

# Contribution to the spider fauna of the genus *Micaria* Westring, 1851 of the USSR. I

(Aranei, Gnaphosidae)

By K. G. Mikhailov

## Abstract

Faunistical data on 22 *Micaria* species are presented, two of them being described as new: *M. tarabaevi* spec. nov. (male), *M. aborigenica* spec. nov. (female). New synonymy is established: *M. centrocnemis* Kulczyński, 1885 = *M. rossica* Thorell, 1875; *Micariolepis similis* Tyshchenko, 1965 = *Micaria dives* Lucas, 1846. *Micaria kopetdaghenensis* Michailov, 1986 is redescribed, its female is described for the first time.

Twenty species of the genus *Micaria* (including *Micariolepis*) have hitherto been reported from the USSR (CHARITONOV, 1932, 1936, 1951; TYSHCHENKO, 1965; OLIGER, 1983; MIKHAILOV & FET, 1986, etc.). According to new data, the *Micaria* fauna of the USSR includes 27 species. I don't cite the following species, which are not known to me: *M. pallida* O. Pickard-Cambridge, 1885 (Tadzhikistan, Pamir: from Syrykol to Pyandzh; ♂ subad.), *M. aciculata* Simon, 1895 (Altay, Sailugem Mt. Ridge, river Toushougty; ♂), *M. hissarica* Charitonov, 1951 (Tadzhikistan, Kondar Canyon; ♂), *M. shadini* Charitonov, 1951 (Tadzhikistan, Kondar Canyon, ♀), *M. violens* Oliger, 1983 (Primorye Province, Lazovsky Reserve; ♂).

The materials have been shared between the collections of the Zoological Museum of the Moscow State University (ZMMU), Zoological Institute of the USSR Academy of Sciences, Leningrad (ZIL), Zoologische Staatssammlung, München (ZSM), Naturhistorisches Museum Wien (NHM), and Ust-Kamenogorsk Teachers' Training Institute, Kazakhstan (UTI).

In the material sections the species recorded from new areas have been marked with an asterisk (\*). The materials checked by me and mentioned in the distribution sections have been marked with two asterisks (\*\*). The number following the measurements (always, like the scales, in mm) is put into brackets and means the number of measured specimens.

I am deeply obliged to Dr. V. Ovcharenko (Leningrad), Dr. S. Golovatch (Moscow), Dr. K. Eskov (Moscow), Dr. Y. Marusik (Magadan), Dr. P. Dunin (Baku), Dr. S. Zonstein (Frunze), Dr. S. Ovchinnikov (Frunze), Dr. D. Logunov (Novosibirsk), Dr. S. Alexeev (Alagir, North Ossetia), Dr. V. Fet (Kara-Kala, Turkmenia), Dr. E. Zhukovetz (Minsk), Dr. A. Zyuzin (Leningrad), Dr. S. Kuznetsov (Orenburg), the late Dr. A. Nenlin (Tashkent), Dr. L. Savelieva (Ust-Kamenogorsk), Dr. Ch. Tarabaev (Alma-Ata), Dr. N. Formozov (Moscow), Dr. V. Yanushev (Moscow), who kindly made their collections available for study. I wish to thank particularly Dr. S. Golovatch, who was kind enough as to check the English of the final manuscript.

The following abbreviations have been introduced for the collectors hereinafter. A. A. – A. D. Avershin; A. B. – A. V. Bykov; A. G. – A. S. Gembitskiy; A. R. – A. N. Reykhardt; A. T. – A. V. Tanasevitch; A. Z. – A. A. Zyuzin; C. T. – Ch. K. Tarabaev; D. L. – D. V. Logunov; E. P. – E. N. Pavlovsky; E. Z. – E. M. Zhukovetz; I. G. – I. B. Grishkan; K. E. – K. Y. Eskov; K. M. – K. G. Mikhailov; L. S. – L. G. Savelieva; N. E. – N. S. Egorova; N. F. – N. A. Formozov; N. K. – N. Kardan; N. P. – N. Potapova; N. Po. – N. Y. Polchaninova; N. R. – N. A. Ryabinin; N. U. – N. S. Ustinova; O. B. – O. V. Burskiy; O. S. – O. Soyunov; P. D. – P. M. Dunin; S. A. – S. K. Alexeev; S. B. – S. P. Bukhkalov; S. D. – S. I. Deryugin; S. G. – S. I. Golovatch; S. K. – S. F. Kuznetsov; S. O. – S. V. Ovchinnikov; S. Z. – S. L. Zonstein; S. Za. – S. I. Zabelin; V. B. – V. V. Belov; V. Br. – V. A. Bragina; V. K. – V. A. Krivokhatkiy; V. O. – V. I. Ov-

charenko; V. P. – V. I. Pereleshina; V. R. – V. Ružička; V. T. – V. P. Tyshchenko; V. Y. – V. V. Yanushev; Y. B. – Y. B. Byzova; Y. M. – Y. M. Marusik.

### Micaria pulicaria (Sundevall, 1831)

*Clubiona pulicaria* Sundevall, 1831. Vet. Ak. Handl.: 140–141.

*Micaria pulicaria*: CHARITONOV, 1926. Ezheg. Zool. Muz. AN SSSR za 1925: 105–106, pl. V, fig. 3.

*Micaria pulicaria*: TYSCHCHENKO, 1971. Identification book of spiders: 136–137, fig. 351 (♂).

*Micaria pulicaria*: WUNDERLICH, 1980. Zool. Beitr., N. F., 25(2): 252–255, Abb. 3a–e, 16a–g, 38a–d.

Material examined: Moscow Area: Bolshevo, on ground, 16.7.1926 (leg. et det. V. I. Pereleshina, ZMMU Ta-1968) 1♀. Ryazan Area\*: Oksky Reserve, Tyshlovo, Quercus forest, 21.6.1981 (leg. et det. K. E., ZMMU) 1♀. Krasnoyarsk Prov.: Enisey, Mirnoye, multibaccaceous taiga, 29.6.1977 (K. E., ZMMY) 1♀; Evenkiya, river Taymura, mouth of river Nentene, grassy sandy bank, 26.7.1982 (leg. et det. K. E., ZMMU) 1♂. Magadan Area\*: near Magadan, Snezhnaya Dolina, bank of river Dukcha, 7.10.1984 (leg. et det. Y. M., ZMMU) 1♀; 23 km N of Magadan, river Dukcha, pebble along river, 25.6.1985 (leg. et det. Y. M.) 1♂ 2♀ (ZMMU) 1♀ (ZSM). Kamchatka: river Kamchatka, 6 km below the mouth of river Belaya, in grass, 15.8.1930 (leg. et det. V. P., ZMMU Ta-2421) 1♂; river Kamchatka, 11 km below mouth of river Belaya, swampy plants, 15.8.1930 (leg. et det. V. P., ZMMU Ta-2419) 1♂; river Kamchatka, below mouth of river Belaya, harvested field, 15.8.1930 (leg. et det. V. P., ZMMU Ta-2420) 1♀ 1 juv. Stavropol Prov.\*: Prielbrusye, Azan, 6.7.1974 (V. R., ZMMU) 1♀. Byelorussia: Gomel Area, Gomel distr., bank of river Sozh, on sand, 28.4.1980 (leg. V. V. Golubkov, det. E. Z., ZMMU) 1♂. Caucasus: Georgia\*: near Oni, Shovi, 21.10.1981 (S. G., ZSM) 1♀. Caucasus, Azerbaidzhan: Shemakha distr., Pirkuli Reserve, humid clearing, 2.6.1984 (D. L.) 2♀ (ZMMU) 1♀ (ZSM); Shemakha distr., Pirkuli Reserve, marsh Beyouk-Nokhur, 10.9.1984 (D. L.) 1♂ (ZMMU) 1♂ (ZSM). Caucasus: Armenia\*: near village Geghasar, 5 km N of Spitak, Pambak Valley, 1650–1700 m, valley forest Salix and scrub Acer, Fraxinus, etc., 13.11.1985 (S. G., ZSM) 1♂. Kazakhstan, East-Kazakhstan Area: Kalba upland, Dubogala Lake, 25.–29.5.1966 (leg. et det. L. S.) 1♂ (UTI) 1♂ (ZSM); (L. S., ZMMU) 1♀; near 30 km NW of Ust-Kamenogorsk, right bank of river Irtysh, ravine with Salix, Populus tremula, Elaeagnus, near brook, 24.6.1983 (S. G., ZMMU) 1♀. Kirghizia, N. Tien-Shang Mts.: Kungey-Alatoo Mt. Ridge, Cholpon-Ata Valley, 8.8.1978 (S. Z., ZMMU) 1♀; Kungey-Alatoo Mt. Ridge, near river Cholpon-Ata, steppe, 9.8.1978 (S. Z., ZMMU) 2♀; N slope of Kirghizskiy Mt. Ridge, 2 km N of Frunze, Karagachyovaya Roshcha, 750 m 17.6.1979 (S. Z., ZSM) 2♀; foothills of Kirghizskiy Mt. Ridge, near Frunze, near Kok-Dzhar, 1000–1300 m 16.4.1983 (S. O., ZMMU) 1♂; foothills of Kirghizskiy Mt. Ridge, near Frunze, near Tash-Maynok, 1000–1400 m, 23.4.1983 (S. O., ZSM) 1♀; Kirghizskiy Mt. Ridge, Chon-Kurchak, 2.7.1986 (S. O., ZMMU) 2♂. Kirghizia, W. Tien-Shang Mts., Ferganskiy Mt. Ridge, Baubashata Mt. Ridge, near Arslanbob, Kirov leskhoz, Juglans regia forest, 1200 m, 3.7.1981 (S. Z., ZMMU) 1♀; Ferghanskiy Mt. Ridge, Baubashata Mt. Ridge, Kara-Alma, Juglans regia forest, 1300–1500 m, 4.6.1979 (S. Z., ZMMU) 1♂ 1♀; Ferghanskiy Mt. Ridge, Baubashata Mt. Ridge, near Arslanbob, Charvak, Juglans regia forest, 1200–1300 m, 12.8.1981 (S. Z., ZSM) 1♀; Ferghanskiy Mt. Ridge, Baubashata Mt. Ridge, near Arslanbob, Yarodar, Juglans regia forest, 1200–1400 m, 1.–7.6.1982 (S. Z., ZMMU) 2♀.

Distribution in the USSR. Karelian ASSR (UZENBAEV, 1984, 1985). Moscow Area (VAGNER, 1892: *Melanophora pulicaria* + *Micaria nitens* K.; PERELESHINA, 1928\*\*). Kursk Area (PICHKA, 1984 a, b). Belgorod Area: Valouyki (KULCZYŃSKI, 1913). Voronezh Area (PICHKA & SKUFYIN, 1981). Tatarian ASSR (AZHEGANOV & GORSHKOV, 1973). Kuybyshev Area (KRASNOBAEV, 1983). Rostov Area (SPASSKY, 1914, 1919, 1925; MINORANSKIY et al., 1977). Kirov Area (GARKUSHA, 1980). Perm Area (CHARITONOV, 1926). Sverdlovsk Area (CHARITONOV, 1923). Omsk Area (SPASSKY & LAVROV, 1928). Tomsk Area (ERMOLAEV, 1934). Krasnoyarsk Prov.: Stolby Reserve (ŠTERNBERGS, 1977). Kamchatka (SYTSHEVSKAJA, 1935\*\*). Estonia (Vilbaste, 1969, 1972, 1974, 1980). Latvia (PRIEDITIS & ŠTERNBERGS, 1981: *M. pulicaria* + *M. similis*; ŠTERNBERGS, 1981, 1983: *M. pulicaria* + *M. similis*). Ukraine: Odessa or Simpheropol, Crimea (THORELL, 1875 a). Kazakhstan: Kzyl-Orda Area: Aral Sea: Barsakelmes Island (PAVLENKO, 1985); Alma-Ata Area (TARABAEV, 1979); East-Kazakhstan Area (SAVELIEVA\*\*, 1970, 1979). Kirghizia (ZONSTEIN, 1984\*\*).

Wrong determinations. Orenburg Area (KUZNETSOV & KOBLOVA, 1977) – *M. rossica*; Samarkand (KRONEBERG, 1875) – *M. septempunctata*.

### Micaria tripunctata Holm, 1978

*Micaria tripunctata* Holm, 1978. Ent. scand., 9: 68–70, Abb. 1–5.

*Micaria tripunctata*: WUNDERLICH, 1980. Zool. Beitr., N. F., 25(2): 255–256, Abb. 17a–c, 39.

Material examined: Tyumen Area: E slope of Polar Ural, Mt. Rayiz, 15 km W of Kharp, basin of river Sob, sparse stand of Larix and Picea, 500–600 m, 10.7.1982 (A. T., ZMMU) 1♀. Krasnoyarsk Prov.: left bank of Enisey, Mirnoye, swampy suppressed Picea stand, near brook, 14.–16.8.1979 (leg. K. E., det. V. O., ZMMU) 1♂ 1♀. Tuva ASSR\*: Erzin, delta of river Erzin, 28.7.1985 (N. F., ZMMU) 1♀. Khabarovsk Prov.\*: Nanayskiy distr., Betula forest, litter, 1983 (N. R., ZMMU) 1♀. Amur Area\*: Jewish Autonomous Region, Dichun, 22.8.1978 (V. B., ZSM) 1♀.

Distribution in the USSR. Tyumen Area: Polar Ural (TANASEVITCH, 1985\*\*). Krasnoyarsk Prov.: Mirnoye (ESKOV, 1986\*\*).

### **Micaria nivosa L. Koch, 1866**

Figs. 1–3

*Micaria nivosa* L. Koch, 1866. Die Arachnidenfam. Drassiden: 58, T. 3, F. 42–43.

*Micaria nivosa*: WUNDERLICH, 1980. Zool. Beitr., N. F., 25(2): 256–259, Abb. 12, 18a–e, 40a–d.

Material examined: Murmansk Area: Kandalaksha Reserve, Luda Irenyonok, rocks, 17.7.1976 (Y. B., ZSM) 1♀. Krasnoyarsk Prov.: Evenkia, river Taymura, mouth of river Chambe, meteorological station Kerbo, grassy bank, on ground, 15.8.1982 (K. E., ZMMU) 1♂. Kazakhstan, East-Kazakhstan Area: Ust-Kamenogorsk, Sogra, delta of Ulba river, pebble and under stones, 12.9.1971 (L. S., UTI) 1♂; Kalba upland, Monastyr Lakes, 20.6.1969 (L. S., UTI) 1♀.

New for the USSR fauna!

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

*Aranea fulgens* Walckenaer, 1802. Aran. Paris., 22: 222.

*Micaria fulgens*: TYSHCHENKO, 1971. Identification book of spiders: 136, fig. 347 (♂), 352 (♀).

*Micaria fulgens*: WUNDERLICH, 1980. Zool. Beitr., N. F., 25(2): 259–260, Abb. 19a–d, 41a–b.

Material examined: Ryazan Area\*: Oka Reserve, Lubyaniki, pitfall traps, 17.–26.7.1977 (leg. N. P., det. K. E.) 1♂ 6♀ (ZMMU) 1♂ 1♀ (ZSM). Stavropol Prov.\*: Prielbrusye, Azan, 30.6.1974 (V. R., ZMMU) 1♀. North Ossetia\*: Tsey Mt. Ridge, S slope, upper forest line, 2500 m, 1.–28.8.1982 (S. A.) 1♂ 2♀ (ZMMU) 2♀ (ZSM); Tsey Mt. Ridge, S slope, polydominant grassland, 2000 m, 28.8.1982 (S. A., ZMMU) 1♀; Tsey Canyon, moraine under Kalper Pass 2800 m, 28.7.1982 (S. A., ZSM) 1♂ 1♀; Mozdok, near village Novo-Georgievskaya, forest, delta of Terek river, 27.5.1982 (S. G., ZMMU) 1♂. Caucasus, Azerbaidzhan\*: near Zakataly, village Dzhar, 750 m, 14.7.1981 (P. D., ZMMU) 1♀; Sheki distr., 10 km N of Sheki, Gelyarsen-Gerarsen, 1300 m, clearing in Quercus–Carpinus forest, 28.6.1978 (P. D., ZMMU) 2♀; Kakhi distr., near Kashkachay, 15 km SE of Kakhi, 1000 m, 3.7.1977 (P. D., ZMMU) 1♀; Shemakha distr., Pirkuli Reserve, Nakhambet, 23.5.1984 (D. L., ZMMU) 1♂; Shemakha distr., Pirkuli Reserve, Pirkuli, forest, 25.5.1984 (D. L., ZSM) 1♂. Kazakhstan, East-Kazakhstan Area: near Ust-Kamenogorsk, Menovnoye, delta of Irtysh river, pebble, 11.5.1969 (leg. et det. L. S., UTI) 1♀. Kirghizia, N. Tien-Shang Mts.: N slope of Kirghizskiy Mt. Ridge, Frunze Area, Uzun-Bulak, 6.1981 (S. O., ZMMU) 1♀; N slope of Kirghizskiy Mt. Ridge, Ala-Archa Canyon, Juniperus sparse stand, 2000 m, 27.4.1983 (S. O., ZSM) 2♂ 2♀; Kungey-Alatoor Mt. Ridge, Chon-Uryukty valley, 2000–2500 m, zone of Picea forests, 22.6.1983 (S. O., ZMMU) 1♂ 1♀; same locality, 2000 m, Picea forest, 16.5.1985 (S. Z., ZSM) 1♀. Kirghizia, W. Tien-Shang Mts.: Ferghanskiy Mt. Ridge, Baubashata Mt. Ridge, Kirov leskhoz, near Arslanbob, Juglans regia forest, 1200 m, 3.7.1981 (S. Z., ZMMU) 1♀; Ferghanskiy Mt. Ridge, Baubashata Mt. Ridge, near Arslanbob, Yarodar, Juglans regia forest, 3.–7.6.1982 (S. Z., ZMMU) 1♂ 2♀.

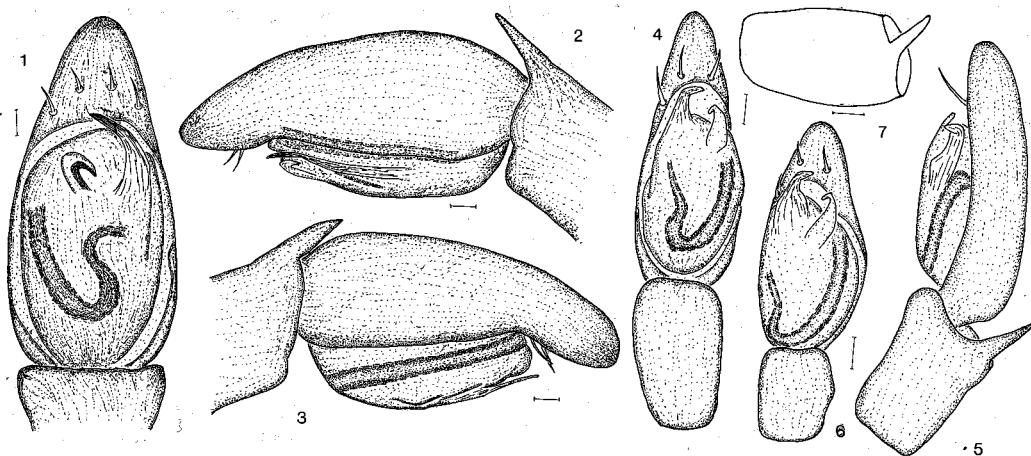
Distribution in the USSR. Moscow Area (VAGNER, 1892). Lipetsk Area (VAGNER, 1895). Latvia (ŠTERNBERGS, 1981). Ukraine: Kharkov Area (KIRILENKO & LEGOTA, 1981). Kazakhstan: Alma-Ata Area (SPASSKY & SHNITNIKOV, 1937; TARABAEV, 1979); East-Kazakhstan Area (SAVELIEVA, 1979\*\*). Kirghizia (ZONSTEIN, 1984\*\*).

### **Micaria romana L. Koch, 1866**

*Micaria Romana* L. Koch, 1866. Die Arachnidenfam. Drassiden: 67, T. 3, F. 48.

*Micaria romana*: WUNDERLICH, 1980. Zool. Beitr., N. F., 25(2): 260–263, Abb. 9a–c, 20a–d, 42a–f.

Material examined: Krasnodar Prov.\*: Slaviansk distr., wheat field, on ground, 4.6.1970 (N. E., ZMMU) 1♀; same locality, 2.7.1971 (N. E.) 2♂ 3♀ (ZMMU) 1♀ (ZSM); Caucasian Reserve, N slope, near Ghuzeripl, 640 m, mixed forest, 13.7.1974 (V. O., ZSM) 1♀. Ukraine, Crimea\*: Belogorsk, village Karasyovka, 6.1981 (V. Br., ZMMU) 3♀; Belogorsk,



Figs. 1–3. *Micaria nivosa* L. Koch, right palp of ♂ (East-Kazakhstan Area). — 1) ventral view; 2) inner view; 3) lateral view. Scale = 0.03.

Figs. 4–7. *Micaria septempunctata* O. Pickard-Cambridge, left palp of ♂ (4, 5, 7 from Kirghizia, 6 from Uralsk Area, Kazakhstan). — 4, 6) ventral views; 5) lateral view; 7) palpal tibia in dorsal view. Scale = 0.03.

Karabi, 28.5.1982 (V. Br., ZSM) 1 ♀. Caucasus, Armenia\*: near town Sevan, near railway station, under stones, 28.7.1983 (D. L., ZMMU) 1 ♀. Turkmenia\*: SW Kopetdagh Mts., 6.1983 (S. Za., ZMMU) 1 ♂ 1 ♀.

Distribution in the USSR. Latvia (Sternbergs, 1981: *M. scintillans*).

### *Micaria funerea* Simon, 1878

*Micaria funerea* Simon, 1878. Arachn. Fr., 4: 18.

*Micaria funerea*: WUNDERLICH, 1980. Zool. Beitr., N. F., 25(2): 263–264, Abb. 21a–g, 43a–d.

Material examined: Caucasus, North Ossetia, Tsey Canyon, polydominant grassland, 1800 m, 5.8.1982 (S. A., ZMMU) 1 ♀.

New for the USSR fauna!

### *Micaria albimana* O. Pickard-Cambridge, 1872

*Micaria albimana* O. Pickard-Cambridge, 1872. Proc. Zool. Soc. London: 251, T. 16, F. 34.

*Micaria albimana*: WUNDERLICH, 1980. Zool. Beitr., N. F., 25(2): 264–266, Abb. 22a–f, 44a–c.

Material examined: Uzbekistan\*, Tashkent Area: Bekabad distr., Dalverzin, right bank of Syrdarya, artificial bush, 29.6.1980 (A. N., ZMMU) 1 ♀. Tadzhikistan\*: Komsomolabad distr., Zakaznik Sangvor, Lulya-Kharvi, river Lulya-Kharvi, 1800 m, 11.7.1978 (V. O., ZSM) 1 ♂. Kirghizia\*, Uzun-Akhmat-Tau, 1700 m, 14.8.1986 (S. O., ZMMU) 1 ♀.

Distribution in the USSR. Turkmenia (VLASOV & SYCHEVSKAYA, 1937: *M. formicaria*; KUZNETSOV & FET, 1986: *Micaria* sp.; FET, 1986; MIKHAILOV & FET, 1986).

### *Micaria formicaria* (Sundevall, 1831)

*Clubiona formicaria* Sundevall, 1831. Vet. Ak. Handl.: 141.

*Micaria formicaria*: AZHEGANOV, 1968. A short identification book of spiders: 134–135, f. 318 (♂), 328 (♀).

*Micaria formicaria*: TYSHCHENKO, 1971. Identification book of spiders: 136–137, f. 350 (♂).

*Micaria formicaria*: WUNDERLICH, 1980. Zool. Beitr., N. F., 25(2): 266–269, Abb. 4a–b, 23a–b, 45a–e.

Material examined: Voronezh Area\* (ZMMU) 1 ♀. Stavropol Prov.\*: Prielbrusye, 3.7.1974 (V. R., ZMMU) 2 ♂. North Ossetia\*: Tsey Mt. Ridge, S slope, 2000 m, polydominant grassland, 28.8.1982 (S. A., ZMMU) 1 ♂. Amur Area\*: Khingan Reserve, bank of Karanga river, 19.–22.8.1983 (Y. M., ZMMU) 1 ♀. Caucasus, Armenia\*: near Sevan town, under stones, 2100 m, 28.7.1983 (D. L. & V. O., ZSM) 1 ♀. Caucasus, Georgia\*: Lagodekhi Reserve, under tree, litter, 27.7.1982 (Y. M., ZMMU) 1 ♂. Caucasus, Azerbaidzhan\*: Apsheron Peninsula, Zykh, 14.6.1977 (P. D., ZSM) 1 ♂. Kazakhstan, East Kazakhstan Area, near Ust-Kamenogorsk, left bank of Irtysh River, floodland forest, 7.–8.1984 (L. S., UTI) 1 ♀.

Distribution in the USSR. Lipetsk Area (PANTELEEEVA, 1982). Belgorod Area: Valouyki (KULCZYŃSKI, 1913). Chelyabinsk Area (AZHEGANOV, 1951; PAKHORUKOV, 1985). Tomsk Area: Tomsk (KULCZYŃSKI, 1901). Ukraine: Kharkov Area (KIRILENKO & LEGOTAY, 1981); Dnepropetrovsk Area (THORELL, 1875a); Crimea (THORELL, 1875a; SPASSKY, 1927). Moldavia (KARPENKO & LEGOTAY, 1980; KARPENKO, 1981). Kazakhstan: Chimkent Area (DUBININ, 1946); Alma-Ata Area (SPASSKY & SHNITNIKOV, 1937; TARABAEV, 1979). Uzbekistan (DUBININ, 1954).

As it was noticed (MIKHAILOV & FET, 1986), the determination of *M. formicaria* by V. I. Pereleshina-Sychevskaya (VLASOV & SYCHEVSKAYA, 1937) for the environs of Ashkhabad is wrong; specimens revised refer to *M. albimana*. It is possible that the material of V. B. DUBININ (1946, 1954) from the desert zone, determined also by Sychevskaya, also belongs to *M. albimana*.

### **Micaria aenea Thorell, 1871**

*Micaria aenea* Thorell, 1871. Rem. Syn. Europ. Spiders: 175.

*Micaria aenea*: WUNDERLICH, 1980. Zool. Beitr., N. F., 25(2): 271–273, Abb. 5, 26a–d, 48a–b.

Material examined: Magadan Area: Tenkino distr., environs of Sibit-Tyellakh, biological station "Aborigen", 1983–1985 (leg. A. A. & Y. M., det. K. M. & Y. M.) 1 ♂ 3 ♀ (ZSM) 8 ♀ (ZMMU).

New for the USSR fauna!

### **Micaria guttulata (C. L. Koch, 1839)**

*Macaria guttulata* C. L. Koch, 1839. Die Arachniden, 6: 95, Abb. 500.

*Micaria guttulata*: WUNDERLICH, 1980. Zool. Beitr., N. F., 25(2): 273–275, Abb. 27a–d, 49.

Material examined: Kirghizia, W. Tien-Shang Mts.: Ferghanskiy Mt. Ridge, Baubashata Mt. Ridge, near Arslanbob, Kirov leskhoz, Juglans regia forest, 1200 m, 3.7.1981 (S. Z., ZMMU) 1 ♀.

Distribution in the USSR. Ukraine: Crimea (SPASSKY, 1927). Kirghizia (ZONSTEIN, 1984\*\*).

### **Micaria silesiaca L. Koch, 1875**

*Micaria silesiaca* L. Koch, 1875. Abh. naturf. Ges. Görlitz, 15: 4, T. 1, F. 2, 3.

*Micaria silesiaca*: WUNDERLICH, 1980. Zool. Beitr., N. F., 25(2): 275–277, Abb. 8, 28a–d, 50a–d.

Material examined: Caucasus, Georgia\*: Lagodekhi Reserve, near meteorological station, 2050–2150 m, 22.6.1982 (Y. M., ZMMU) 1 ♀. Caucasus, Azerbaidzhan\*: Shemakha distr., Pirkuli Reserve, open slope, 1300–1400 m, 31.5.1984 (D. L.) 1 ♂ 1 ♀ (ZSM) 1 ♂ (ZMMU); same locality, 1500 m, 3.5.1984 (D. L., ZMMU) 1 ♀.

Distribution in the USSR. Tomsk Area: Tomsk (ERMOLAEV, 1934: *M. hospes*).

### **Micaria lenzi Bösenberg, 1899**

*Micaria Lenzi* Bösenberg, 1899. Verh. Nat. Ver. Rheinl. Westf., 56: 101, 120, T. 1, F. 8.

*Micaria lenzi*: WUNDERLICH, 1980. Zool. Beitr., N. F., 25(2): 277–279, Abb. 6, 29a–d, 51a–c.

Material examined: Tuva ASSR: near Mugur-Aksy, delta of Karty river, near frontier, 1200 m, 26.5.1985 (O. B., ZMMU) 1 ♀; Erzin, delta of Erzin river, 28.7.1985 (N. F., ZMMU) 1 ♀. Magadan Area: Tenkino distr., near Sibit-Tyel-lakh, biological station "Aborigen", 1979–1983 (S. B., Y. M., N. K., A. A.) 28 ♂ 62 ♀ (ZMMU) 1 ♂ 5 ♀ (ZSM) 2 ♀ (NHM); Tenkino distr., near Vetrennyi, pebbly bank of Kolyma river, 13.6.1983 (leg. et det. Y. M., ZMMU) 1 ♂; Tenkino distr., Kolyma river, 5 km below mouth of Detrin river, relict steppe (ZMMU) 1 ♂. Caucasus, Armenia: near Sevan town, under stones, 2100 m, 28.7.1983 (D. L. & V. O., ZSM) 1 ♀; near Sevan town, near hydrobiological station, under stones, 31.7.1983 (D. L., ZMMU) 1 ♀. Caucasus, Azerbaijan, Nakhichevan, salinated semidesert, under stones, 200 m, 25.7.1983 (D. L. & V. O.) 1 ♀ (ZMMU) 1 ♀ (ZSM). Kazakhstan, Alma-Ata Area: 40 km from Alma-Ata along Karaganda road semidesert, under stones, 16.11.1984 (ZMMU) 1 ♀. Kirghizia: Pamiro-Alay Mts., Osh Area, Alay Mt. Ridge, W. Koksu valley, 2500 m (leg. S. Z., det. Y. M., ZMMU) 1 ♀; N. Tien-Shang Mts., Kirghizskiy Mt. Ridge, Chon-Kurchak, 2.7.1986 (S. O., ZMMU) 1 ♀; Bank of Toktogul Lake, near Komsomol, 11.8.1986 (S. O., ZMMU) 1 ♀. Turkmenia\*, Sary-kamysh, 20.6.1985 (O. S., ZMMU) 1 ♂.

New for the USSR fauna!

### *Micaria alpina* L. Koch, 1872

*Micaria alpina* L. Koch, 1872. Zeitschr. Ferdinand. Tirol, (3), 17: 313.

*Micaria alpina*: WUNDERLICH, 1980. Zool. Beitr., N. F., 25(2): 281–283, Abb. 31a–d, 54a–d.

Material examined: Komi ASSR: near Vorkuta, 1981 (A. T.) 1 ♂ 3 ♀ (ZMMU) 1 ♂ 2 ♀ (ZSM); Vorkuta distr., near Mulda, tundra, lichenes & dwarf bush, 7.8.1981 (A. T., ZMMU) 1 ♂. Krasnoyarsk Prov.: Evenkia, river Taymura, mouth of river Chambe, meteorological station Kerbo, Larix taiga with Ledum, in moss, 17.8.1982 (K. E., ZMMU) 2 ♀. Magadan Area: Tenkino distr., near Sibit-Tyellakh, biological station "Aborigen", 1980–1985 (leg. A. A., K. E., S. B., Y. M., det. K. M., Y. M.) 10 ♂ 21 ♀ (ZMMU) 4 ♂ 9 ♀ (ZSM) 2 ♀ (NHM).

New for the USSR fauna!

### *Micaria septempunctata* O. Pickard-Cambridge, 1872

Figs. 4–7

*Micaria septem-punctata* O. Pickard-Cambridge, 1872. Proc. Zool. Soc. London: 250, T. 16, F. 32.

*Micaria septempunctata*: WUNDERLICH, 1980. Zool. Beitr., N. F., 25(2): 307–308, Abb. 69a–e.

*Micaria milleri* WUNDERLICH, 1980. Ibid.: 284–285, Abb. 55a–b (♀).

*Micaria septempunctata*: MIKHAILOV & FET, 1986. Sbornik trudov Zool. Muz. Mosk. gos. Univ., 24: 178–180, fig. 2(b)–(c).

Material examined: Caucasus, Azerbaijan\*: Saatly, Dzhafarkhan, 10–12 km S of Sabirabad, cotton field, Om, 15.6.1983 (P. D., ZMMU) 1 ♂. Kazakhstan, Uralsk Area\*: Dzhanybek, Artemisia pauciflora, 23.6.1982 (K. M., ZSM) 1 ♂; same locality, 26.8.1982 (K. M., ZMMU) 1 ♀. Uzbekistan: Samarkand, Turkestan Collection of A. P. Fedchenko (ZMMU Ta-1191) 1 ♀; Bukhara Area, Kyzyltapa distr., near farm "Malek", stony desert, 2.6.1980 (A. N., ZMMU Ta-3566) 2 ♀. Turkmenia: Gasan-Kuli, Delili, under stones & in rodent holes, 21.1.1981 (S. A., ZSM) 1 ♂ 3 juv.; Gasan-Kuli, N shore of Maloye Delili Lake, ant nest, 25.1.1982 (K. M., ZMMU) 2 ♂ 1 juv.; Mary Area, S of Bayram-Ali, bank of Murghab river, Ghindukush, 28.5.1929 (V. P., ZMMU) 1 ♂; Central Kopetdag Mts., bank of river Firyuzinka, 13.6.1929 (V. P., ZMMU) 1 ♂; Badkhyz, Eroylanduz, 16.4.1984 (V. Y., ZSM) 1 ♀; Repetek Reserve, on ground between ants, 24.5.1929 (V. P., ZMMU) 3 ♂ 3 ♀; same locality, in hole, 25.4.1981 (V. K., ZMMU Ta-3564) 1 ♀; same locality, in hole, 11.5.1981 (V. K., ZMMU Ta-3565) 1 ♀; same locality, ant nest, 23.4.1982 (V. K., ZMMU) 1 ♀; Armudarya, Farab distr., Narghyz island, Tamarix, 9.4.1983 (S. A., ZSM) 1 ♂. Kirghizia\*, N. Tien-Shang Mts.: 2 km N of Frunze, Karagachovaya Roshcha, 750 m, 6.1979 (S. Z., ZMMU) 1 ♂; near Frunze, 750 m, 30.3.1983 (S. O., ZMMU) 1 ♂.

Distribution in the USSR. Uzbekistan: Bukhara Area (MIKHAILOV & FET, 1986). Turkmenia (MIKHAILOV & FET, 1986).

The determination of *M. formicaria* from the environs of Samarkand (KRONEBERG, 1875) is wrong. This specimen actually belongs to *M. septempunctata*.

Male. Carapace length  $1.01 \pm 0.38$  (13), width  $0.73 \pm 0.24$  (13), ratio  $1.36 \pm 0.22$  (13). Abdomen length  $1.20 \pm 0.37$  (13), width  $0.67 \pm 0.31$  (13), ratio  $1.81 \pm 0.25$  (13). Palpus (fig. 4–7). For the determination of this species it is useful to remember that the palpal tibial apophysis can sometimes be broken off.

As it was noticed earlier (MIKHAIEV & FET, 1986), *M. milleri* Wunderlich, 1980, described from Bulgaria (Varna) by a single female, is actually a junior synonym of *M. septempunctata*. The shape of the fore margin of the epigynal groove is variable.

***Micaria pygmaea* Kroneberg, 1875**  
Figs. 8–12

*Micaria pygmaea* Kroneberg, 1875. Izv. Obshch. lyubit. estestvozn., antropol. i etnogr., 19 (3): 19, T. 5, F. 42a–c.  
*Micaria pygmaea*: MIKHAIEV & FET, 1986. Sbornik trudov Zool. Muz. Mosk. gos. Univ., 24: 180–181, fig. 2(d)–(f).

non *Micaria rossica*: WUNDERLICH, 1980. Zool. Beitr., N. F., 25(2): 308–309.

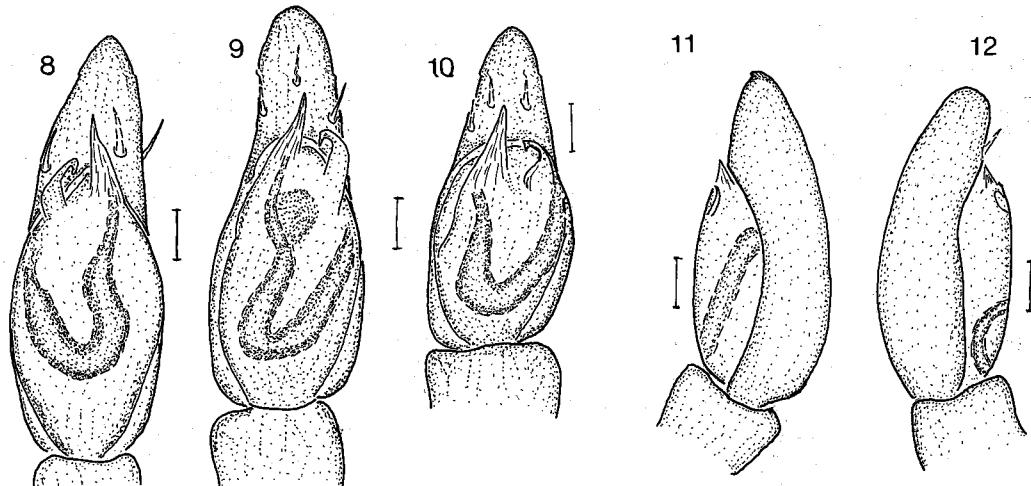
Material examined: Kizil-Kum, Turkestan Collection of A. P. Fedchenko (holotype, ZMMU Ta-1193) 1 ♂. Turkmenia: W. Kopetdagh Mts., near Sharlouk, 30.5.1982 (S. Za., ZMMU) 1 ♂ (without abdomen). Tadzhikistan: Varzaminor, 8.6.1978 (V. O., ZMMU) 1 ♂; Gandjino, 13.–15.6.1986 (S. Z., ZMMU) 1 ♂.

Distribution in the USSR. Uzbekistan (CHARITONOV, 1969). Turkmenia (KAPLIN, 1978: det. V. F. Bakhvalov; MIKHAIEV & FET, 1986). Tadzhikistan (MIKHAIEV & FET, 1986). Kizil-Kum (KRONEBERG, 1875; MIKHAIEV & FET, 1986). It is possible that the data of Kaplin and Charitonov actually refer to *M. septempunctata*.

Male. Carapace length 0.83–1.00, width 0.58–0.63, ratio 1.43–1.60. Abdomen length 0.88–1.15, width 0.50–0.53, ratio 1.67–2.30. Palpus (fig. 8–12). By the structure of the retinaculum, this species resembles *M. septempunctata*, but differs by the straight embolus and absence of the tibial apophysis.

*M. septempunctata* and *M. pygmaea* must be separated from the *silesiaca*-group, in which both were attributed with some doubt by WUNDERLICH (1980). I create thus a new group, the *septempunctata*-group. Males are distinguished by the ecto-lateral position of the retinaculum, females by the bifurcation of the epigynal groove.

As noticed earlier (MIKHAIEV & FET, 1986), WUNDERLICH's (1980) synonymization of *M. pygmaea* under *M. rossica* appears to be wrong, as evidenced by a restudy of the types.



Figs. 8–12. *Micaria pygmaea* Kroneberg, palp of ♂ (8 right, 9–12 left; 8 from Tadzhikistan, 9 from Turkmenia, 10–12 from Kisil-Kum, holotype). – 9–10) ventral views; 11) lateral view; 12) inner view. Scale = 0.03.

## *Micaria rossica* Thorell, 1875

*Micaria rossica* Thorell, 1875. Hor. Soc. Ent. Ross., 11: 112–113.

*Micaria modesta* Kroneberg, 1875. Izv. Obshch. lyubit. estestvozna., antropol. i etnogr., 19(3): 19–20, T. 2, F. 5a–c.

*Micaria scenica* Simon, 1878. Arachn. Fr., 4: 17.

*Micaria centrocnemis* Kulczyński, 1885. Pam. Wydz. mat. przyr. Akad. Umiej., 11: 42–43, T. XI, F. 21 (♀). (n. syn.)

*Micaria scenica*: TYSHCHENKO, 1971. Identification book of spiders: 136, f. 349 (♂), 350 (♀).

*Micaria scenica*: WUNDERLICH, 1980. Zool. Beitr., N. F., 25(2): 286–287, Abb. 33a–e, 57a–e.

*Micaria rossica*: WUNDERLICH, 1980. Ibid.: 308–309, Abb. 70a–c.

*Micaria centrocnemis*: WUNDERLICH, 1980. Ibid.: Abb. 66.

*Micaria rossica*: MIKHAILOV & FET, 1986. Sbornik trudov Zool. Mus. Mosk. gos. Univ., 24: 176–178, fig. 2a.

non *Micaria pygmaea* Kroneberg, 1875. Izv. Obshch. lyubit. estestvozna., antropol. i etnogr., 19(3): 19, T. 5; F. 42a–c.

Material examined: Volgograd Area\*: near Elton Lake, 26.–27.6.1982 (A. B., ZMMU) 1♂. Stavropol Prov.\*: Petrovskoye distr., Bogataya Balka, wheat field, 17.–18.7.1971 (leg. et det. N. E., ZMMU) 3♀. Krasnodar Prov.\*: Slavyansk distr. (N. E., ZSM) 2♂. Orenburg Area\*: near Orenburg, windbreak, 11.7.1974 (S. K., ZMMU) 1♀. Magadan Area\*: Tenkino distr., near Sibit-Tyellakh, biological station "Aborigen", 1980–1985 (leg. A. A., I. G., S. B., N. K., Y. M., det. K. M., Y. M.) 32♂ 100♀ (ZMMU) 2♂ 8♀ (ZSM) 3♂ 18♀ (NHM); upper flow of Kolyma river, 56 th km of road from Ust-Omchug to Vetrynniy, 29.7.1985 (leg. et det. Y. M., ZMMU) 4♀; 10 km N of Palatka, 3.7.1985 (leg. et det. Y. M., ZMMU) 1♂; environs of Magadan, Gertner Bay? Near Nyuklya, 27.6.1985 (leg. et det. Y. M.) 2♀ (ZMMU) 1♀ (ZSM); near Talon, 10.6.1985 (leg. A. Meshcheryakov, det. Y. M.) 1♂. Ukraine: Donetsk Area: Novoazov distr., Reserve "Khomutovskaya Step", calcareous rock, under stones, 6.1982 (leg. et det. N. Po., ZMMU) 1♀ 4 juv. Azerbaidzhan: Baku, W outskirts, Yasamalskaya Dolina, young park (*Morus*, *Salix*, *Populus*, etc.), formerly Artemesia semidesert, 1.5.1977 (P. D., ZMMU) 1♀; 50 km SW of Baku, Gobustan, Gobustan Reserve, 20 m, semidesert of Artemesia & Salsola, 18.4.1984 (P. D., ZSM) 1♂; Baku, 29.5.1977 (P. D., ZMMU) 1♀; Saatly distr., 10–12 km S of Sabirabad, near village Dzhafarkhan, cotton field, 0 m, 15.6.1983 (P. D., ZMMU) 2♂; Lachin distr., near Lachin, 1200 m, afterforest vegetation, bushes, 1.6.1980 (P. D., ZMMU) 1♀; Apsheron Peninsula, Dyubendy, opposite of Artyom Island, –28 m, Caspian Sea shore, fixed sand, 21.5.1977 (leg. et det. P. D.) 4♀ (ZMMU) 1♀ (ZSM). Kazakhstan, Uralsk Area\*: Janybek, Artemesia pauciflora, 28.–31.5.1982 (K. M., ZSM) 1♀; same locality, Artemesia pauciflora, 24.–27.8.1982 (K. M., ZSM) 1♀; same locality, Artemesia pauciflora, 24.–27.8.1982 (K. M., ZMMU) 1♀; same locality, on ground, 25.6.1972 (ZMMU) 1♀. Kazakhstan, Akmolinsk (now Tselinograd) Area: Kokshetau, stony steppe slopes, under dried dung, 3.6.1957 (leg. et det. V. T., ZIL) 2♂. Kazakhstan, Dzhezkazgan Area\*: Znanarky distr., K. Marx farm, steppe, 11.6.1984 (S. D., ZMMU) 2♂ 1♀. Kazakhstan, Alma-Ata Area: Alma-Ata Reserve, right Talgar, multitherbation, 4.8.1984 (S. D., ZMMU) 1♂. Kazakhstan, East Kazakhstan Area, near Ust-Kamenogorsk, Menovnoye, Irtysk River valley, left bank, 11.5.1969 (L. S., UTI) 1♀. Turkmenia: SW Kopetdag Mts., near Kara-Kala, Parkhay, 400 m, 20.–21.4.1985 (S. Z., ZSM) 1♂; Farab distr., Amudarya river, Narghyz Island, 17.4.1984 (S. A., ZSM) 1♂ 1♀; Repetek, on ground between ants, 24.5.1929 (V. P., ZMMU) 1♀; same locality, ant nest, 23.4.1982 (V. K., ZMMU) 1♂ 1♀; Tashauz Area: Chirishli, 10.5.1983 (O. S., ZMMU) 1♂; Kankakyr, on ground, 13.–15.4.1985 (O. S., ZMMU) 2♂. Kirghizia, N. Tien-Shang Mts.: Issyk-Kul Area, S slope of Kungey-Alatau Mt. Ridge, Karkara valley, Irisu valley, 2000–2500 m, 13.7.1983 (S. O., ZSM) 1♀; 20 km S of Frunze, Kirghizsky Mt. Ridge, Malinovoye Canyon, 22.6.1984 (S. O., ZMMU) 2♂ 3♀; Issyk-Kul Area, Kungey-Alatau Mt. Ridge, Tyup distr., Tyup valley, upper reaches of Tyup river, Santash valley, 2200–2400 m, 17.7.1984 (S. O., ZMMU) 1♂ 2♀; 40 km NW of Frunze, Chu valley, near Nizhnechuysk, near Dzhanig-Pakhta village, 600 m 15.8.1983 (S. O., ZMMU) 1♂; Issyk-Kul Area, Kungey-Alatau Mt. Ridge, Chon-Uryukty valley, 2000–2500 m, zone of *Picea* forest, 22.6.1983 (S. O., ZMMU) 3♂ 1♀; same locality, 2000 m, 16.5.1985 (S. Z.) 2♂ (ZMMU) 1♂ (ZSM). Kirghizia, C. Tien-Shang Mts.: S slope of Terskey-Alatau Mt. Ridge, Molo valley, 3100 m, 13.7.1983 (S. O., ZMMU) 2♀; S slope of Terskey-Alatau Mt. Ridge, Koilyu valley, *Picea* forest, 2800 m, 16.7.1983 (S. O., ZSM) 1♂ 2♀; Terskey-Alatau Mt. Ridge, Kaindy Mt. Ridge, 5 km from river Sary-Dzhaz, 3000 m, 17.7.1983 (S. O., ZMMU) 1♂. Tadzhikistan\*: Ura-Tyube (formerly in Samarkand Area), 1.7.1908 (E. P., ZIL) 1♀; Pamir Mts., Kara-Art valley, NE of Kara-Kul Lake, 17.7.1928 (A. R., ZIL) 3♂.

Distribution in the USSR. Voronezh Area (PICHKA & SKUFYIN, 1981). Rostov Area (SPASSKY, 1914, 1919, 1925, 1940; MINORANSKIY et al., 1977). Kalmyk ASSR (MINORANSKIY & PONOMAREV, 1984). Orenburg Area (KUZNETSOV & KOBLOVA, 1977: *M. pulicaria*). Kamchatka (KULCZYŃSKI, 1885: *M. centrocnemis*). Ukraine: Simferopol, Odessa (THORELL, 1875 a, b); Transcarpathia (LEGOTAY, 1959); Kharkov Area (KIRILENKO & LEGOTAY, 1981); Crimea (SPASSKY, 1927). Azerbaidzhan (DUNIN, 1984). Turanian Zoogeographical Province (SPASSKY, 1952: *M. rossica* + *M. modesta*). Kazakhstan: Kzyl-Orda Area: Aral Sea: Barsakelmes Island (PAVLENKO, 1985: *M. modesta*); Kustanay Area (ASHIKBAEV, 1973, 1976); Semirechye (SPASSKY & SHNITNIKOV, 1937); East-Kazakhstan Area (SAVELIEVA, 1979); Alma-Ata Area (TARABAEV, 1979: *M. scenica*). Uzbekistan (KRONEBERG, 1875: *M. modesta*;

CHARITONOV, 1969: *M. modesta*). Turkmenia (OVCHARENKO & FET, 1980: *M. modesta*; MIKHAIEV & FET, 1986).

WUNDERLICH (1980) supposed the synonymy of *M. rossica* and *M. centrocnemis*. My material from Magadan Area confirms this supposition: in the epigynal structure of females, all intergrades from *M. rossica* to *M. centrocnemis* are observed. The male palpal structure shows no difference from the variation limits of *M. rossica* (see figures in WUNDERLICH, 1980; MIKHAIEV & FET, 1986).

### ***Micaria kopetdagensis* Michailov in Michailov et Fet, 1986**

Figs. 13–19

*Micaria kopetdagensis* Michailov in: MIKHAIEV & FET, 1986. Sbornik trudov Zool. Muz. Mosk. gos. Univ., 24: 180, fig. 2 (g)–(h).

Material examined: Caucasus, N. Osetia\*: Tsei Mt. Ridge, S slope upper forest line, 2500 m, 1.–28.8. 1982 (S. A.) 6♂ 2♀ (ZMMU) 2♂ 2♀ (NMMU) 2♂ 1♀ (ZSM); Tsei Mt. Ridge, S slope, 2500 m, 19.8. 1982 (S. A., ZMMU) 1♂; Tsei Mt. Ridge, S slope, 2000 m, polydominant grassland, 28.8. 1982 (S. A., ZMMU) 1♀. Caucasus, Azerbaidzhan\*: Shemakha distr., Pirkuli Reserve, 1500 m, 30.5. 1984 (D. L., ZMMU) 1♂. Caucasus, Armenia\*: near Sevan town, 2100 m, under stones, 28.7. 1983 (D. L. & V. O., ZMMU) 2♀; near Sevan town, environs of hydrobiological station, under stones, 31.7. 1983 (D. L., ZSM) 1♀. Turkmenia: SW Kopetdag Mts., Syunt-Khasardagh Reserve, grassland, 5.–9.7. 1982 (N. U., ZMMU, holotype Ta-3569) 1♂.

Distribution in the USSR. Turkmenia (FET, 1986; MIKHAIEV & FET, 1986).

This species was originally described by a single male. I redescribe here the male and describe the female for the first time.

Male. Carapace and sternum brown. Legs: femora dark brown, other joints paler, palest are tarsal tips. Abdomen dark gray, with two slightly expressed, transverse white bands.

Carapace length  $1.60 \pm 0.45$  (12), width  $1.16 \pm 0.27$  (12), ratio  $1.39 \pm 0.26$  (12). Leg dimensions (male above, female below):

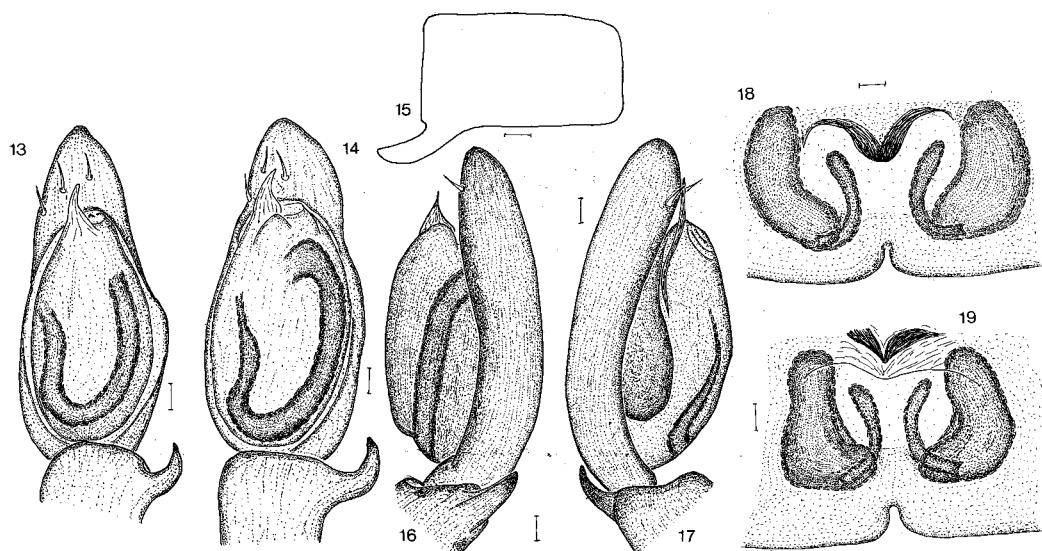
		I	II	III	IV
Femur	♂	$1.18 \pm 0.27$ (9)	$1.01 \pm 0.18$ (11)	$0.86 \pm 0.12$ (11)	$1.26 \pm 0.17$ (11)
	♀	$1.04 \pm 0.09$ (9)	$0.97 \pm 0.14$ (10)	$0.83 \pm 0.15$ (10)	$1.27 \pm 0.20$ (10)
Patella	♂	$0.56 \pm 0.11$ (9)	$0.46 \pm 0.13$ (11)	$0.43 \pm 0.07$ (10)	$0.49 \pm 0.09$ (10)
	♀	$0.51 \pm 0.08$ (8)	$0.47 \pm 0.07$ (10)	$0.46 \pm 0.10$ (10)	$0.56 \pm 0.11$ (10)
Tibia	♂	$0.95 \pm 0.20$ (9)	$0.79 \pm 0.14$ (10)	$0.66 \pm 0.11$ (10)	$1.07 \pm 0.14$ (11)
	♀	$0.75 \pm 0.13$ (8)	$0.70 \pm 0.09$ (10)	$0.62 \pm 0.09$ (10)	$1.01 \pm 0.11$ (10)
Metatarsus	♂	$0.82 \pm 0.15$ (8)	$0.70 \pm 0.13$ (11)	$0.72 \pm 0.11$ (10)	$1.16 \pm 0.16$ (11)
	♀	$0.67 \pm 0.12$ (8)	$0.62 \pm 0.11$ (10)	$0.65 \pm 0.11$ (10)	$1.08 \pm 0.16$ (10)
Tarsus	♂	$0.76 \pm 0.27$ (7)	$0.72 \pm 0.16$ (10)	$0.63 \pm 0.07$ (10)	$0.79 \pm 0.13$ (11)
	♀	$0.72 \pm 0.08$ (8)	$0.67 \pm 0.13$ (10)	$0.59 \pm 0.09$ (10)	$0.74 \pm 0.16$ (10)

Leg armature: femur I, III dorsal 1, dorsal-prolateral 1, femur II, IV dorsal 1; tibia III, IV from ventral 2.2 to ventral 2.2.2, lateral 2.2.2; metatarsus III, IV from ventral 2.2.2, lateral 2 to ventral 2.2.2, lateral 2.2, dorsal 2.2.2.

Abdomen length  $1.90 \pm 0.48$  (12), width  $1.15 \pm 0.32$  (12), ratio  $1.66 \pm 0.24$  (12).

Female. Coloration as in male. Carapace length  $1.57 \pm 0.18$  (10), width  $1.12 \pm 0.14$  (10), ratio  $1.41 \pm 0.11$  (10). Leg dimensions see above. Leg armature: femur I–IV as in male; tibia III, IV maximum ventral 2.2.2, lateral 2, dorsal 2.2; metatarsus III, IV maximum ventral 2.2.2, lateral 2.2.2, dorsal 2.

Abdomen length  $2.73 \pm 0.98$  (10), width  $1.76 \pm 0.54$  (10), ratio  $1.55 \pm 0.25$  (10).



Figs. 13–17. *Micaria kopetdagensis* Michailov, left palp of ♂ (13, 16, 17 from Turkmenia, holotype, 14, 15 from North Ossetia). — 13, 14) ventral views; 15) palpal tibia in dorsal view; 16) lateral view; 17) inner view. Scale = 0.03.

Figs. 18–19. *Micaria kopetdagensis* Michailov, epigyne of ♀. — 18) North Ossetia, 19) Ukraine. Scale = 0.03.

Palpus (figs. 13–17). By the structure of the palpus, *M. kopetdagensis* is closely related to *M. rossica*, but differs by the tibial apophysis, constant shape of the embolus, and constant absence of the retinaculum.

Epigyne (figs. 18–19). By the epigynal structure, *M. kopetdagensis* is related to *M. alpina*, but differs by the shorter seminal ducts, less expressed posterior border, and invariably curved anterior border of the epigynal groove. The shape of the anterior border of the epigynal groove of *M. alpina* is variable.

*M. kopetdagensis* belongs to the *rossica*-group (*scenica*-group of WUNDERLICH, 1980). Thus, this group includes only two species; three species attributed to it by Wunderlich (*M. scenica*, *M. rossica*, *M. centroc nemis*) are actually one: *M. rossica*.

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

*Drassus dives* Lucas, 1846. Explor. Sci. Alger., Zool., 1, Arachn.: 220–221, T. 13, F. 9.

*Micarolepis similis* Tyshchenko, 1965. Ent. Obozr., 44(5): 70, fig. 8 (♀) (syn. nov.)

*Micaria dives*: WUNDERLICH, 1980. Zool. Beitr., N. F., 25 (2): 287–290, Abb. 1, 34a–d, 58a–d.

*Micaria tyschchenkoi* Brignoli, 1983. A catalogue of Araneae: 583 (nom. nov. pro *Micarolepis similis*, praeocc. in *Micaria* by BÖSENBERG, 1902) (syn. nov.)

Material examined: Ukraine, Dnepropetrovsk Area\*: Dnepropetrovsk, 7.6.1973 (A. Z., ZMMU) 1 ♀. Kirghizia, N. Tien-Shang Mts.: between Kirghizsky and Kungey-Alatoos Mt. Ridges, Buam Canyon, 1000–1300 m, 1.5.1984 (S. O., ZSM) 1 ♂; Kirghizsky Mt. Ridge, 20 km S of Frunze, Malinovoye Canyon, 22.6.1984 (S. O., ZMMU) 1 ♂; Kungey-Alatoos Mt. Ridge, Issyk-Kul Area, Chon-Uryukty valley, Picea forest zone, 2000–2500 m, 22.6.1983 (S. O., ZMMU) 1 ♀; Kungey-Alatoos Mt. Ridge, Cholpon-Ata valley, 2200 m, 10.8.1977 (S. Z., ZSM) 1 ♀; foothills of Kirghizsky Mt. Ridge, Frunze Area, Niamezin Canyon, 23.4.1982 (S. O., ZMMU) 1 ♀ inad. Kirghizia, W. Tien-Shang Mts.: S foothills of Ferghansky Mt. Ridge, near Dzhelalabad, 800 m, semidesert, 29.4.1982 (S. Z., ZMMU) 1 ♂; Ferghansky Mt. Ridge, Syuren-Tyube Mt. Ridge, Changet valley, 1100–1600 m, Juglans regia forest, 9.4.1982 (S. Z., ZMMU) 1 ♀.

Distribution in the USSR. Kalmyk ASSR (MINORANSKIY et al., 1980; PONOMAREV & MINORANSKIY, 1981; MINORANSKIY & PONOMAREV, 1984). Kazakhstan: Akmtolinsk (now Tselinograd) Area: Kokshetau Mts. (TYSCHENKO, 1965). Kirghizia (ZONSTEIN, 1984\*\*).

The epigyne of *Micariolepis similis*, as depicted by TYSCHENKO (1965, Fig. 8B), has no difference from *Micaria dives*, except for the shape of the epigynal groove's anterior border. The latter species has a procurved arched border, the first has a straight, in the middle slightly recurved one. However, this difference is not sufficient for separation of the species. Besides, both species have equal leg coloration and armature.

### *Micaria subopaca* Westring, 1862

*Micaria subopaca* Westring, 1862. Aran. Suec.: 336.

*Micaria albostriata*: TYSCHENKO, 1971. Identification book of spiders: 136, fig. 348 (♂).

*Micaria subopaca*: WUNDERLICH, 1980. Zool. Beitr., N. F., 25(2): 290–291, Abb. 35a–e, 59.

Material examined: Moscow Area: Bolshevo, under pine bark, 28.11.1926 (leg. et det. V. P., ZMMU Ta-2119) 1♂ 1♀. Ryazan Area\*: Oka Reserve, Brykin Bor, on pine bark, 5.6.1981 (leg. et det. K. E., ZSM) 1♀. Byelorussia, Minsk Area: Myadel distr., near Naroch Lake, 11.6.1967 (leg. A. G., det. E. Z., ZMMU) 1♀; Soligorsk distr., Velichkovichi, 12.5.1982 (leg. et det. E. Z., ZMMU) 1♀.

Distribution in the USSR. Leningrad Area (CHARITONOV, 1928: *M. albostriata*). Moscow Area (PERELESHINA, 1928\*\*: *M. albostriata*). Lipetsk Area (PANTELEEEVA, 1982: *M. albostriata*). Belgorod Area: Valouyki (KULCZYŃSKI, 1913). Kamchatka (KULCZYŃSKI, 1885: *M. humilis*; 1926: *M. albostriata*). Estonia (VILBASTE, 1973, 1980). Latvia (PRIEDITIS & STERNBERGS, 1981: *M. albostriata*; STERNBERGS, 1981: *M. albostriata*). Byelorussia (GEMBITSKY et al., 1985\*\*).

### *Micaria tarabaevi* spec. nov.

Figs. 20–22

Material examined: Holotype 1♂, Kazakhstan, Alma-Ata Area, near Alma-Ata, 2500–3200 m, subalpine zone, 29.6.1983 (C. T., ZMMU Ta-4256).

Male. Carapace length 1.7, width 1.25, ratio 1.36. Carapace and sternum brown-black, legs straw-coloured, femur I brown, femur II light brown. Leg dimensions:

	I	II	III	IV
Femur	1.37	1.17	0.86	1.36
Patella	0.71	0.57	0.53	0.57
Tibia	1.14	0.89	0.74	1.21
Metatarsus	1.00	0.77	0.80	1.21
Tarsus	0.89	0.86	0.69	0.86

Leg armature: femur I dorsal 1, dorsal-prolateral 1, femur II, IV dorsal 1, femur III dorsal 1.2; tibia III ventral 2.2.2, lateral 2.2, tibia IV ventral 2.2.2; metatarsus III, IV ventral 2.2.2, lateral 2.2, dorsal 2.

Abdominal length 2.25, width 1.35, ratio 1.67. Abdomen black, dorsally with one transversal band of white scales.

Palpus (Figs. 20–22). Femur 0.60, patella 0.31, tibia 0.29, cymbium 0.49.

Female unknown.

By the structure of the palpus, *M. tarabaevi* spec. nov. is similar to *M. lenzi*, but distinguishable by the bifurcate tibial apophysis. Embolus and retinaculum structure, and even the arrangement of addi-

tional lateral spines of both species are identical. It is possible that *M. tarabaevi* spec. nov. is an aberrant form of *M. lenzi*. To this complex may also be attributed the male of *M. sociabilis* Kulczyński described from Hungary. The latter species is distinguished by the absence of spines on the cymbium and of retinaculum (only one palp was preserved — WUNDERLICH, 1980). The absence of spines on the cymbium is not typical for *Micaria* and indicates an aberrant form. In this case the female of *M. sociabilis* must be attributed to another species.

Despite the bifurcate tibial apophysis, *M. tarabaevi* spec. nov. belongs (as *M. lenzi*) to the *silesiaca*-group.

Derivatio nominis. The species is dedicated to Chinghiz K. Tarabaev, my friend and colleague arachnologist from Kazakhstan.

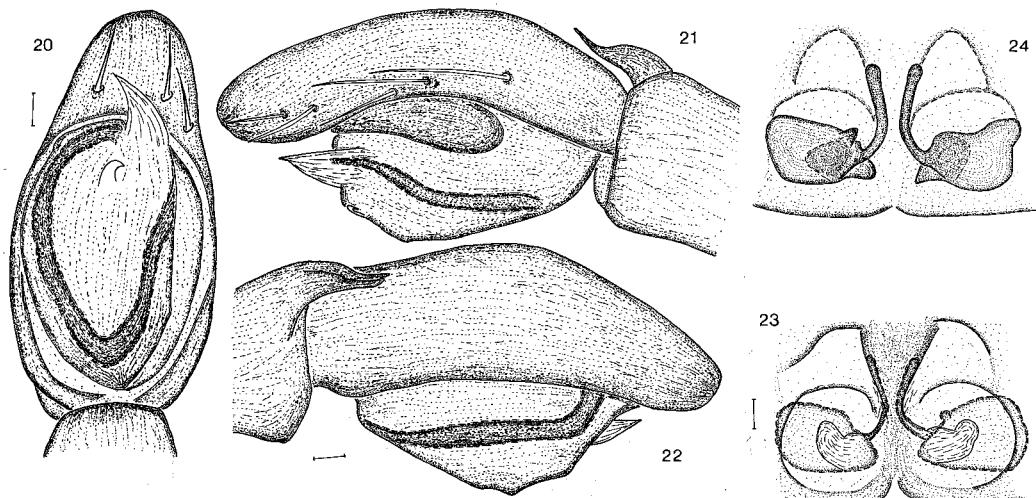
### *Micaria aborigenica* spec. nov.

Figs. 23—24.

Material examined: Holotype ♀, Magadan Area, Tenkino distr., near Sibit-Tyellakh, 700 m, mountain tundra, *Pinus pumila* & lichenes, broken stone 26.7.—5.8.1979 (S. B., ZMMU Ta-4257).

Female. Carapace: length 1.38, width 1.08, ratio 1.28. Carapace and sternum brown. Leg coloration: femur I—IV brown, patella III—IV light brown, other articles straw-coloured. Leg dimensions:

	I	II	III	IV
Femur	1.05	1.00	0.83	1.13
Patella	0.50	0.45	0.43	0.58
Tibia	0.75	0.68	0.55	1.00
Metatarsus	0.65	0.60	0.60	0.95
Tarsus	0.58	0.53	0.48	0.70



Figs. 20—22. *Micaria tarabaevi* spec. nov., right palp of ♂. — 20) ventral view; 21) inner view; 22) lateral view. Scale = 0.03.

Figs. 23—24. *Micaria aborigenica* spec. nov., epigyne of ♀. — 23) external view; 24) inner view (vulva). Scale = 0.04.

Leg armature: femur I–IV dorsal 1, tibia III ventral 2.2.2, lateral 2, tibia IV ventral 2.2, lateral 2; metatarsus III–IV ventral 2.2.2, lateral 2.2, dorsal 2.

Abdomen: length 2.43, width 1.50, ratio 1.62. Abdomen grey, white bands of scales absent or inconspicuous.

Epigyne (Figs. 23–24).

Male unknown.

By the structure of the epigyne, *M. aborigenica* spec. nov. belongs to the *silesiaca*-group, but definitely this problem can be solved only upon a study of the male palpal structure.

N. I. Platnick (pers. communication) claims that this species is not met with in North America.

Derivatio nominis. The species is named after the biological station "Aborigen", at which it was discovered.

#### References

- ASHIKBAEV, N. Zh. 1973: [Life forms of spiders (Araneae) inhabiting wheat fields in the Kustanay Area]. – Ent. Obozr., Leningrad, **52**(3): 508–519 [in Russian]  
— 1976: [Spider fauna (Araneae) of wheat fields of Kustanay Area]. – Nauch. trudy Kazakhsk. selskokhoz. Inst., Alma-Ata, **19**(1): 20–21 [in Russian]
- AZHEGANOVA, N. S. 1951: [To the spider fauna of Troitsk forest-steppe Reserve]. – Izv. est. – nauch. Inst. Moltov. gos. univ., Molotov **13**(2–3): 137–156 [in Russian]  
— 1968: [A short identification book of spiders (Aranei) of forest-steppe and forest regions of the USSR]. – Opredeliteli po faune SSSR, izdavaemye Zool. Inst. AN SSSR. Nauka Publ., Leningrad, **98**: 1–149 [in Russian]  
— & U. P. K. GORSHKOV 1973: [Spiders from the burrows of carnivorous mammals from Volgo-Kama Reserve]. – Uchyonye zap. Perm. ped. Inst., Perm. **109**: 61–68 [in Russian]
- BRIGNOLI, P. M. 1983: A catalogue of the Araneae described between 1940 and 1981. – Manchester Univ. Press, Dover: 1–784
- CHARITONOV, D. E. 1923: [To the spider fauna of the eastern side of the Urals]. – Izv. Biol. nauch.-issl. Inst. Perm. gos. univ., Perm, **2**(1): 25–36, 1 tabl. [in Russian]  
— 1926: [Materials to the spider fauna of Perm Gouvernement]. – Ezheg. Zool. Muz. AN SSSR za 1925, Leningrad: 103–136, 1 tab. [in Russian]  
— 1932: Katalog der russischen Spinnen (Beilage Annu. Mus. Zool. Acad. Sci. USSR). – Leningrad: 1–206  
— 1936: [A supplement to the catalogue of Russian spiders]. – Uchyonye zap. Perm. gos. univ., Perm, **2**(1): 167–225 [in Russian]  
— 1951: [Spiders and harvestmen]. – In: Ushchelye Kondara. Acad. Sci. USSR Publ., Moscow–Leningrad: 209–216 [in Russian]  
— 1969: [Materials to the spider fauna of the USSR]. – Uchyonye zap. Perm. gos. univ., Perm, **179**: 59–133 [in Russian]
- DUBININ, V. B. 1946: [Inhabitants of mammal burrows in South Kazakhstan Area and their importance for man]. – Izv. Akad. nauk Kazakh. SSR, Parazitol., Alma-Ata, **4**: 93–103 [in Russian]  
— 1954: [On the inhabitants of animal burrows in Uzbekistan clay deserts]. – Trudy Zool. Inst. Acad. Sci. USSR, Leningrad, **15**: 283–303 [in Russian]
- DUNIN, P. M. 1984: [Fauna and ecology of spiders of Apsheron Peninsula (Azerbaijdzhansk SSR)]. – In: Fauna i ekologiya paukov, Perm: 45–60 [in Russian]
- ERMOLAEV, W. N. 1934: Materialen zur Spinnenfauna Westsibiriens. III. Die Spinnen der Stadt Tomsk. – Folia zool. hydrobiol., Riga, **7**(1): 130–147
- ESKOV, K. Y. 1986: [Spider fauna (Aranei) of the hypoarctic zone of Siberia]. – In: Yuzhnye tundry Taymyra. Nauka Publ., Leningrad: 174–191 [in Russian]
- FET, V. Y. 1985: [A zoogeographical analysis of the spider fauna of the southwestern Kopetdag]. – In: Fauna i ekologiya paukov SSSR. Trudy Zool. Inst. Akad. nauk SSSR, Leningrad, **139**: 72–77 [in Russian]
- GARKUSHA, T. A. 1980: [Soil fauna as a component of drained peatbog biogeocenoses. Spiders]. – In: Pochvennaya fauna i biologicheskaya aktivnost osushennykh i rekultiviruemых torfianikov. Nauka Publ., Moscow: 28–36 [in Russian]

- GEMBITSKY, A. S., G. A. EFREMOVA & E. M. ZHUKOVETS 1985: [Spiders (Aranei) from bird nests of Byelorussia]. – Vestsi Akad. nauk Byeloruss. SSR, Ser. biyal. nauk, Minsk, 1; 81–87 [in Byelorussian]
- KAPLIN, V. G. 1978: [Complexes of terrestrial invertebrates of sandy deserts of the south subzone (East Karakum taken as an example)]. Ylym Publ., Ashkhabad; 1–160 [in Russian]
- KARPENKO, N. G. 1981: [Hygrotermic groups of carnivorous soil-dwelling arthropods of Moldavian agrobiocenoses]. – In: Problemy pochvennoy zoologii. Tez. dokl. VII Vses. soveshch., Kiev: 94–95 [in Russian]
- & M. V. LEGOTAY 1980: [Toward a study of the spiders (Aranei) on the fields of vegetable crops in Moldavia]. – Vestn. zool., Kiev, 5: 33–36 [in Russian]
- KIRILENKO, V. A. & M. V. LEGOTAY 1981: [Toward a study of the fauna of Aranei in eastern forest-steppe of Ukraine]. – In: Fauna i ekologiya nasekomykh, Perm: 45–54 [in Russian]
- KRASNOBAEV, Y. P. 1983: [To the spider fauna of Zhiguli Reserve]. – In: Problemy ratsionalnogo ispolzovaniya i okhrany prirodnogo kompleksa Samarskoy Luki, Kuybyshev: 83–86 [in Russian]
- KRONEBERG, A. 1875: [A. P. Fedchenko's journey in Turkestan. Vol. II. Zoogeographical researches. Part IV. Section 1. Spiders. Araneae]. – Izv. Obshch. lyubit. estestv., antropol. i etnogr., Moscow, 19(3): I–IV + 1–55, tab. I–V [in Russian]
- KULCZYNSKI, V. 1885: Araneae in Camtschadalia a Dre B. Dybowski collectae. – Pam. Wydz. mat.-przyr. Akad. Umiej., Kraków, 11: 1–60 + 1–6, tab. IX–XI
- 1901: Arachnoidea. – In: Dritte Asiatische Forschungsreise des Grafen Eugen Zichy. Bd. II. Zoologische Ergebnisse, Budapest: 313–369, tab. XII–XIII
- 1913: Arachnoidea. – In: Velitchkovsky V. Fauna du district de Walouyki, Kraków, 10: 1–30
- 1926: Arachnoidea Camtschadalica. – Annu. Mus. Zool. Acad. Sci. URSS, Leningrad, 27(1): 29–72, tab. II–III
- KUZNETSOV, G. T. & V. Y. FET 1986: [Materials on the spider fauna of Kopetdagha]. – In: Priroda Tsentralnogo Kopetdagha. Ylym Publ., Ashkhabad: 48–67 [in Russian]
- KUZNETSOV, S. F. & T. A. KOBLOVA 1977: [Materials to a study of spiders (Aranei) of Orenburg Town]. – Nauch. trudy Kuybyshev. ped. Inst., Kuybyshev, 199: 43–51 [in Russian]
- LEGOTAY, M. V. 1959: [Additional data on the arachnofauna of the Transcarpathian Area]. – Dokl. i soobshch. Uzhgorod. gos. univ., Biol., Uzhgorod: 53–56 [in Russian]
- Mikhailov, K. G. & V. Y. FET 1986: [Contribution to the spider fauna (Aranei) of Turkmenia. I. Families Anyphaenidae, Sparassidae, Zoridae, Clubionidae, Micariidae, Oxyopidae]. – In: Fauna, sistematika i filogeniya bezpozvonochnykh zhivotnykh. Sbornik trudov Zool. Muz. Mosk. gos. univ., Moscow, 24: 168–186 [in Russian]
- MINORANSKIY, V. A., V. P. GRAMOTENKO & A. V. PONOMAREV 1977: [Some data on the distribution of spiders in Rostov Area]. – In: Voprosy arakhnoentomologii, Perm: 92–105 [in Russian]
- & A. V. PONOMAREV 1984: [Materials to the spider fauna of Kalmykia]. – In: Fauna i ekologiya paukoobraznykh, Perm: 82–92 [in Russian]
- , A. V. PONOMAREV & V. P. GRAMOTENKO 1980: [Spiders (Aranei) poorly-known and new for the southwestern part of the European USSR]. – Vestn. zool., Kiev, 1: 31–37 [in Russian]
- OLIGER, T. I. 1983: [New species of the spider families Pholcidae, Clubionidae, Agelenidae from Lazovsky State Reserve]. – Zool. Zh., Moscow, 62(4): 627–629 [in Russian]
- OVCHARENKO, V. I. & V. Y. FET 1980: [Fauna and ecology of the spiders (Aranei) of Badkhyz (Turkmenian SSR)]. – Ent. Obozr., Leningrad, 59(2): 442–447 [in Russian]
- PAKHORUKOV, N. M. 1985: [Characteristics of spider complexes of forest-steppe biocenoses of southern Transsuralia]. – In: Fauna i ekologiya paukov SSSR. Trudy Zool. Inst. Akad. nauk SSSR, Leningrad, 139: 92–98 [in Russian]
- PANTELEEVA, N. Y. 1982: [Towards a study of spiders of the Reserve "Galichya Gora"]. – In: Issledovaniya rastit. i zhivotn. mira zapovedn. "Galichya Gora", Voronezh: 89–94 [in Russian]
- PAVLENKO, T. V. 1985: [Distribution of spiders in the natural complexes of the Barsakelmes Island (Aral Sea)]. – In: Fauna i ekologiya paukov SSSR. Trudy Zool. Inst. Akad. nauk SSR, Leningrad, 139: 147–155 [in Russian]
- PERELESHINA, V. I. 1928: [Fauna of spiders in the environs of the Biological station at Bolshevo]. – Zap. Biol. St. v Bolshevo, Moscow, 2: 1–74, 1 tab. [in Russian]
- PICHKA, V. E. 1984a: [To the spider fauna of Tsentralno-Chernozymny Reserve]. – In: Fauna i ekologiya paukoobraznykh, Perm: 68–77 [in Russian]
- 1984b: [To the fauna and ecology of spiders of Tsentralno-Chernozymny Reserve]. – In: Ekologo-faunist. issled. Tsentr. lesostepi evrop. chasti SSSR, Moscow: 65–67 [in Russian]

- & K. V. SKUFYIN 1981: [Addition to the spider fauna of central forest-steppe]. – Vestn. zool., Kiev, 6: 7–15 [in Russian]
- PONOMAREV, A. V. & V. A. MINORANSKIY 1981: [On the spiders (Aranei) from the burrows of *Citellus pygmaeus* Pall. in the semidesert zone of the European part of the USSR]. – Ent. Obozr., Leningrad, 60(1): 196–200 [in Russian]
- PRIEDITIS, A. P. & M. T. ŠTERNBERGS 1981: [Fauna of spiders (Aranei) in an apple orchard agrobiocenosis]. – In: Zashchita rasteniy ot vreditelей bolezney. Trudy Latv. Selskokhoz. Akad., Elgava, 188: 9–12 [in Russian]
- SAVELIEVA, L. G. 1970: [Fauna and zoogeographical connections of spiders of East-Kazakhstan Area]. – In: Biologiya i geografiya, Alma-Ata, 6: 78–88 [in Russian]
- 1979: [Zoogeographical complexes of spiders (Aranei) from East Kazakhstan]. – In: Priroda i khozyaystvo Vostochnogo Kazakhstana, Alma-Ata: 139–148 [in Russian]
- SPASSKY, S. A. 1914: [Spiders of Don Area. 2.] – Izv. Donsk. politekhn. Inst., Sect. 2, Novocherkassk, 3(2): 85–97 [in Russian]
- 1919: Die Spinnen des Dongebietes. II. – Zool. Anz., Leipzig, 58(5–7): 147–159
- 1925: [Identification book of spiders of Don Area]. – Novocherkassk: 1–62, 2 tab. [in Russian]
- 1927: [Materials to the fauna of spiders of Taurian Gouvernement]. – Izv. Donsk. Inst. selsk. khoz. i melior., Rostov-on-Don, 7:66–80 [in Russian]
- 1940: [Spiders]. – In: Priroda Rostovskoy oblasti. Rostizdat. Publ., Rostov-on-Don: 193–202 [in Russian]
- 1952: [Spiders of the Turanian zoogeographical province]. – Ent. Obozr. Leningrad, 32: 192–205 [in Russian]
- & S. D. LAVROV 1928: [Materials to the spider fauna of western Siberia and Kazakhstan]. – Trudy Sibirs. Inst. selsk. khoz. i lesovedstva, Omsk, 10(2): 203–213 [in Russian]
- & V. N. SHNITNIKOV 1937: [Materials to the spider fauna of Kazakhstan]. – In: O vrediteliakh zhivotnovodstva v Kazakstane. Trudy Kazakh. Fil. Akad Nauk SSSR, Moscow–Leningrad, 2: 264–300 [in Russian]
- ŠTERNBERGS, M. T. 1977: [Materials to the spider fauna (Aranei) of "Stolby" Reserve]. – Trudy zapov. "Stolby", Krasnoyarsk, 11: 87–90 [in Russian]
- 1981: [Materiali par Latvijas zirneklu faunu. V. Dzimta Clubionidae]. Review of the spider fauna of Latvia. V. The family Clubionidae. – Latv. Entomologs, Riga, 24: 56–59
- 1983: [Spiders (Cheliceraata, Aranei)]. – In: Prirodnyi rezervat Moritssala. Flora i fauna. Avots Publ., Riga: 41–47 [in Russian]
- SYTSHEVSKAJA, V. I. 1935: Etude sur les Araignées de la Kamtchatka. – Folia zool. hydrobiol., Riga, 8(1): 80–103
- TANASEVITCH, A. V. 1985: [A study on the spiders (Aranei) of the Polar Urals] – In: Fauna i ekologiya paukov SSSR. Trudy Zool. Inst. Akad. nauk SSSR, Leningrad, 139: 52–62 [in Russian]
- TARABAEV, C. K. 1979: [Spiders as inhabitants of apple tree crowns in piedmont Zailiysky Alatau]. – In: Novosti entomologii kazakhstana. Trudy Kazakh. ot d. VEO, Alma-Ata: 117–118 (deposited in VINITI no. 3415 – 1979) [in Russian]
- THORELL, T. 1875a: Verzeichniss Südrussischer Spinnen. – Horae Soc. Entomol. Ross., St.-Peterbourg, 11: 39–122
- 1875b: Description of several European and North-African spiders. – Kungl. Svenska Vet.-Akad. Handl., Stockholm, 13(5): 1–204
- TYSHCHENKO, V. P. 1965: [A new genus and new species of spiders (Aranei) from Kazakhstan]. – Ent. Obozr., Leningrad, 44(5): 696–704 [in Russian]
- 1971: [Identification book of spiders of the USSR European part]. – Opredeliteli po faune SSSR, izdavaemye Zool. Inst. AN SSSR. Nauka Publ., Leningrad, 105: 1–281 [in Russian]
- USENBAEV, S. D. 1984: [Peculiarities of the distribution of spiders of the herpetobium of a dried mesotrophic marsh in South Karelia]. – In: Fauna i ekologiya paukoobraznykh, Perm: 110–119 [in Russian]
- 1985: [Fauna and ecology of spiders (Aranei) of biocenosis of a dried mesotrophic marsh]. – In: Nasekomye i fitopatogennye griby v lesnykh ekosistemakh, Petrozavodsk: 81–110 [in Russian]
- VAGNER, V. A. 1892: [Araneina]. – In: Dwigubsky. Primitiae Faunae Mosquensis. Vtoroe izd. Opyt kataloga predstaviteley Moskovskoy fauny. Congr. int. zool., Moscow, 2: 117–120 [in Russian]
- 1895: [List and description of the collection on spider biology]. – Kollektii zool. kabineta Varshav. univ., Warshaw, 4: 1–20, tab. I–II [in Russian]
- VILBASTE, A. C. 1969: Eesti madalsoode ämblikefauna struktuurist ja sesoonsetest muutustest. – Eesti NSV Tead. Akad. toim., Biol., Tallin, 18(4): 390–407
- 1972: Eesti rabade ämblikefauna struktuurist ja sesoonsetest muutustest. – Ibid., 21(4): 307–326

- 1973: Eesti siirdesoometsade ämblikefauna struktuurist ja sesoonsetest muutustest. -- *Ibid.*, **22**(3): 210–225  
 -- 1974: Väinamere laidude Ämblikefaunast. -- *Loodusvaatlusi*, Tallin, **1**: 132–145  
 -- 1980: The spider fauna of Estonian mires (1). -- *Eesti NSV Tead. Akad. toim., Biol.*, **Tallin**, **29**(4): 313–327  
 VLASOV, J. P. & V. I. SYTCHEVSKAYA 1937: [The spiders in the environs of Ashkhabad]. -- In: *Problemy parazitol. i fauny Turkmenii. Trudy Soveta po izuch. proizvodit. sil, ser. turkmen.*, Moscow–Leningrad, **9**: 247–258 [in Russian]  
 WUNDERLICH, J. 1980: Revision der europäischen Arten der Gattung *Micaria* Westring, 1851, mit Anmerkungen zu den übrigen paläarktischen Arten (Arachnida: Araneina: Gnaphosidae). -- *Zool. Beitr.*, N. F., West Berlin, **25**(2): 233–341  
 ZONSTEIN, S. L. 1984: [To the fauna and ecology of spiders (Aranei) of the lower strata of walnut-fruit forests of South Kirghizia]. -- In: *Entomol. issled. v Kirghizii. Ilim Publ.*, Frunze, **17**: 144–151 [in Russian]

Kirill G. Mikhailov  
 Zoological Museum  
 Moscow State University  
 Moscow  
 USSR