type locality: Iaikum, Irtin (Western kazakhsatn) [Occurs ad Iaikum et Irtin].
Between Sharif Khaneh and Urmia-See: 1 220 m (Azerbaijan) (UVAROV & DIRSH, 1952). Fars province (GARAI, 2010).
- Sphingonotus (Sphingonotus) satrapes* Saussure, 1884, ssp. *decarinatus* Uvarov, 1933. Type locality (holotype ♂): Masjid-i-Suleiman (Khuzestan, Iran).
North Karaj (Alborz) to Kandovan (East Azerbaijan) (AZMAYESH FARD, 1974, 1990). Talesh (Gilan); Zagros mounts (GARAI, 2010).
- Sphingonotus (Sphingonotus) satrapes* Saussure, 1884, ssp. *satrapes*. Type locality (syntypes): Turkestan and Iran [Turquestania. Persia].
- Sphingonotus (Sphingonotus) satrapes* Saussure, 1884 [no subspecies indicated].
Garmsar (90 km East of Tehran, in Semnan province); Bahram (Tehran) (UVAROV & DIRSH, 1952). Mardabat (Tehran) (DESCAMPS & DONSKOFF (1965). Firuzabad, Farrashband, Sarmashad, Kazerun, Jahrom, Darab, Shiraz, Jereh, Dashte-shur (Fars) (HASHEMI, 1976).
- Sphingonotus (Sphingonotus) savignyi* Saussure, 1884, ssp. *savignyi*. Type locality (syntypes): Chartum (Nubia, Southern Egypt).
Rud Shur (Bushehr) (UVAROV & DIRSH, 1952, as *Sphingonotus savignyi*). Rafsanjan, Deh Bakri (*Jebal Barrez*) (Kerman); between Khash and Iranshahr (Sistan & Baluchestan); Mardabat (Tehran) (DESCAMPS & DONSKOFF (1965, as *Pseudosphingonotus savignyi*). Karaj (Alborz) (AZMAYESH FARD, 1974, 1990). Azerbaijan and Golestan provinces (GHAHARI & al. 2009). Markazi and Khorasan provinces, Houz-e Soltan (Qom) (GARAI, 2010).
- Sphingonotus (Sphingonotus) theodori* Uvarov, 1923, ssp. *iranicus* Mistshenko, 1937. Type locality (holotype ♀): Duzab (Kerman, Iran).
Rud Shur (Bushehr); Mahmudieh (Tehran); near Bunab (Azerbaijan) (UVAROV & DIRSH, 1952). South-West Iran (MIRZAYANS, 1959). Kazerun, Nowdan, Firuzabad, Farrashband, Juytorki, Fasa, Shiraz, Abadeh, Khun-Khoreh, Darab, Estahban, Neyriz, Khaneh-ket, Khorameh (Fars) (HASHEMI, 1976). Bushehr (GARAI, 2010).
- Sphingonotus (Sphingonotus) theodori* Uvarov, 1923, ssp. *theodori*. Type locality (holotype ♀): Wadi Kelt (Palestine).
In most parts of Iran (MIRZAYANS, 1959). Karaj, Taleghan (Alborz); Kandor (Fars) (AZMAYESH FARD, 1990).
- Sphingonotus (Sphingonotus) theodori* Uvarov, 1923 [no subspecies indicates].
Takht-i-Jamshid (Fars) (UVAROV, 1938)
- 10-4-2-2. *Sphingoderus* Bey-Bienko, 1950. Northern Africa, Balkans, Asia.
In Iran: principally known in North and Centre (West Azerbaijan; Gilan; Golestan; Isfahan; Tehran), also in South (Fars).
- Sphingoderus angustus* Descamps, 1967. Type locality (holotype ♀): Shiraz (Fars), 10 km to Astahbanhad (Fars).
- Sphingoderus carinatus* (Saussure, 1888). Tehran (UVAROV, 1938). Type locality (holotype ♀): Biskra (Algeria).
Tehran province; neighbour of Gurmeh (West Azerbaijan); Kadich (Isfahan) (UVAROV & DIRSH, 1952, as *Sphingonotus carinatus* Saussure). Golestan and Gilan provinces (GHAHARI & al. 2009).
- 10-4-2-3. *Helioscirtus* Saussure, 1888. Northern Africa and Western Asia.
In Iran: known in North-West, North East and South (Azerbaijan; Fars; Hormozgan; Kerman; Razavi Khorasan; Khuzestan).
- Helioscirtus moseri* Saussure, 1884, ssp. *moseri*. Type locality (syntypes ♂♂): Turkestan; Iran: shores of Caspian Sea [Turquestania. Persia: Mare Caspium].
East to Sabzewar (Razavi Khorasan) (UVAROV & DIRSH, 1952). Deh Bakri (*Jebal Barrez*, Kerman); (DESCAMPS & DONSKOFF (1965). Hormozgan province (GARAI, 2010).
- Helioscirtus moseri* Saussure, 1884, ssp. *siazovi* Uvarov, 1933. Type locality (holotype ♂): South Iran, Bushehr to Borazjan (Bushehr).
Neighbour of Sharif Khaneh and Urmia-See: 1 220 m (Azerbaijan) (UVAROV & DIRSH, 1952).
- Helioscirtus moseri* Saussure, 1884 [no subspecies indicated].
Persian Gulf; Ahwaz (Khuzestan); Hormozgan and Khorasan provinces (SHUMAKOV, 1963). Fasa, Ardekan, Shiraz, Estahban (Fars); Rud Ghal (Fars) (HASHEMI, 1976).

- 10-4-2-4. *Leptopternis* Saussure, 1884. Northern Africa, eastern Europe and Asia.
In Iran: at North-West and East (Alborz; East Azerbaijan; Kerman; Khorasan; Markazi; Qom; Sistan & Baluchestan; Tehran).
Leptopternis gracilis (Eversmann, 1848). Type locality: Songonia (Lower Volga, Central Russia). Moradabad (Tehran) (UVAROV & DIRSH, 1952). Khorasan province; Khash (Sistan & Baluchestan); Azerbaijan province; central deserts around Qom (SHUMAKOV, 1963). Rafsanjan (Kerman) (DESCAMPS & DONSKOFF, 1965). North Karaj (Alborz) to Kandovan (East Azerbaijan); North-West Karaj to Taleghan (Alborz) (AZMAYESH FARD, 1974). Markazi province; Houz-Soltan (Qom) (GARAI, 2010). Khorasan (Afshar Museum specimen).
- 10-4-2-5. *Hyalorrhhipis* Saussure, 1884. Northern Africa and Southern Asia.
In Iran: at East (Kerman; North Khorasan; Sistan & Baluchestan).
Hyalorrhhipis shestoperoi Uvarov & Moritz, 1929, ssp. *gedrosica* Bey-Bienko, 1960. Type locality (holotype ♀): Saravan (Sistan & Baluchestan).
Hyalorrhhipis shestoperoi Uvarov & Moritz, 1929, ssp. *shestoperoi*. Type locality: between Kerki (Turkmenistan) and Turbati Haidari [*Turbet-i-Kheidari*] (North Khorasan, Iran). Kerman districts (MIRZAYANS, 1959).
Hyalorrhhipis turcmena Uvarov, 1926, ssp. *turcmena*. Type locality (holotype ♀): Mola-Kara (Transcaspia, Turkmenistan) [near to the North Iranian boundary]. North Khorasan province (MIRZAYANS, 1959).
Hyalorrhhipis turcmena Uvarov, 1926, ssp. *grandis* Bey-Bienko, 1960. Type locality (holotype ♀): Iran-shahr (Sistan & Baluchestan).
- 10-4-2-6. *Asphingoderus* Bey-Bienko, 1950. Turkey and Middle East.
In Iran: known at North-West (Hamadan) and South (Fars).
Asphingoderus uvarovites (Mistshenko, 1937), ssp. *similis* Bey-Bienko, 1951. Type locality: between Ankara and Tuz-Goel (Turkey). Hamadan, to North-West Iran (MIRZAYANS, 1959). Ardekan (Fars) (HASHEMI, 1976).
- 10-4-2-7. *Cophotylus* Krauss, 1902. Africa and South Asia.
In Iran: at Centre and South-East (Sistan & Baluchestan; Yazd).
Cophotylus iranicus Dirsh, 1949. Type locality: Deh-Bala (Yazd, Central Iran). Zabol (Sistan & Baluchestan) (MIRZAYANS, 1959).
- 10-4-2-8. *Heliopteryx* Uvarov, 1914. Genus endemic in Turkey and Iran. Principally North and Centre Iran (Alborz; East Azerbaijan; Gilan; Isfahan; Razavi Khorasan; Kurdistan. Also South: Fars).
Heliopteryx humeralis (Kuthy, 1907). Type locality: Bolkar mountains [*Bulgar-Maden*] (Southern Turkey). North Karaj (Alborz) to Kandovan (East Azerbaijan); South-West Karaj to Eshtehard (Alborz) (AZMAYESH FARD, 1974). Gilan and Isfahan provinces (GHAHARI & *al.* 2009). Fars and Kurdistan provinces (GARAI, 2010). Mashhad, Golmakan, Akhلامad (Razavi Khorasan); Kerengan (East Azerbaijan) (JABBARI & *al.* 2015).
- 10-4-2-9. *Phaeonotus* Popov, 1951. Monospecific genus, endemic to South-East Iran (Sistan & Baluchestan).
Phaeonotus pulcher Popov, 1951. Type locality (holotype ♂): Saravan (Sistan & Baluchestan, Iran). Saravan, Bampur, Sarbaz (Sistan & Baluchestan) (POPOV, 1951).
- 10-4-2-10. *Pseudoceles* Bolivar, 1899. Middle East.
In Iran: principally known in North-West (Alborz; East Azerbaijan; Gilan; Mazandaran; Tehran; Zanzan. Also in South: Fars).
Pseudoceles dirshi Popov, 1951. Type locality (holotype ♂): Gardaneh-Bijan (Fars, Iran). Kakan, Komehr, Sia-Sakht, Gardaneh-Bijan 2 500-3 000m (Fars) (POPOV, 1951).
Pseudoceles inornatus Bey-Bienko, 1951. Type locality (holotype ♂): Tehran province (North Iran). Tehran; Alborz (MIRZAYANS, 1959).
Pseudoceles persa (Saussure, 1884). Type locality (syntypes ♂♂): Shah Kuh mount (Isfahan, Iran) [*Persia: Shahkuh*]. Demavend: 1 300 m (Mazandaran) (UVAROV & DIRSH, 1952, as *Pseudoceles violaceus* (Moritz) and *Pseudoceles popovi* Dirsh). Rudbar (Gilan) (UVAROV & DIRSH, 1952, as *Pseudoceles demavendi* Dirsh). North Karaj (Alborz) to Kandovan (East Azerbaijan); South Karaj (Alborz) to Malard (Tehran) (AZMAYESH FARD, 1974). Zanzan; Kandovan (East Azerbaijan) (GARAI, 2010).
Pseudoceles zangezuri Dirsh, 1949. Type locality (holotype ♂): Zangezour mountains (Azerbaijan Republic).

11. OXYINAE Brunner von Wattenwyl, 1893

11-1. Oxyini Brunner von Wattenwyl, 1893

11-1-1. *Oxya* Serville, 1831. Africa and Asia.

In Iran: at North-East and South-East.

Oxya fuscovittata (Marschall, 1836). Type locality (holotype ♀): South-Eastern and South Asia (including Iranian Baluchestan), or Cape of Good Hope [*India orientalis vel Caput bonae spei*]. North-East of Iran, after the map in COPR (1982: 213) (“In rice fields”).

Oxya nitidula (Walker, 1870). Type locality (holotype ♂): Northern India [*Industan*]. South-East Iran. Rice pest (MIRZAYANS, 1959).

12. TROPIDOPOLINAE Jacobson, 1905

12-1. Tropidopolini Jacobson, 1905

12-1-1. *Tropidopola* Stål, 1873. Southern Europe, Africa, Asia.

Present in Iran (Azerbaijan; Fars; Gilan; Kerman; Khuzestan; Mazandaran; Sistan & Baluchestan).

Tropidopola cylindrica (Marschall, 1836), ssp. *iranica* Uvarov, 1926. Type locality: Iran.

Sistan & Baluchestan and Kerman provinces (MIRZAYANS, 1959). Firuzabad, Kazerun (Fars) (HASHEMI, 1976).

Tropidopola cylindrica (Marschall, 1836), ssp. *obtusa* Uvarov, 1926. Type locality (holotype ♀): Qualat-Salat (Iraq).

Abbasi (Khuzestan) (MIRZAYANS, 1959).

Tropidopola turanica Uvarov, 1926 ssp. *caspiica* Uvarov, 1933. Type locality (holotype ♂): Golodnaya steppe (Nadezhdinsky, Uzbekistan).

Mazandaran, Azerbaijan and Gilan provinces (GHAHARI & *al.*, 2009).

Tropidopola turanica Uvarov, 1926 [no subspecies indicated].

North of Iran and Caspian sea shores (MIRZAYANS, 1959).

12-1-2. *Dabba* Uvarov, 1933. Monospecific genus, endemic in South-East Iran (Kerman; Sistan & Baluchestan).

Dabba bampura Uvarov, 1933. Type locality (holotype ♀): Mountains in the South of Bampur (Sistan & Baluchestan).

Jiroft (Kerman: centre) and South Kerman (SHUMAKOV, 1963).

A-A-B. Family DERICORYTHIDAE Jacobson & Bianchi, 1905

1. DERICORYTHINAE Jacobson & Bianchi, 1905

1-1. *Dericorys* Serville, 1833. From North and East Africa up to Mongolia.

In Iran: this genus is in almost the whole territory (East Azerbaijan; Fars; Gilan; Golestan; Hormozgan; Isfahan; Kerman; Khuzestan; Kurdistan; Lorestan; Mazandaran; North Khorasan; Razavi Khorasan; Sistan & Baluchestan; Tehran).

Dericorys albidula Serville, 1838. Type locality (holotype ♀): Egypt, and Mount Lebanon (Lebanon) [*Égypte. Mont-Liban*] [and on a label of type: *desert du Sinai*].

Gorgan (Golestan); North Khorasan; Kerman; Sistan & Baluchestan (MIRZAYANS, 1959). Fars province; Damawand mounts (Mazandaran); Natanz (Isfahan); Lorestan; Alborz mounts (GARAI, 2010). Mashhad, Gonabad (Razavi Khorasan); Gombad (Golestan) (JABBARI & *al.*, 2015).

Dericorys annulata (Fieber, 1853). Type locality: Asia Minor (*Klein-Asien*)

Isfahan (UVAROV, 1938, as *Dericorys roseipennis lazurescens* Uvarov). Bone-e Kuh (Tehran) (UVAROV & DIRSH, 1952, as *Dericorys roseipennis roseipennis*). Kerman and Sistan & Baluchestan provinces (MIRZAYANS, 1959). Shiraz (Fars) (HASHEMI, 1976).

Dericorys cyrtosterna Uvarov, 1933. Type locality (holotype ♂): Nehbendum (Sistan & Baluchestan, Iran). Kerman and Sistan & Baluchestan provinces (Mirzayans, 1959). Hormozgan province (Garai, 2010).

Dericorys tibialis (Pallas, 1773). Type locality (syntypes): Ural River (Siberia, Russia)

Between Rudhend and Delidjai: 1 800 m (Tehran) (UVAROV & DIRSH, 1952). In most parts of Iran (MIRZAYANS, 1959). Mardabat (Tehran) (DESCAMPS & DONSKOFF, 1965). Neyriz, Khorameh, Khaneh-ket (Fars) (HASHEMI, 1976). Gilan and Isfahan provinces (GARAI, 2010).

Dericorys uvarovi Ramme, 1930, ssp. *uvarovi*. Type locality (syntypes): Sardarabat (Armenia)

Tabriz region (East Azerbaijan) (DESCAMPS & DONSKOFF, 1965).

Dericorys uvarovi Ramme, 1930, ssp. *iranica* Mistshenko, 1951. Type locality (holotype ♂): Fars province (Iran).

Yazd; Fars; Abbasi (Khuzestan) (MIRZAYANS, 1959). Between Khash and Iranshahr (Sistan & Baluchestan) (DESCAMPS & DONSKOFF, 1965, as *D. uvarovi uvarovi*). Abadeh, Firuzabad, Far-rashband, Sarmashad (Fars) (HASHEMI, 1976).

- Dericorys vitrea* Bey-Bienko, 1957. Type locality (holotype ♂): Pichin (Sistan & Baluchistan, Iran) Ghasr-ghand, Pichin (Sistan & Baluchistan); Pichin (MIRZAYANS, 1959).
- Dericorys xenosterna* Uvarov, 1933. Type locality (holotype ♀): Sistan & Baluchistan (Iran). Khorasan and Kerman provinces (MIRZAYANS, 1959). Zagros mounts; Kurdistan (GARAI, 2010).
- 1-2. *Farsinella* Bey-Bienko, 1948. Genus endemic to South-East Iran (Sistan & Baluchistan; Kerman).
- Farsinella predtetshenskyi* Bey-Bienko, 1948. Type locality (holotype ♀): Southern Kerman province (Iran). Baluchistan and Kerman provinces (MIRZAYANS, 1959).
- Farsinella uvarovi* Bey-Bienko, 1948. Type locality (holotype ♀): Dezuk River (Sistan & Baluchistan, Iran) Baluchistan and Kerman provinces (MIRZAYANS, 1959).

2. CONOPHYMINAE Mistshenko, 1952

- 2-1. *Conophyma* Zubovski, 1898. Near and Middle East. In Iran: at East (Golestan).
Conophyma pazukii Mirzayans, 1991. Type locality (holotype ♂): Gorgan (Golestan).
- 2-2. *Khayyamia* Koçak, 1981. Genus endemic to South and South-West Iran (Fars; Kohgiluyeh & Boyer-Ahmad; Kurdistan; Sistan & Baluchistan).
- Khayyamia mirzayani* (Popov, 1951), ssp. *kurda* (Descamps, 1967). Type locality (holotype ♂): Kermanshah province (Iran) Kurdistan (HOSSEINI & MOFIDI-NEYESTANAK, 2014).
- Khayyamia mirzayani* (Descamps, 1967), ssp. *mirzayani*. Type locality (holotype ♀): Dinar mountains (Zagros range, Kohgiluyeh & Boyer-Ahmad, Iran), and Kakan (Fars, Iran). Chah-Bahar (Sistan & Baluchistan) (DESCAMPS, 1967).
- Khayyamia mirzayani* Popov, 1951 [no subspecies indicated, but certainly the nominative one]. Komehr (Fars) (POPOV, 1951).
- Khayyamia subaptera* (Bey-Bienko, 1960). Type locality (holotype ♀): Kakhe-Tefan (Sistan & Baluchistan, Iran).
- 2-3. *Zagrosia* Descamps, 1967. Genus endemic to South and South-West Iran (Fars; Kermanshah).
- Zagrosia davatchii* Descamps, 1967. Type locality (holotype ♂): Mahi Dasht (Kermanshah, Iran). Fars province. (DESCAMPS, 1967).
- Zagrosia nigrofasciata* Descamps, 1967. Type locality (holotype ♂): Dacht and Argeague, between Shiraz and Kazerun (Fars, Iran).

3. IRANELLINAE Mistshenko, 1952

- 3-1. *Iranella* Uvarov, 1922. Iraq, Afghanistan and Iran (Kerman; Semnan; South Khorasan; Sistan & Baluchistan).
- Iranella eremiaphila* Uvarov, 1922. Type locality (holotype ♂): Abadekh (Iraq). Bam, Djamal Bariz (Kerman) (UVAROV & DIRSH, 1952). Sistan & Baluchistan; South Khorasan; Damghan (Semnan) (MIRZAYANS, 1959).
- Iranella rugosa* Shumakov, 1956. Type locality (holotype ♀): Bakhrandzerd (Kerman). Bahramdjerd (probably *Bakhrandzerd*) (MIRZAYANS, 1959).
- 3-2. *Iraniobia* Bey-Bienko, 1954. Genus endemic to South Iran (Sistan & Baluchistan).
- Iraniobia mesopsera* Bey-Bienko, 1954. Type locality (holotype ♂): Baluchistan (Sistan & Baluchistan, Iran). Saravan (Sistan & Baluchistan) (MIRZAYANS, 1959).
- Iraniobia mirzayani* Descamps, 1967. Type locality (holotype ♂): Chah-Bahar (Sistan & Baluchistan, Iran). Chah-Bahar (Sistan & Baluchistan) (DESCAMPS, 1967).
- Iraniobia pavlovskii* Bey-Bienko, 1954. Type locality (holotype ♂): Saravan, Bampusht (Sistan & Baluchistan, Iran). Between Khash and Iranshahr (Sistan & Baluchistan) ((DESCAMPS & DONSKOFF, 1965).
- Iraniobia salavatiani* Bey-Bienko, 1954. Type locality (holotype ♂): Saravan (Sistan & Baluchistan, Iran). Saravan, Bampusht (Sistan & Baluchistan) (MIRZAYANS, 1959).
- Iraniobia zarudnyi* (Uvarov, 1933, as *Charora zarudnyi*). Type locality (holotype ♂): Bampur (Sistan & Baluchistan, Iran). Zahedan, Khash (Sistan & Baluchistan) (MIRZAYANS, 1959). Zagros mounts (GARAI, 2010).

- 3-3. *Iraniola* Bey-Bienko, 1954. Monospecific genus, endemic to North Iran: Tehran, Semnan.
Iraniola elbursiana (Ramme, 1929). Type locality (holotype ♂): Chesme-Ali [= Cheshmeh-Ali, = Shar-e Rey] (Tehran, Iran).
 Noukeh (Semnan) (MIRZAYANS, 1959).

A-A-C. Family PAMPHAGIDAE Burmeister, 1840

1. PAMPHAGINAE Burmeister, 1840

1-1. Tropidauchenini Zhang, Yin & Yin, 2003

- 1-1-1. *Saxetania* Mistshenko, 1951. Kazakhstan, Uzbekistan and Iran.
 West Iran (Kermanshah), North Iran (Qazvin; Mazandaran; Semnan; Razavi Khorasan), South Iran (Bushehr; Fars; Kerman) and Centre Iran (Yazd).
Saxetania aelleni Dirsh, 1952. Type locality (holotype ♂): Deh-Bid (Fars, Iran).
 Bam, Djamal Bariz, Sabzawaran (Kerman); (UVAROV & DIRSH, 1952, as *Tropidauchen aelleni*). Maskun (*Jebal Barrez*), Deh Bakri (d°) (Kerman) (DESCAMPS & DONSKOFF, 1965).
Saxetania cultricolis (Saussure, 1887), ssp. *integra* Descamps, 1967. Type locality (holotype ♂): Sarvestan (Fars, Iran)
Saxetania cultricolis (Saussure, 1887) (subspecies not indicated, but probably it is the nominative one; type locality : Ashgabat, Turkmenistan [*Turquestania meridionalis: Achabad*]). Shahrud (Semnan) (UVAROV & DIRSH, 1952).
Saxetania decumana Mistshenko, 1951. Type locality (holotype ♂): Dakipatargun lake (maybe South-Eastern Khorasan, but more probably Northern Sistan & Baluchestan; Iran).
 Bushehr; Kazerun (Fars) (GARAI, 2010).
Saxetania dehbidi (Dirsh, 1952). Type locality (holotype ♂): Deh-Bid (Fars, Iran).
 Borazjan (Bushehr) (GARAI, 2010).
Saxetania edentulum (Uvarov, 1923). Type locality (holotype ♂): Abadeh (Fars, Iran).
 Taft (Yazd) (GARAI, 2010).
Saxetania elbursiana (Ramme, 1929). Type locality (holotype ♀): Shah-Kuh (Shah-Kooh), 2 500 m, in Elburz range (Qazvin, Iran).
 North of Iran; Shah-Kooh (Qazvin) (MIRZAYANS, 1959).
Saxetania irrasa Mistshenko, 1951. Type locality (holotype ♀): Mashhad (Meshed) (Razavi Khorasan, Iran).
Saxetania muricata Mistshenko, 1951. Type locality: Central Khorasan (Iran).
Saxetania onerosa Mistshenko, 1951. Type locality (holotype ♀): Torbat-Heydarieh (Torbete-Heidar) (Razavi Khorasan, Iran).
Saxetania popovi (Dirsh, 1952). Type locality (holotype ♂): Tangeh (North of Kerman province).
Saxetania sabulosa (Uvarov, 1933). Type locality: Iran.
 Kermanshah (MIRZAYANS, 1959).
Saxetania spinosa Mistshenko, 1951. Type locality (holotype ♂): Shahrood (Shahrud) (Semnan, Iran).
 Kuh-i-Nizva: 2 200 - 2 600 m (Mazandaran) (UVAROV & DIRSH, 1952, as *Tropidauchen nizvai* Dirsh 1952). Shahrood (Semnan) (MIRZAYANS, 1959). Khorasan province (GARAI, 2010).
- 1-1-2. *Tropidauchen* Saussure, 1887. This genus is endemic to Iran.
 In Iran, at North (Mazandaran; Semnan), West (Kurdistan ; Kermanshah; Lorestan; Markazi) and South (Chaharmahal a Boyer-Ahmad; Kohgiluyeh & Boyer-Ahmad; Fars).
Tropidauchen escalerai (Bolivar, 1912). Type locality: Gotvend (Khuzestan, Iran) [*Gotvend: Persia*]. (According to ÜNAL, 2016 this specie is possibly synonym to *T. securicolle* Saussure).
 Kurdistan province; Firuzabad (Fars) (MIRZAYANS, 1959). Firuzabad, Sibkhalaj, Farrashband, Shiraz, Abadeh, Didegan, Kazerun, Mamasani, Dashte-Arjan, Bonrud (Fars); Yasuj (Kohgiluyeh & Boyer-Ahmad); Zanganeh (Kermanshah) (HASHEMI, 1976). Shiraz (Fars) (GARAI, 2010). Chagajor, and Kaemenogra, in high valley of Karum (Khuzestan); Shiraz (Fars); Bushehr [*Buschir*] (ÜNAL, 2016). Kakan (Fars) (MIRZAYANS, 1959). Between Kazerun (Fars) and Bushehr (Bushehr) (DESCAMPS & DONSKOFF, 1965). Kohgiluyeh & Boyer-Ahmad province (GARAI, 2010).
Tropidauchen cristatum Mistshenko, 1951. Type locality (holotype ♂): Farahan (Markazi, Iran).
 Farahan, Arak (Markazi) (MIRZAYANS, 1959).
Tropidauchen flavipes Mistshenko, 1951. Type locality (holotype ♂): Semnan (Iran).
 Semnan (MIRZAYANS, 1959). Lorestan province; Damawand mount (Mazandaran) (GARAI, 2010).
Tropidauchen predtetshenskii Mistshenko, 1951. Type locality (holotype ♂): Farahan (Markazi, Iran).
 Farahan, Arak (Markazi) (MIRZAYANS, 1959).
Tropidauchen serratum Mistshenko, 1951. Type locality (holotype ♂): Gorgan (Golestan, Iran) [*Astrabad*].
 Caspian sea regions (SHUMAKOV, 1963).

Tropidauchen securicolle Saussure, 1887. Type locality (lectotype ♂): “Syria” after the descriptor, but according to DIRSH (1952) and ÜNAL (2016) “this is certainly incorrect and the type probably originated from Iran”.

Tropidauchen viridis Bey-Bienko, 1950. Type locality (holotype ♂): Kurdistan (Iran). Kurdistan province and North-West Iran (SHUMAKOV, 1963). Akinlu (Kurdistan) (DESCAMPS & DONSKOFF, 1965).

1-2. Nocarodeini, Bolivar, 1916

- 1-2-1. *Araxiana* Mistshenko, 1951. Monospecific genus, distributed in Transcaucasia (Azerbaijan republic) and Iran. In Iran: at West (Azerbaijan; Hamadan) and East (Razavi Khorasan).
Araxiana woronovi (Uvarov, 1918). Type locality (lectotype ♂): Ordubad (Nakhichevan, Azerbaijan republic) Azerbaijan province; Nahavand (Hamadan); Moghan (Razavi Khorasan) (SHUMAKOV, 1963).
- 1-2-2. *Bufonocarodes* Mistshenko, 1951. Transcaucasia (Georgia) and Iran: West (Alborz/Ardabil; East Azerbaijan; Hamadan; Markazi) and Centre (Isfahan; Yazd).
Bufonocarodes intricatus Mistshenko, 1951. Type locality (holotype ♀): Kharadzi (Khuzestan [Arabistan], Iran). Tabriz (East Azerbaijan) (MIRZAYANS, 1959). Central parts of Iran; Isfahan, Yazd and Hamadan provinces (SHUMAKOV, 1963). Hamadan, Qazvin and Kerman provinces (ÜNAL, 2016).
Bufonocarodes mistshenkoi Descamps, 1967, ssp. *mistshenkoi*. Type locality (holotype ♂): mountains at South-East of Tabriz (East Azerbaijan). West and East Azerbaijan, Ardebil, Isfahan and Kurdistan provinces (ÜNAL, 2016).
Bufonocarodes mistshenkoi Descamps, 1967, ssp. *luteipes* Descamps, 1967. Type locality (holotype ♂): Dodjac, at North of Ardebil (Azerbaijan, Iran).
Bufonocarodes robustus Mistshenko, 1951. Type locality (holotype ♂): Farahan (Ilam, Iran). Varamin, Evin (Tehran) (ÜNAL, 2016).
Bufonocarodes sabalanicus Descamps, 1967. Type locality (holotype ♂): Kinkerlou, at foot of Mount Sabalan (Ardabil). Mount Nodouz (between Mechkinshahr and Ahar, East Azerbaijan) (DESCAMPS, 1967). Kurdistan province (ÜNAL, 2016).
- 1-2-3. *Iranacris* Mistshenko, 1951. Monospecific genus, endemic to West Iran (Markazi).
Iranacris dentatus Mistshenko, 1951. Type locality (holotype ♀): Farahan (Ilam, Iran). Arak (Markazi) (MIRZAYANS, 1959). West Azerbaijan (Mirzayans 1998, in ÜNAL, 2016).
- 1-2-4. *Neoparanothrotetes* Mirzayans, 1991. Genus endemic to South (Kerman) and South-West Iran (Chaharmahal & Bakhtiari; Lorestan).
Neoparanothrotetes borumandi Mirzayans, 1991. Type locality (holotype ♀): Sabzkuh, 2 700 m (Chaharmahal & Bakhtiari, Iran). Ashtran-Kooh, Bakhtiari (Chaharmahal & Bakhtiari); Lorestan (MIRZAYANS, 1991). Chaharmahal & Bakhtiari, Fars, Isfahan and Lorestan provinces (ÜNAL, 2016).
Neoparanothrotetes diamesus (Bey-Bienko, 1957). Type locality (holotype ♀): Zandjan (Kerman according to OSF, Zanjan according to ÜNAL, 2016). Known only from the type locality (ÜNAL, 2016).
- 1-2-5. *Nocaracris* Uvarov, 1928. Balkans and Middle East.
 In Iran: at North-West (Azerbaijan) and North-East (Razavi Khorasan).
Nocaracris cyanipes (Fischer von Waldheim, 1846). Type locality (holotype ♀): Armenia. Azerbaijan province (MIRZAYANS, 1959). Mashhad (Razavi Khorasan) (JABBARI & *al.*, 2015)
Nocaracris rubripes (Motschulsky, 1846). Type locality (holotype ♂): Caucasus (Armenia). North of Iran (MIRZAYANS, 1959, ÜNAL 2016). East Azerbaijan (map in ÜNAL, 2016)
- 1-2-6. *Nocarodes* Fischer von Waldheim, 1846. Jordan and Middle East.
 In Iran: at West (Alborz; East Azerbaijan; Kurdistan: Markazi; Zanjan; Tehran).
 1-2-6a. *Nocarodes* group *serricollis* Fischer von Waldheim, 1846.
Nocarodes serricollis Fischer von Waldheim, 1846. Type locality (holotype ♀): Karabagh (Azerbaijan republic). Jolfa (East Azerbaijan) (MIRZAYANS, 1959, as *N. fragosus*). Azerbaijan and Ardabil provinces (ÜNAL, 2016).
Nocarodes corrugatus Mistshenko, 1951. Type locality (holotype ♀): Molla-Ali (Gilan, Iran). Gharasou (Azerbaijan) (MIRZAYANS, 1959; ÜNAL, 2016).

- Nocarodes scabiosus* Mistshenko 1959, ssp. *scabiosus*. Type locality (holotype ♂): Tabriz (East Azerbaijan, Iran).
Known only from the type locality (ÜNAL, 2016).
- Nocarodes scabiosus* Mistshenko 1959, ssp. *mistshenkoi* Descamps, 1967. Type locality (holotype ♂): mountains at North of Tabriz, from 1 700 m up to 2 000 m (East Azerbaijan, Iran).
Known only from the type locality (ÜNAL, 2016).
- Nocarodes balachowskyi* Descamps, 1967. Type locality (holotype ♂): Queidjaihleb mount, road Ahar-Tabriz (East Azerbaijan, Iran).
- Nocarodes pullus* Mistshenko, 1951. Type locality (holotype ♂): Kutursu (= Ghotoursou), Sabalan mounts (Elburz range, Ardabil province, Iran).
Remark: Ünal (2016) has synonymized the monospecific genus *Savalania* Mistshenko 1951 with the genus *Nocarodes*, based about structure of phallus.
- 1-2-6b. *Nocarodes* group *iranicus* (Werner, 1939).
- Nocarodes keredjensis* (Werner, 1939). Type locality (holotype ♀): Karaj (Alborz, Iran).
Known only from the type locality (ÜNAL, 2016)
- Nocarodes humerosus* Mistshenko, 1951. Type locality (holotype ♀): Farahan, North of Malyat-abad (Ilam, Iran).
Qom; Arak, Farahan (Markazi) (MIRZAYANS, 1959). Ilam province (ÜNAL, 2016).
- Nocarodes crispus* Mistshenko, 1951. Type locality (holotype ♀): .Maragheh (East Azerbaijan, Iran).
Kurdistan and Zanjan provinces (GARAI, 2010). Azerbaijan, Ardabil, Kermanshah, Kurdistan and Zanjan provinces (ÜNAL, 2016).
- Nocarodes iranicus* (Werner, 1939). Type locality (holotype ♀): Karaj (Tehran, Iran).
Semnan; Varamin (Tehran) (MIRZAYANS, 1959, as *N. specialis*). Tehran, Semnan and Kermanshah provinces (ÜNAL, 2016).
- Nocarodes urmianus* Ramme, 1939, ssp. *urmianus*. Type locality (holotype ♂): Danalu, Lake Urmia (Azerbaijan, Iran).
- 1-2-6c. *Nocarodes* group *znojkoii* Miram, 1938.
- Nocarodes nanus* Mistshenko, 1951. Type locality (holotype ♀): Bartaz Pass (Arax Valley, Azerbaijan republic).
Gharadagh (Arax Valley, East Azerbaijan) (MIRZAYANS, 1959).
- Nocarodes ebneri* Ramme, 1951. Type locality (holotype ♂): Kendevan, 3 000 m (Elburz range, Mazandaran, Iran).
Elburz region (SHUMAKOV, 1963). West and East Azerbaijan according Mirzayans (1998), in ÜNAL (2016), but “this records possibly refer to *N. znojkoii* or *N. nanus*”.
- 1-2-8. *Paranothrotres* Mistshenko, 1951. Uzbekistan. Turkey. Syria. Iraq. Armenia.
In Iran: at West (Alborz; Ardabil; Kermanshah; Kurdistan) and North (Semnan; Mazandaran) East Azerbaijan-
- 1-2-8a. *Paranothrotres* group *gotvendicus* (Bolívar, 1912)
- Paranothrotres apicalis* (Bolivar, 1912). Type locality (holotype ♂): Kouh Cherri (Khuzestan, Iran).
Farahan (Ilam); Kaemenogra, in high valley of Karum (Khuzestan) (ÜNAL, 2016).
- Paranothrotres demawendi* (Ramme, 1951). Type locality (holotype ♂): Demawand, above 3 000 m (Elburz range, Mazandaran, Iran).
Damawand mount (Mazandaran) and North Alborz mountain regions (SHUMAKOV, 1963).
- Paranothrotres gotvendicus* (Bolivar, 1912), ssp. *gotvendicus*. Type locality (syntypes): Gotvend (Khuzestan, Western Iran).
Kurdistan and Kermanshah provinces (MIRZAYANS, 1959). North-West Iran and Kurdistan province (SHUMAKOV, 1963).
Remark: according to ÜNAL (2016) this species is known only from the type locality (3 syntypes), and all the other samples identified under this name are in fact *P. opacus* s. l.
- Paranothrotres tenuicornis* Mistshenko, 1951, ssp. *tenuicornis*. Type locality (holotype ♂): Elburz Mounts (Iran).
North Iran, Elburz range: Shahrood (Semnan) (MIRZAYANS, 1959). Tehran (ÜNAL, 2016).
- 1-2-8b. *Paranothrotres* group *nigripes* (Stshelkanovtzev, 1916)
- Paranothrotres schelkovnikovi* Uvarov, 1918. Type locality (lectotype ♂): Urmia (West Azerbaijan, Iran).
Maragheh (in Sabalan mountain, East Azerbaijan) (MIRZAYANS, 1959). Zanjan; Alborz, province; Zagros mounts (GARAI, 2010). Akinlu: 2 000 m (Kurdistan) (DESCAMPS & DONSKOFF, 1965, as *P. opacus schelkovnikovi*). Zanjan province (ÜNAL, 2016).

- Paranothrotres ornatus* Mistshenko, 1951. Type locality (holotype ♂): Saroga-darya, Karadag (East Azerbaijan, Iran).
Azerbaijan (MIRZAYANS, 1959). 60 km West to Ardabil (Ardabil) (DESCAMPS & DONSKOFF, 1965, as *Paranothrotres opacus nigripes*). Sabalan mount (Ardabil); Gilan province (ÜNAL, 2016).
- 1-2-8c. *Paranothrotres* group *opacus* (Brunner von Wattenwyl, 1882).
Paranothrotres opacus (Brunner von Wattenwyl, 1882), ssp. *opacus*. Type locality (lectotype ♂): Shiva (Gilan, North-West Iran) [*Chiva*].
Paranothrotres opacus (Brunner von Wattenwyl, 1882), ssp. *rectus*. Type locality (holotype ♂): Abbas Khan (Lorestan, Western Iran).
Shah Kerem (Kurdistan); Ksar-I Sherifi (Kermanshah) (ÜNAL, 2016)
Paranothrotres ocellatus Mistshenko, 1951. Type locality (holotype ♀): Siah-Güvez (Kurdistan, NW Iran).
- 1-2-8d. *Paranothrotres* group *margaritae* (Miram, 1938).
Paranothrotres citimus Mistshenko, 1951. Type locality (holotype ♂): Tavile, Avroman mounts (Kurdistan, NW Iran [not “Iraq”, as erroneously written in OSF]).
Known only from the type locality (ÜNAL, 2016).
- 1-2-9. *Paranocarodes* Bolivar, 1916. Balkan; Turkey; Eastern Iran (Razavi Khorasan).
- 1-2-8a. *Paranocarodes* group *straubei* (Fieber, 1853)
Paranocarodes straubei (Fieber, 1853). Type locality (lectotype ♂): Brussa [*Bursa*] (NW Turkey).
Mashhad (Razavi Khorasan) (JABBARI & *al.*, 2015). [But this species would be known only from Western Turkey, according to ÜNAL, 2016].
Paranocarodes fieberi (Brunner von Wattenwyl, 1882). Type locality (lectotype ♂): Gallipoli (NW Turkey). [Species known only from Western Turkey, according to ÜNAL, 2016].
Khorasan (JABBARI & *al.*, 2015).

2. THRINCHINAE Stål, 1878

2-1. Thrinchini Stål, 1878

- 2-1-1. *Asiotmethis* Uvarov, 1943. Balkans; European Russia; Northern Middle East (Turkmenistan; Uzbekistan; Kazakhstan); Western Asia (Western Siberia; Kyrgyzstan); China (*partim*); North-Western (Azerbaijan) and North-Eastern Iran (Razavi Khorasan).
Asiotmethis artemisianus Shumakov, 1949. Type locality: Iran.
Khorasan province (MIRZAYANS, 1959).
Asiotmethis turritus (Fischer von Waldheim, 1833). Type locality: Karabagh upland (Azerbaijan).
Neichabour (Razavi Khorasan) (MIRZAYANS, 1959).
- 2-1-2. *Eremocharis* Saussure, 1884. Afghanistan; Eastern (Sistan & Baluchestan; Kerman; Khorasan) and Northern Iran (Semnan).
Eremocharis bampura Uvarov, 1933, ssp. *bampura*. Type locality (holotype ♂): *Kuusha-Larumba*, Bampur (Sistan & Baluchestan, Iran).
Iranshahr, Gouché (Sistan & Baluchestan) (DESCAMPS & DONSKOFF, 1965, as *Eremocharis granulosa bampura*). Gew, Saravan, Crouche (Sistan & Baluchistan) ÜNAL, 2016).
Eremocharis bampura Uvarov, 1933, ssp. *khorasana* Uvarov, 1933. Type locality (holotype ♂): Daki-patargun (Khorasan, Iran).
Khorasan, Sistan & Baluchestan and Kerman provinces (MIRZAYANS, 1959). Between Khash and Iranshahr (Sistan and Baluchestan) (DESCAMPS & DONSKOFF, 1965, as *Eremocharis granulosa khorasana*).
Eremocharis subsulcata (Stål, 1875), ssp. *subsulcata*. Type locality (syntypes ♂♀): Shahrood, in Elburz mountains (Semnan).
Bajestan (South Khorasan) (ÜNAL, 2016).
- 2-1-3. *Eremopeza* Saussure, 1884. From Caucasian republics and Syria to Afghanistan.
In Iran, widely distributed: West Azerbaijan; Bushehr; Fars; Golestan; Hamadan; Hormozgan; Ilam; Isfahan; Kerman; Kermanshah; Razavi Khorasan; Khuzestan; Kohgiluyeh and Boyer-Ahmad; Kurdistan; Lorestan; Mazandaran; Semnan; Sistan & Baluchestan; Tehran; Yazd.
Eremopeza angusta (Uvarov, 1934). Type locality (holotype ♂): Khanagin (Iraq)..
Shiraz (Fars) (HASHEMI, 1976).
Eremopeza bicoloripes (Moritz, 1928). Type locality (holotype ♂): Torbat-Heydarieh (Razavi Khorasan, Iran) [*Turbeti*].
Khorasan province (MIRZAYANS, 1959). Sanandaj, in Zagros mounts (Kurdistan) (GARAI, 2010).
Shirvan (North Khorasan) (ÜNAL, 2016).
Eremopeza cinerascens (Stål, 1875), ssp. *cinerascens*. Type locality (syntypes): Shahrud (Semnan, Iran).

- Sabzewar (Razavi Khorasan); Shahrud: 1 110 m (Semnan) (UVAROV & DIRSH, 1952). Khorasan and Gilan provinces; Central regions (MIRZAYANS, 1959). Tehran, and road of Chemchak: 2 000 m (Tehran) (DESCAMPS & DONSKOFF, 1965). Taft (Yazd) (GARAI, 2010). Varamin, Tehran (Tehran); Bampur (Sistan & Baluchistan) Karaj (West Tehran) (ÜNAL, 2016).
- Eremopeza cinerascens* (Stål, 1875), ssp. *virescens* (Uvarov, 1933). Type locality (holotype ♂): Kum (Iraq).
Kashan (Isfahan); Qom, Tehran, Fars and Sistan & Baluchestan provinces (MIRZAYANS 1959). Natanz (Isfahan); Lorestan province; Zagros mounts (GARAI, 2010). Shiraz (Fars) (HASHEMI, 1976). Near Kerman (ÜNAL, 2016).
- Eremopeza cinerascens* (Stål, 1875) [no subspecies specified].
Isfahan (Afshar Museum specimen).
- Eremopeza festiva* (Bolivar, 1884). Type locality (syntypes): Ordubad, Arax valley (Nakhichevan, Armenia).
North of Azerbaijan (MIRZAYANS, 1959).
- Eremopeza gibbera* (Stål, 1876), ssp. *lata* (Uvarov, 1934). Type locality (holotype ♂): Erbil (Iraq).
Kermanshah (ÜNAL, 2016).
- Eremopeza gibbera* (Stål, 1876) [no subspecies indicated, but probably the ssp. *lata*, because the other ssp. (the nominative one) is in Syria]. Khorasan, Baluchestan, Kerman, Fars, Isfahan, Hormozgan, Ilam, Kerman, Khuzestan (MIRZAYANS, 1959, 1998). Firuzabad, Farrashband, Juytorki, Ghir-Kareezin, Kazerun, Jereh, Dashte-Shur, Dadin, Jahrom, Darab, Parishan-lake (Fars) (HASHEMI, 1976). Mashhad (Razavi Khorasan) (JABBARI & *al.*, 2015).
- Eremopeza gigas* (Kirby, 1914). Type locality (holotype): Quetta (Balochistan, Pakistan).
Isfahan (UVAROV, 1938, as *Tmethis hotsoni* Uvarov). Aliabad (Golestan); Bam, Djamal Bariz (Kerman); Khash-Iranshahr, Nasratabad (Sistan & Baluchistan); Varzan: 1 300 - 2 200 m (Tehran) (UVAROV & DIRSH, 1952). Kerman (Afshar Museum specimen)
- Eremopeza reducta* (Uvarov, 1934). Type locality (holotype ♀): Bushehr [*Bushir*] to Buruzdjun (Bushehr).
Fars, Kermanshah and Khuzestan provinces (MIRZAYANS, 1959). Between Kazerun (Fars) and Bushehr (Bushehr); Rafsanjan (Kerman) (DESCAMPS & DONSKOFF, 1965). Dalaki, Borazjan (Bushehr); Kazerun (Fars); Zagros mounts; Mahmood-Abad (Mazandaran) (GARAI, 2010). Firuzabad, Farrashband, Juytorki, Ghir-Kareezin, Kazerun, Jereh, Dashte-Shur, Dadin, Jahrom, Darab, Parishan-lake (Fars) (HASHEMI, 1976).
- Eremopeza saussurei* (Uvarov, 1918), ssp. *cyanea* Bey-Bienko, 1951. Type locality: Western Khorasan (Iran).
Kerman (MIRZAYANS, 1959). Between Khash and Iranshahr (Sistan & Baluchestan); Sanandaj (Kurdistan); Firuzabad (Fars) (DESCAMPS & DONSKOFF, 1965). Zagros mounts, Makou (West Azerbaijan); Kurdistan (GARAI, 2010). Central and South Iran (ÜNAL, 2016).
- Eremopeza saussurei* (Uvarov, 1918), ssp. *saussurei*. Type locality (syntypes): Danalu (Azerbaijan, Iran).
Azerbaijan, Kurdistan, Hamadan, Isfahan, Fars (MIRZAYANS, 1959). Shiraz (Fars) (HASHEMI, 1976). North-East Iran (and East Turkey) (ÜNAL, 2016).
- Eremopeza saussurei* (Uvarov, 1918), ssp. *violacea* (Uvarov, 1922). Type locality (syntypes): Abadeh (Fars, Iran).
Fars, Kerman and Isfahan provinces, and central regions of Iran (MIRZAYANS, 1959). Shiraz, Arsanjan, Khafrak, Firuz-abad, Sargar, Javarg, Ardekan, Kakan, Komehr, Sibkhalaj, Isfahan, Kazerun, Dashte-Arjan (Fars); Yasuj (Kohgiluyeh & Boyer-Ahmad) (HASHEMI, 1976). Khoram-Abad (Lorestan); Hossein-Abad (Hamedan); Kohgiluyeh & Boyer-Ahmad province (GARAI, 2010). East Iran (ÜNAL, 2016).
- Eremopeza saussurei* (Uvarov, 1918). [no subspecies indicated].
Azerbaijan, Kurdistan, Hamadan, Isfahan and Fars provinces (MIRZAYANS, 1959).
- Eremopeza soltanii* (Ünal, 2016). Type locality (holotype ♂): Dehloran (Ilam, Iran).
- 2-1-4. *Eremotmethis* Uvarov, 1943. Egypt; Arabian Peninsula and Iran (country where it is widely distributed according to MIRZAYANS, 1959).
- Eremotmethis carinatus* (Fabricius, 1775). Type locality (neotype): Jeddah (Saudi Arabia).
Shahrood (Semnan); Khorasan, Baluchestan, Hormozgan and Kerman provinces; Central regions; Zagros mounts (GARAI, 2010). Dehloran (Ilam); near Bampur (Sistan & Baluchistan); near Kerman; North to Bandar Abbas (Hormozgan); Lingeh (Hormozgan, Lar (Fars), Saravan, Suran (Sistan & Baluchistan); Khar (Tehran), Sabsevaran (Kerman); Qaen *Kain*] (South Khorasan); Khorasan province (ÜNAL, 2016).

- 2-1-5. *Iranotmethis* Uvarov, 1943. Genus endemic to Iran: at West (Alborz; West Azerbaijan; Kermanshah; Khuzestan; Kurdistan), Centre (Isfahan), North (Tehran) and South (Chaharmahal & Boyer-Ahmad).
Iranotmethis cyanipennis (Saussure, 1884), ssp. *cyanipennis*. Type locality (lectotype ♂): Iran. Khuzestan; West of Iran (MIRZAYANS, 1959). Akinlu (Kurdistan) (DESCAMPS & DONSKOFF, 1965). Dardjazin, Dablabad (Hamadan) (ÜNAL, 2016).
Iranotmethis cyanipennis (Saussure, 1884), ssp. *kurdus* Bey-Bienko & Mistshenko, 1951. Type locality (holotype ♀): Khane (in valley of Lakhidzhan, Kurdistan, Iran). Tehran (MIRZAYANS, 1959).
Iranotmethis cyanipennis (Saussure, 1884), ssp. *iranicus* (Werner, 1939). Type locality (holotype ♂ [but holotype ♀ according to OSF]): Karaj (*Keredj*, Alborz [or Tehran? cf. ÜNAL, 2016: 67]).
Iranotmethis luteipes Bey-Bienko, 1951. Type locality (holotype ♀): Kashan (Isfahan, Iran). Chagajor (High valley of Karum, Khuzestan) (ÜNAL, 2016).
Iranotmethis persa (Saussure, 1888), ssp. *persa*. Type locality: Iran. Rezaieh (West Azerbaijan) (MIRZAYANS, 1959).
Iranotmethis persa (Saussure, 1888), ssp. *zagrosi* (Uvarov, 1933). Type locality (holotype ♂): Harunabad (Kermanshah, Iran). Kurdistan, Kermanshah and Khuzestan provinces (MIRZAYANS, 1959). Chagajor, Sefid (High Karum, Khuzestan) (ÜNAL, 2016).
- 2-1-6. *Melanotmethis* Bey-Bienko, 1948. Turkmenistan and North-East Iran (North Khorasan).
Melanotmethis fuscipennis (Redtenbacher, 1889), ssp. *unicolor* (Uvarov, 1933). Type locality: Buzhnut (North Khorasan, Iran).
Melanotmethis fuscipennis (Redtenbacher, 1889), ssp. *fuscipennis*. Type locality (syntypes ♂♀): Turkmenistan. North Khorasan (MIRZAYANS, 1959).
- 2-1-7. *Strumiger* Zubovski, 1896. Kazakhstan, Afghanistan and East Iran (Khorasan; Kerman).
Strumiger desertorum Zubovski, 1896, ssp. *persa* Uvarov, 1933. Type locality (lectotype ♂): Atkul, SW of Lake Namaksar (South Khorasan, Iran) Khorasan and Kerman provinces (MIRZAYANS, 1959). Podachi-Kuimurgak (Kerman) (ÜNAL, 2016).
- 2-1-8. *Thrinchus* Fischer von Waldheim, 1833. Kazakhstan; Western China; North Iran (Kurdistan; Razavi Khorasan)
Thrinchus arenosus Bey-Bienko, 1948, ssp. *arenosus*. Type locality (holotype ♂): Kazakhstan. Kurdistan; Torbat-Heydarieh (Razavi Khorasan) (MIRZAYANS, 1959).
- 2-1-9. *Tmethis* Fieber, 1853. Northern Africa (from Morocco to Egypt), up to Afghanistan and Iran.
Tmethis festivus (Saussure, 1884). Type locality (syntypes ♂♀): Iran, and Georgia (Caucasus) [*Persia. Caucasus; Georgia*]. West of Iran (MIRZAYANS, 1959, as *T. pulchripennis*).

A-B. Superfamily PYRGOMORPHOIDEA Brunner von Wattenwyl, 1874

A-B-A. Family PYRGOMORPHIDAE Brunner von Wattenwyl, 1874

1. PYRGOMORPHINAE Brunner von Wattenwyl, 1882

1-1. *Atractomorphi* Bolivar, 1905

- 1-1-1. *Atractomorpha* Saussure, 1862. Africa and Southern Asia.
 In Iran: Sistan & Baluchestan province.
Atractomorpha acutipennis (Guérin-Méneville, 1844), ssp. *acutipennis*. Type locality (neotype ♀): Nossi-Bé (Madagascar). Sistan & Baluchestan province (MIRZAYANS, 1959).

1-2. *Chrotogonini* Bolívar, 1904

- 1-2-1. *Chrotogonus* Serville, 1836. Widely distributed in Africa, Central and Western Asia. Western (East and West Azerbaijan), Central (Yazd) and South-Eastern Iran (Fars; Sistan & Baluchestan).
Chrotogonus (Chrotogonus) trachypterus (Blanchard, 1836), ssp. *robertsi* Kirby, 1914. Type locality: Bombay (India) [*Cette espèce vient de Bombay*]
 Aliabad (Golestan); Zahedan, Khash, Iranshahr (Sistan and Baluchestan) (UVAROV & DIRSH, 1952). Fasa, Lar (Fars) (HASHEMI, 1976). Yazd (GARAI, 2010). Arasbaran (East Azerbaijan); Miandoab (West Azerbaijan) (HAVASKARY & al., 2012).
- 1-2-2. *Tenuitarsus* Bolivar, 1904. From Mauritania to India.
Tenuitarsus angustus (Blanchard, 1836). Type locality (holotype ♀): Cairo (Egypt).

Sistan & Baluchestan province (MIRZAYANS, 1959).

1-3. *Pyrgomorphini* Brunner von Wattenwyl, 1882

1-3-1. *Pyrgomorpha* Serville, 1838. From Iberia/France and Africa up to Kazakhstan, Western China and Mongolia.

In Iran, widely distributed: East and West Azerbaijan; Fars; Gilan; Hormozgan; Kerman; Razavi Khorasan; South Khorasan; Kurdistan; Sistan and Baluchestan; Tehran.

Pyrgomorpha (Pyrgomorpha) bispinosa Walker, 1870, ssp. *deserti* Bey-Bienko & Mistshenko, 1951. Type locality : Samarkand (Uzbekistan).

Orzuhieh (Kerman) (DESCAMPS & DONSKOFF, 1965). Gilan and Hormozgan provinces (GARAI, 2010).

Pyrgomorpha (Pyrgomorpha) conica (Olivier, 1791). Type locality (neotype ♀): Southern provinces of France [*Provinces méridionales de la France*].

Bam, Djamal Bariz (Kerman); Nasratabad, Khash (Sistan & Baluchestan); Birjand (South Khorasan) (UVAROV & DIRSH, 1952). Widely distributed (MIRZAYANS, 1959). Kazerun, Nowdan. Darab, Jahrom, Fasa, Shiraz, Arsanjan. Firuzabad (Fars) (HASHEMI, 1976).

Pyrgomorpha (Pyrgomorpha) cognata Krauss, 1877, ssp. *captutorugosa* Hsiung, 1997. Type locality (holotype ♂): Khor Arbaat Delta (Sudan).

Mashhad (Razavi Khorasan) (JABBARI & *al.*, 2015).

Pyrgomorpha (Pyrgomorpha) guentheri Burr, 1899. Type locality (syntypes): Seir (North-Western Iran).

[Synonym : *Pyrgomorphella predtetshenskii* Bey-Bienko, 1951, according to Kevan & *al.*, 1975.]

Mishu Dagh: 1 700 m (East Azerbaijan); Rud Shur, Mahmudieh (Tehran) (UVAROV & DIRSH, 1952, as *Pyrgomorpha brachyptera* Bolivar). North-West and Central Iran (MIRZAYANS, 1959).

Rezaieh (West Azerbaijan) (DESCAMPS & DONSKOFF, 1965). Bostan-Abad, Mianeh (East Azerbaijan) (GARAI, 2010). Arak (Markazi); Hamadan; Kurdistan (MIRZAYANS, 1959, as *Pyrgomorphella predtetshenskii*)

B. Infraorder TETRIGIDEA Rambur, 1834.

B-A. Superfamily TETRIGOIDEA Rambur, 1834.

B-A-A. Family TETRIGIDAE Rambur, 1834.

1. TETRIGINAE Rambur, 1838

1-1. Tetrigini Rambur, 1838

1-1-1. *Ergatettix* Kirby, 1914. From Fars province in Iran up to China and Indonesia.

Ergatettix dorsifera (Walker, 1871). Type locality (holotype ♂): Bombay (Maharashtra, India).

Jahrom, Kazerun (Fars) (HASHEMI, 1976). "Iran" (INGRISCH, 2001: 152).

Ergatettix siasovi (Moritz, 1928). Type locality: Iran [*Persia*].

1-1-2. *Hedotettix* Bolivar, 1887. Africa and Southern Asia.

In Iran: Fars; Kerman; Khorasan; Sistan and Baluchestan.

Hedotettix alienus Uvarov, 1936. Type locality (holotype ♀): Umm a Khisa, Hasa (Arabian Peninsula).

Kerman, Khorasan and Sistan & Baluchestan provinces (MIRZAYANS, 1959). Shiraz, Fasa, Jalian (Fars) (HASHEMI, 1976).

1-1-3. *Paratettix* Bolivar, 1887. Widely distributed in Americas, Europe, Africa, Asia and Australia.

In Iran: Kerman; Khuzestan; Lorestan; Sistan & Baluchestan; Tehran.

Paratettix histricus (Stål, 1861). Type locality (holotype ♂): Java (Malaysia).

Sistan & Baluchestan (MIRZAYANS, 1959).

Paratettix iranicus Uvarov & Dirsh, 1952. Type locality (syntypes): Häfthos, North of Tehran (Tehran, Iran).

Paratettix obliterated Bey-Bienko, 1951, ssp. *iranicus* Bey-Bienko, 1951. Type locality (holotype ♀): Ordubad (Araks river, Azerbaijan republic).

Lorestan, Khuzestan, Kerman and Sistan & Baluchestan provinces (MIRZAYANS, 1959).

Paratettix uvarovi Semenov 1915. Type locality: West Turkmenistan and West Kazakhstan [*Habitat tota provincial Trancaspica*].

North of Teheran (UVAROV & DIRSH, 1952). North of Iran (MIRZAYANS, 1959).

1-1-4. *Tetrix* Latreille, 1802. Widely distributed in North America, Europe and Asia. Also known in South America, Africa and Australia.

In Iran: Alborz; Gilan; Kohgiluyeh & Boyer-Ahmad; Tehran.

Tetrix depressa Brisout de Barneville, 1848. Type locality (holotype ♀, lost): Fontainebleau (Seine-et-Marne, France).

Varzan: 1 300 - 2 200 m (Tehran) (UVAROV & DIRSH, 1952). North of Iran (MIRZAYANS, 1959). Yasuj, Abnahr (Kohgiluyeh & Boyer-Ahmad); Ardekan, Kakan, Jahrom, Firuzabad (Fars); Sang-mang (Fars) (HASHEMI, 1976); Khomer, Bostan Abad (East Azerbaijan) (GARAI, 2010).

Tetrix bolivari Saulcy, 1901. Type locality (types lost): France, in departments Aude, Moselle (vicinity of Dieuze) and Alpes-de-Haute-Provence departments (according to DEFAUT & MORICHON, 2015: 115).

Caspian sea coasts, Northern Alborz mountains (SHUMAKOV, 1963).

Tetrix tartara Bolivar, 1887, ssp. *tartara*. Type locality (syntypes): *Turkestan*.

Rasht (Gilan) (BENEDIKTOV, 2014).

[*Tetrix tenuicornis* (Sahlberg, 1891), ssp. *tenuicornis*. Type locality: Finland.

According to the map in OSF this species would be present in Iran; but we have not been able to identify the bibliographical reference.].

C. Infraorder TRIDACTYLIDEA Brullé, 1836.

C-A. Superfamily TRIDACTYLOIDEA Brullé, 1836.

C-A-A. Family TRIDACTYLIDAE Brullé, 1836.

1. TRIDACTYLINAE Brullé, 1836

1-1. *Xya* Latreille, 1809. Africa, Europe, Asia, Australia. Known in Western (Azerbaijan) and South-Eastern Iran (Fars, Kerman).

Xya variegata Latreille, 1809. Type locality (lectotype ♀): Nice (Alpes-Maritimes department, France). Azerbaijan province.

Xya japonica (Haan, 1844). Type locality: Japan.

West and South Iran (MIRZAYANS, 1959). Jahrom, Kazerun, Dadin, Dashte-arjan, Firuzabad (Fars); Zangian (Kerman) (HASHEMI, 1976).

1-2. *Asiotridactylus* Günther, 1995. Southern and Eastern Africa, Western Asia and India.

In Iran: at West (Azerbaijan).

Asiotridactylus fasciatus (Guérin-Méneville, 1844). Type locality: unknown.

Azerbaijan province (MIRZAYANS, 1959, as *Tridactylus savignyi*).

Key to families, subfamilies and tribes of recorded species of Acrididea in Iran

| | | |
|---|---|--|
| 1 | Pronotum with pointed and elongated apex, covers the abdomen and wings | TETRIGIDAE, Tetriginae, Tetrigini |
| - | Pronotum without an elongated apex extending over the abdomen. | 2 |
| 2 | Surface of hind femur with regular feather shaped ridges, or with head conical. (Femur extremely narrow.) | 3 |
| - | Surface of hind femur reticulated with irregular ridges or with linear tubercles. | 35 |
| 3 | Front edge of mesosternal interspace strongly convex towards the back. (Antennal segments slightly thickened in the apex. Foveolae, roundly triangular or concave. Prosternum between the bases of coxa swollen but without a process. Pronotum short, with low indistinct carina, or transverse grooves. Body length 8-15 mm.) | ACRIDIDAE, Egnatiinae, Egnatiini |
| - | Front edge of mesosternal interspace straight or concave. | 4 |
| 4 | Prosternum, between frontal coxa, with conical, cylindrical, or wedge shaped projection. | 5 |
| - | Prosternum without projection, sometimes with a tumor shaped elevation. | 18 |
| 5 | Wings complete, occasionally exposing up to two terminal abdominal segments. | 8 |
| - | Wings absent or short, exposing more than four abdominal segments, or narrowed and ribbon shaped. | 6 |

- 6 Completely wingless.
(Tympanal organ and foveola absent or indistinct. Pronotum with a low median carina. Male last abdominal tergite split in the middle. Cerci long, with sides strongly compressed).
..... **DERICORYTHIDAE, Conophyminae, Conophymini**
- Tegmina abbreviated, short, or long ribbon-like. [**ACRIDIDAE, Catantopinae**]. 7
- 7 Foveolae developed, but not margined. Lateral carina of pronotum convergent in front of the first transverse groove. (Pronotum rugose. Metazona short, half the length of prozona. Fastigium long and narrow, with deep sulci. Frons oblique. Median carina of pronotum low, interrupted by rear transverse groove).
..... **ACRIDIDAE, Catantopinae, Paraconophymatini**
- Foveolae absent. Lateral carina of pronotum very weak.
(Pronotum greatly broadened laterally. Tegmina long and narrow, five times longer than broad and parallel sided.)
..... **ACRIDIDAE, Catantopinae, Wiltshirellini**
- 8 ♂♂ cerci conical and shorter than the last abdominal sternite; if longer, hairy or with apical rim.
..... 9
- ♂♂ cerci longer than the last abdominal sternite, or broad. 16
- 9 Hind tibiae with 16-22 dorsal spines. **ACRIDIDAE, Catantopinae, Uvaroviini**
- Hind tibiae with less than 16 dorsal spines. Foveolae absent or indistinct. 10
- 10 Head much shorter than pronotum. 11
- Head normal, about the length of pronotum [**ACRIDIDAE**]. 12
- 11 Body shape dorso-ventrally flat. Pronotum flat, with affected median carina. Meso- and metasternal interspaces distinctly separated. (Head small and shorter than pronotum.)
..... **DERICORYTHIDAE, Iranellinae, Iranellini**
- Body not flat dorso ventrally. Pronotum with a low median carina. Mesosternum with a narrow interspace. Meso and metasternal lobes not contiguous.
(No foveolae. Hind tibiae in the distal part flatly widened, with sharp marked margins. Hind tibiae have 6-9 spines on outer margins.)
..... **ACRIDIDAE, Oxyinae, Oxyini**
- 12 Body slender. Foveolae absent.
(Face sloping. Prosternum with a short cone-like process between the coxae of the fore-leg. Pronotum with a low median carina. Tegmina strongly abbreviated. Spines in the lower part of the tibiae long, projecting upward. Metathorax narrow, its greatest width 1/2 to 2/3 of meso- and metathorax combined. Ovipositor widened toward the tip, and with dorsal valve longer than ventral one.)
..... **ACRIDIDAE, Catantopinae, Diexini**
- Body cylindrical or locust-like. (Foveolae usually present.) 13
- 13 Head a little longer than pronotum. Frons slanting. Foveolae present. Arolium, between claws wide, large and plate-like.
(Meso and metasternal lobes contiguous. ♂♂ cerci hairy, broad and flat at apices.)
..... **ACRIDIDAE, Tropidopolinae, Tropidopolini**
- Head a little shorter than pronotum. Frons perpendicular to occiput, sometimes slanting. Foveolae present or absent. Arolium bristle shaped. (Body shape locust-like, not cylindrical.) 14
- 14 Pronotum with four transverse grooves.
(♂♂ cerci conical and weakly bent inward. Prosternal process wide and wedge shaped, flattened with a triangular incision on the apex. Body slender, and head much shorter than pronotum. Without foveolae. Antennae reaching beyond the posterior margin of the pronotum. Pronotum with a low median carina and without lateral carina. Tegmina narrow, especially when it approaches its apex. Wings elongate and triangular.)
..... **ACRIDIDAE, Hemiacidinae, Hieroglyphini**

- Pronotum with 2-3 transverse grooves. 15
- 15 Mesosternum with long side grooves, 1,5 times longer than their inter-space.
..... **ACRIDIDAE, Cyrtacanthacridinae, Cyrtacanthacridini**
- Mesosternal side grooves shorter than 1,5time the length of inter-space. 16
- 16 ♂♂ cerci long and narrow, or wide and bent down.
..... **ACRIDIDAE, Eyrepocnemidinae, Eyrepocnemidini**
- ♂♂ cerci wide and not bent down, with apical lobes. 17
- 17 ♂♂ cerci without apical teeth, sometimes bent up. **ACRIDIDAE, Catantopinae, Catantopini**
- ♂♂ cerci with two apical teeth. **ACRIDIDAE, Calliptaminae, Calliptamini**
- 18 Antennae filiform with cylindrical or flatly rectangular segments. Foveolae absent or variable in shape
..... 19
- Antennae with wider basal segments narrowed toward the apex. Foveolae rectangular
..... 34
- 19 Labium with rounded outer lobe between the labial palps. Pronotum usually with dorsal and lateral carina.
Tegmina often with a projection in anterior part. Apical segments of antenna narrow por wider than middle
segments. Sometimes brachypterous, or with X-shaped marking. 20
- Labium without rounded projection between palps. Lateral carina often affected medially and incurved. Apical
segments of antennae not wider 21
- 20 Tegmina often with marginal basal projection. Sometimes brachypterous or with X marking on pronotum. It
may have slit shaped tympanum (*Gomphocerippus*) Or with rounded and semicircular tympanum (*Chorthip-
pus*) **ACRIDIDAE, Gomphocerinae, Gomphocerini**
- Tegmina at anterior margin straight and without marginal basal projection. Precostal field of tegmina narrow-
ing by approaching the apex. Cubital field of wings not wide.
..... **ACRIDIDAE, Gomphocerinae, Stenobothrini**
- 21 Median carina of pronotum usually high.
(Frontal ridge wide and flat. Pronotum cylindrical or roof shaped, with sharp and mostly raised median carina,
it may be shield-like: *Pyrgodera*.) **ACRIDIDAE, Locustinae, Locustini**
- Pronotum usually with low median carina, sometimes rough with tubercles or interrupted at crossing point with
median carina 22
- 22 Wings normally coloured and with dark band, but in *Celes* only the apex is darkened. If the median carina of
pronotum is high, with an imperfect X marking: *Oedaleus*. In *Oedipoda* hind femora has a high plate-like dor-
sal carina, abruptly interrupted (entire in the other two genera). *Mioscirtus* has a saddled shape pronotum and a
sharp median carina **ACRIDIDAE, Locustinae, Oedipodini**
- Wings clear, if coloured or with dark bands, pronotum saddle shaped and median carina not sharply project-
ted 23
- 23 Foveolae absent. Antennae flattened in basal segments. Pronotum with distinct and complete lateral carina. (In *Du-
roniella* mesosternal interspace distinct. Metasternum with separated lobes, but in ♂♂ may be contiguous in poster-
ior parts.) **ACRIDIDAE, Acridinae, Phlaeobini**
- Foveolae present; if absent, median carina of pronotum very high or saddle shaped. Antennae if flattened in
basal segments, head conical 24
- 24 Foveolae very small or triangular, or irregularly rounded. 25
- Foveolae rectangular; Tegmina with or without intercalata. 27

- 25 Pronotum saddle shaped. 26
 - Pronotum cylindrical, if saddle shaped with tubercles. 28
- 26 Tegmina with a distinct intercalata vein in median field. Body hairless (except in *Sphingonotus pilosus*) or pronotum longer than 1.4 times the length of head. Wings colourless, or coloured and mostly with dark bands. Valves of female ovipositor hooked and with a process on ventral pair. (The spurious median vein not serrate, *Neosphingonotus* or *Parasphingonotus*).
 **ACRIDIDAE, Locustinae, *Sphingonotini***
 - Body and legs covered by long sometimes scattered hairs. 27
- 27 Hind wings clear or faintly smoky. Tympanal lobe small. Antenna short and with slightly wider apical segments. Median carina of pronotum distinct and bidented in prozona. Tegmina narrow in apical half with sparse transverse veins. Spurious median vein of tegmina closer to median vein than CuA
 **ACRIDIDAE, Locustinae, *Trilophidiini***
 - Hind wings often coloured red or yellow. Pronotum shorter than 1,3 times the length of head. Body covered by long hairs. **ACRIDIDAE, Locustinae, *Acrotylini***
- 28 Pronotum with one complete median transverse groove crossing the low median carinae sometimes with an X shaped marking. Body graceful: *Aiolopus*. With two dark stripes along the sides of the body: *Parapleurus*. Antennae shorter than the length of head plus pronotum and foveola triangular : *Hilethera*.
 **ACRIDIDAE, Locustinae, *Parapleurini***
 - Pronotum cylindrical, usually with well marked median and lateral carinae. Foveolae rectangular. If intercalata vein present, it is not S shaped and not serrate. [**ACRIDIDAE, Gomphocerinae**]. 29
- 29 Tarsal claws asymmetrical. Subgenital plate of ♂ elongated.
 **ACRIDIDAE, Gomphocerinae, *Chrysochraontini***
 - Tarsal claws generally symmetrical. Subgenital plate of ♂ short. 30
- 30 No tympanal organ, or tympanum greatly reduced. (Posterior margin of pronotum in metazona with extra attachment or a notch.) **ACRIDIDAE, Gomphocerinae, *Hypernephiini***
 - Tympanal organ fully developed. 31
- 31 Labium with a beak shaped extension (*Xenocheila*) or with a rounded lobe. 32
 - Labium without extension or a rounded projection. Pronotum with X marking, or frontal ridge furrowed.
 34
- 32 Tegmina with wide cubital field, 4 times wider than median field. (Pronotum with distinct median and lateral carina. Lateral carinae concave.) **ACRIDIDAE, Gomphocerinae, *Arcypterini***
 - Tegmina with narrower cubital field. 33
- 33 Metasternal lobes contiguous. Pronotum with sharp median carina and with X marking. (Vertex wide. Lateral carina of pronotum only partly seen in metazona).
 **ACRIDIDAE, Gomphocerinae, *Ramburiellini***
 - Metasternal lobes separated. Pronotum with lower or medially affected median carina. Pronotum mostly with X marking. (Foveolae well defined and visible from above. Occiput smooth or rugosa, or with a sharp median carina. Frontal ridge wide and flat: *Dociostaurus*, or narrow with sharp edges.)
 **ACRIDIDAE, Gomphocerinae, *Dociostaurini***
- 34 Basal segments of antennae wider but not sword shaped. Foveolae under the vertex, or absent. (Lobes of metasternum contiguous : *Ochrilidia*) **ACRIDIDAE, Gomphocerinae, *Ochrilidiini***
 - Basal segment of antennae very wide and sword shaped. Foveolae present and seen from above.
 35
- 35 Tarsi with large and wide arolium between claws. **ACRIDIDAE, Acridinae, *Acridini***
 - Tarsi with small narrow arolium, not reaching the middle of the claws.
 **ACRIDIDAE, Acridinae, *Truxalini***

| | | |
|----|--|------------------------|
| 36 | Head conical or body flat. Antennae under the vertex. Basal segments wider. [PYRGOMORPHIDAE, Pyrgomorphinae]. | 37 |
| - | Head globular. Face perpendicular to the occiput. Antennae filiform. [PAMPHAGIDAE, Pamphaginae]. | 39 |
| 37 | Antennae shifted from the eye and articulated before the lateral ocelli. | 38 |
| - | Antennae articulated near the eyes directly under the lateral ocelli. Wings pale, hardly red along basal veins. Prosternum thick but not raised in a form of plate. | Pyrgomorphini |
| 38 | With linear tubercles behind eyes. Wings red, not pale at basal parts. Prosternum with a plate like process. | Atractomorphini |
| - | Without linear tubercles behind eyes. Body wide, flat, rough with tubercles, especially in females. Head not produced forward. | Chrotogonini |
| 39 | Median carina of pronotum weak and hardly noticeable. (Fastigium distinct and joint to frontal suture. Tympanal organ large and hind femur finely serrated.) | Pamphagini |
| - | Median carina of pronotum distinct without groove (<i>Savalania</i> ; <i>Nocarodes</i>), groove only on anterior part (<i>Paranocarodes</i>), or with a complete longitudinal groove (<i>Iranacris</i>). | Nocarodeini |

DISCUSSION

For accurate identification of species and higher taxa from Iran, molecular phylogenetic studies in relation to modern taxonomy and having access to collected specimen is required. DEFAUT (2012, 2017a), WILLEMSE & al (2009) and HUSEMANN & al. (2013) works are examples for future researches in Iran. Species in **Locustinae**, **Gomphocerinae** and **Pamphagidae** need a complete taxonomy revision. Many species of *Chorthippus*, *Gomphocerippus* or *Glyptobothrus* are difficult to classify. The genus *Glyptobothrus* Chopard 1952 is regarded as subgenus of *Chorthippus* Fieber 1852 by STOROZHENKO (2002); but in several recent phylogenetic trees the species of *Glyptobothrus* are far from that of *Chorthippus*. It means than *Chorthippus* and *Gomphocerippus* are distinct genera. According to recent molecular studies (reinterpreted by DEFAUT 2012, 2013, 2017a), the old genus *Chorthippus* Fieber 1852 must be divided into three genera: *Chorthippus* s. str., *Gomphocerippus* Roberts 1941 (junior synonym: *Glyptobothrus* Chopard 1952) and *Pseudochorthippus* Defaut, 2012.

There is still some doubt about the species from *Locusta*: genus. Some authors think that *Locusta migratoria* is with two subspecies: *Locusta migratoria migratoria* Linnaeus 1758 al North of Eurasia, and *Locusta migratoria cinerascens* (Fabricius, 1781) al South (Mediterranean region, Africa, Arabia, India, Indonesia, Australia). The map in MA & al. (2012: 4346) suggests than in Iran only, or principally, *L. m. cinerascens* is present (which the authors name erroneously *Locusta migratoria migratorioides*: it is a junior synonym). Other authors with DEFAUT & al. (2013) admit that the distinct two species, *Locusta migratoria* and *Locusta cinerascens*, have several subspecies. The map in DEFAUT & al. (2013: 54),

which is based both on that of CROP (1982: 448) and on that of MA & al. (2012: 4346), suggests than *L. cinerascens* is the main species in Iran. It is likely that *L. m. migratoria* can still occur all at the North.

In more than 15 genera of Iranian Acrididae, a prosternal elevation of different shapes is present between their front coxae. These genera were previously classified in subfamily **Catantopinae** Brunner, after BEY BIENKO & MISTSHENKO (1963); they are now classified in various subfamilies and tribes. *Khayyamia* Koçak 1981 (= *Dinaria* Popov, 1951) with concealed ovipositor under paraprocts or elongate head can be distinguished from *Paraconophyma* Uvarov, 1921 or from *Pezotettix* Burmeister, 1840, by their elongate and parallel sided elytra (POPOV, 1951).

It is noticeable than *Catantops* Schaum, 1853, the eponym genus for subtribe **Catantopinae** Brunner von Wattenwyl, 1893, is not recorded in Iran: "*Catantops*" *saucius* and "*Catantops*" *axillaris* were recorded by MIRZAYANS (1959) from Kerman and Fars, but they are now classified in *Diabolocatantops* Jago, 1984. **Diexini** Mistshenko, 1945 **Uvaroviini** Mistshenko, 1952 and **Wiltshirellini** are classified in **Catantopinae** Brunner von Wattenwyl, 1893.

24 genera are endemic to Iranian territory, and 53 species are classified in these genera (**table 1**).

In conclusion it is clear that grasshopper species in Iran must cope with various difficult environmental conditions to survive. Climate change and weather warming with decreased rain fall and habitat destruction have produced unfavorable conditions by shortage of food plants for Orthopteran species in Iran and increased stress (HODJAT, 2016; HUEY & al., 2002). Only biodiversity research can show if environmental stress have changed the local species richness.

Table 1. Distribution of the 24 endemic genus into the families and subfamilies

| Families | Subfamilies | Endemic genus | number of species |
|-------------------------|---------------------|----------------------------------|-------------------|
| Acrididae | Calliptaminae | <i>Sphodronotus</i> Uvarov | 2 |
| | Catantopinae | <i>Wiltshirella</i> Popov | 1 |
| | Teratodinae | <i>Lyrotylus</i> Uvarov | 3 |
| | | <i>Lyrotylodes</i> Bey-Bienko | 1 |
| | | <i>Esfandiarina</i> Popov | 1 |
| | Egnatiinae | <i>Paracharora</i> Fishelson | 1 |
| | | <i>Paregnatius</i> Uvarov | 5 |
| | | <i>Bienkonina</i> Dirsh | 1 |
| | Gomphocerinae | <i>Grigorija</i> Mistshenko | 1 |
| | | <i>Kirmanina</i> Uvarov | 1 |
| | | <i>Xenocheila</i> Uvarov | 1 |
| | Locustinae | <i>Brunnerella</i> Saussure | 2 |
| | | <i>Heliopteryx</i> Uvarov | 1 |
| <i>Phaeonotus</i> Popov | | 1 | |
| Tropidopolinae | <i>Dabba</i> Uvarov | 1 | |
| Dericorythidae | Dericorythinae | <i>Farsinella</i> Bey-Bienko | 2 |
| | Conophyminae | <i>Khayyamia</i> Koçak | 4 |
| | | <i>Zagrosia</i> Descamps | 2 |
| | Iranellinae | <i>Iraniobia</i> Bey-Bienko | 5 |
| | | <i>Iraniola</i> Bey-Bienko | 1 |
| Pamphagidae | Pamphaginae | <i>Tropidauchen</i> Saussure | 7 |
| | | <i>Iranacris</i> Mistshenko | 1 |
| | | <i>Neoparanthrotes</i> Mirzayans | 2 |
| | Thrinchinae | <i>Iranotmethis</i> Uvarov | 6 |
| Total | | | 53 |

Acknowledgements

We thank Dr. Saboori, Director of the Museum of Tehran, for his support. Thanks to OSF staff for providing an update global information on Orthoptera. Dr. Husemann, Center of Natural History, Universität Hamburg, initially helped us with the manuscript. Didier Morin, Montpellier, France, for provide us texts of two old and precious references. We are also grateful to Dr. Alexander Bugrov, Institute of Systematics and Ecology of Animals in Russia, for sending us the characters of *Hypernephiini* Mistshenko, 1976.

REFERENCES

- ALEXANDROV N. V., 1947 – Les Acridiens des régions Nord, Nord-Est et Nord-Ouest de l'Iran. *Entomologie et Phytopathologie Appliquées*, **3**: 6-15.
- AZMAYESH FARD P., 1974 – Identification and distribution of banded wings grasshoppers (Orthoptera; Oedipodinae) of Karadj. *Entomologie et Phytopathologie Appliquées*, **36**: 25-30. [In Farsi.]
- AZMAYESH FARD P., 1990 – Key to the species and subspecies of *Sphingonotus* Fieber in Karaj vicinity. *Journal of Entomological Society of Iran*, **10** (1-2): 17-35. [In Farsi.]
- BENEDIKTOV Alexander A., 1997 – On the taxonomy of the tribe Sphingonotini (Orthoptera, Acrididae). *Russian entomological Journal*, **6** (1-2): 11-13.
- BENEDIKTOV A. A., 2014 – The new data on distribution of the pygmy grasshopper *Tetrix tartara* s.l. (Orthoptera: Tetrigoidea) and its vibrational signals. *Russian Entomology Journal*, **23** (1):1-4.
- BEY-BIENKO G. J. & L. L. MISTSHENKO – 1963 [1951]. *Orthoptera fauna of the USSR and the adjacent countries*. Zoological Institute of the U.S.S.R. Academy of Sciences. No **38**. Translated edition.
- BORROR D. J. & D. M. DELONG, 1970 – *An introduction to the study of insects*. Third edition. Holt Rinehart and Winston. 812 p.
- CAPRA Felice, 1946 – Sulla terra tipica di alcuni ortoteroidei Italiani. *Bolletino della Società Entomologica italiana*, **76** (3/4): 29-32.
- CIGLIANO Maria Marta, Holger BRAUN, David C. EADES & Daniel OTTE. *Orthoptera Species File* – Version 5.0/5.0. [2018] <<http://Orthoptera.SpeciesFile.org>>
- COPR [Abréviation de « Centre for Overseas Pest Research »], 1982 – *The locust and grasshopper agricultural manual*. London, vii + 690 p.
- DAVATCHI, A. 1954 – *Insect pests of cereals in Iran*. Publication, 211. University of Tehran. 252 p.

- DEFAUT Bernard, 1999a – Synopsis des Orthoptères de France. *Matériaux Entomologiques*, n° hors-série, deuxième édition, révisée et augmentée. 87 p.
- DEFAUT Bernard, 1999b – *La détermination des Orthoptères de France*. Édition à compte d'auteur, F-09400 Bédeilhac, 83 p.
- DEFAUT Bernard, 2012 – Implications taxonomiques et nomenclaturales de publications récentes en phylogénie moléculaire. 1. Les Gomphocerinae de France (Orthoptera, Acrididae). *Matériaux orthoptériques et entomocénétiques*, **17** : 15-20.
- DEFAUT Bernard, 2013 – Addendum à l'article de B. Defaut in *Matériaux orthoptériques et entomocénétiques*, **17** (2012) : 15-20: "Implications taxonomiques et nomenclaturales de publications récentes en phylogénie moléculaire: 1. Les Gomphocerinae de France". *Matériaux orthoptériques et entomocénétiques*, **18** : 127.
- DEFAUT Bernard, 2014 – Note nomenclaturale : "Oedipodinae" ou "Locustinae" ? (Orthoptera, Acrididae). *Matériaux orthoptériques et entomocénétiques*, **19** : 67-70.
- DEFAUT Bernard, 2017a – Notes de lectures phylogénétiques sur les Orthoptères (Orthoptera, Acrididae). *Matériaux orthoptériques et entomocénétiques*, **22** : 5-13.
- DEFAUT Bernard, 2017b – Révision taxinomique des Orthoptères du Maghreb. 1. Espèces et sous-espèces du genre *Calliptamus* Serville (Caelifera, Acrididae). *Matériaux orthoptériques et entomocénétiques*, **22** : 71-84.
- DEFAUT Bernard, & DAVID MORICHON, 2015 – *Faune de France*, 97. *Criquets de France* (Orthoptera, Caelifera), volume 1. 695 p., 41 pl. h-t. Fédération française des sociétés de sciences naturelles, Montpellier.
- DESCAMPS Marius, 1967 – Revue et diagnose préliminaire de quelques Pamphagidae et Acrididae d'Iran (Orthoptera; Acridoidea). *Bulletin de la société entomologique de France*, **72** : 27-37.
- DESCAMPS Marius & Michel DONSKOFF, 1965 – Contribution à la connaissance de la faune du Moyen Orient (missions G. Remaudière 1955 à 1962). III. Orthoptères Acridoïdes. *Vie et Milieu*, série C, **16**: 497-516. Paris.
- DEY Lara-Sophi, Alireza SABOORI, Seyed Hossein HODJAT, Mehdi TORK & Martin HUSEMANN – [submitted]. The Iranian fauna of *Sphingonotus* (Oedipodinae): taxonomic problems, sympatry and microhabitat divergence.
- DEY Lara-Sophi, Alireza SABOORI, Seyed Hossein HODJAT, Mahdi TORK, Felix PAHLOW & Martin HUSEMANN, 2018 – A faunistic review of the Iranian species of *Sphingonotus* (Orthoptera, Oedipodinae) with a key to the species. *Zootaxa*, **4379** (2): 151-176.
- DIRSH Vitaly M., 1951 – Revision of the group Truxales (Orthoptera, Acrididae). *EOS*, Revista Española de Entomología, Tomo extraordinario, [1950]: 119-247
- DIRSH Vitaly M., 1961 – A preliminary revision of the families and subfamilies of Acridoidea (Orthoptera Insecta). *Bulletin of the British Museum (Nat. History)*, *Ent.* **10** (9): 351-463.
- FISHELSON Lev, 1993 – Contribution to the knowledge of Egnatiinae (Orthoptera: Acrididae) from Israel and Iran with description of a new genus and four new species. *Israel Journal of Entomology*. **27**:1-18.
- GARAI Gyulainé Adrienne, 2010. Contribution to the knowledge of the Iranian Orthopteroid insects. *Esperiana*, **15**: 393-417.
- GHAHARI H., M. HAVASKARY, M. TABARI, H. OSTOVAN, H. SAKENIN & A. SATAR, 2009 – An annotated catalogue of Orthoptera (Insecta) and their natural enemies from Iranian rice fields and surrounding grasses. *Biologiezentrum linz-Austria*, **41** (1):639-672.
- HASHEMI, A., 1976 – List of Orthoptera from province of Fars. *Journal of Entomological Society of Iran*, **3**:113-121.
- HAVASKARY M., R. FARSHBAF, M. H. KAZEMI, A. SATAR, A. RAFEII, 2012 – A contribution to the short horned grasshopper (Orthoptera, Acrididae) from Arasbaranand vicinity, N W Iran. *Munis Entomology & Zoology*, **7** (2), 970-977.
- HODJAT Seyed Hossein, 2012 – An update list of Pamphagidae Burmeister 1840 (Insecta; Orthoptera) of Iran with a key to the genera. *Journal of Crop Protection*, **1** (3): 261-269.
- HODJAT Seyed Hossein, 2013 – Iranellinae (Orthoptera; Catantopidae) species recorded in Iran. *Journal of Entomology Research*. **4**: 281-287. Iran Azad University, Arak.
- HODJAT Seyed Hossein, 2015 – An Introduction to subfamily Gomphocerinae Fieber, 1853 (Orthoptera; Acrididae) of Iran with keys to tribes and genera. *Journal of the Entomological Research Society*, **17** (1): 97-105.
- HODJAT Seyed Hossein, 2016 – A review of Iranian Dociostaurini (Orthoptera: Gomphocerinae) with keys to their species. *Entomologia generalis*, **17** (2): 97-105.
- HODJAT Seyed Hossein, 2016 – Effects of crowding and stress on locusts, aphids, armyworms and specifically the hemipteran *Dysdercus fasciatus* Sign. (Hemiptera:Pyrrhocoridae). *Journal of Crop Protection* **5** (3); 313-329.
- HODJAT Seyed Hossein – [submitted].What happened to the grasshoppers in Iran? A comparison between Acrididea records before 1963 and after 2000, a review.
- HODJAT S Seyed Hossein & Mehdi TORK, 2014 – A preliminary guide for Oedipodinae identification (Orthoptera; Acridoidea) in Iran. *Journal of Entomology Research*, **7** (3): 249-259.
- HOLLIS David, 1968 – A revision of the genus *Aiolopus* Fieber (Orthoptera, Acrididae). *Bulletin of the British Museum of Natural Historia (Entomology)*, **22** : 307-355.
- HOSSEINI S.A. & M. MOFIDI-NEYESTANAK, 2014 – An investigation of fauna and taxonomy of Orthoptera (Hexapoda) in Kurdistan province, Iran. *Entomology Journal of Agricultural crops*, **1** (3): 9-26.

- HUEY Raymond B., Margen CARLSON, Lisa CROZIER, Melanie FRAZER, Hayden HAMILTON, Christopher HARLEY, Anhthu HOANG & Joel G. KINGSOLVER, 2002 – Plants versus animals: Do they deal with stress in different ways? *Integrated and comparative Biology*, **42** (3): 415-423.
- HUSEMANN Martin, 2008 – *Genetische und morphologische Untersuchungen zur Phylogenie der Gattung Sphingonotus Fieber, 1852. Zur Evolution tegminofemoraler Stridulationsorgane*. Ms. Thesis-University of Osnabruck, Germany.
- HUSEMANN Martin, David LUCIA-POMARES & Axel HOCHKIRCH, 2013 – A revision of the Iberian Sphingonotini with description of two new species (Orthoptera, Acrididae, Oedipodinae). *Zoological Journal of the Linnaean Society*. **168**: 29-60.
- HUSEMANN Martin, S. NAMKUNG, J. C. HABEL, P. D. DANLEY & Axel HOCHKIRCH, 2012 – Phylogenetic analyses of band-winged grasshoppers (Orthoptera, Acrididae, Oedipodinae) reveal convergence of wing morphology. *Zoologica Scripta*: 515-526.
- HUSEMANN Martin, J. RAY & Axel HOCHKIRCH, 2011 – A revision of the subgenus *Parasphingonotus* Benediktov & Husemann, 2009 (Orthoptera, Oedipodinae, Sphingonotini). *Zootaxa*, **2916**: 51-61.
- ICZN: cf. International Trust for Zoological Nomenclature.
- IMMS A. D., 1960 – *A general textbook of entomology, including the anatomy, physiology, development and classification of insects*. Methuen and Co. Ltd., London. 886 p.
- INGRISCH Sigfrid, 2001 – Tetrigidae from Nepal in the Zoologische Staatssammlung München (Insecta, Orthoptera, Tetrigidae). *Spixiana*, **24** (2): 147-155.
- INTERNATIONAL TRUST FOR ZOOLOGICAL NOMENCLATURE, 1999 – *International code of zoological nomenclature*, 4^e edition, 306 p.
- JABBARI A., M. MODARRES AWAL, L. FEKRAT, J. KARIMI, J. & M. RASHKI, 2015 – On the short-horned grasshoppers (Orthoptera: Caelifera) fauna of north-eastern Iran with some information on sweep sampling capture rates. *Iranian Journal of Animal Biosystematics (IJAB)*, **2** (1): 33-42.
- KUMAR H. & M. K. USMANI, 2016 – Taxonomy studies on Acrididae (Orthoptera: Acridoidea) of Gujarat region under western parts of India. *Munis Entomology and Zoology*, **11** (1): 77-86.
- LA GRECA Marcello, 1990b – Il genere *Acrotylus* Fieb. (Insecta, Orthoptera, Acrididae) in Namibia, e riesame del gruppo di specie *insubricus-fisheri-patruelis-somaliensis*. *Animalia*, Genova, **17** : 153-188.
- LI B., Z. LIU & Z.-M. ZHENG, 2011 – Phylogeny and classification of the Catantopidae at the tribal level (Orthoptera; Acrididae). *Zookeys*, **148**: 209-255.
- MACHÁČKOVÁ & FIKÁČEK, 2014 – Catalogue of the type specimens deposited in the department of Entomology, National Museum, Prague, Czech Republic. Polyneoptera. *Acta entomologica musei nationalis Pragae*, **54** (1): 399-450.
- MIRZAYANS H., 1959 – Liste des Orthoptères et leur distribution en Iran. *Entomologie et phytopathologie appliquées*, **18** : 10-28.
- MIRZAYANS H., 1991 – Three new genera and four new species of Orthoptera from Iran. *Journal of Entomological Society of Iran*. Supplementum 6, 26 p.
- MIRZAYANS H., 1998 – *The list of Orthoptera in the Insect Collection of Plant Pests & Diseases*. Research Institute. Pamphagidae and Pyrgomorphidae. 39 p.
- MISTSHENKO Lev-Leonidovich, 1974 – The knowledge of grasshoppers of the genus *Doclostaurus* Fieb. (Orthoptera, Acrididae. I & II. *Revue d'Entomologie de l'URSS*, pp. 334-342 and 589-601.
- NAYEEM R. & K. USMANI, 2012 – Taxonomy and field observations of grasshopper and locust fauna (Orthoptera: Acridoidea) of Jharkhand, India. *Munis Entomology and Zoology*, **7** (1): 391-417.
- OSF: cf. CIGLIANO & al.
- POPOV Georg-Basil, 1951 – Some new Iranian Acrididae (Orthoptera). *Proceeding of Royal Entomological Society of London (B.)*, **20** (9-10): 110-120.
- RITCHIE J. M., 1987 – The male of *Esfandiaria obesa* Popov 1951 (Orthoptera, Acrididae, Teratodinae) and the validity of the genus *Esfandiaria* Popov 1951. *Articulata*, **11**: 355-358.
- SAUSSURE Henri (de), 1884 – Prodrum Oedipodiorum, insectorum ex ordine orthopterum. *Mémoires de la société de physique et d'histoire naturelle de Genève*, **28** (9) : 1-257.
- SHISHODIA M. S., Kailash CHANDRA & Sunil Kumar GUPTA, 2010 – An annotated Checklist of Orthoptera (Insecta) from India. *Records of the zoological Survey of India*, Occasional Paper n° **314**: 1-366.
- SHUMAKOV E M., 1963 – *Acridoidea of Afghanistan and Iran*. Académie des Science de l'URSS. 284 p.
- SIANAKI S., 2012 – *Biodiversity of short horned grasshoppers in Varamin and Shahr Rey*. Thesis, Faculty of Agriculture, Islamic Azad University, Jahrom Branch. 127 p.
- SOLTANI A. A., 1978 – Preliminary synonymy and description of new species in the genus *Doclostaurus* Fieber 1853 (Orthoptera, Acridoidea; Gomphocerinae) with a key to the species in the genus. *Journal of Entomological Society of Iran*. Supplement 2, 93 p.
- STOROZHENKO Sergei Yurievich, 2002 – To the knowledge of the genus *Chorthippus* Fieber, 1852 and related genera (Orthoptera; Acrididae). *Far Eastern Entomologist*, **113** :1-16
- ÜNAL Mustafa, 2016 – Pamphagidae (Orthoptera: Acridoidea) from the Palearctic Region: taxonomy, classification, keys to genera and a review of the tribe Nocarodeini I. Bolívar. *Zootaxa*, **4206** (1): 001-223.
- UVAROV Boris-Petrovich, 1921 – A contribution to our knowledge of the Orthoptera Acridoidea of Mesopotamia, and N. W. Persia. *Journal of the Bombay Natural History Society*, **27**: 61-70.
- UVAROV Boris-Petrovich, 1925 – A contribution to our knowledge of the Orthoptera Acridoidea. *Journal Bombay Natural History Society*. **31** (10): 803-810.

- UVAROV Boris-Petrovich, 1938 – Orthoptera from Iraq and Iran. *Zoological series of Field Museum of Natural History*, Chicago, **20** (33): 439-451.
- UVAROV Boris-Petrovich – 1966. *Grasshoppers and locusts, a handbook of general acridology*. Vol. 1; Cambridge University Press. 481 p.
- UVAROV Boris-Petrovich. & Vitaly M. DIRSH – 1952. Orthoptera collected in Iran. *Verhandlungen der Naturforschenden Gesellschaft in Basel*, 63 (1): 1-16.
- WILLEMSE Fer, Otto von HELVERSEN & Baudewijn ODÉ, 2009 – A review of *Chorthippus* species with angled pronotal lateral keels from Greece with special reference to transitional populations between some Peloponnesian taxa (Orthoptera, Acrididae). *Zool. Med. Leiden*, **83** : 319-507.