

Iranian Asilidae (Insecta: Diptera)

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Abstract: A new checklist of Asilidae from Iran, consisting of 156 species and subspecies belonging to 9 subfamilies, is presented. One tribe, 8 genera, and 31 species are new records for the Iranian fauna. Notes on synonymy, distribution, habitat, and prey of the species are included.

Key Words: Diptera, Asilidae, Iran

Iran Asilidae Türleri (Insecta: Diptera)

Özet: İran'ın Asilidae familyasına ait 156 tür ve alt tür içeren yeni bir kontrol listesi hazırlanmıştır. Bir tribüs, sekiz cins ve 31 tür İran faunası için yeni kayıt olarak belirlenmiştir. Ayrıca, türlerin sinonim, dağılış, habitat ve avları ile ilgili bilgiler verilmiştir.

Anahtar Sözcükler: Diptera, Asilidae, İran, sinonim, habitat, yayılış

Introduction

Robber flies (Insecta: Diptera: Asilidae) comprise a large and widespread family of insects. The adults are often active flies of considerable size and readily attract attention (Geller-Grimm, 2005). Asilid adults attack insects of almost all orders, from wasps, bees, and flies to dragonflies and grasshoppers; even some spiders are eaten (Lavigne et al., 1978; Lavigne, 2001). Because they prey voraciously on other insects, they contribute to the maintenance of the natural balance among insect populations. To some extent, parasitic wasps and flies are taken by them, but much of their prey consists of plant-feeding insects. Certain species are known to prey on *Apis mellifera* L. and from time to time are reported to seriously deplete the populations of apiaries (Londt, 1993; Rabinovich and Corley, 1997). Robber flies are particularly abundant in open, dry and sunny habitats, which provide optimal conditions in which to observe their many forms and behaviours (Shurovnekov, 1962;

Joern and Rudd, 1982). Female Asilidae deposit white/yellow/brown eggs on low-lying plants and grasses, in sand or in crevices within soil, bark, or wood. Egg-laying habits depend on the species and their morphological adaptations; most species deposit eggs in groups in the soil or inserted into plant parts; a few deposit their eggs in masses, which are then covered with a chalky protective coating. Robber fly larvae live in the soil, rotting wood or in various other decaying organic materials that occur in their environment. Larvae are predacious, feeding on eggs, larvae, or other soft-bodied insects, which they encounter as they move through the specific habitat. Robber flies overwinter as larvae and pupate in the larval substrate and move close to the surface prior to pupation; adults emerge at the appropriate time for the species, leaving their pupal cases sticking out of the larval substrate. Complete development ranges from 1 to 3 years, depending on the species and environmental conditions. Theodor (1980)

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proposed that larval growth is accelerated in warmer regions and that many asilid species live no longer than 1 year (Cannings, 1998; Geller-Grimm, 2005).

Currently there are 7029 described species and subspecies belonging to 815 genera distributed throughout the world; however, a great number remain to be described in Asia, Australia, and South America. Among these species, 1688 occur in the Palaearctic region. In addition, 18 genera and 39 species have been described from Eocene, Oligocene, and Miocene fossil beds; 15 of these genera are also Recent (Geller-Grimm, 2005). The oldest fossils of Asilidae are *Araripogon axelrodi* Grimaldi, 1990 (Cretaceous, from the Santana Formation in Brazil, approximately 110 million years ago) and an undescribed species from New Jersey amber (Cretaceous, 94-90 million years ago) (Grimaldi, 1990; Grimaldi and Cumming, 1999).

There have been few studies of the systematics of Iranian Asilidae and none have been conducted by researchers from Iran. The first published records of Iranian asilids were those of Portschinsky (1873), who described 2 new species. This was followed by papers by Bigot (1880) and Hermann (1905), who reported on new and little known species from "Persia". As a result of the Persian expeditions of N.A. Zarudny from 1898 to 1901, additional species were recorded (Becker and Stein, 1913). Engel (1930) summarised the known distribution of the Asilidae of the Palaearctic, noting the species that had been collected in Iran up to that time. It was not until the mid 1950s that interest in the Iranian asilid fauna was rekindled by Timon-David (1955), who erected a new genus, *Iranopogon*, for a previously undescribed species, which he named *I. brandti*. Subsequently, Oldroyd (1958) produced a list of asilids from Iran, while Janssens (1961) commented on species occurring in both Iraq and Iran. Fourteen years later, Abbassian-Lintzen (1964a) made the first definitive study of Iranian Asilidae and, in a later paper, she compiled notes on the genus *Eremisca* (Abbassian-Lintzen 1964b). While revising the genus *Neomochtherus* Osten-Sacken, Tsacas (1968) observed that some species of that genus had been recorded from Iran. Theodor (1980), who has produced the most modern treatment of the Asilidae of the Palestine/Israel region, noted that some of those species also had been recorded in Iran. Geller-Grimm and Hradsky (1999) and Tomasovic (1999, 2002) have recently described additional new species.

Biological notes concerning Iranian species are very rare and usually consist of habitat or prey records, such as those provided by Abbassian-Lintzen (1964a). A record of a dragonfly (Odonata: Libellulidae: *Orthetrum* sp.) falling prey to an undetermined asilid species was published by McLachlan (1903), while a 'Persian' asilid [*Philonicus albiceps* (Meigen, 1820)] was noted attacking House Flies by Ricardo (1920).

Materials and Methods

Surveys were conducted and collections made by the second author in different regions of Iran from 1997 to 2007. Identifications of collected material were identified by the senior author. Concurrently, collections contained in Iranian universities were examined as well as material from many world museums. Subsequently we have produced an updated checklist of Iranian Asilidae. The most important collections examined in Iran are those of Mazandaran, Isfahan, Tehran, and Islamic Azad Universities (including Amol, Damghan, Ghaemshahr, Rood-e-hen, Shahr-e-Rey, and Science and Research Branches). The specimens were collected or loaned by the second and fourth authors and sent to the senior author for determination. Of course many specimens were sent to Dr. Pavel A. Lehr (Russian Academy of Sciences) through 1998-2002, too. Identifications made by Engel (1930), Oldroyd (1958), Abbassian-Lintzen (1964a, 1964b), Tsacas (1968), Theodor (1980) and Lehr (1988) in these collections were accepted as valid and incorporated into the list. The specimens after determining by the senior author were sent to the collection of second author. The taxonomic arrangement and synonymies are those of Geller-Grimm (2005), as are the distributional data for regions outside Iran.

Results and Discussion

The Iranian list of Asilidae now contains 156 species and subspecies belonging to 9 subfamilies, 8 tribes, and 68 genera. Eight genera not previously recorded in Iran are *Andrenosoma* Rondani, 1856; *Choerades* Walker, 1851; *Euscelidia* Westwood, 1849; *Eutolmus* Loew, 1848; *Machiremisca* Lehr, 1996; *Molobratia* Hull, 1958; *Neoitamus* Osten Sacken, 1878, and *Scytomedes* Röder, 1882. Thirty-one species are new records for the country. The complete list of robber flies of Iran follows:

Subfamily Apocleinae Papavero, 1973

1. *Apoclea albipila* Becker in Becker & Stein, 1913

Iranian Records: Baluchestan (Becker and Stein, 1913), Iran (Engel, 1930).

Collection Dates: 16-22 April (Becker and Stein, 1913).

2. *Apoclea algira* (Linnaeus, 1767)

Synonymy: *Asilus alginis* Fabricius, 1787; *A. vegeta* Wiedemann, 1828; *A. pallida* Macquart, 1838; *A. fuscana* Macquart, 1838; *A. aberrans* Schiner, 1867; *A. deformis* Walker, 1871.

Iranian Records: Baluchestan (Oldroyd, 1958).

Collection Dates: 11 March-2 April (Oldroyd, 1958).

Distribution outside Iran: Algeria, Egypt, Israel, Libya, Morocco, Niger, Tunisia, Turkey.

3. *Apoclea continuata* Becker in Becker & Stein, 1909

Iranian Records: Baluchestan (Becker and Stein, 1913), Iran (Engel, 1930).

Collection Dates: 17 March-21 April (Becker and Stein, 1913).

Material examined: Guilan: Lahijan, November 2002; 1♂.

Biology: The species is a hunter of grasshoppers and relatives, especially *Paratettix caucasicus* Bei-Bienko (Orthoptera: Tetrigidae).

4. *Apoclea femoralis* (Wiedemann, 1828)

Synonymy: *Asilus helva* Wiedemann, 1828; *A. illustris* Schiner, 1867; *A. aperta* Becker in Becker & Stein, 1909.

Iranian Records: Baluchestan, Kerman, Khorasan (Becker and Stein, 1913), Iran (Engel, 1930).

Collection Dates: 4-21 July (Becker and Stein, 1913).

Distribution outside Iran: Egypt, Israel, Nigeria, Sudan, Yemen.

5. *Apoclea helvipes* Loew, 1873

Iranian Records: Baluchestan, Kerman, Southern Iran (Becker and Stein, 1913; Oldroyd, 1958).

Collection Dates: 4-20 July (Becker and Stein, 1913), 1-18 May (Oldroyd, 1958).

Distribution outside Iran: Algeria, Kazakhstan, Turkey.

6. *Apoclea micracantha* Loew, 1856

Synonymy: *Apoclea arabica* Becker, 1910 *sensu* Efflatoun, 1937 (questionable *sensu* Geller-Grimm, 2002).

Iranian Records: Iran (Engel, 1930).

Material examined: Isfahan: Najaf-Abad, August 2000; 1♀.

Biology: The species is a hunter of wasps, e.g., *Ancistrocerus auctus* (Fabricius) (Hymenoptera: Vespidae).

Distribution outside Iran: Egypt, Israel, Libya, Morocco, Tunisia, Yemen.

7. *Apoclea plurisetosa* Becker in Becker & Stein, 1909

Iranian Records: Baluchestan, Sistan (Becker and Stein, 1913), Iran (Engel, 1930)

Collection Dates: 31 May-3 July (Becker and Stein, 1913).

8. *Apoclea trivialis* Loew, 1873

Iranian Records: Khorasan (Becker and Stein, 1913).

Collection Dates: 29 July-1 August (Becker and Stein, 1913).

Distribution outside Iran: Algeria, Kazakhstan, Libya, Tunisia, Turkey.

9. *Hippomachus iranensis* Londt, 1985

Iranian Records: Baluchestan (Londt, 1985).

Collection Dates: 13-19 March (Londt, 1985).

10. *Philodicus ponticus* (Bigot, 1880)

Synonymy: *Alcimus bimaculatus* Becker in Becker & Stein, 1913.

Iranian Records: Baluchestan, Kerman, Khorasan, Sistan (Becker and Stein, 1913), Baluchestan (Oldroyd, 1958), Iran (Engel, 1930; Theodor, 1980).

Collection Dates: 10 June-20 September (Becker and Stein, 1913), 28 May-18 June (Oldroyd, 1958).

Material Examined: Golestan, Gonbad, August 2003, 1♀, 1♂; Guilan, Rasht, July 2004, 1♀.

Biology: The species is apparently a wasp hunter, *Vespa germanica* (Fabricius) and *Vespa orientalis* Linnaeus (Hymenoptera: Vespidae) having been recorded as prey.

Distribution outside Iran: Afghanistan, Azerbaijan, Greece, Iraq, Israel, Russia, Turkey.

11. *Philodicus spectabilis* Loew, 1871

Iranian Records: Baluchestan, Makran (Oldroyd, 1958).

Collection Dates: 21 March-22 May (Oldroyd, 1958).

Distribution outside Iran: Afghanistan, Kazakhstan.

12. *Polyphonioides laevigatus* Loew, 1848

Iranian Record: Khuzestan (Oldroyd, 1958).

Collection Dates: 22-24 March (Oldroyd, 1958).

Distribution outside Iran: Albania, Azerbaijan, Greece, Israel, Turkey, Syria.

13. *Promachus canus* (Wiedemann, 1818)

Synonymy: *Asilus tesselatus* Pallas in Wiedemann, 1818 (*nomen nudum*).

Iranian Records: Iran (Engel, 1930).

Material Examined: Ardabil, Moghan, July 2003, 2♀.

Biology: This species was found preying on *Podalonia hirsuta hirsuta* (Scopoli, 1763) (Hymenoptera: Sphecidae). Hayat and Alaoğlu (1996a) and Hayat (1997) recorded *Ontophagus* sp. (Coleoptera: Scarabaeoidea), *Andrena* sp. (Hymenoptera: Andrenidae), and *Apis mellifera* Linnaeus (Hymenoptera: Apidae) as prey. Özbek and Hayat (1999) noted this species as an *A. mellifera* hunter in Turkey.

Distribution outside Iran: Afghanistan, Kazakhstan, Russia, Taiwan, Turkey.

14. *Promachus canus leontochlaenus* Loew, 1871

Iranian Records: Khorasan (Becker and Stein, 1913).

Collection Dates: 18-20 April (Becker and Stein, 1913).

Material Examined: Khuzestan: Ahwaz, January 2003, 1♀; Isfahan: Najafabad, August 2003, 1♂.

Biology: This species was found preying on *Chalybion (Chalybion) flebile* (Lepeletier de Saint-Fargeau) (Hymenoptera: Sphecidae).

Distribution outside Iran: Kazakhstan, Turkey.

15. *Promachus griseiventris* Becker in Becker & Stein, 1913

Synonymy: *Promachus aegyptiacus* Efflatoun, 1929.

Iranian Records: Baluchestan, Kerman (Becker and Stein, 1913), Baluchestan (Oldroyd, 1958), Iran (Engel, 1930; Theodor, 1980).

Collection Dates: 15-23 June (Becker and Stein, 1913), 19 June-8 July (Oldroyd, 1958).

Distribution outside Iran: Egypt, Israel, Sudan.

16. *Promachus leoninus* Loew, 1848

Iranian Records: Iran (Lehr, 1988).

Material Examined: Golestan, Gonbad, February, 2003, 1♀; Kerman, Jiroft, November 2004, 1♂.

Biology: This species was found preying on *Polistes dominulus* (Christ) (Hymenoptera: Vespidae).

Distribution outside Iran: Azerbaijan, Bosnia-Herzegovina, Croatia, Greece, India, Israel, Myanmar (Burma), Romania, Russia, Slovenia, Turkey.

17. *Promachus rectangularis* Loew, 1854

Synonymy: *Erax cinctipes* Walker, 1871 (Loew, 1873).

Iranian Records: Baluchestan, Kerman (Becker and Stein, 1913), Iran (Engel, 1930).

Collection Dates: 27 March-3 July (Becker and Stein, 1913).

Distribution outside Iran: Egypt, Ethiopia, Yemen.

Subfamily Asilinae Latreille, 1802

18. *Aneomochtherus atripes* (Oldroyd, 1958)

Iranian Record: Baluchestan (Oldroyd, 1958).

Collection Dates: 4-18 June (Oldroyd, 1958).

19. *Aneomochtherus hungaricus rossicus* (Engel, 1927)

Synonymy: *Neomochtherus hungaricus distans* Tsacas, 1968; *N. sercovae* Lehr, 1964 (Lehr, 1996); *N. serkovae* Lehr, 1996.

Iranian Records: Iran (Tsacas, 1968).

Distribution outside Iran: Azerbaijan, Armenia, China, Kazakhstan, Mongolia.

20. *Aneomochtherus mesopotamicus* (Janssens, 1961)

Iranian Records: Iran (Tsacas, 1968).

Distribution outside Iran: Iraq (Lehr, 1988).

21. *Aneomochtherus mundus* (Loew, 1849)

Synonymy: *Neomochtherus rhodius* Tsacas, 1963.

Material Examined: East Azarbayjan, Tabriz, October 2004, 1♂. New record for the Iranian fauna.

Biology: The species is the predator of grasshoppers especially *Acridella robusta* Uvarov (Orthoptera: Acrididae).

Distribution outside Iran: Greece, Turkey.

Comment: A fly parasite was reared from *A. mundus* and determined to be *Megaselia scalaris* (Loew) (Diptera: Phoridae) by Prof. Henry L. Disney of Cambridge University (UK).

22. *Aneomochtherus perplexus* (Becker, 1923)

Synonymy: *Neomochtherus repentinus* Richter, 1963.

Iranian Record: Iran (Tsacas, 1968), Khuzestan (Oldroyd, 1958).

Collection Dates: 28 March-6 April (Oldroyd, 1958).

Material Examined: Guilan, Astara, April 2000, 1♀, 2♂.

Distribution outside Iran: Azerbaijan, Russia, Turkey.

23. *Aneomochtherus petrishtshevae* (Stackelberg, 1937)

Iranian Records: Iran (Tsacas, 1968).

Distribution outside Iran: Kazakhstan.

24. *Antiphrisson adpressus* (Loew, 1849)

Iranian Record: Khuzestan (Oldroyd, 1958).

Collection Dates: 28 March-6 April (Oldroyd, 1958).

Distribution outside Iran: Azerbaijan, Egypt, Israel, Kazakhstan, Russia, Tunisia, Turkey.

25. *Antiphrisson trifarius* (Loew, 1849)

Synonymy: *Asilus sareptanus* Lichtwardt, 1903; *A. thalhammeri* Lichtwardt, 1903.

Material Examined: Mazandaran, Savadkoooh, July 1999, 1♀. New record for the Iranian fauna.

Distribution outside Iran: Albania, Azerbaijan, Belgium, Bosnia-Herzegovina, Croatia, Egypt, France, Germany, Greece, Hungary, Israel, Italy, Kazakhstan, Malta, Morocco, Romania, Russia, Slovenia, Spain, Switzerland, Syria, Tunisia, Turkey.

26. *Asiloephesus excisus* (Loew, 1848)

Synonymy: *Asilus excisus* Loew, 1848; *Eutolmus excisus* (Loew, 1848).

Iranian Records: Khorasan (Becker and Stein, 1913).

Collection Dates: 8-11 October (Becker and Stein, 1913).

Distribution outside Iran: Turkey.

27. *Asilus barbarus* Linnaeus, 1758

Synonymy: *Asilius sinis* Séguin, 1930; *A. flavipes* Esipenko, 1970.

Material Examined: Khuzestan, Andimeshk, August 2000, 2♀. New record for the Iranian fauna.

Biology: This species was found preying on *Sphex flavipennis* Fabricius (Hymenoptera: Sphecidae).

Distribution outside Iran: Algeria, Morocco, Russia, Tunisia.

28. *Asilus crabroniformis* Linnaeus, 1758

Material Examined: Semnan, Shahrood, June 2000, 1♀. New record for the Iranian fauna.

Biology: This species was found preying on the cricket, *Cryllus desertus* (Pallas) (Orthoptera: Gryllidae).

Distribution outside Iran: Algeria, Austria, Azerbaijan, Belgium, Bosnia-Herzegovina, Croatia, Czech Republic, France, Denmark, Finland, Germany, Hungary, Italy, Morocco, Norway, Poland, Romania, Russia, Slovakia, Slovenia, Spain, Sweden, Switzerland, The Netherlands, Turkey, United Kingdom,

29. *Asilus lucidus* Pallas in Wiedemann, 1818

Iranian Records: Iran (Lehr, 1988).

Material Examined: Kordestan: Sanandaj, September 2003.

Distribution outside Iran: Russia.

30. *Astochia caspica* Hermann, 1917

Synonymy: *Astochia sareptana* Becker, 1923.

Iranian Records: Iran (Lehr, 1988).

Distribution outside Iran: Afghanistan, Azerbaijan, Kazakhstan, Russia.

31. *Astochia metatarsata* Becker in Becker & Stein, 1913

Iranian Records: Baluchestan, Kerman (Becker and Stein, 1913), Baluchestan (Oldroyd, 1958), Iran (Engel, 1930).

Collection Dates: 23 April-1 July (Becker and Stein, 1913), 14 May-18 June (Oldroyd, 1958).

32. *Astochia sodalis* (Wulp, 1899)

Iranian Records: Iran (Abbassian-Lintzen, 1964a).

Distribution outside Iran: Yemen.

33. *Eccoptopus longitarsis* (Macquart, 1838)

Synonymy: *Eccoptopus erythrogaster* Loew, 1871; *Coelopus lucidus* (Becker, 1907).

Iranian Records: Iran (Theodor, 1980).

Distribution outside Iran: Algeria, Egypt, Iraq, Israel, Morocco, Spain, Tunisia.

34. *Engelepogon brunnipes* (Fabricius, 1794)

Synonymy: *Acanthopleura brunnipes* (Fabricius, 1794); *Asilus castanipes* (Meigen, 1820); *A. rufipes* (Meigen, 1820) (*nomen nudum*); *Mochterus goliath* (Schiner, 1867).

Material Examined: Kordestan, Bijar, September 1999, 2♀. New record for the Iranian fauna.

Biology: This species was found preying on *Bembix bicolor* Radoszkowski (Hymenoptera: Sphecidae).

Distribution outside Iran: Algeria, Greece, Morocco, Tunisia, Turkey, former Yugoslavia.

35. *Engelepogon cingulifer* (Becker in Becker & Stein, 1913)

Synonymy: *Machimus/ Acanthopleura*: Engel, 1927.

Iranian Records: Baluchestan, Khorasan (Becker and Stein, 1913), Iran (Engel, 1930).

Collection Dates: 20 April-17 May (Becker and Stein, 1913).

Distribution outside Iran: Azerbaijan, Kazakhstan.

36. *Erax grootaerti* Tomasovic, 2002

Iranian Records: Chiraz (Tomasovic, 2002).

Collection Dates: 19 March (Tomasovic, 2002).

37. *Erebunus farinosus* (Becker in Becker & Stein, 1913)

Synonymy: *Epitriptus farinosus* Becker in Becker & Stein, 1913; *Argillemisca transcasica* (Lehr, 1964); *Eremisca transcasica* Lehr, 1964; *E. transcasica pilosa* Lehr, 1964.

Iranian Records: Khorasan (Becker and Stein, 1913).

Collection Dates: 8-11 October (Becker and Stein, 1913).

Distribution outside Iran: Kazakhstan.

38. *Eremisca heleni heleni* (Efflatoun, 1934)

Iranian Record: Southern Iran: Gulf of Oman; Siah, Bander-Abbas (Abbassian-Lintzen, 1964b), Iran (Theodor, 1980).

Collection Dates: 23 January-28 October (Abbassian-Lintzen, 1964b).

Biology: "On sand dunes; in evening attracted by light" (Abbassian-Lintzen, 1964b).

Distribution outside Iran: Egypt, Israel, Morocco, Oman.

39. *Eremisca shahgudiani* Abbassian-Lintzen, 1964

Synonymy: *Eremisca araratica* Richter, 1966.

Iranian Record: Khuzestan, SE Iran (Abbassian-Lintzen, 1964b).

Collection Dates: 24-31 October (Abbassian-Lintzen, 1964b).

Biology: "The specimens were found among tamarisk and oleander bushes on sandy soil on the river bank at Bala-Rud and between shrubs on light soil at Shush" (Abbassian-Lintzen, 1964b).

Distribution outside Iran: Armenia, Azerbaijan.

40. *Esatanas shah* (Rondani, 1873)

Iranian Records: Iran (Engel, 1930)

Distribution outside Iran: Kazakhstan.

41. *Eutolmus parricida* (Loew, 1848)

Material Examined: Mazandaran, Ramsar, November, 2000, 1♀. New record for the Iranian fauna.

Biology: This species was found preying on *Sphex oxianus* Gussakovsky (Hymenoptera: Sphecidae).

Distribution outside Iran: Afghanistan, Turkey.

42. *Machimus annulipes* (Brullé, 1832)

Synonymy: *Asilus basalis* Loew, 1849; *A. cerdo* Gerstaecker, 1861.

Material Examined: Kermanshah: Kermanshah, July 2004, 1♂. Semnan, Garmsar, October 2004, 1♂. New record for the Iranian fauna.

Biology: This species was collected with *Sarcophaga (Liopygia) argyrostoma* Robineau-Desvoidy and

Sarcophaga (Sarcophaga) lehmanni Mueller (Diptera: Sarcophagidae) as prey.

Distribution outside Iran: Albania, Azerbaijan, Bosnia-Herzegovina, Bulgaria, Croatia, Greece, Hungary, Israel, Poland, Romania, Slovenia, Switzerland, Turkey.

43. *Machimus armipes* Becker in Becker & Stein, 1913

Iranian Records: Baluchestan, Kerman (Becker and Stein, 1913), Iran (Engel, 1930).

Collection Dates: 4 May-1 July (Becker and Stein, 1913).

Distribution outside Iran: Middle Asia.

44. *Machimus nevadensis* (Strobl in Czerny & Strobl, 1909)

Material Examined: Yazd, Abarkooh, October 2002, 1♀. New record for the Iranian fauna.

Biology: This species was observed preying on wasps, *Ceceris tuberculata* Villers (Hymenoptera: Sphecidae).

Distribution outside Iran: Eastern Europe.

45. *Machimus thoracius* (Loew, 1849)

Iranian Records: Baluchestan, Kerman (Becker and Stein, 1913).

Collection Dates: 21-26 August (Becker and Stein, 1913).

Distribution outside Iran: Hungary, Turkey.

46. *Machimus rusticus* (Meigen, 1820)

Synonymy: *Asilus genualis* Zeller, 1840; *A. obscurus* Meigen, 1820.

Material Examined: Khorasan: Bojnord, April 2004, 1♀. New record for the Iranian fauna.

Biology: This species was observed preying on *Papilio demoleus demoleus* L. (Lepidoptera: Papilionidae). *Amphicoma* sp. (Coleoptera: Scarabaeoidea), *Sphaerophoria scripta* (Linnaeus) (Diptera: Syrphidae), and *Thymelicus sylvestris* Poda (Lepidoptera: Hesperiidae) were determined as prey in Turkey (Hayat & Alaoğlu, 1996b; Hayat, 1997).

Distribution outside Iran: Albania, Austria, Belgium, Bosnia-Herzegovina, Bulgaria, Croatia, Czech Republic, France, Germany, Greece, Italy, Kazakhstan, Poland, Romania, Slovakia, Slovenia, Spain, Switzerland, The Netherlands, Turkey, United Kingdom.

47. *Machiremisca decipiens* (Wiedemann in Meigen, 1820)

Synonymy: *Dysmachus*: Lehr 1988; *A. variegatus* Meigen, 1820; *Eutolmus multicolor* Schiner, 1854 (*nomen nudum*)/ *varispinus* Strobl in Cerny & Strobl, 1909; *Eremisca*: Lehr, 1996; *Machiremisca decipiens* (Wiedemann in Meigen, 1820) (comb. n. in Tomasovic et al., 2003).

Material Examined: Isfahan, Shahrza, August 2001, 1♀, 1♂. New record for the Iranian fauna.

Biology: This species was collected with *Ancistrocerus auctus* Fabricius (Hymenoptera: Vespidae).

Distribution outside Iran: France, Italy, Portugal, Spain.

48. *Neoitamus cyanurus* (Loew, 1849)

Synonymy: *Asilus aestivus* (Schrank, 1781); *A. niger* (De Geer, 1776); *A. tabidus* (Meigen, 1820); *A. tipuloides* (Harris, 1776) (Doubtful species in Lehr, 1988).

Material Examined: Mazandaran, Neka, August 2002, 1♀, 1♂. New record for the Iranian fauna.

Biology: This species was collected with *Silvia ochraceus* (Loew) (Diptera: Tabanidae) as prey.

Distribution outside Iran: Austria, Belgium, Bulgaria, Czech Republic, Denmark, Finland, France, Germany, Greece, Hungary, Ireland, Italy, Luxembourg, Poland, Romania, Russia, Sweden, Switzerland, Taiwan, The Netherlands, Turkey.

49. *Neoitamus senectus* Richter, 1963

Iranian Record: West Azerbaijan, Miyandoab (Hasbenli and Bayrakdar, 2006).

Collection Dates: 3 July 2005 (Hasbenli and Bayrakdar, 2006).

Distribution outside Iran: Armenia, Azerbaijan, Georgia, Moldavia, Russia, Turkey, Ukraine.

50. *Neolophonotus pegasus* (Loew, 1858)

Iranian Record: Baluchestan (Oldroyd, 1958).

Collection Dates: 13 March-9 April (Oldroyd, 1958).

Distribution outside Iran: South African Republic, Sudan.

51. *Oldroydiana calceatus* (Oldroyd, 1958)

Synonymy: *Dysmachus calceatus* Oldroyd, 1958.

Iranian Records: Khuzestan (Oldroyd, 1958).

Collection Dates: 22-24 March (Oldroyd, 1958).

52. *Philonicus albiceps* (Meigen, 1820)

Synonymy: *Asilus canescens* Widemann in Meigen, 1820; *A. albobarbus* Zeller, 1840 (error); *A. nudus* (Loew, 1840); *Philonicus domesticus* Ricardo, 1920; *P. elutus* Loew, 1871; *Cerdistus pulcher* Becker, 1923; *C. marinus* Becker, 1923; *C. orientalis* Esipenko, 1969.

Iranian Records: Enzeli, Northern Iran (Ricardo, 1920).

Collection Dates: 17-19 June (Ricardo, 1920).

Material Examined: Kordestan, Bijar, April 2003, 1♂.

Biology: It hunts house flies (*Musca domestica* Linnaeus), entering houses for this purpose at Enzeli in the early summer, flying near the windows; however, it was not abundant enough to be an effective control (Ricardo, 1920).

Distribution outside Iran: Albania, Austria, Azerbaijan, Belgium, Bosnia-Herzegovina, Bulgaria, Croatia, Cyrus, Czech Republic, Denmark, East Siberia and Far East of Russia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Israel, Italy, Liechtenstein, Luxembourg, Malta, Mongolia, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland, The Netherlands, Turkey, United Kingdom.

53. *Reminasus ephippium* (Macquart, 1855)

Synonymy: *Asilus pulcher* Ricardo, 1922.

Iranian Records: Sistan (Becker and Stein, 1913).

Collection Dates: 4 June (Becker and Stein, 1913).

Distribution outside Iran: China, India, Mongolia, Sri Lanka.

54. *Satanas gigas* (Eversmann, 1855)

Iranian Record: Baluchestan, Kerman, Khorasan, Sistan (Becker and Stein, 1913), Baluchestan (Oldroyd, 1958), Iran (Engel, 1930).

Collection Dates: 13 May-4 September (Becker and Stein, 1913), 1-28 May (Oldroyd, 1958).

Material Examined: Semnan, Damghan, September 2004, 2♂.

Biology: This species was collected with *Podalonia hirsuta hirsuta* (Scopoli) (Hymenoptera: Sphecidae) as prey.

Distribution outside Iran: Algeria, Azerbaijan, China, Egypt, Greece, Israel, Kazakhstan, Libya, Mongolia, Romania, Russia, Turkey.

55. *Tolmerus cingulatus* (Fabricius, 1781)

Synonymy: *Epitriptus cingulatus* (Fabricius, 1781); *Asilus annulatus* Macquart, 1826; *A. striatus* Meigen, 1820; *A. pictipes* Loew, 1848; *A. maculosus* Harris, 1776.

Iranian Records: Khorasan (Becker and Stein, 1913), Iran (Engel, 1930).

Collection Dates: 5-6 August (Becker and Stein, 1913).

Biology: Hayat and Alaoğlu (1996b) recorded one specimen of *Sarcophaga* sp. (Diptera: Sarcophagidae) as prey of this species.

Distribution outside Iran: Austria, Azerbaijan, Belgium, Bosnia-Herzegovina, Bulgaria, Croatia, Czech Republic, Denmark, Finland, France, Germany, Hungary, Italy, Norway, Poland, Romania, Russia, Slovakia, Slovenia, Sweden, Switzerland, The Netherlands, Turkey, United Kingdom.

56. *Tolmerus facialis* Becker in Becker & Stein, 1913

Iranian Records: Baluchestan (Becker and Stein, 1913).

Collection Dates: 23-April-5 May (Becker and Stein, 1913).

57. *Turkiella cervinus* (Loew, 1856)

Synonymy: *Cerdistus cervinus* (Loew, 1856); *Epitriptus cretaceus* Becker in Becker & Stein, 1913.

Iranian Records: Iran (Becker and Stein, 1913; Engel, 1930).

Distribution outside Iran: Egypt, Iraq, Kazakhstan, Morocco, Tunisia, Turkey.

Subfamily Dasypogoninae Macquart, 1838

Tribe Dasypogonini Macquart, 1838

58. *Dasypogon diadema* (Fabricius, 1781)

Synonymy: *Asilus analis* Fabricius, 1794; *A. liburnicus* Germ., 1817; *A. nervosus* Meigen, 1804; *A. punctatus* Fabricius, 1781; *A. bohemicus* Preysler, 1790; *A. cylindrica* Fabricius, 1794; *A. fasciatus* Meigen, 1820; *A. rubidus* Hermann, 1906; *A. umbrosus* Brullé, 1832;

Selidopogon sicanus Costa, 1853; *S. diadema* Fabricius, 1781.

Iranian Records: Azerbaijan, Fars, Khuzestan and N Iran (Abbassian-Lintzen, 1964a), Iran (Theodor, 1980).

Collection Dates: 15 April-13 August (Abbassian-Lintzen, 1964a).

Biology: "The species was always closely associated with trees and bushes" (Abbassian-Lintzen, 1964a).

Distribution outside Iran: Albania, Austria, Azerbaijan, Belgium, Bosnia-Herzegovina, Bulgaria, Croatia, Czech Republic, France, Germany, Greece, Hungary, Italy, Morocco, Poland, Romania, Russia, Slovakia, Slovenia, Spain, Switzerland, Turkey, United Kingdom.

59. *Dasypogon irinelae* Weinberg, 1986

Material Examined: West Azarbaijan, Oshnavieh, May 1998, 1♀, 1♂. New record for the Iranian fauna.

Biology: This species was collected with *Chalybion (Chalybion) flebile* (Lepeletier de Saint-Fargeau, 1845) (Hymenoptera: Sphecidae) as prey. Among the prey of this species, *Camptopus lateralis* (Germar) (Hemiptera: Alydidae), *Eristalis tenax* (Linnaeus) (Diptera: Syrphidae), *Systropha culvicornis* (Scopoli) (Hymenoptera: Halictidae), *Megabombus (Thoracobombus) sylvarum daghestanicus* (Radoszkowski), *Pyrobombus soroeensis* (Fabricius), and *Apis mellifera* Linnaeus (Hymenoptera: Apidae) were noted (Hayat and Alaoğlu, 1996a; Hayat, 1997; Özbek and Hayat, 1999). The ethology of this species was also studied by Hayat and Çalışkan (2003).

Distribution outside Iran: Azerbaijan, Turkey.

60. *Dasypogon magisi* Tomasovic, 1999

Iranian Records: Fars (Tomasovic, 1999).

Collection Dates: 10-15 June (Tomasovic, 1999).

61. *Dasypogon octonotatus* Loew, 1869

Synonymy: *Dasypogon diadema melanopterus* Loew, 1869; *Dasypogon variabilis* Brullé, 1832 (Engel, 1930; Weinberg, 1991).

Material Examined: East Azerbaijan, Arasbaran, September 2003, 1♂. New record for the Iranian fauna.

Biology: This species was collected with *Katamenes sichelii* (Giordani Soika) and *Vespa crabro crabro* Linnaeus (Hymenoptera: Vespidae) as prey.

Distribution outside Iran: Azerbaijan, Greece, Kazakhstan, Mongolia, Romania, Russia, Turkey, West Siberia.

62. *Molobratia teutonus* (Linnaeus, 1767)

Synonymy: *Asilus marmoratus* Geoffroy in Fourcroy, 1785; *Dasypogon teuton* Macquart, 1834; *Erax tenthredoides* Scopoli, 1763.

Material Examined: Isfahan, Samirom, July 1998, 1♀, 1♂. New record for the Iranian fauna.

Biology: *Andrena* sp. (Hymenoptera: Andrenidae) was determined as prey of this species by Hayat (1997) and Özbek and Hayat (1999). Giray (1981) mentioned *M. teutonus* as a predator of some hymenopterous species, especially *Apis mellifera* Linnaeus (Apidae).

Distribution outside Iran: Albania, Austria, Belgium, Bulgaria, Czech Republic, Denmark, France, Germany, Greece, Hungary, Italy, Poland, Romania, Russia, Spain, Sweden, The Netherlands, Switzerland, Turkey.

63. *Saropogon alternatus* Loew, 1873

Synonymy: *Saropogon alternans* Loew, 1873.

Iranian Records: Baluchestan (Oldroyd, 1958), Azerbaijan (Abbassian-Lintzen, 1964a).

Collection Dates: 7-10 April (Oldroyd, 1958), 2-5 August (Abbassian-Lintzen, 1964a).

64. *Saropogon bijani* Abbassian-Lintzen, 1964

Iranian Records: Khuzestan (Abbassian-Lintzen, 1964a).

Collection Dates: 24 April-17 May (Abbassian-Lintzen, 1964a).

65. *Saropogon clausus* Becker, 1906

Synonymy: *Saropogon vosseleri* Becker, 1906.

Iranian Records: Baluchestan and Khorasan (Becker and Stein, 1913).

Collection Dates: 17 April-1 May (Becker and Stein, 1913).

Distribution outside Iran: Algeria, Morocco, Tunisia.

66. *Saropogon fucatus* Loew, 1869

Iranian Records: Baluchestan (Becker and Stein, 1913).

Collection Dates: 1-19 March (Becker and Stein, 1913).

Distribution outside Iran: North Africa, Spain.

67. *Saropogon gigas* Becker in Becker & Stein, 1913

Iranian Records: Baluchestan and Kerman (Becker and Stein, 1913).

Collection Dates: 24 June-8 July (Becker and Stein, 1913).

68. *Saropogon jugulum* (Loew, 1847)

Synonymy: *Dasypteron brachypterum* Loew, 1869; *D. micropterus* Loew, 1869.

Iranian Records: Khuzestan (Oldroyd, 1958, Abbassian-Lintzen, 1964a).

Collection Dates: 28 March-18 May (Oldroyd, 1958), 7 April-20 May (Abbassian-Lintzen, 1964a).

Distribution outside Iran: Albania, Algeria, Bosnia-Herzegovina, Croatia, Egypt, France, Greece, Libya, Morocco, Slovenia, Spain, Turkey.

69. *Saropogon longicornis* (Macquart, 1838)

Iranian Records: Baluchestan (Becker and Stein, 1913; Theodor, 1980), Sistan and Khorasan (Becker and Stein, 1913), Tehran (Abbassian-Lintzen, 1964a), Iran (Engel, 1930).

Collection Dates: 12 March-24 April (Becker and Stein, 1913), 18 June (Abbassian-Lintzen, 1964a).

Distribution outside Iran: Egypt, Israel.

70. *Saropogon luctuosus* (Wiedemann in Meigen, 1820)

Synonymy: *Dioctria nigripennis* Costa, 1844.

Material Examined: East Azarbaijan, Arasbaran, September 2003, 19. New record for the Iranian fauna.

Distribution outside Iran: Croatia, France, Greece, Italy, Portugal.

71. *Saropogon mofidii* Abbassian-Lintzen, 1964

Iranian Records: Khuzestan (Abbassian-Lintzen, 1964a).

Collection Dates: 2 June (Abbassian-Lintzen, 1964a).

72. *Saropogon verticalis* Oldroyd, 1958

Iranian Records: Baluchestan (Oldroyd, 1958; Abbassian-Lintzen, 1964a), Khuzestan (Abbassian-Lintzen, 1964a).

Collection Dates: 23-30 April (Oldroyd, 1958), 18-30 May (Abbassian-Lintzen, 1964a).

Biology: "The flies are wasp hunters" (Abbassian-Lintzen, 1964a).

73. *Saropogon vestitus* (Wiedemann, 1828)

Synonymy: *Dasypteron aegypticus* Macquart, 1838; *D. confluens* Loew, 1851.

Iranian Records: Baluchestan (Becker and Stein, 1913), Iran (Theodor, 1980).

Collection Dates: 17-19 March (Becker and Stein, 1913).

Distribution outside Iran: Egypt, Israel, Libya, Switzerland, Syria, Turkey.

Subfamily *Laphriinae* Macquart, 1838

Tribe *Atmosinini* Hardy, 1928

74. *Amathomyia persiana* Hermann, 1912

Synonymy: *Amathomyia persiana* Becker in Becker & Stein, 1913.

Iranian Records: Baluchestan (Becker and Stein, 1913), Iran (Engel, 1930).

Collection Dates: 28 April (Becker and Stein, 1913).

Distribution outside Iran: Kazakhstan, Tunisia.

75. *Loewinella virescens* (Loew, 1871)

Iranian Records: Khuzestan (Oldroyd, 1958).

Collection Dates: 28 March-6 April (Oldroyd, 1958).

Distribution outside Iran: China, Russia.

Tribe *Ctenotini* Hull, 1962

76. *Ctenota coerulea* (Becker in Becker & Stein, 1913)

Iranian Records: Khorasan (Becker and Stein, 1913), Iran (Engel, 1930).

Collection Dates: 15-17 July (Becker and Stein, 1913).

Distribution outside Iran: Israel, Kazakhstan, Mongolia.

77. *Ctenota molitrix* Loew, 1873

Iranian Records: Baluchestan (Becker and Stein, 1913), Khuzestan and SW Iran (Abbassian-Lintzen, 1964a), Iran (Engel, 1930; Theodor, 1980).

Collection Dates: 16-22 April (Becker and Stein, 1913), 1 May (Abbassian-Lintzen, 1964a).

Biology: "On dry white clay with xerophilous and halophilous plants" (Abbassian-Lintzen, 1964a).

Distribution outside Iran: Egypt, Israel, Kazakhstan, Syria.

78. *Stiphrolamyra pleskei* (Becker in Becker & Stein, 1913)

Synonymy: *Lamyra pleskei* (Becker in Becker & Stein, 1913) (Hradsky & Geller-Grimm, 1997).

Iranian Records: Baluchestan, Kerman (Becker and Stein, 1913), Iran (Engel, 1930).

Collection Dates: 15-23 June (Becker and Stein, 1913).

Distribution outside Iran: Afghanistan, Turkey.

Tribe Laphriini Macquart, 1838

79. *Choerades fimbriata* (Meigen, 1820)

Synonymy: *Laphria marginata* Meigen, 1820.

Material Examined: Ardabil, Moghan, September 1998, 2♀, 1♂. New record for the Iranian fauna.

Biology: *Tabanus ansarii* (Abbas-Lintzen) (Diptera: Tabanidae) was detected as the prey of *C. fimbriata*.

Distribution outside Iran: Albania, Armenia, Austria, Azerbaijan, Czech Republic, Finland, former Yugoslavia, France, Germany, Hungary, Italy, Poland, Romania, Russia, Slovakia, Switzerland, Turkey, West Siberia.

80. *Choerades gilva* (Linnaeus, 1758)

Synonymy: *Asilus rufa* De Geer, 1776; *Laphria bilineata* Walker, 1849.

Material Examined: Kermanshah, Ravansar, July 2000, 1♀; Ilam: Ilam, August 2001, 2♀. New record for the Iranian fauna.

Biology: This species was collected with *Delta dimidiatipenne* (Saussure) and *Vespa crabro* Linnaeus (Hymenoptera: Vespidae) as prey.

Distribution outside Iran: Bulgaria, Canada, Czech Republic, Denmark, England, Finland, France, Germany, Hungary, Italy, Mongolia, Norway, Poland, Romania, Russia, Sweden, Switzerland, The Netherlands, USA.

81. *Choerades marginata* (Linnaeus, 1758)

Synonymy: *Asilus media* (Müller, 1765); *A. aurea* (Olivier, 1789); *Erax nigra* Scopoli, 1763; *Laphria*

anthrax Meigen, 1804; *L. nigra* (Meigen, 1804); *L. nigrifrons* (Megerle in Meigen, 1820); *L. fulgida* (Meigen, 1820); *L. podagraria* (Meigen, 1820); *L. strandi* (Duda, 1940); *L. chrysocephala* Meigen, 1820.

Material Examined: East Azarbaijan, Arasbaran (Khomarlo), September 2003, 1♀. New record for the Iranian fauna.

Distribution outside Iran: Albania, Austria, Belgium, Czech Republic, Denmark, England, former Yugoslavia, Finland, France, Germany, Hungary, Italy, Luxembourg, Norway, Poland, Romania, Sweden, Switzerland, The Netherlands.

82. *Laphria dizonias* Loew, 1847

Iranian Records: Fars and Southern Iran (Abbassian-Lintzen, 1964a).

Collection Dates: 2-9 May (Abbassian-Lintzen, 1964a).

Biology: "Collected around fig trees" (Abbassian-Lintzen, 1964a).

Distribution outside Iran: Azerbaijan, Armenia, Greece, Iraq, Israel, Turkey.

83. *Laphria flava* (Linnaeus, 1761)

Synonymy: *Erax conopsoides* Scopoli, 1763; *E. ferox* Scopoli, 1763; *Asilus fulva* Geoffroy in Fourcroy, 1785; *Asilus pedemontana* Fabricius, 1794; *Laphria escorialensis* Strobl, 1906.

Material Examined: Mazandaran, Savadkooh, September 2002, 1♀, 1♂. New record for the Iranian fauna.

Biology: The species is a predator of the Gypsy moth, *Lymantria dispar* Linnaeus (Lepidoptera: Lymantridae) in oak forests.

Distribution outside Iran: Albania, Algeria, Austria, Belgium, Czech Republic, Denmark, England, former Yugoslavia, France, Germany, Greece, Hungary, India, Italy, Luxembourg, Mongolia, Norway, Poland, Romania, Russia, Spain, Sweden, The Netherlands, Turkey.

84. *Nusa infumata* (Loew, 1851)

Synonymy: *Laphria brachyptera* Loew, 1851; *Dasythrix stenura* Loew, 1858; *D. ruficornis* Wulp, 1899.

Iranian Records: Tehran (Abbassian-Lintzen, 1964a), Iran (Theodor, 1980).

Collection Dates: 23 July (Abbassian-Lintzen, 1964a).

Distribution outside Iran: Egypt, Kazakhstan, Kenya, Mozambique, Namibia, Russia, South African Republic, Tanzania, Yemen, Zimbabwe.

85. *Nusa puella* (Rondani, 1873)

Iranian Records: Iran (Lehr, 1988).

86. *Nusa ramicosa* (Loew, 1871)

Synonymy: *Dasythrix ramicosa* Loew, 1871.

Iranian Records: Baluchestan, Kerman (Becker and Stein, 1913), Baluchestan (Oldroyd, 1958), Khuzestan (Abbassian-Lintzen, 1964a).

Collection Dates: 28 April-1 July (Becker and Stein, 1913), 10 May (Oldroyd, 1958), 20-31 May (Abbassian-Lintzen, 1964a).

Biology: "All specimens on fine white clay with more or less sparse vegetation" (Abbassian-Lintzen, 1964a).

Distribution outside Iran: Azerbaijan, China, Iraq, Kazakhstan, Turkey.

Tribe Andrenosomini Hull, 1962

87. *Andrenosoma atrum* (Linnaeus, 1758)

Synonymy: *Andrenosoma atra* (Linnaeus, 1758); *Erax prostratum* Scopoli, 1763.

Material Examined: Ardabil, Ardabil, July 2002, 1♂. New record for the Iranian fauna.

Biology: This species was collected with Colorado potato beetle, *Leptinotarsa decemlineata* Say (Coleoptera: Chrysomelidae) as prey.

Distribution outside Iran: Algeria, Austria, Bulgaria, Czech Republic, Denmark, former Yugoslavia, France, Germany, Greece, Italy, Poland, Romania, Russia, Spain, Sweden, Switzerland, Turkey.

Subfamily Laphystiinae Hendel, 1936

88. *Glyphotrichis impulvinatus* Oldroyd, 1958

Iranian Records: Baluchestan (Oldroyd, 1958), Khuzestan (Abbassian-Lintzen, 1964a).

Collection Dates: 19 March-2 April (Oldroyd, 1958), 15 April-29 May (Abbassian-Lintzen, 1964a).

Biology: "Numerous on sandy bank of the Karkheh River very numerous. Preying on solitary wasps of same body length and appearance as *G. impulvinatus*, the wasps inhabiting minute burrows in the sand" (Abbassian-Lintzen, 1964a).

89. *Laphystia dimidiata* Oldroyd, 1958

Iranian Records: Khuzestan (Oldroyd, 1958).

Collection Dates: 28 March-10 April (Oldroyd, 1958).

90. *Laphystia erberi* (Schiner, 1865)

Synonymy: *Laphycitis arenacea* Paramonov, 1930.

Iranian Records: Baluchestan, Khuzestan (Oldroyd, 1958).

Collection Dates: 5 March-10 April (Oldroyd, 1958).

Distribution outside Iran: Azerbaijan, Egypt, Greece, Iraq, Israel, Italy, Kazakhstan, Malta, Spain, Romania, Tunisia, Turkey.

91. *Laphystia latiuscula* Loew, 1871

Synonymy: *Laphystia metallescens* Hermann, 1906.

Iranian Records: Fars (Abbassian-Lintzen, 1964a).

Collection Dates: 20 April (Abbassian-Lintzen, 1964a).

Distribution outside Iran: Afghanistan, Russia.

92. *Laphystia lehri* Abbassian-Lintzen, 1964

Iranian Records: Khuzestan (Abbassian-Lintzen, 1964a).

Collection Dates: 12 April-22 May (Abbassian-Lintzen, 1964a).

Biology: "On sandy ground with sparse vegetation beside saline swamps" (Abbassian-Lintzen, 1964a).

93. *Perasis sussiana* Abbassian-Lintzen, 1964

Iranian Records: Khuzestan (Abbassian-Lintzen, 1964a).

Collection Dates: 22 April-20 May (Abbassian-Lintzen, 1964a).

Biology: "On light, loose soil, and predator of large yellow ants" (Abbassian-Lintzen, 1964a).

Distribution outside Iran: Azerbaijan.

94. *Psilocurus hypopygialis* (Paramonov, 1930)

Synonymy: *Laphystia hypopygialis* (Paramonov, 1930); *Psilocurus translatus* Oldroyd, 1958 *sensu* Lehr, 1988, questionable *sensu* Weinberg & Bächli, 2001.

Iranian Records: Khuzestan (Oldroyd, 1958; Abbassian-Lintzen, 1964a).

Collection Dates: 28 March-6 April (Oldroyd, 1958), 12 April-20 May (Abbassian-Lintzen, 1964a).

Biology: "On white clay with more or less sparse vegetation" (Abbassian-Lintzen, 1964a).

Distribution outside Iran: Armenia, Azerbaijan, Iraq.

95. *Scytomedes haemorrhoidalis* (Fabricius, 1794)

Synonymy: *Gastrichelus nubeculipennis* (Costa, 1863); *Scytomedes menstruus* Loew in von Röder, 1882.

Material Examined: West Azerbaijan, Maco, June 1999, 1♀. New record for the Iranian fauna.

Biology: This species was collected with *Musca domestica* (Diptera: Muscidae) as prey.

Distribution outside Iran: Algeria, Bulgaria, France, Greece, Italy, Morocco, Tunisia, Turkey.

96. *Trichardis leucocomus* (Wulp, 1899)

Synonymy: *Strobilothrix albipila* Becker, 1907.

Iranian Records: Khuzestan (Oldroyd, 1958; Abbassian-Lintzen, 1964a), Iran (Theodor, 1980).

Collection Dates: 28, 29 May (Abbassian-Lintzen, 1964a).

Biology: "Collecting localities at river banks with pure sandy soil, rocks, tamarisks and oleander" (Abbassian-Lintzen, 1964a).

Distribution outside Iran: Algeria, Egypt, Israel, Kazakhstan, Mongolia, Morocco, Yemen.

97. *Trichardopsis richteri* Oldroyd, 1958

Synonymy: *Acrochordomerus kasakh* Lehr, 1958.

Iranian Records: Southern Iran (Oldroyd, 1958), Khuzestan (Abbassian-Lintzen, 1964a).

Collection Dates: 29 May-2 June (Abbassian-Lintzen, 1964a).

Distribution outside Iran: Kazakhstan.

98. *Triclis olivaceus* (Loew, 1851)

Synonymy: *Gastrichelius halictivorus* Rondani, 1856.

Iranian Record: Iran (Theodor, 1980).

Distribution outside Iran: Azerbaijan, France, Greece, Israel, Italy, Kazakhstan, Russia, Turkey.

99. *Udenopogon inscriptus* Becker in Becker & Stein, 1913

Iranian Records: Baluchestan and Kerman (Becker and Stein, 1913), Iran (Engel, 1930).

Collection Dates: 21 July-10 August (Becker and Stein, 1913).

Subfamily Leptogastrinae Schiner, 1862

100. *Euscelidia pallasii* (Wiedemann, 1818)

Synonymy: *Leptogaster conopsooides* (Pallas in Wiedemann, 1818) as a collection name; *Leptogaster pubiceps* Loew, 1871.

Material Examined: Markazi, Arak, September 2001, 1♀. New record for the Iranian fauna.

Distribution outside Iran: Greece, Russia, Turkey.

101. *Leptogaster cylindrica hispanica* Meigen, 1838

Iranian Records: Iran (Lehr, 1988).

Distribution outside Iran: Algeria, Azerbaijan, Bosnia-Herzegovina, Croatia, France, Italy, Kazakhstan, Morocco, Slovenia, Spain, West Siberia.

102. *Leptogaster gracilis* Loew, 1847

Iranian Records: Baluchestan (Oldroyd, 1958).

Collection Dates: 2 April (Oldroyd, 1958).

Distribution outside Iran: Israel, Kazakhstan, Mongolia, Romania, Russia, Turkey.

103. *Leptogaster guttiventris* Zetterstedt, 1842

Synonymy: *Leptogaster cylindrica* Meigen, 1820.

Material Examined: Golestan, National Park, September 2002, 1♀. New record for the Iranian fauna.

Biology: This species was collected with *Podalonia micipsa* (Morice) (Hymenoptera: Sphecidae) as prey.

Distribution outside Iran: Austria, Belgium, Czech Republic, Denmark, England, Finland, France, Germany, Hungary, Poland, Russia, Sweden, Switzerland, The Netherlands.

104. *Leptogaster nartshukae* Lehr, 1961

Iranian Records: Iran (Lehr, 1988).

Distribution outside Iran: Kazakhstan, Mongolia, West and East Siberia.

105. *Leptogaster pubicornis* Loew, 1847

Synonymy: *Leptogaster pusillus* Jaennicke, 1867.

Material Examined: Golestan, Minoodasht, September 2002, 1♀. New record for the Iranian fauna.

Biology: This species was collected with *Archips rosanus* (Linnaeus) (Lepidoptera: Tortricidae) as prey.

Distribution outside Iran: Bulgaria, Czech Republic, France, Germany, Greece, Hungary, Italy, Russia, Switzerland, Turkey.

Subfamily Ommatiinae Hardy, 1927

106. *Ommatius tenellus* Wulp, 1889

Iranian Record: Baluchestan (Oldroyd, 1958).

Collection Dates: 10-14 May (Oldroyd, 1958).

Distribution outside Iran: Algeria, Azerbaijan, Chad, China, Egypt, Ethiopia, India, Israel, Niger, Senegal, Sudan, Yemen.

Subfamily Stenopogoninae Hull, 1962

Tribe Cyrtopogonini Artigas & Papavero, 1991

107. *Heteropogon lugubris mesasiaticus* Lehr, 1970

Iranian Records: Iran (Lehr, 1988).

Distribution outside Iran: Azerbaijan, Kazakhstan.

108. *Heteropogon pyrinus* Hermann, 1906

Synonymy: *Heteropogon pyrrhinus* Engel, 1925.

Iranian Records: Iran (Hermann, 1905; Engel, 1930; Theodor, 1980).

Distribution outside Iran: Azerbaijan, Egypt, Israel, Kazakhstan.

109. *Holopogon dimidiatus* (Meigen, 1820)

Synonymy: *Podoctria dimidipennis* (Megerle in Meigen, 1820); *Dasytopogon fuscipennis* (Meigen, 1820); *Holopogon timidus* Loew, 1847.

Material Examined: Golestan, National Park, September 2002, 1♀. New record for the Iranian fauna.

Distribution outside Iran: Austria, France, Greece, Hungary, Italy, Poland, Romania, Russia, former Yugoslavia.

110. *Holopogon imbecillus* Loew, 1871

Iranian Records: Iran, Ob Ali bei Tehran (Oldroyd, 1958).

Collection Dates: 28 July (Oldroyd, 1958).

Distribution outside Iran: Middle Asia (including, Armenia and Azerbaijan).

111. *Holopogon nigripennis* (Meigen, 1820)

Iranian Records: Khorasan (Becker and Stein, 1913).

Collection Dates: 22-23 April (Becker and Stein, 1913).

Distribution outside Iran: Austria, Azerbaijan, Belgium, Bulgaria, China, Czech Republic, Far East of Russia, France, Germany, Greece, Italy, Kazakhstan, Mongolia, Poland, Slovakia, Switzerland, West and East Siberia.

112. *Rhabdogaster cinerascens* (Wulp, 1899)

Synonymy: *Psilinus cinerascens* Wulp, 1899.

Iranian Records: Makran (Oldroyd, 1958).

Collection Dates: 25 March (Oldroyd, 1958).

Distribution outside Iran: Kenya, Yemen.

Tribe Dioctriini Enderlein, 1936

113. *Dioctria dispar* Loew, 1871

Material Examined: Guilan, Rasht, July 1999, 1♀. New record for the Iranian fauna.

Biology: The species is a predator of the Rice Stem Borer, *Chilo suppressalis* Walker (Lepidoptera: Pyralidae) in the rice fields.

Distribution outside Iran: Russia.

114. *Dioctria flavipennis* Meigen, 1820

Synonymy: *Dioctria aurifrons* Meigen 1820.

Material Examined: Mazandaran, Behshahr, July 2002, 1♀; Guilan: Rast, July 2005, 1♀. New record for the Iranian fauna.

Biology: The species is a predator of *Sesamia* sp. (Lepidoptera: Noctuidae) in corn fields and *Dociostaurus crassiusculus* (Pantel) (Orthoptera: Acrididae) in cotton fields.

Distribution outside Iran: Austria, Bulgaria, Czech Republic, France, Germany, Hungary, Poland, Romania, Russia, Switzerland, Turkey.

115. *Dioctria gracilis* Meigen, 1820

Synonymy: *Dioctria hyalipennis* Meigen, 1830; *D. concinna* Costa, 1883.

Material Examined: Southern Khorasan, Birjand, September 2001, 1♀, 1♂. New record for the Iranian fauna.

Biology: This species is a predator of the Rice Stem Borer, *Chilo suppressalis* Walker and *Chilo phragmitellus* (Hübner) (Lepidoptera: Pyralidae) in rice and corn fields.

Distribution outside Iran: Algeria, France, Germany, Italy, Switzerland, Turkey.

116. *Dioclea hyalipennis* (Fabricius, 1794)

Synonymy: *Dioclea anomala* Macquart, 1826; *D. flavipes* Meigen, 1804; *D. frontalis* Meigen, 1804; *D. varipes* Meigen, 1820; *D. baumhaueri* Meigen, 1820; *D. strandi* Duda, 1940.

Material Examined: Sistan and Baluchestan, Zahedan, April 2001, 2♀. New record for the Iranian fauna.

Biology: This species was collected with *Paratettix histicus* (Stål) (Orthoptera: Tetrigidae) as prey.

Distribution outside Iran: Algeria, Austria, Belgium, Bulgaria, Canada, Czech Republic, Denmark, England, Finland, former Yugoslavia, France, Italy, Luxembourg, Poland, Romania, Russia, Spain, Switzerland, The Netherlands, Tunisia, USA.

117. *Dioclea linearis* (Fabricius, 1787)

Synonymy: *Asilus cingulata* Zetterstedt, 1849; *A. linearis* Meigen, 1830.

Material Examined: Guilan, Fooman, May 2003, 1♀. New record for the Iranian fauna.

Biology: This species was collected with *Ancistrocerus auctus* (Fabricius) and *Katamenes sichelii* (Giordani Soika) (Hymenoptera: Vespidae) as prey.

Distribution outside Iran: Austria, Belgium, Bulgaria, Czech Republic, Denmark, England, former Yugoslavia, France, Germany, Hungary, Italy, Luxembourg, The Netherlands, Poland, Romania, Russia, Switzerland.

118. *Dioclea lugens* Loew, 1873

Iranian Records: Iran (Lehr, 1988).

Distribution outside Iran: Turkey.

Tribe Stenopogonini Hardy, 1930

119. *Amphisbetetus dorsatus* Becker in Becker & Stein, 1913

Synonymy: *Amphisbetetus rufipes* Engel, 1930.

Iranian Records: Baluchestan (Becker and Stein, 1913), Iran (Engel, 1930; Theodor, 1980).

Collection Dates: 27 March-27 April (Becker and Stein, 1913).

Distribution outside Iran: Egypt, Israel, Kazakhstan, Turkey.

120. *Amphisbetetus favillaceus* (Loew in Rosenhauer, 1856)

Iranian Records: Khuzestan (Abbassian-Lintzen, 1964a).

Collection Dates: 14 April-2 June (Abbassian-Lintzen, 1964a).

Biology: Abbassian-Lintzen (1964a) obtained all specimens in the stony semi-desert hills of N Khuzestan, where they flew over the ground for very short distances.

Distribution outside Iran: Afghanistan, Azerbaijan, Greece, Israel, Spain, Turkey.

121. *Anarolius jamshidi* Abbassian-Lintzen, 1964

Iranian Records: NE Tehran (Abbassian-Lintzen, 1964a).

Collection Dates: 30 March-1 May (Abbassian-Lintzen, 1964a).

Distribution outside Iran: Turkey.

122. *Ancylorhynchus argyrogaster* (Séguy, 1932)

Iranian Records: Iran (Lehr, 1988).

123. *Ancylorhynchus bicolor* (Becker in Becker & Stein, 1913)

Iranian Records: Iran (Engel, 1930), Khorasan (Becker and Stein, 1913).

Collection Dates: 29 July-1 August (Becker and Stein, 1913).

124. *Ancylorhynchus farinosus* (Becker in Becker & Stein, 1913)

Iranian Records: Baluchestan (Becker and Stein, 1913), Iran (Engel, 1930).

Collection Dates: 10-18 May (Becker and Stein, 1913).

125. *Crobilocerus megilliformis* (Loew, 1847)

Iranian Records: Fars and Tehran (Abbassian-Lintzen, 1964a).

Collection Dates: 12-15 May (Abbassian-Lintzen, 1964a).

Distribution outside Iran: Armenia, Azerbaijan, Greece, Romania, Turkey.

126. *Crobilocerus spinosus persianus* Geller-Grimm & Hradský, 1999

Iranian Records: Iran (Geller-Grimm & Hradský, 1999).

127. *Eriopogon laniger* (Meigen, 1804)

Synonymy: *Eriopogon flavescens* Jaennicke, 1867 (Geller-Grimm, 1999).

Iranian Records: Baluchestan (Becker and Stein, 1913).

Collection Dates: 7 May (Becker and Stein, 1913).

Distribution outside Iran: Algeria, France, Morocco, Portugal, Spain, Tunisia.

128. *Galactopogon hispidus* Engel, 1929

Iranian Records: Baluchestan, Khuzestan (Oldroyd, 1958), Fars, Khuzestan, SE Iran (Abbassian-Lintzen, 1964a).

Collection Dates: 11-28 March (Oldroyd, 1958), 10 March-10 May (Abbassian-Lintzen, 1964a).

Distribution outside Iran: Algeria, Jordan, Israel.

129. *Habropogon decipiens* Theodor, 1980

Material Examined: Kermanshah, Kermanshah, September 2000, 1♂. New record for the Iranian fauna.

Biology: This species was collected with *Palmodes occitanicus puncticollis* (Kohl) (Hymenoptera: Sphecidae) as prey.

Distribution outside Iran: Israel, Jordan, Turkey.

130. *Habropogon doriae* Rondani, 1873

Iranian Records: Iran (Engel, 1930).

Distribution outside Iran: Azerbaijan.

131. *Habropogon lineatus* Lehr, 1960

Iranian Records: Tabriz, Iran (Lehr, 1988).

Distribution outside Iran: Azerbaijan.

132. *Habropogon longiventris* Loew, 1847

Iranian Records: Tehran (Abbassian-Lintzen, 1964a).

Collection Dates: 19 June (Abbassian-Lintzen, 1964a).

Material Examined: Sistan and Baluchestan: Zabol, December 1998.

Biology: This species was collected with *Katamenes sichelii* (Giordani Soika) (Hymenoptera: Vespidae) as prey.

Distribution outside Iran: Azerbaijan, France, Greece, Israel, Russia, Turkey.

133. *Habropogon montanus* Lehr, 1960

Iranian Records: Khuzestan (Abbassian-Lintzen, 1964a).

Distribution: USSR-Kazakh (incl. Turkistan), Soviet Middle Asia and Iran.

Collection Dates: 9 April (Abbassian-Lintzen, 1964a).

Distribution outside Iran: Kazakhstan.

134. *Habropogon verticalis* Becker in Becker & Stein, 1913

Iranian Records: Baluchestan (Becker & Stein, 1913).

Collection Dates: 23-27 April (Becker and Stein, 1913).

Distribution outside Iran: Turkey.

135. *Jothopogon leucomallus* (Loew, 1871)

Iranian Records: Baluchestan (Becker and Stein, 1913), Iran (Theodor, 1980).

Collection Dates: 23 April-5 May (Becker and Stein, 1913).

Distribution outside Iran: Israel, Jordan, Turkey.

136. *Iranopogon brandti* Timon-David, 1955

Iranian Records: Iran (Timon-David, 1955).

137. *Pycnopogon hirsutus* Becker in Becker & Stein, 1913

Iranian Records: Baluchestan (Becker and Stein, 1913).

Collection Dates: 9-25 February (Becker and Stein, 1913).

138. *Pycnopogon melanostomus* Loew, 1874

Iranian Records: Khuzestan (Abbassian-Lintzen, 1964a).

Collection Dates: 13 May (Abbassian-Lintzen, 1964a).

Material Examined: Mazandaran: Behshahr, May 2005.

Biology: This species was collected with *Calliphora vomitoria* Linnaeus (Diptera: Calliphoridae) as prey.

Distribution outside Iran: Egypt, Kazakhstan.

139. *Scylaticus elamiensis* Abbassian-Lintzen, 1964

Iranian Records: Khuzestan (Abbassian-Lintzen, 1964a).

Collection Dates: 8-24 April (Abbassian-Lintzen, 1964a).

140. *Stenopogon avus* (Loew, 1874)

Iranian Records: NE Iran, NE Khorasan (Abbassian-Lintzen, 1964a), Iran (Engel, 1930).

Collection Dates: 14 July (Abbassian-Lintzen, 1964a).

Distribution outside Iran: Kazakhstan.

141. *Stenopogon elongatus* (Meigen, 1804)

Synonymy: *Asilus loewi* Schiner, 1866 (*nomen nudum*).

Iranian Records: Iran (Lehr, 1988).

Biology: The species is a powerful predator of grasshoppers, *Locusta migratoria* L., and *Dociostaurus maroccanus* (Thunberg) (Orthoptera: Acrididae) in Kuzestan province (Khajehzadeh, 2004).

Distribution outside Iran: Egypt, France, Greece, Hungary, Israel, Romania, Russia, Tunisia, Turkey, West Sahara.

142. *Stenopogon heteroneurus* (Macquart, 1838)

Iranian Records: Baluchestan (Becker and Stein, 1913), Fars (Abbassian-Lintzen, 1964a).

Collection Dates: 17 March-27 April (Becker and Stein, 1913), 1-22 May (Abbassian-Lintzen, 1964a).

Distribution outside Iran: Algeria, Egypt, Israel, Morocco, Tunisia.

143. *Stenopogon junceus* (Wiedemann in Meigen, 1820)

Synonymy: *Dasypogon tanygastrus* Loew, 1861.

Iranian Records: Azerbaijan, Fars, Khuzestan, NW Iran (Abbassian-Lintzen, 1964a).

Collection Dates: 17 April-27 August (Abbassian-Lintzen, 1964a).

Biology: "Several times *S. junceus* was observed preying on Migratory Locusts, *Schistocerca gregaria* (Forskal)" (Abbassian-Lintzen, 1964a).

Distribution outside Iran: Afghanistan, Azerbaijan, France, Greece, Israel, Morocco, Russia, Spain, Turkey.

144. *Stenopogon laevigatus* (Loew, 1851)

Synonymy: *Dasypogon bicolor* Bigot, 1878.

Iranian Records: Fars (Abbassian-Lintzen, 1964a).

Collection Dates: 23 July (Abbassian-Lintzen, 1964a).

Material Examined: Golestan, Bandar-Torkman, September 2001, 1♀.

Biology: This species was collected with *Calliphora vomitoria* Linnaeus (Diptera: Calliphoridae) as prey. *Muscina* sp. (Diptera: Muscidae), *Chrysotoxum* sp. and *Pipizella* sp. (Diptera: Syrphidae), *Tabanus bromius* Linnaeus (Diptera: Tabanidae) and *Apis mellifera* Linnaeus (Hymenoptera: Apidae) were recorded as prey of this species by Hayat and Alaoğlu (1994) and Hayat (1997). Özbek and Hayat (1999) emphasised the importance of this species as predator of *A. mellifera* in Erzurum, Turkey.

Distribution outside Iran: Afghanistan, Azerbaijan, Turkey.

145. *Stenopogon nigriventris* Loew, 1868

Material Examined: Golestan, National Park, June 1999, 2♀. New record for the Iranian fauna.

Biology: This species was collected with *Acridella turrita* Linnaeus (Orthoptera: Acrididae) as prey.

Distribution outside Iran: Azerbaijan, Greece, Turkey.

146. *Stenopogon rufipilus* (Loew, 1873)

Iranian Records: Northern Khorasan (Abbassian-Lintzen, 1964a), Iran (Engel, 1930).

Collection Dates: 9 July (Abbassian-Lintzen, 1964a).

147. *Stenopogon sabaudus* (Fabricius, 1794)

Synonymy: *Asilus fulvulus* Pallas in Wiedemann, 1818 (*nomen nudum*); *A. occultus* Loew, 1861.

Iranian Records: Kurdestan, Western Iran (Abbassian-Lintzen, 1964a).

Collection Dates: 3 July (Abbassian-Lintzen, 1964a).

Biology: In Turkey, *Camptopus lateralis* (Germar) (Hemiptera: Alydidae), *Ceresa bubalus* Fabricius (Homoptera: Membracidea), *Polistes* (s. str.) *dominulus mucheri* Gusenleitner (Hymenoptera: Vespidae), *Andrena bicolor* Fabricius (Hymenoptera: Andrenidae), *Dasypoda altercator* (Harris) (Hymenoptera: Melittidae), *Lasioglossum* sp. (Hymenoptera: Halictidae), *Apis mellifera* Linnaeus (Hymenoptera: Apidae), and some ichneumonids were determined as prey of this species (Hayat and Alaoğlu, 1994; Hayat, 1997). Özbek and Hayat (1999) noted that *A. mellifera* comprised most of the preys of this species.

Distribution outside Iran: Albania, Austria, Azerbaijan, Bosnia-Herzegovina, Bulgaria, Croatia, Czech Republic, France, Germany, Greece, Hungary, Italy, Slovakia, Slovenia, Spain, Switzerland, Syria, Turkey.

148. *Stenopogon sciron* (Loew, 1873)

Synonymy: *Scleropogon theseus* Loew, 1873.

Iranian Records: Kerman (Abbassian-Lintzen, 1964a), Iran (Engel, 1930; Theodor, 1980).

Collection Dates: 17 June (Abbassian-Lintzen, 1964a).

Distribution outside Iran: Afghanistan, Azerbaijan, China, Egypt, Turkey.

149. *Stenopogon sciron superbus* (Portschinsky, 1873)

Iranian Records: Baluchestan (Oldroyd, 1958), Iran (Engel, 1930).

Collection Dates: 19 April-12 June (Oldroyd, 1958).

Distribution outside Iran: Afghanistan, Azerbaijan, Kazakhstan, Russia.

Subfamily Stichopogoninae Hardy, 1930

150. *Rhadinus megalonix* Loew, 1856

Iranian Records: Khuzestan (Oldroyd, 1958), Khuzestan (Abbassian-Lintzen, 1964a).

Collection Dates: 28 March-6 April (Oldroyd, 1958), 1 May (Abbassian-Lintzen, 1964a).

Distribution outside Iran: Azerbaijan, Egypt, Iraq, Israel, Libya, Sudan, Syria, Tunisia, Yemen.

151. *Stichopogon albellus* Loew, 1856

Iranian Records: Baluchestan (Oldroyd, 1958), Khuzestan (Abbassian-Lintzen, 1964a).

Collection Dates: 10 May-21 July (Oldroyd, 1958), 11 April (Abbassian-Lintzen, 1964a).

Distribution outside Iran: Egypt, Israel.

152. *Stichopogon auritinctus* Abbassian-Lintzen, 1964

Iranian Records: Azerbaijan (Abbassian-Lintzen, 1964a).

Collection Dates: 13 July (Abbassian-Lintzen, 1964a).

153. *Stichopogon caucasicus* Bezzi, 1910

Iranian Records: Baluchestan, Makran (Oldroyd, 1958), Azerbaijan (Abbassian-Lintzen, 1964a).

Collection Dates: 25 March-4 June (Oldroyd, 1958), 30 July-6 August (Abbassian-Lintzen, 1964a).

Biology: "All specimens from banks along small watercourses" (Abbassian-Lintzen, 1964a).

Distribution outside Iran: Russia.

154. *Stichopogon chrysostoma* Schiner, 1867

Synonymy: *Stichopogon lucidiventris* Becker, 1902.

Iranian Records: Khorasan (Becker and Stein, 1913), Tehran (Abbassian-Lintzen, 1964a).

Collection Dates: 6 August (Becker and Stein, 1913), 18 April (Abbassian-Lintzen, 1964a).

Distribution outside Iran: Cyrus, Egypt, Israel, Kazakhstan, Libya, Mongolia, Turkey.

155. *Stichopogon scaliger* Loew, 1847

Synonymy: *Stichopogon; congener* Loew, 1856.

Iranian Records: Azerbaijan (Abbassian-Lintzen, 1964a), Baluchestan and Kirman (Becker and Stein, 1913).

Collection Dates: 13 May-10 August (Becker and Stein, 1913), 13 August (Abbassian-Lintzen, 1964a).

Distribution outside Iran: Bulgaria, Czech Republic, Egypt, France, Greece, Italy, Kazakhstan, Romania, Slovakia, Turkey.

156. *Stichopogon schineri* Koch, 1872

Synonymy: *Stichopogon spinimanus* Pokorný, 1887.

Iranian Records: Baluchestan (Oldroyd, 1958).

Collection Dates: 30 April (Oldroyd, 1958).

Distribution outside Iran: Bulgaria, Germany, Spain, France, Corsica, Greece, Italy, Yugoslavia (incl. Bosnia-Herzegovina, Croatia, Macedonia, Slovenia), Morocco, and Switzerland.

As a result of the specimens collected by the authors and the literature searches on Iranian Asilidae, the number of species and subspecies of robber flies for Iran has been increased to 156. Of these, 31 species are new records for the country. Iran is a large country incorporating various geographical regions and climates (Figure) and we expect that a large number of species remain to be discovered. To find new species and distributional records, more studies should be conducted on this important insect group in Iran.



Figure. Map of Iran with boundaries of provinces.

In the present study, some collected material had been damaged by dermestid beetles (Coleoptera: Dermestidae) and determination was impossible. Otherwise, the number of new records would probably have been greater than that recorded in this paper (possibly 120–150 additional species). Unfortunately, most of the specimens preserved in different Iranian collections are severely damaged and cannot be identified.

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