

## Spiders (Arachnida: Aranei) of Azerbaijan 4. Fauna of Naxçivan

## Пауки (Arachnida: Aranei) Азербайджана 4. Фауна Нахичевани

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КЛЮЧЕВЫЕ СЛОВА: Aranei, пауки, Кавказ, Азербайджан, Нахичевань, фауна, новые находки.

**ABSTRACT.** A list of 185 species from 28 families found in Naxçivan, Azerbaijan is presented. Three species: *Malthonica lyncea* (Brignoli, 1978), *Singa neta* (O. Pickard-Cambridge, 1872) and *Siwa atomaria* (O. Pickard-Cambridge, 1876) are new to the fauna of the whole former Soviet Union. Eight species are new to Caucasus as a whole (*Drassyllus crimeaensis* Kovblyuk, 2003, *Haplodrassus silvestris* (Blackwall, 1833), *Micaria dives* (Lucas, 1846), *Minicia marginella* (Wider, 1834), *Pellenes seriatus* (Thorell, 1875), *Sitticus pulchelus* Logunov, 1992, *Dipoena inornata* (O. Pickard-Cambridge, 1861) and *Lasaeola prona* (Menge, 1868) and three are new to Azerbaijan (*Bolyphantes caucasicus* Tanasevitch, 1990, *Cyclosa sierrae* Simon, 1870 and *Xysticus spasskyi* Utotschkin, 1968). 15 poorly known species are illustrated.

**РЕЗЮМЕ.** Приведён список пауков выявленных в Нахичевани: 185 вида из 28 семейств. Три вида: *Malthonica lyncea* (Brignoli, 1978), *Singa neta* (O. Pickard-Cambridge, 1872) и *Siwa atomaria* (O. Pickard-Cambridge, 1876) являются новыми для фауны бывшего СССР. Восемь видов являются новыми для Кавказа: *Drassyllus crimeaensis* Kovblyuk, 2003, *Haplodrassus silvestris* (Blackwall, 1833), *Micaria dives* (Lucas, 1846), *Minicia marginella* (Wider, 1834), *Pellenes seriatus* (Thorell, 1875), *Sitticus pulchelus* Logunov, 1992, *Dipoena inornata* (O. Pickard-Cambridge, 1861) и *Lasaeola prona* (Menge, 1868), а три вида — новые для Азербайджана: *Bolyphantes caucasicus* Tanasevitch, 1990, *Cyclosa sierrae* Simon, 1870 и *Xysticus spasskyi* Utotschkin, 1968). 15 видов проиллюстрированы.

### Introduction

Naxçivan (or Nakhichevan) Autonomous Republic is an administrative unit of Azerbaijan separated from the rest of the country by the belt ca 30 km wide. It has

joint borders with Armenia, Iran and Turkey. Very little is known about araneofauna of this territory compared to some other regions of Azerbaijan, e.g. Absheron Peninsula, Sheki-Zagatala area, Lenkoran area, Mugan steppe [Dunin, 1984, 1989; Dunin & Mamedov, 1992; Guseinov, 1999].

The first spiders from Naxçivan were reported by Schmidt [1895] who mentioned two species, *Oxyopes lineatus* Latreille, 1806 and *Lycosa piochardi* (= *L. praegrans* C.L. Koch, 1836). Ninety years later Neni-lin [1985] added two more species belonging to jump-ing spiders for this area: *Menemerus marginatus* (Kro-neberg, 1875) and *Sitticus saltator* (Simon, 1868). Later about twenty additional species were recorded from Naxçivan. Mikhailov [1986, 1988, 1990, 1992] men-tioned four species from the families Corinnidae, Gna-phosidae and Clubionidae: *Trachelas charitonovi* = *Orthobula c.* (Mikhailov, 1986), *Clubiona corticalis* (Walckenaer, 1802), *C. neglecta* O. Pickard-Cambridge, 1862, and *Micaria lenzi* Bösenberg, 1899. One species of theridiid spider, *Robertus arundineti* (O. Pickard-Cambridge, 1871), was recorded by Eskov [1987]. Du-nin [1988] reported two cribellatae spiders, *Eresus niger* = *E. cinnaberinus* (Olivier, 1789) and *Uloborus plumipes* Lucas, 1846. In his revisions of Caucasian Linyphidae Tanasevitch [1987, 1990] recorded five species in Naxçivan, *Archaraeoncus prospiciens* (Thorell, 1875), *Centromerus minor* Tanasevich, 1990, *Pelecopsis crassipes* Tanasevich, 1987, *Stemonyphantes lineatus* (Linnaeus, 1758) and *Walckenaeria antica* (Wider, 1834). Dunin [1991, 1992] added two dysderid species to the fauna of republic (*Dysdera richteri* Chari-tonov, 1956 and *Harpactea nachitschevanica* Dunin, 1991). Four additional species (*Heliophanus auratus* C.L. Koch, 1835, *Phlegra fuscipes* (= *P. cinereofascia-ta* Simon, 1868), *Salticus tricoloratus* C.L. Koch, 1846, *Sitticus ammobophilus* (Thorell, 1875) were reported by Logunov [Logunov 1996a, 1998; Logunov & Rakov, 1998; Rakov & Logunov, 1996]. So, until recently only 22 species were known from Naxçivan.

Most recent works concerned Naxçivan fauna are as follows: Logunov & Guseinov [2002] concluded that Nenilin's record of *S. saltator* actually refers to *S. ammophilus*. Recently Azarkina [2003] described a new species of jumping spider, *Phlegra dunini* Azarkina, 2003, from Naxçivan. Three agelenid and six *Enoplognatha* species were added to the fauna Naxçivan on the base of present material [Guseinov et al., in press, 2004a, b].

Thus, up to date, 31 species of spiders from 12 families were known in Naxçivan. During our join trip to Naxçivan in 2003 we collected many additional spider species. Results of the treatment of this material are given in the present paper.

## Material and methods

Major part of material have been collected at three localities far separated from each other. In northeastern Naxçivan material was collected in three closely separated (ca. 4-10 km) sites. Some specimens were collected in Naxçivan City and Sharur Town. Considering that fauna of Naxçivan is almost unknown, we list in our survey all species found in the area, although rather many of them were not identified to species level.

List of main collecting sites is given below. Numbers 13, 14 and 15 correspond to our field numbers in Azerbaijan in 2003.

[13] W part, Sharur Distr., Dasharkh Vill., 39°33,629'N 45°02.53'E, 870 m, 1-4.06.2003

[14] W part, Sharur Distr., ca 3 km E of Akhura Vill. 39°34' N 45°11'E, 1400 m, 2.06.2003

[15/01] NE part, Shakhbuz Dist., Batabat locality, 39°31,9'N 45°47.3'E, 2100 m, subalpine meadows & under stones, 3.06.2003

[15/02] NE part, Shakhbuz Dist., env. of Bichenek Vill., 39°31,696'N 45°46.6'E, 2000 m, oak forest, 3.06.2003

[15/03] NE part, Shakhbuz Dist., env. of Bichenek Vill., Bichenek River, 39°29,473'N 45°44.997'E, 1600 m, gravely bank, 3.06.2003

Species new to the fauna of Azerbaijan are marked with "A", species new to Caucasus as a whole are marked with "C", species new to the fauna of the former Soviet Union as a whole are indicated by "U". Species earlier reported from Naxçivan are shown by "\*" sign.

Naxçivan has different spelling: Naxçivan in Azerbaijani alphabet, Nakhichevan' — transliteration from Russian to English, Naxçivan — direct transliteration from Azerbaijani into English.

Material treated herein was shared between Zoological Museum University of Turku (main collection and YM temporary collection), Zoological Museum of Moscow State University and Institute of Zoology, Baku.

The names of collectors are abbreviated as follow: YMM (Yuri M. Marusik), EFG (Elchin F. Guseinov), HAA (Halid A. Aliev).

## Survey of species

### AGELENIDAE (3 species)

*Malthonica lehtineni* Guseinov, Marusik et Koponen, 2004

MATERIAL. 1 ♂ [15/01] (EFG).

COMMENTS. Described only recently based exclusively on material from Naxçivan.

*Malthonica lyncea* (Brignoli, 1978)<sup>U</sup>

MATERIAL. 1 ♂ [14] (YMM).

COMMENTS. Earlier was known from Turkey only [Platnick, 2003]. Our record, first for Azerbaijan and former USSR, extends known range further to north-east.

*Malthonica nakhichevanica* Guseinov, Marusik & Koponen, 2004

MATERIAL. 1 ♂ (YMM) [14]; 1 ♀ [15/02] (YMM).

COMMENTS. Described only recently based exclusively on material from Naxçivan.

### ARANEIDAE (7)

*Araniella opisthographa* (Kulczyński, 1905)

MATERIAL. 1 ♂ [14] (EFG).

COMMENTS. It seems this species has Euro-Central Asian range [cf. Mikhailov, 1997].

*Cyclosa sierrae* Simon, 1870<sup>A</sup>

Fig. 1.

C. s.: Levi, 1977: 79, f. 30-33; Levy, 1998: 318, f. 24-32.

MATERIAL. 5 ♀♀ [14] (YMM & EFG).

COMMENTS. Mediterranean species. Earlier reported in Georgia. New species for Azerbaijan. By general appearance this species is very similar to *C. conica* (Pallas, 1772), although can be separated by the shape of epigyne and palp.

*Hypsosinga sanguinea* (C.L. Koch, 1844)

MATERIAL. 1 ♂, 1 ♀ [15/02] (EFG).

COMMENTS. Trans-Palaearctic species.

*Mangora acalypha* (Walckenaer, 1802)

MATERIAL. 1 ♀ [14] (HAA); 1j [15/02] (YMM).

COMMENTS. Euro-Central Asian species.

*Singa hamata* (Clerck, 1757)

MATERIAL. 1 ♂ [13] (YMM).

COMMENTS. Trans-Palaearctic species.

*Singa neta* (O. Pickard-Cambridge, 1872)<sup>U</sup>

Figs 2, 3.

S. n.: Levy, 1984: 124, f. 26-41.

MATERIAL. 1 ♂, 1 ♀ [14] (EFG).

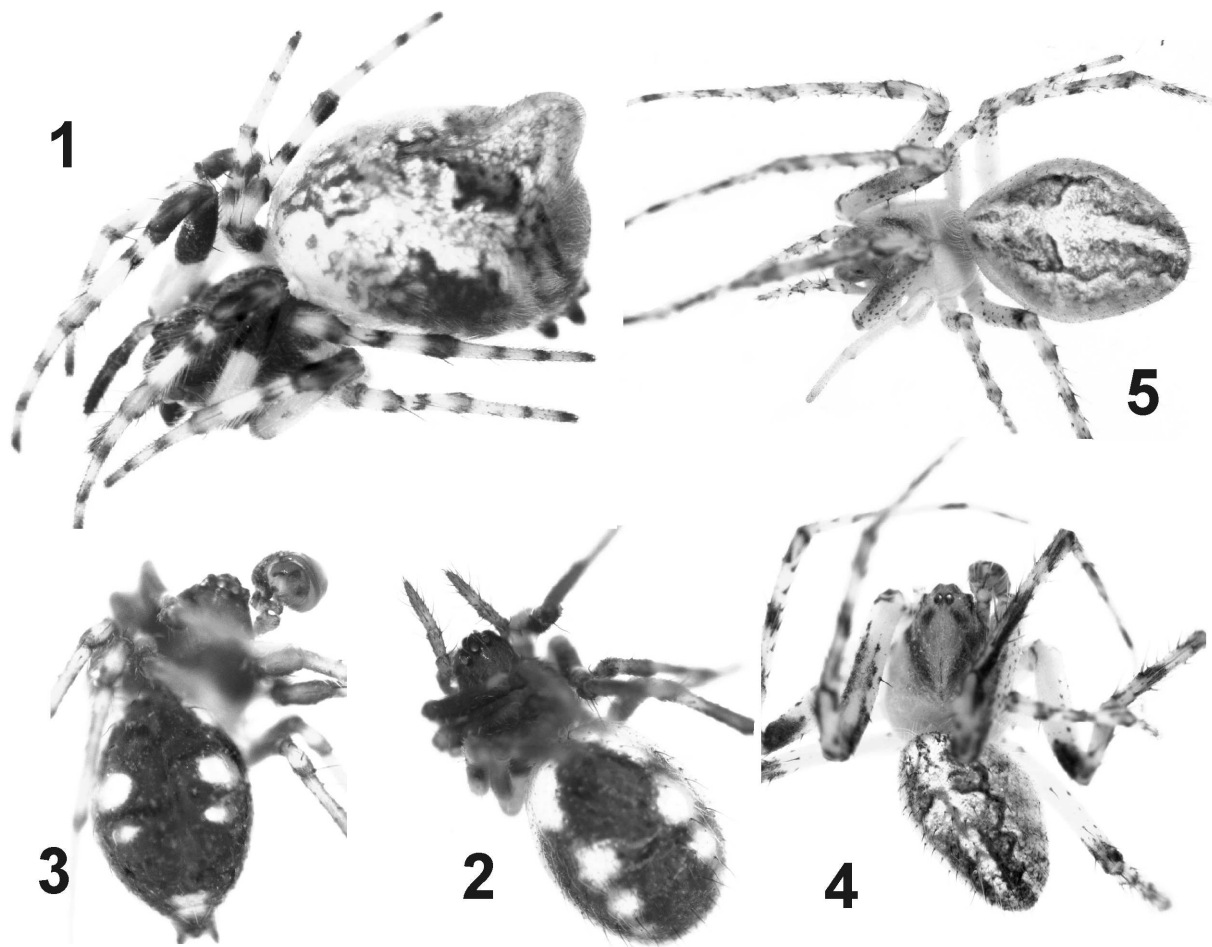
COMMENTS. Mediterranean species. Our record is being the first for Azerbaijan and former USSR, and northeasternmost in the range. This species can be easily separated from the other congeners by having round spots on abdomen. Other *Singa* species have longitudinal stripes and bands.

*Siwa atomaria* (O. Pickard-Cambridge, 1876)<sup>U</sup>

Figs 4, 5.

S. a.: Levy, 1986: 3, f. 1-9.

MATERIAL. 1 ♂, 2 ♀♀ [13] (YMM & HAA).



Figs 1–5. General appearance of *Cyclosa sierrae*, ♀ (1), *Singa neta*, ♂ & ♀ (2, 3) and *Siwa atomaria*, ♂ & ♀ (4, 5).  
Рис. 1–5. Внешний вид *Cyclosa sierrae*, ♀ (1), *Singa neta*, ♂ & ♀ (2, 3) и *Siwa atomaria*, ♂ & ♀ (4, 5).

COMMENTS. East Mediterranean species. Earlier known from Egypt and Israel only [Levy, 1986]. Our record is being the first for Azerbaijan and former USSR, and northeasternmost in the range. It worth mentioning that genus *Siwa* Grasshoff, 1970 was never reported east of Israel.

This species can be easily separated from other Araneidae and related *Larinia* Simon, 1874, by peculiar body pattern and copulatory organs.

#### CLUBIONIDAE (5)

*Cheiracanthium mildei* L. Koch, 1864

MATERIAL. 1 ♂ [13] (YMM).

COMMENTS. Widely distributed in West and Central Palaearctic and in Nearctic.

*Clubiona corticalis* (Walckenaer, 1802)\*

COMMENTS. Reported from Shakhbuz Dist. (Kemyur, Bichenek) by Mikhailov [1992].

*Clubiona neglecta* O. Pickard-Cambridge, 1862\*

COMMENTS. Reported from Ordubad Dist. (Bilav) by Mikhailov [1990].

*Clubiona pseudosimilis* Mikhailov, 1990

MATERIAL. 4 ♂♂ [15/01] (YMM).

COMMENT. Known throughout whole Caucasus [Mikhailov, 1997].

*Clubiona golovatchi* Mikhailov, 1990

MATERIAL. 1 ♀ [15/02] (YMM).

COMMENT. Known throughout whole Caucasus [Mikhailov, 1997].

#### CORINNIDAE (4)

Corinnidae gen. sp.

MATERIAL. 1 ♀ [15/03] (YMM).

COMMENTS. This undescribed species probably belongs to probably a new genus related to *Phrurolithus*. It is known for us from southeastern Azerbaijan also.

*Orthobula charitonovi* (Mikhailov, 1986)\*

COMMENTS. Reported from Naxçıvan: Ordubad Dist. (Bilav) by Mikhailov [1986, sub. *Trachelas c*].

*Phrurolithus festivus* (C. L. Koch, 1835)

MATERIAL. 12 ♂♂, 8 ♀♀ [15/02] (YMM &amp; EFG).

COMMENTS. Trans-Palaeartic range [cf. Mikhailov, 1997].

*Phrurolithus* sp.

MATERIAL. 6 ♂♂, 2 ♀♀ [15/01] (YMM, EFG &amp; HAA); 2 ♂♂, 6 ♀♀ [15/03] (YMM &amp; EFG).

COMMENTS. Probably a new species related to *P. pul-latus* Kulczyński, 1897. It will be considered in a special paper devoted to corinnids of Azerbaijan.

## DICTYNIDAE (2)

*Dictyna* sp.

MATERIAL. 1 ♂, 1 ♀ [14] (YMM).

COMMENTS. Probably a new species similar to *Dyctina civica* (Lucas, 1849).*Lathys stigmatisata* (Menge, 1869)

MATERIAL. 9 ♀♀ [14] (YMM, EFG &amp; HAA).

COMMENTS. Rather widespread species known from Western Europe to Western Siberia.

## DYSDERIDAE (2)

*Dysdera richteri* Charitonov, 1956\*

COMMENTS. Reported from Shakhbuz Dist. (Kyukyu) by Dunin [1992].

*Dysdera* sp.

MATERIAL. 1 ♂, 1 ♀ [15/01] (YMM &amp; EFG).

COMMENTS. Probably a new species. It will be considered in a separate paper.

*Harpactea nachitschevanica* Dunin, 1991\*

MATERIAL. 2 ♀♀ [15/01] (EFG); 38 ♂♂, ♀♀ [15/02] (YMM &amp; EFG); 1 ♀ [15/03] (YMM).

COMMENTS. All our specimens were collected at the type locality. This species is unknown outside of relic Bichenek oak forest from where it was described by Dunin [1991].

## ERESIDAE (1)

*Eresus cinnaberinus* (Olivier, 1789) ? \*

Fig. 9.

MATERIAL. 1 ♀ [13] (YMM).

COMMENTS. Reported from Sadarak Dist. (Sadarak) Naxçıvan by Dunin [1988, sub *E. niger*]. Judging from the vulva our specimen may belong to another sibling species.

## FILISTATIDAE (2)

*Filistata* sp.

MATERIAL. 1 ♂, 1 ♀ [13] (YMM).

COMMENTS. It seems that our specimens belong to undescribed species related to *F. insidiatrix* (Forskål, 1775). It will be considered in a separate paper devoted to Azerbaijani Filistatidae.*Pritha crosbyi* (Spassky, 1938)

Fig. 15.

MATERIAL. 1 ♂, 1 ♀ [13] (YMM).

COMMENTS. It seems this species has Caucasus-Central Asian range. Earlier it was known in Central Asia and recently [Marusik &amp; Guseinov, 2003] it has been reported from eastern Azerbaijan. Naxçıvan is a westernmost locality of this species. It has rather specific color pattern (Fig. 15).

## GNAPHOSIDAE (29)

*Callilepis nocturna* (Linnaeus, 1758)

MATERIAL. 1 ♂ [15/01] (EFG); 4 ♂♂, 1 ♀, 2 juv. [15/03] (YMM).

COMMENTS. Trans-Palaeartic range [Marusik et al., 2000].

*Drassodes lapidosus* (Walckenaer, 1802)

MATERIAL. 1 ♀ [13] (EFG); 5 ♂♂, 8 ♀♀ [14] (YMM &amp; HAA); 5 ♂♂, 1 ♀, 1 juv. [15/01] (YMM &amp; EFG); 1 ♂, 3 ♀♀ [15/03] (EFG).

COMMENTS. Exact range of this species is uncertain because it was frequently confused with *D. cupreus* Blackwall, 1834. It seems, that it has European distribution.*Drassodes* sp.1

MATERIAL. 1 ♀ [14] (HAA).

COMMENTS. Probably a new species. It will be treated in a separate paper.

*Drassode* sp.2

MATERIAL. 1 ♀ [14] (HAA).

COMMENTS. Probably a new species. It will be treated in a separate paper.

*Drassyllus praeficus* L.Koch, 1866

MATERIAL. 1 ♀ [14] (EFG).

COMMENTS. Almost trans-Palaeartic distribution.

*Drassyllus pusillus* (C.L. Koch, 1833)

MATERIAL. 1 ♂ [15/01] (YMM).

COMMENTS. Trans-Palaeartic distribution.

*Drassyllus crimeaensis* Kovblyuk, 2003

MATERIAL. 2 ♀♀ [14] (EFG).

COMMENTS. Recently described from Crimea [Kovblyuk, 2003] and therefore record from Naxçıvan is being the first for Azerbaijan and Caucasus as a whole.

## Gnaphosidae gen. sp.1

Figs. 7–8.

MATERIAL. 1 juv. [13] (EFG); 1 ♂, 2 juv. [14] (YMM).

COMMENTS. Probably a new species belonging to an undescribed genus. Both males and subadult females of this species have very peculiar coloration resembling that of velvet ants (Mutillidae). It will be considered in a special paper devoted to Gnaphosidae.

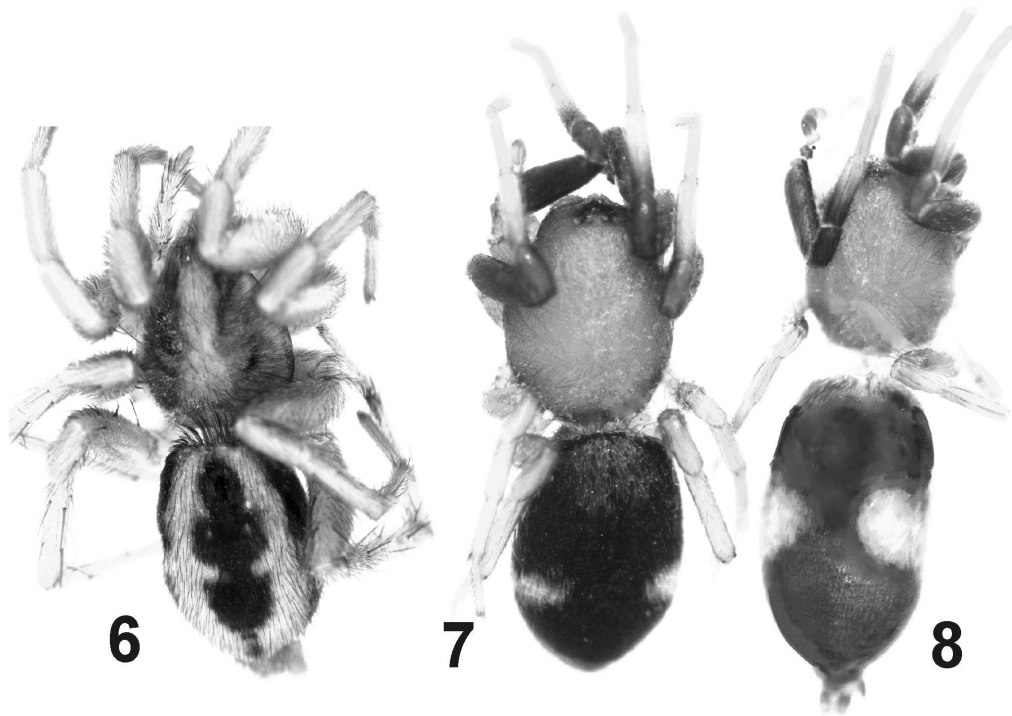
## Gnaphosidae gen. sp.2

Fig. 6.

MATERIAL. 1 ♀ [14] (YMM).

COMMENTS. Probably a new species. Its generic belonging is unclear. By its peculiar coloration and structure of the epigyne this species is related to *Cesonia aspida* Chatzaki, 2002. However, all other *Cesonia* have been described from new world and *Cesonia aspida* was assigned to this genus only tentatively [see Chatzaki et al., 2002]. Thus the generic belonging of both these species remains unclear.





Figs. 6–8. Dorsal pattern of Gnaphosidae gen. sp.2, ♀ (6) and Gnaphosidae gen. sp.1, ♂ & ♀ (7, 8).

Рис. 6–8. Внешний вид, вид сверху Gnaphosidae gen. sp.2, ♀ (6) и Gnaphosidae gen. sp.1, ♂ & ♀ (7, 8).

#### Gnaphosidae gen. sp.3

MATERIAL. 1 ♂, 1 juv. [13] (YMM).

COMMENTS. Probably a new species belonging to undescribed genus. It will be considered in a special paper devoted to Gnaphosidae.

#### *Haplodrassus dalmatensis* (L. Koch, 1866)

MATERIAL. 1 ♀ [13] (EFG); 3 ♂♂, 3 ♀♀ [14] (EFG); 2 ♂♂, 1 ♀ [15/03] (EFG).

COMMENTS. It seems this species has Euro-Central Asian range [cf. Mikhailov, 1997].

#### *Haplodrassus signifer* (C. L. Koch, 1839)

MATERIAL. 1 ♂ [14] EFG.

COMMENTS. Circum-Holarctic range [Marusik et al., 2000].

#### *Haplodrassus silvestris* (Blackwall, 1833)<sup>c</sup>

MATERIAL. 1 ♂ [15/02] (YMM).

COMMENTS. Although it is treated by Platnick [2003] as a Palearctic species, it seems that it has Euro-Caucasian range. Records of this species in Siberia are doubtful [cf. Mikhailov, 1997]. This is a new species for Azerbaijan and Caucasus as a whole.

#### *Leptodrassus* sp.

MATERIAL. 1 ♂ [14] (YMM).

COMMENTS. Our specimen most probably belongs to a new species.

#### *Micaria dives* (Lucas, 1846)<sup>c</sup>

MATERIAL. 5 ♂♂, 6 ♀♀, 7 juv. [15/03] (YMM & EFG).

COMMENTS. Although this species has trans-Palaearctic range [Marusik et al., 2000] it was never reported from Azerbaijan and Caucasus as a whole.

#### *Micaria fulgens* (Walckenaer, 1802)

MATERIAL. 1 ♂, 2 ♀♀ [15/02] (YMM & EFG).

COMMENTS. Euro-Baikalian range [Marusik et al., 2000].

#### *Micaria lenzi* Bösenberg, 1899\*

COMMENTS. Recorded from Naxçıvan (no exact locality) by Mikhailov [1988].

#### *Micaria pallipes* (Lucas, 1846)

MATERIAL. 1 ♀ [14] (YMM); 3 ♀♀ [15/03] (YMM & EFG).

COMMENTS. Euro-Central Asian range [Platnick, 2003].

#### *Micaria rossica* Thorell, 1875

MATERIAL. 1 ♂, 2 ♀♀ [15/03] (EFG); 1 ♀ [14] (EFG).

COMMENTS. Circum-Holarctic range [Marusik et al., 2000].

#### *Nomisia conigera* (Spassky, 1941)

MATERIAL. 2 ♀♀ [13] (EFG); 7 ♀♀ [14] (YMM & EFG).

COMMENTS. Known from Central Asia and Azerbaijan [Mikhailov, 1997].

#### *Nomisia exornata* (C.L. Koch, 1839)

MATERIAL. 1 ♂, 1 ♀ [14] (EFG); 3 ♂♂, 3 ♀♀ [15/03] (EFG).

COMMENTS. Euro-Central Asian range [Platnick, 2003].

#### *Nomisia ripariensis* (O. Pickard-Cambridge, 1872)

MATERIAL. 1 ♀ [13] (YMM); 1 ♀ [14] (YMM).

COMMENTS. Known from Greece to Azerbaijan [Platnick, 2003].

*Poecilochroa* sp.

MATERIAL. 1 ♂ [14] (EFG); 1 ♂ [15/03] (EFG).

COMMENTS. Most probably our specimens belong to undescribed species. To be considered in a separate paper.

*Trachyzelotes jaxartensis* (Kroneberg, 1875)

MATERIAL. 1 ♀ [13] (YMM).

COMMENTS. Widespread species known in whole south Holarctic, Africa and Hawaii [Platnick, 2003].

*Trachyzelotes* sp.

MATERIAL. 1 ♀ [13] (EFG); 1 ♂ [14] (EFG).

COMMENTS. Most probably our specimens belong to undescribed species related to *T. malkini* Platnick et Murphy, 1984. They will be considered in a separate paper.

*Zelotes caucasicus* (L. Koch, 1866)

MATERIAL. 4 ♂♂, 2 ♀♀ [13] (YMM & EFG); 1 ♀ [14] (YMM).

COMMENTS. Euro-Central Asian range [Platnick, 2003].

*Zelotes longipes* (L. Koch, 1866)

MATERIAL. 2 ♀♀ [14] (EFG); 5 ♀♀ [15/01] (YMM); 5 ♀♀ [15/03] (EFG).

COMMENTS. Trans-Palaeartic range [Platnick, 2003].

*Zelotes* sp.1.

MATERIAL. 1 ♀ [15/02] (EFG); 4 ♀♀ [15/03] (YMM).

COMMENTS. Probably undescribed species related to *Z. subterraneus* (C.L. Koch, 1833). It will be treated in a separate paper.

*Zelotes* sp.2

MATERIAL. 2 ♀♀ [14] (YMM & EFG).

COMMENTS. Probably undescribed species. It will be considered in a separate paper.

*Zelotes* sp.3

MATERIAL. 1 ♂ [14] (YMM).

COMMENTS. Probably undescribed species related to *Z. atrocaeruleus* (Simon, 1878). It will be treated in a separate paper.

LINYPHIIDAE (17)

*Agyneta fuscipalpus* (C.L. Koch, 1936)

MATERIAL. 1 ♀ [15/01] (YMM); 1 ♂ [15/02] (YMM).

COMMENTS. Euro-Baikaian range [Marusik et al., 2000].

*Araeoncus caucasicus* Tanasevitch, 1987

Fig. 10.

MATERIAL. 1 ♀ [14] (YMM).

COMMENTS. Known exclusively from Caucasus [Tanasevitch, 1990; Mikhailov, 1997]. Females of this species can be easily recognized by the shape of epigyne and transparent receptacula.

*Archaeoncus prospiciens* (Thorell, 1875)\*

COMMENTS. Reported from Ordubad Dist. (Bilav) by Tanasevitch [1987].

*Bolyphantus caucasicus* Tanasevitch, 1990<sup>A</sup>

MATERIAL. 1 ♀ [15/02] (YMM).

COMMENTS. Early this species was known from North Osetia only [Tanasevitch, 1990] and therefore it is a new species record for Azerbaijan.

*Centromerus minor* Tanasevitch, 1990\*

COMMENTS. Reported from Naxçıvan (locality #15/02) by Tanasevitch [1990].

*Erigoninae* gen. sp.1

MATERIAL. 1 ♀ [15/01] (YMM).

COMMENTS. Generic and specific belonging of this species is unclear.

*Erigoninae* gen. sp.2

MATERIAL. 1 ♀ [15/02] (YMM).

COMMENTS. Generic and specific belonging of this species is unclear.

*Erigoninae* gen. sp.3

MATERIAL. 1 ♀ [14] (YMM).

COMMENTS. Generic and specific belonging of this species is unclear. It resembles by general appearance to *Tapinocyba* although type of epigyne is very different.

*Erigone dentipalpis* (Wider, 1834)

MATERIAL. 1 ♀ [13] (YMM); 1 ♂ (YMM) [14].

COMMENTS. Trans-Palaeartic range [Marusik et al., 2000].

*Linyphia hortensis* Sundevall, 1830

MATERIAL. 2 ♀♀ [15/02] (YMM).

COMMENTS. Trans-Palaeartic range [cf. Eskov, 1994].

*Linyphia triangularis*

MATERIAL. 1 ♀ [15/02] (EFG).

COMMENTS. Trans-Palaeartic range [cf. Eskov, 1994].

*Metopobactrus prominulus*

MATERIAL. 1 ♀ [15/02] (YMM).

COMMENTS. Holarctic distribution.

*Minicia marginella* (Wider, 1834)<sup>C</sup>

MATERIAL. 1 ♀ [15/02] (YMM).

COMMENTS. Although this species has trans-Palaeartic range [Marusik et al., 2000] it was never reported from Azerbaijan and Caucasus as a whole.

*Pelecopsis crasipes* Tanasevitch, 1987\*

MATERIAL. 1 ♀ [15/01] (YMM); 1 ♀ [15/02] (YMM).

COMMENTS. Known throughout whole Caucasus [Tanasevitch, 1990]. Part of type series derived from Bichenek locality (15/02).

*Stemonyphantes lineatus* (Linnaeus, 1758)\*

COMMENTS. Reported from Naxçıvan (locality #15/02) by Tanasevitch [1987].

*Styloctetor* sp.

Fig. 11.

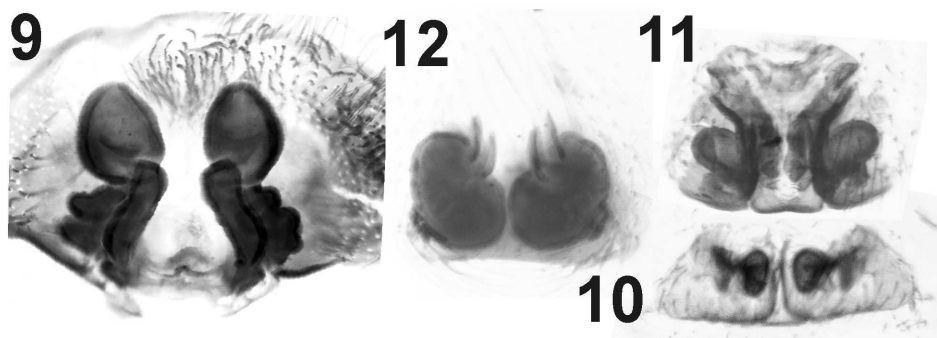
MATERIAL. 1 ♀ [13] (YMM).

COMMENTS. Our specimen resembles somewhat *S. romanus* (O. Pickard-Cambridge, 1872), although clearly belongs to a separate, most probably new species.

*Tenuiphantes mengei* (Kulczyński, 1887)

MATERIAL. 1 ♂, 5 ♀♀, 1 juv. [15/02] (YMM).

COMMENTS. Trans-Palaeartic range [Platnick, 2003].



Figs. 9–12. Epigyne of *Eresus cinnaberinus* (9), *Araeoncus caucasicus* (10), *Styloctetor* sp. (11) and *Agroeca* sp. (12): 9 — dorsal view; 10–12 — ventral view.

Рис. 9–12. Эпигина *Eresus cinnaberinus* (9), *Araeoncus caucasicus* (10), *Styloctetor* sp. (11) и *Agroeca* sp. (12): 9 — сверху; 10–12 — снизу.

*Walckenaeria antica* (Wider, 1834)\*

MATERIAL. 1 ♂, 2 ♀♀ [15/02] (YMM).

COMMENTS. Euro-Yenisei range [Marusik et al., 2002]. It was reported from Naxçıvan, Shakhbuz Dist. (Bichenek) by Tanasevitch [1987].

LIOCRANIDAE (3)

*Agroeca cuprea* Menge, 1873

MATERIAL. 1 ♀, 2 juv. [15/02] (YMM & EFG).

COMMENTS. It seems this species has Euro-West Siberian range [cf. Mikhailov, 1997].

*Agroeca* sp.

Fig. 12

MATERIAL. 1 ♀ [14] (EFG).

COMMENTS. It seems that our specimen belongs to a new species. It has rather simple epigyne (Fig. 12). It will be considered in a separate paper devoted to liocranids of Azerbaijan.

*Mesiothelus* sp.

MATERIAL. 2 ♀♀ [14] (YMM & EFG).

COMMENTS. Our specimens seem to belong to undescribed species. It will be treated in a separate paper.

LYCOSIDAE (18)

*Alopecosa albofasciata* (Brulle, 1832)

MATERIAL. 2 ♂♂, 2 ♀♀ [14] (EFG); 3 ♂♂, 3 ♀♀ [15/02] (YMM).

COMMENTS. Euro-Central Asian range [Marusik et al., 2003b].

*Alopecosa cursor* (Hahn, 1831)

MATERIAL. 1 ♂ [15/03] (YMM).

COMMENTS. Euro-Central Asian range [Marusik et al., 2003b].

*Arctosa cinerea* (Fabricius, 1777)

MATERIAL. 2 ♂♂ [15/03] (YMM).

COMMENTS. It seems that it has Euro-Caucasian range [Marusik et al., 2003].

*Arctosa leopardus* (Sundevall, 1833)

MATERIAL. 1 ♀, 1 juv. (YMM) [14].

COMMENTS. It seems that it has Euro-Central Asian range [Marusik et al., 2003b].

*“Arctosa” tbilisiensis* Mcheidze, 1946

MATERIAL. 1 ♂, 1 ♀ (YMM) [14].

COMMENTS. Known from Macedonia to Caucasus [Marusik et al., 2003b].

*Aulonia kratochvili* Dunin, Buchar & Absolon, 1986

MATERIAL. 2 ♀♀ [13] (YMM); 6 ♂♂, 8 ♀♀ [14] (YMM).

COMMENTS. Known from Macedonia to Caucasus [Marusik et al., 2003b].

*Lycosa praegrands* C.L. Koch, 1836\*

COMMENTS. Reported from Naxçıvan by Schmidt [1895, sub. *L. piochardi*].

*Pardosa azerifalcata* Marusik, Guseinov & Koponen, 2003

MATERIAL. 3 ♂♂, 1 juv. [14] (YMM).

COMMENTS. Known so far from Azerbaijan only [Marusik et al., 2003a].

*Pardosa* aff. *aenigmatica* Tongiorgi, 1966

MATERIAL. 1 ♂, 1 ♀ [15/01] (YMM).

COMMENTS. Status of this species is uncertain. Most probably Azerbaijanian population is not conspecific with those from Italy and represents a separate species [cf. Marusik et al., 2003b].

*Pardosa morosa* (L. Koch, 1870)

MATERIAL. 12 ♀♀ [14] (YMM & EFG); 2 ♀♀ [15/01] (YMM); 1 ♂, 5 ♀♀ [15/03] (YMM).

COMMENTS. Euro-Central Asian range [Marusik et al., 2003b].

*Pardosa proxima* (C. L. Koch, 1847)

MATERIAL. 7 ♀♀ (YMM) [14]; 1 ♀ [15/01] (YMM).

COMMENTS. Exact range is uncertain [Marusik et al., 2003b], although it may have Euro-Central Asian range.

*Pardosa* sp.1

MATERIAL. 12 ♂♂, 4 ♀♀ [15/01] (YMM & EFG).

COMMENTS. Our specimens resemble *P. blanda* (C.L. Koch, 1833), although belongs to a separate, probably new species. They will be treated in a separate paper.

*Pardosa* sp.2

MATERIAL. 1 ♂ [13] (YMM); 2 ♀♀ [14] (YMM & EFG).

COMMENTS. This species belongs to *monticola* group and most probably represents a new species. It will be treated in a separate paper.

*Pardosa* sp.3

MATERIAL. 1 ♀ [14] (YMM).

COMMENTS. This species belongs to *monticola* group and most probably represents a new species. It will be treated in a separate paper.

*Pardosa* sp.4

MATERIAL. 1 ♀ [13] (YMM).

COMMENTS. Like two former species this female belongs to *monticola* group and most probably represents a new species. It will be treated in a separate paper.

*Pardosa* sp. 5

MATERIAL. 1 ♀ [15/03] (EFG).

COMMENTS. This is probably a new species similar to *P. proxima*. It will be treated in a separate paper.

*Pirata latitans* (Blackwall, 1841)

MATERIAL. 2 ♂♂, 1 ♀ [14] (YMM); 1 ♂ [15/02] (YMM).

COMMENTS. Euro-Caucasian range [Marusik et al., 2003b].

*Trochosa* sp.

MATERIAL. 1 ♀ [15/02] (YMM).

COMMENTS. Belonging of our female is unclear, because identification of *Trochosa* species requires males.

## MIMETIDAE (1)

*Ero* sp.

MATERIAL. 3 juv. [15/02] (YMM).

COMMENTS. Specific belonging of our specimens is unclear because we have no adult specimens.

*Mimetes laevigatus* (Keyserling, 1863)

MATERIAL. 1 ♂ [13] (YMM).

COMMENTS. Male from Naxçıvan well corresponds to figures of this species drawn by Canard [1982: f. 1, 3-4]. It seems this species has Euro-Central Asian range [cf. Mikhailov, 1997].

## OECOBIIDAE (2)

*Ambika nadiae* (Spassky, 1936)

MATERIAL. 1 ♂ [13] (EFG).

COMMENTS. Known from Azerbaijan to Xinjiang and Sichuan [Song et al., 1999].

*Oecobius* sp.

MATERIAL. 1 ♂, 4 juv. Sharur Town, 870 m, 4.06.2003 (YMM).

COMMENTS. Our specimens most probably belong to undescribed species.

## OONOPIDAE (2)

*Oonops pulcher* Templeton, 1835

MATERIAL. 1 ♂, 1 ♀ [14] (EFG).

COMMENTS. Specific belonging of Naxçıvan and Azerbaijan population is unclear. Male of Azerbaijanian population has somewhat different palp than those from Crimea.

Possibly *O. pulcher* in fact represents a series of vicariating species distributed from Europe to Caucasus.

*Silhouettella* sp.

Figs 13, 14.

MATERIAL. 1 ♀ [13] (YMM).

COMMENTS. Our female belongs to undescribed species resembling *S. loricatula* (Roewer, 1942), although has different shape of male palp and its body is relatively longer. Besides Naxçıvan this species occurs in Absheron Peninsula and Gobustan [personal data]. Earlier this species was reported from Azerbaijan as *Dysderina loricata* (L. Koch, 1872) [Dunin, 1984, 1989].

## OXYOPIDAE (2)

*Oxyopes lineatus* Latreille, 1806\*

COMMENTS. Reported from Naxçıvan by Schmidt [1895].

*Oxyopes* sp.

MATERIAL. 1 juv. [14] (YMM).

COMMENTS. Specific belonging of the single juvenile species is uncertain. It may belong to *O. globifer* Simon, 1876 occurring from Mediterranean Europe to Central Asia.

## PHILODROMIDAE (9)

*Paratibellus oblongiusculus* (Lucas, 1846)

MATERIAL. 1 ♀ [13] (YMM); 2 ♂♂, 2 ♀♀ [14] (EFG).

COMMENTS. Known from Western Europe to Central Asia [Platnick, 2003]. Judging from the conformation of the male palp of this species *Paratibellus* most probably is a junior synonym of *Thanatus*. Females and males of *Thanatus bungei* (Kulczyński, 1908) and *T. constellatus* Charitonov, 1946 have almost the same copulatory organs.

*Philodromus dispar* Walckenaer, 1826

MATERIAL. 2 ♂♂, 1 ♀ [15/02] (YMM).

COMMENTS. Known from Europe to Central Asia and in Nearctic [Platnick, 2003].

*Philodromus rufus* Walckenaer, 1826

MATERIAL. 2 juv. [15/02] (YMM).

COMMENTS. Circum-Holarctic range [Marusik et al., 2000].

*Philodromus* sp.1

MATERIAL. 1 ♀ [13] (YMM).

COMMENTS. Specific belonging of this specimen is unknown. It will be revised in a separate paper devoted to Philodromidae of Azerbaijan [Logunov & Guseinov, in preparation].

*Philodromus* sp.2

MATERIAL. 1 ♀ [13] (YMM).

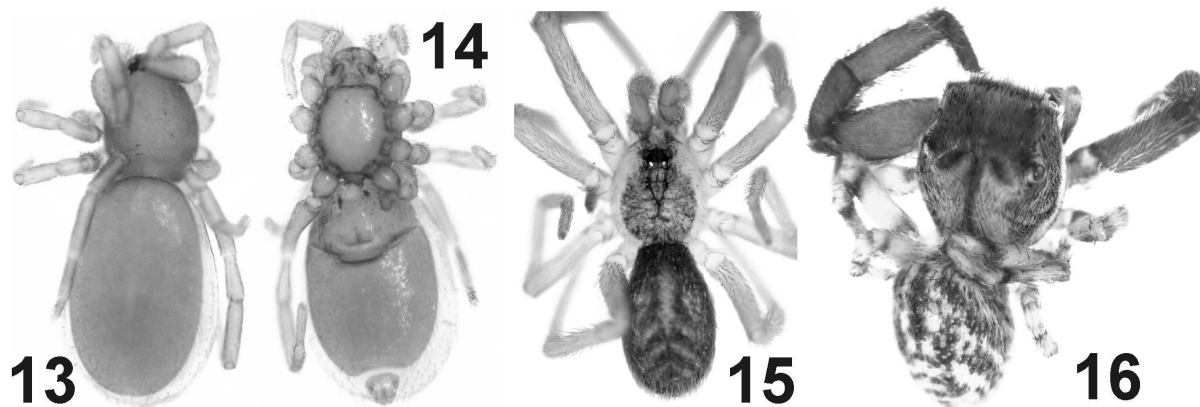
COMMENTS. Specific belonging of this specimen is unknown. It will be revised in a separate paper devoted to Philodromidae of Azerbaijan [Logunov & Guseinov, in preparation].

*Thanatus imbecillus* L. Koch, 1878

MATERIAL. 1 ♀ [13] (YMM); 1 ♂, 3 ♀♀ [14] (YMM & EFG); 1 ♂, 1 ♀ [15/01] (YMM); 1 ♂, 3 ♀♀ [15/03] (YMM & EFG).

COMMENTS. Known from Bulgaria to Central Asia [Platnick, 2003].





Figs. 13–16. General appearance of *Silbhouttella* sp., ♀ (13–14), *Pritha crosbyi*, ♂ (15) and *Neatha abscheronica*, ♂ (16).  
Рис. 13–16. Внешний вид *Silbhouttella* sp., ♀ (13–14), *Pritha crosbyi*, ♂ (15) и *Neatha abscheronica*, ♂ (16).

*Thanatus vulgaris* L. Koch, 1878

MATERIAL. 2 ♂♂, 1 ♀ [13] (YMM); 1 ♀ [14] (HAA); 1 ♀ [15/03] (EFG).

COMMENTS. Circum-Holarctic range [Logunov, 1996b; Platnick, 2003].

*Thanatus* sp.1

MATERIAL. 1 ♂ [14] (YMM).

COMMENTS. Specific belonging of this specimen is unknown. It will be revised in a separate paper devoted to Philodromidae of Azerbaijan [Logunov & Guseinov, in preparation].

*Thanatus* sp.2

MATERIAL. 1 ♀ [14] (EFG).

COMMENTS. Specific belonging of this specimen is unknown. It will be revised in a separate paper devoted to Philodromidae of Azerbaijan [Logunov & Guseinov, in preparation].

PHOLCIDAE (2)

*Holocnemis* ? sp.

MATERIAL. 1 ♂ [13] (YMM); 5 ♂♂, 3 ♀♀ Naxçivan City, 4.06.2003 (YMM).

COMMENTS. This species is probably undescribed. It will be considered in a separate paper.

*Spermophora senoculata* L. Koch, 1878

MATERIAL. 1 ♂, 6 ♀♀ [13] (YMM); 2 ♂♂, 3 ♀♀ [14] (YMM).

COMMENTS. Holarctic species [Platnick, 2003].

PRODIDOMIDAE (1)

*Anagraphis* sp.<sup>u</sup>

MATERIAL. 1 ♂, 4 ♀♀ [14] (YMM).

COMMENTS. This genus was never reported from Azerbaijan and former Soviet Union. Most probably our specimens belong to undescribed species. They will be considered in a separate paper.

SALTICIDAE (22)

*Ballus depressus* (Walckenaer, 1802)

MATERIAL. 1 ♂, 1 ♀ [15/02] (YMM).

COMMENTS. Euro-Central Asian range [Logunov & Guseinov, 2002].

*Bianor albobimaculatus* (Lucas, 1846)

MATERIAL. 1 ♀ [15/02] (YMM).

COMMENTS. Afro-Mediterranean-Central Asian range [Logunov & Guseinov, 2002].

*Chalcoscirtus infimus* (Simon, 1868)

MATERIAL. 2 ♂♂, 1 ♀ [15/03] (EFG); 1 ♂, 1 ♀ [14] (EFG).

COMMENTS. Mediterranean-Central Asian range [Logunov & Guseinov, 2002].

*Chalcoscirtus tanasevitchi* Marusik, 1991

MATERIAL. 1 ♂ [13] (YMM); 1 ♂ [14] (YMM).

COMMENTS. Caucaso-Central Asian range [Logunov & Guseinov, 2002].

*Cyrba algerina* (Lucas, 1846)

MATERIAL. 6 ♂♂, ♀♀ [13] (YMM & EFG); 2 ♂♂ [14] (EFG).

COMMENTS. Mediterranean-Central Asian range [Logunov & Guseinov, 2002].

*Euophrys frontalis* (Walckenaer, 1802)

MATERIAL. 4 ♀♀ [13] (YMM); 1 ♂, 2 ♀♀ [14] (EFG); 1 ♂ [15/02] (YMM).

COMMENTS. Trans-Palaearctic range [Logunov & Guseinov, 2002].

*Heliophanus auratus* C.L.Koch, 1835\*

COMMENTS. It was reported from Naxçivan (locality #15/02) by Rakov & Logunov [1996].

*Heliophanus cupreus* (Walckenaer, 1802)

MATERIAL. 3 ♂♂, 8 ♀♀ [15/02] (YMM & EFG).

COMMENTS. Euro-Caucasian range [cf. Mikhailov, 1997; Logunov & Guseinov, 2002].

*Heliophanus equestior* L. Koch, 1867

MATERIAL. 1 ♂ [13] (YMM); 2 ♂♂ (YMM) [14]; 16 ♂♂, 2 ♀♀, 5 juv. [15/03] (YMM & EFG).

COMMENTS. Euro-Caucasian range [cf. Mikhailov, 1997; Logunov & Guseinov, 2002]. During collecting spi-

ders, we noted that in most of the cases males of this species were found in the nests of subadult females. It seem that they reach adult stage earlier than females and in the nests guard juvenile females and at the same moment wait for their adulthood to mate with them.

*Heliophanus flavipes* (Hahn, 1832)

MATERIAL. 1 ♂ [15/01] (YMM); 1 ♂ [15/02] (EFG).

COMMENTS. Trans-Palaearctic range [Logunov & Guseinov, 2002].

*Heliophanus mordax* (O. Pickard-Cambridge, 1872)

MATERIAL. 24 ♂♂, 5 ♀♀, 12 juv. [14] (YMM & EFG); 1 ♂ [15/03] (EFG).

COMMENTS. It is distributed from the Middle East to Central Asia [Logunov & Guseinov, 2002]. Collecting spiders, we noted that in most of the cases males of this species were found in the nests of subadult females. It seem that they reach adult stage earlier than females and in the nests guard juvenile females and at the same moment wait for their adulthood to mate with them.

*Menemerus marginatus* (Kroneberg, 1875)\*

COMMENTS. Reported from Naxçivan, Julfa by Nenilin [1985].

*Myrmarachne formicaria* (De Geer, 1778)

MATERIAL. 4 ♂♂, 1 juv. [14] (YMM & EFG).

COMMENTS. Trans-Palaearctic disjunctive range [Logunov & Guseinov, 2002].

*Neaetha absheronica* Logunov & Guseinov, 2002

Fig. 16.

MATERIAL. 1 ♂ [15/03] (YMM).

COMMENTS. Earlier it was known from the single locality in eastern Azerbaijan and therefore Naxçivan is westernmost and the second locality of this species. By general appearance male of this species resembles *Pellenes* species.

*Pellenes epularis* (O. Pickard-Cambridge, 1872)

MATERIAL. 1 ♂ [14] (EFG).

COMMENTS. Euro-Central Asian range [cf. Mikhailov, 1997; Logunov & Guseinov, 2002].

*Pellenes geniculatus* (Simon, 1868)

MATERIAL. 1 ♂, 1 ♀ [14] (YMM & EFG).

COMMENTS. Euro-Central Asian range [cf. Mikhailov, 1997; Logunov & Guseinov, 2002].

*Pellenes seriatus* (Thorell, 1875)<sup>c</sup>

MATERIAL. 1 ♂ [15/01] (YMM).

COMMENTS. Euro-Central Asian range [Logunov & Marusik, 2001], although it was never reported from Azerbaijan and Caucasus as a whole.

*Philaeus chrysops* (Poda, 1761)

MATERIAL. 6 ♂♂, 6 ♀♀ [14] (YMM, EFG & HAA); 4 ♂♂, 1 ♀ [15/03] (YMM & EFG).

COMMENTS. Trans-Palaearctic range [Logunov & Marusik, 2001].

*Phlegra bresnieri* (Lucas, 1848)

MATERIAL. 3 ♀♀ [14] (YMM & EFG).

COMMENTS. Mediterranean-Central Asian range [Logunov & Guseinov, 2002].

*Phlegra dunini* Azarkina, 2003\*

COMMENTS. Recently described from Sadarak [Azarkina, 2003].

*Phlegra fasciata* (Hahn, 1826)

MATERIAL. 1 ♂ [14] (EFG).

COMMENTS. Trans-Palaearctic range [Azarkina, 2003].

*Phlegra cinereofasciata* (Simon, 1868)\*

COMMENTS. Reported from Shakhbuz Dist. (Kel'tsor) by Logunov [1996a] and later Logunov's identification was confirmed by Azarkina [2003].

*Plexippoides gestroi* (Dalmat, 1920)

MATERIAL. 3 ♀♀ [14] (EFG & HAA).

COMMENTS. This species has East-Mediterranean-Caucasian range [Logunov & Guseinov, 2002].

*Pseudicius picaceus* O. Pickard-Cambridge, 1885

MATERIAL. 3 ♂♂, 1 ♀, 3 juv. (YMM) [14].

COMMENTS. Distributed from Mediterranean to Azerbaijan [Platnick, 2003]. Logunov & Guseinov [2002] suggested that this species was erroneously recorded from Azerbaijan by Nenilin [1985]. However, the findings of this species in Naxçivan and also in Talysh Mountains (pers. data) justify record by Nenilin.

*Pseudoeuophrys erratica* (Walckenaer, 1826)

MATERIAL. 1 ♂ [15/02] (YMM).

COMMENTS. Trans-Palaearctic range [Logunov & Marusik, 2001].

*Salticus tricinctus* (C.L. Koch, 1846)\*

MATERIAL. 1 ♂ [15/01] (YMM); 2 ♂♂ [15/03] (YMM).

COMMENTS. Known from Israel to Central Asia [Logunov & Guseinov, 2002], from Naxçivan (locality #15/01) it was reported by Logunov and Rakov [1998].

*Sitticus ammophilus* (Thorell, 1875)\*

COMMENTS. Recorded from Julfa by Logunov [1998]. Nenilin [1985] recorded *S. saltator* from the same locality. However, his record was based on collection of Logunov, which actually refers to *S. ammophilus* [see Logunov & Guseinov 2002].

*Sitticus inexpectus* Logunov & Kronestedt, 1997

MATERIAL. 3 ♀♀ [14] (YMM).

COMMENTS. Euro-Siberian-Central Asian range [Logunov & Guseinov, 2002].

*Sitticus pulchelus* Logunov, 1992<sup>c</sup>

MATERIAL. 1 ♂ [13] (YMM).

COMMENTS. Earlier known from Central Asia only [Platnick, 2003] and therefore record from Naxçivan is being the first for Azerbaijan and Caucasus as a whole.

*Synageles persianus* Logunov, 2004

MATERIAL. 1 ♂ (YMM) [14].

COMMENTS. Distributed from Iran to Azerbaijan [Logunov, 2004].

SCYTODIDAE (1)

*Scytodes thoracica* (Latreille, 1802)?

MATERIAL. 1 ♂ [13] (YMM).

COMMENTS. Specific belonging of Caucasian population is uncertain. According to Lehtinen [personal comm.] *S.*

*thoracica* is restricted to Western Europe and Nearctic and in Asia it is replaced with *S. tigrina* C.L. Koch, 1838, treated as a junior synonym of *S. thoracica*.

#### SPARASSIDAE (1)

*Micrommata virescens* (Clerck, 1757)

MATERIAL. 1 ♀ [14] (EFG); 1 ♂ [15/02] (HAA).

COMMENTS. Trans-Palaearctic range [Platnick, 2003].

#### TETRAGNATHIDAE (1)

*Pachygnatha degeeri* Sundevall, 1830

MATERIAL. 1 ♀ [15/01] (YMM); 1 ♀ [15/03] (EFG).

COMMENTS. Trans-Palaearctic range [Marusik et al., 2000].

#### THERIDIIDAE (16)

*Dipoena* sp.

MATERIAL. 1 ♀ [15 /03] (YMM).

COMMENTS. This is a new species which will be described in as a separate paper.

*Dipoena inornata* (O. Pickard-Cambridge, 1861)<sup>c</sup>

MATERIAL. 1 ♀ [14] (YMM).

COMMENTS. It seems that this species has Euro-Caucasian range. Earlier in the former Soviet Union it was known in Byelorussia and Ukraine [Mikhailov, 1997] and therefore our record is being the first for Azerbaijan and Caucasus as a whole.

*Enoplognatha macrohelis* Levy et Amitai, 1981\*

MATERIAL. 4 ♀♀ [13] (YMM & EFG); 1 ♀ [14] (YMM).

COMMENTS. Recently reported for the first time for Azerbaijan, Caucasus and former Soviet Union as a whole [Guseinov et al., 2004b].

*Enoplognatha mediterranea* Levy et Amitai, 1981\*

MATERIAL. 6 ♀♀ [14] (EFG).

COMMENTS. Recently reported from Naxçıvan [Guseinov et al., 2004b].

*Enoplognatha oelandica* (Thorell, 1875)\*

MATERIAL. 2 ♀♀ [14] (YMM); 1 ♀ [15/03] (EFG).

COMMENTS. Recently reported from Naxçıvan and Azerbaijan for the first time [Guseinov et al., 2004b].

*Enoplognatha parathoracica* Levy et Amitai, 1981\*

MATERIAL. 3 ♂♂ [13] (YMM & EFG).

COMMENTS. Recently reported for the first time for Naxçıvan, Azerbaijan, Caucasus and former Soviet Union as a whole [Guseinov et al., 2004b].

*Enoplognatha quadripunctata* Simon, 1884\*

MATERIAL. 1 ♂, 4 ♀♀ [13] (YMM); 1 ♂, 1 ♀ [14] (YMM & EFG).

COMMENTS. Recently reported for the first time for Naxçıvan, Azerbaijan, Caucasus and former Soviet Union as a whole [Guseinov et al., 2004b].

*Enoplognatha serratosignata* (L. Koch, 1879)\*

MATERIAL. 1 ♀ [15/03] (EFG).

COMMENTS. Recently reported for the first time for Naxçıvan, Azerbaijan and Caucasus as a whole [Guseinov et al., 2004b].

*Lasaeola prona* (Menge, 1868)<sup>c</sup>

MATERIAL. 2 ♂♂, 4 ♀♀ [15/01] (YMM).

COMMENTS. Euro-Mongolian range [Marusik et al., 2000]. New record for Azerbaijan and Caucasus at the whole.

*Robertus arundineti* (O. Pickard-Cambridge, 1871)\*

COMMENTS. Reported from Shakhbuz Dist. by Eskov [1987].

*Steatoda albomaculata* (De Geer, 1778)

MATERIAL. 1 ♀ [13] (YMM).

COMMENTS. Circum-Holarctic range [Marusik et al., 2000].

*Steatoda dahli* (Nosek, 1905)

MATERIAL. 2 ♀♀ [13] (YMM); 4 ♀♀ [14] (YMM); 1 ♂ [15/01] (HAA).

COMMENTS. Known from Israel and Turkey to Uzbekistan [Mikhailov, 1997; Platnick, 2003].

*Steatoda paykulliana* (Walckenaer, 1805)

MATERIAL. 1 ♀ [13] (YMM); 1 ♀ [14] (EFG).

COMMENTS. Known from Europe to Central Asia [Platnick, 2003].

*Theridion impressum* L. Koch, 1881

MATERIAL. 1 ♂ [14] (YMM).

COMMENTS. Trans-Palaearctic-NW Nearctic range [Marusik et al., 2000].

*Theridion melanurum* Hahn, 1831

MATERIAL. 1 ♀ [13] (YMM); 1 ♀ [14] (YMM).

COMMENTS. Holarctic range [Platnick, 2003].

*Theridion* sp.1

MATERIAL. 1 ♀ [14] (YMM).

COMMENTS. New species; to be described in as a separate paper.

*Theridion* sp.2

MATERIAL. 1 ♀ [14] (YMM).

COMMENTS. New species; to be described in as a separate paper.

#### THOMISIDAE (12)

*Ozyptila praticola* (C.L. Koch, 1837)

MATERIAL. 1 ♀ [15/02] (EFG).

COMMENTS. Circum-Holarctic range [Marusik et al., 2000].

*Synema plorator* (O. Pickard-Cambridge, 1872)

Figs 17–19.

MATERIAL. 1 ♀ [14] (EFG).

COMMENTS. Known from Israel to Turkmenistan [Marusik & Logunov, 1995]. Color pattern on our specimen fits well to the syntype of *S. richteri* Utotchkin, 1960 described from Yerevan, Armenia. And we confirm synonymy of *S. plorator* and *S. richteri* queried by Levy [1975].

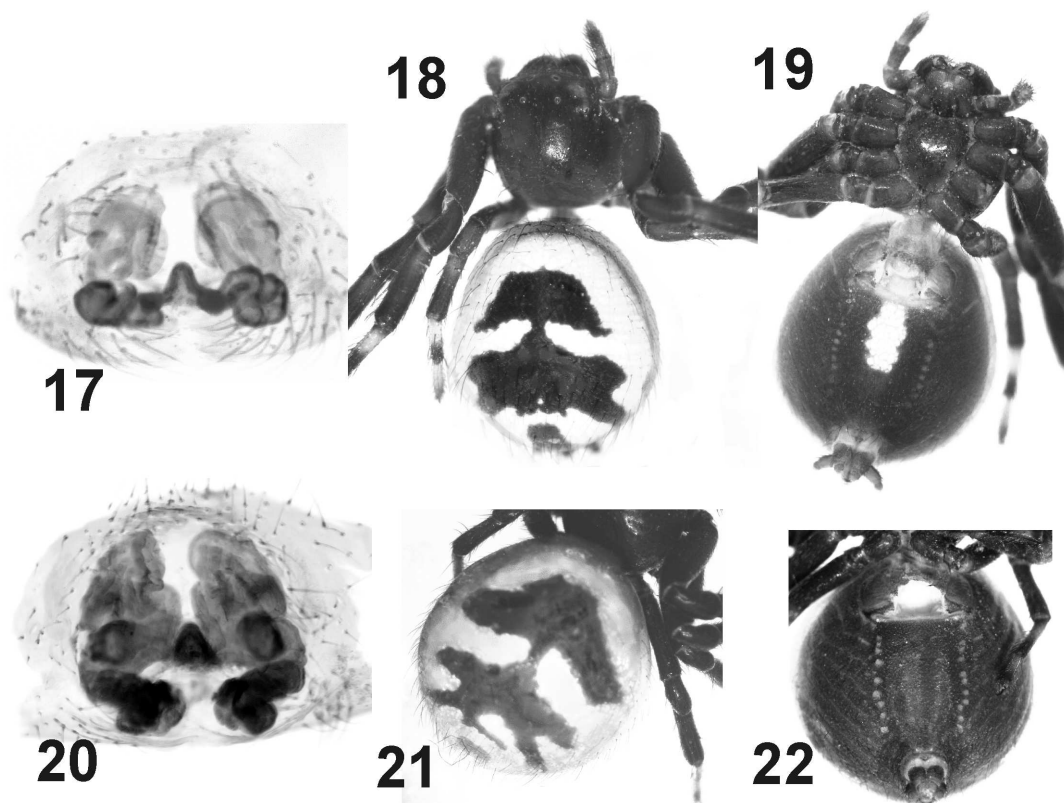
*Synema* sp.

Figs 20–22.

MATERIAL. 2 ♀♀ [15/03] (EFG).

COMMENTS. Probably a new species. It will be considered in a separate paper.

Our specimens (abdominal pattern and epigyne) fit well to illustration of *S. plorator* by Utotchkin [1960: f. 3-4]. Unfortunately it is unclear what was the origin of specimens



Figs. 17–22. Epigyne and general appearance of *Synema plorator* (17–19), and *Synema* sp. (20–22): 17, 20 — epigyne; 18, 21 — dorsal view; 19, 22 — ventral view.

Рис. 17–22. Эпигина и внешний вид *Synema plorator* (17–19), и *Synema* sp. (20–22): 17, 20 — эпигина; 18, 21 — сверху; 19, 22 — снизу.

illustrated by Utotchkin, although it is possible that females came from Gyandzha (=Elisavetpol).

Two species found in Naxçivan can be easily separated by the relative size of spermathecae, dorsal and ventral abdominal pattern (cf. Figs 17–22).

*Thomisus albus* (Gmelin, 1789)

MATERIAL. 3 ♂♂ [14] (YMM, EFG & HAA).

COMMENTS. Trans-Palaearctic range [Marusik et al., 2000].

*Xysticus kochi* Thorell, 1872

MATERIAL. 1 ♂, 1 ♀ [15/02] (EFG).

COMMENTS. Euro-Central Asian range [Platnick, 2003].

*Xysticus loeffleri* Roewer, 1955

MATERIAL. 12 ♀♀ [14] (YMM & EFG); 1 ♀ [15/03] (EFG).

COMMENTS. Caucaso-Central Asian range [Marusik & Logunov, 1995].

*Xysticus luctator* L. Koch, 1870

MATERIAL. 1 ♂ [15/02] (YMM).

COMMENTS. It seems this species has Euro-Caucasian range [cf. Mikhailov, 1997].

*Xysticus spasskyi* Utotschkin, 1968<sup>A</sup>

MATERIAL. 1 ♂, 1 ♀ [15/02] (EFG).

COMMENTS. Known from northern Caucasus and our record is being the first for Azerbaijan and whole trans-Caucasia (Azerbaijan, Armenia & Georgia).

*Xysticus tristrami* (O. Pickard-Cambridge, 1872)

MATERIAL. 1 ♀ [14] (HAA); 2 ♂♂, 2 ♀♀ [15/03] (EFG).

COMMENTS. Known from the Near East to Central Asia [Marusik & Logunov, 1995].

*Xysticus* sp.1

MATERIAL. 1 ♀ [14] (YMM).

COMMENTS. Probably a new species and it will be treated in a separate paper.

*Xysticus* sp.2

MATERIAL. 1 ♀ [15/03] (EFG).

COMMENTS. Probably a new species and it will be treated in a separate paper.

*Xysticus* sp.3

MATERIAL. 1 ♀ [14] (EFG).

COMMENTS. Probably a new species and it will be treated in a separate paper.

ULOBORIDAE (1)

*Uloborus walckenaerius* Latreille, 1806

MATERIAL. 1 ♀ [14] (YMM).

COMMENTS. Trans-Palaearctic range [Marusik et al., 2000].

*Uloborus plumipes* Lucas, 1846\*

COMMENTS. Reported from Naxçivan (Sharur) by Dumin [1988].



## ZODARIIDAE (3)

*Trygetus jacksoni* Marusik & Guseinov, 2003

Figs 23, 24.

MATERIAL. 2 ♂♂ [13] (YMM); 2 ♂♂ [14] (YMM &amp; EFG).

COMMENTS. *T. jacksoni* was recently described by a single female from the eastern Azerbaijan [Marusik & Guseinov, 2003] and it is not sure that males from Naxçivan are conspecific with female holotype. Never the less it is rather safe to suggest that two Azerbaijanian populations belong to the same species, because other four o *Trygetus* species occur in Near East and northern Africa [Platnick, 2003]. It is worth to note that males from Naxçivan are more similar by general appearance (shape of scuta) and male palp to *Palaestina exopolita* O. Pickard-Cambridge, 1872 than to *T. sexoculatus* (O. Pickard-Cambridge, 1872).

*Zodarion cyprum* Kulczyński, 1908

MATERIAL. 12 ♂♂, 8 ♀♀, 5 juv. [15/03] (YMM &amp; EFG).

COMMENTS. Distributed from Cyprus to Caucasus [Mikhailov, 1997; Platnick, 2003].

*Zodarion* sp.

Fig. 25.

MATERIAL. 1 ♂, 2 ♀♀ [14] (YMM &amp; EFG).

COMMENTS. Probably a new species and it will be treated in a separate paper. Considering that many species of *Zodarion* sensu lato can be separated by the abdominal pattern we provide figure of Naxçivan female.

## ZORIDAE (2)

*Zora silvestris* Kulczyński, 1897

MATERIAL. 1 ♀ [13] (YMM); 1 ♀ [14] (YMM).

COMMENTS. Euro-Central Asian range [Platnick, 2003].

*Zora spinimana* (Sundevall, 1833)

MATERIAL. 2 ♂♂, 1 ♀ [15/02] (YMM).

COMMENTS. Trans-Palaearctic range [Platnick, 2003].

## Conclusions

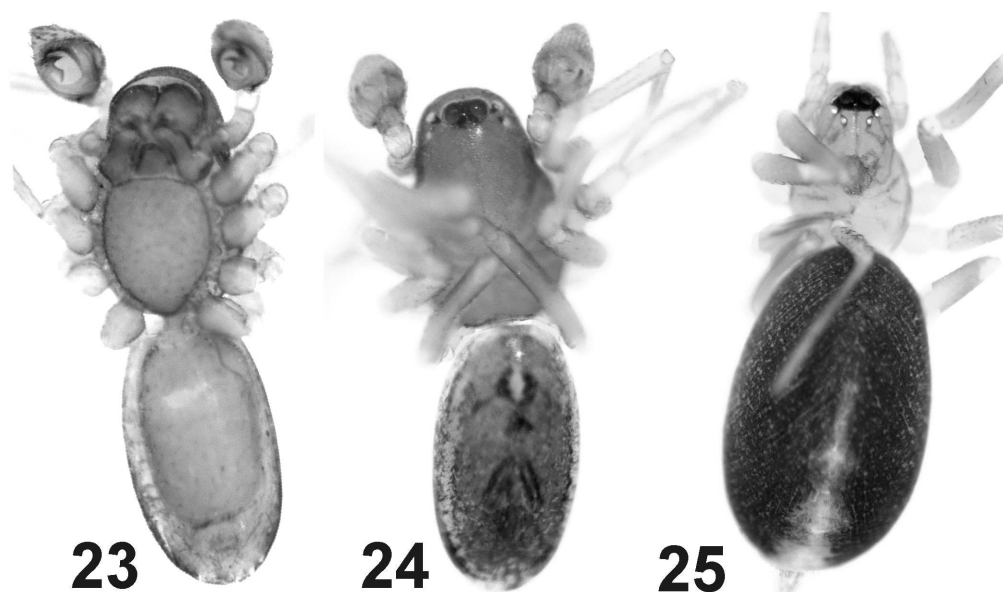
According to literature data and material presented here the known spider fauna of Naxçivan encompass not less than 185 species (Table 1) in comparison to 22 known before 2003. Among additional species found in the study area three species and two genera are new to the fauna of the former Soviet Union *Malthonica lyncea*, *Singa neta* and *Siwa atomaria*; seven species are new to Caucasus as a whole and three are new to Azerbaijan. Among material collected by us in Naxçivan two species are already described as new to science and most probably there are several dozens more among 47 taxa identified only to genus or even family level. These facts clearly demonstrate the specificity of the spider fauna in Naxçivan. It is pertinent to note that over 150 additional species were collected during less than 3 days, and therefore the revealed fauna most probably constitutes only a half or even 1/3 of the real diversity of spider species. Although collecting period was very short, the known spider fauna of Naxçivan at the present stage encompass

more species than adjacent faunas of Iran [143 species, Mozaffarian & Marusik 2001] and Armenia [127 species, Marusik & Guseinov, 2003].

Accounting distributional data of spider in adjacent areas it is easy to predict occurrence in Naxçivan several other families such as Phyxelididae, Cithaeronidae, Hersiliidae, Leptonetidae, Mysmenidae, Nesticidae, Palpimanidae, Prodidomidae and Theridiosomatidae.

Table 1. List of families found in Naxçivan and their species richness  
Табл. 1. Список семейств выявленных в Нахичевани и их видовое богатство

	Family	Number of species
1.	Agelenidae	3
2.	Araneidae	7
3.	Clubionidae	5
4.	Corinnidae	4
5.	Dictynidae	2
6.	Dysderidae	3
7.	Eresidae	1
8.	Filistatidae	2
9.	Gnaphosidae	30
10.	Linyphiidae	18
11.	Liocranidae	3
12.	Lycosidae	18
13.	Mimetidae	2
14.	Oecobiidae	2
15.	Oonopidae	2
16.	Oxyopidae	2
17.	Philodromidae	9
18.	Pholcidae	2
19.	Prodidomidae	1
20.	Salticidae	30
21.	Scytodidae	1
22.	Sparsassidae	1
23.	Tetragnathidae	1
24.	Theridiidae	17
25.	Thomisidae	12
26.	Uloboridae	2
27.	Zodariidae	3
28.	Zoridae	2
<b>Total</b>		<b>185</b>



Figs. 23–25. General appearance of *Trygetus jacksoni*, ♂ (23–24) and *Zodarion* sp., ♀ (25): 23 — ventral view; 24–25 — dorsal view.  
Рис. 23–25. Внешний вид *Trygetus jacksoni*, ♂ (23–24) и *Zodarion* sp., ♀ (25): 23 — снизу; 24–25 — сверху.

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