

CONTRIBUTION TO THE KNOWLEDGE ON THE PREDATORY MITE FAMILY CUNAXIDAE (ACARI: PROSTIGMATA) IN SLOVAKIA

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Abstract: The taxons of the mite family Cunaxidae found out in Slovak territory during the last 35 years are presented in this paper including both published and unpublished data. Three genera – *Lupaeus*, *Pulaeus* and *Neobonzia* belong to the new genera for Slovakia, the species *Pulaeus leonidi*, *Lupaeus martini*, *Neobonzia kuznetzovi*, *Cunaxa bochkovi*, *C. gordeevae*, *C. potchensis*, *C. thessalica* and *Cunaxoides paracroceus* are also stated for the Slovak acarofauna for the first time.

Key words: Cunaxidae, faunistics, first records, mites, Slovakia

INTRODUCTION

The beginnings of the study of family Cunaxidae in Slovakia appeared more than three decades ago and the first findings of the mites of this family were published mainly from agrocenoses of South-West Slovakia (ČARNOGURSKÝ et al. 1994; KALÚZ 1994a). Later, during the field research in various Slovak areas, some further interesting findings on cunaxids were published from National parks – Malá Fatra Mts. (KALÚZ & ŽUFFA 1986, 1988), Veľká Fatra Mts. (KALÚZ & ŽUFFOVÁ 1989) and Vysoké Tatry Mts. (KALÚZ & FERENČÍK 2008; KALÚZ 2011). Another studies had been done in Protected Landscape Areas – Slovenský kras (KALÚZ 1998a, 1998b, 2001) and Cerová vrchovina hills (KALÚZ 2009b). Simultaneously, the mites of the family Cunaxidae were collected also from various Nature reserves (KALÚZ 1998c, 2001, 2003a, 2005a). An extensive study of soil mites run (including the faunistics of cunaxids) in floodplains of the rivers Danube and Morava (ČARNOGURSKÝ et al. 1994; KALÚZ 2008). Recently, this mite family in Slovakia comprises two dozen species and 4 species of the genus *Armascirus* were described from Slovak territory as a new species (KALÚZ 2009a; KALÚZ & VRABEC 2013; KALÚZ et al. 2014). Apart from current species some cunaxids occurring in Slovakia seem rare and were collected from a few localities in the world, only.

MATERIAL AND METHODS

The research widely focussed on faunistics, species spectrum, habitat preferences and community structure of soil mites had been running during the years 1981-2014. For the further study, the mites of the family Cunaxidae were taken from the materials collected. The study localities included many various areas and habitats in Slovak territory. The details of the localities explored are stated in the papers involved into References. When the paper, due to shortage of space, did not present the date and habitat of the collection of specimens, the relevant data had been taken from protocols. All Cunaxidae species found in Slovakia are presented in this paper together with a short characteristics of localities where they occurred. The mites were collected using pitfall traps and soil samples (soil, litter, rhizosphere of various plants, moss and other soil materials), the soil samples much more prevailed during the whole period of the research. Mites from soil samples were isolated in Tullgren photoelectors, preserved in 70% ethylalcohol and mounted into permanent slides using Liquido de Swann, then were identified microscopically. The mites from pitfall traps were sorted under light microscope and then mounted into permanent slides like it is stated above. Species spectrum of cunaxids is presented in the text together with some comments on the species. The mites of the family Cunaxidae were identified under the light microscope using the keys of DEN HEYER (1978, 1980), DEN HEYER & CASTRO (2008a, 2008b, 2012), KALÚZ & VRABEC (2013), SERGEYENKO (2009), SIONTI & PAPADOULIS (2003a, 2003b), SKVARLA & DOWLING (2011), SKVARLA et al. (2014), SMILEY (1992), VAINSTEIN et al. (1978).

RESULTS

This paper presents altogether 24 taxons of the family Cunaxidae collected from Slovak territory during the last more than three decades.

Cunaxidae Thor, 1902

***Dactyloscirus* Den Heyer, 1978**

Dactyloscirus inermis (Trägårdh, 1905)

Published data

SW–Slovakia, Borská nížina lowland, Veľké Leváre, Nat. Reserve Abrod, N–48.32.01, E–17.00.20, meadow, 152 m, 24.05.1999, 1♀ from soil samples, leg. S. Kalúz (KALÚZ & ČARNOGURSKÝ 2000; KALÚZ 2006)

SW–Slovakia, Podunajská rovina plane, Bodíky env., Kráľovská lúka, N–47.53.55, E–17.30.17, *Salici–Populetum*, 124 m, 23.11.1994, 2♀; 02.05.1996, 1♀ from soil samples, leg. S. Kalúz (KALÚZ 1994b)

SW–Slovakia, Podunajská rovina plane, Gabčíkovo env., Istragov, N–47.50.38., E–17.33.43, *Salici–Populetum*, 121 m, 30.03.1994, 1♀ from soil samples, leg. S. Kalúz (KALÚZ 1995a)

SE–Slovakia, Slovenský kras, Silica, Jašterkové jazierko, N–48.33.34, E–20.31.42, pasture, 553 m, 27.07.1987, 4♀, 1♂, 2N; 16.09.1987, 2♀; 21.10.1987, 3♀ from soil samples, leg. S. Kalúz (KALÚZ 1998b) – published as *Cunaxa inermis* (KALÚZ 1992)

SE–Slovakia, Slovenský kras, Silická Brezová, Nat. Reserve Kráľova studňa, N–48.31.15, E–20.30.12, meadow, 431 m, 17.09.1987, 5♀ from soil samples, leg. S. Kalúz (KALÚZ 2001) – published as *Cunaxa inermis* (KALÚZ 1992)

SE–Slovakia, Slovenský kras, Silica, Nat. Reserve Pod Fabiankou, N–48.32.51, E–20.31.48, pasture, 495 m, 06.07.1987, 2♀ from soil samples, leg. S. Kalúz – published as *Cunaxa inermis* (KALÚZ 1992)

***Armascirus* Den Heyer, 1978**

Armascirus bison (Berlese, 1888)

Published data

SW–Slovakia, Borská nížina lowland, Veľké Leváre, Nat. Reserve Abrod, N–48.32.01, E–17.00.20, meadow, *Molinietum caeruleae*, 14.09.1999, 1♀ from soil sample, leg. S. Kalúz (KALÚZ & ČARNOGURSKÝ 2000)

SW–Slovakia, Bratislava, Podunajské Biskupice, Nat. Reserve Ostrov Kopáč, N–48.05.43.39, E–17.09.45.26, *Quercetum delechampi*, 130 m, 12.06.2006, 1♀ from grass rhizosphere, leg. O. Majzlan (KALÚZ 2007)

S–Slovakia, Cerová vrchovina Mts., Drňa, VN Hostice, N–48.14.46, E–20.05.52; 252 m, pasture with *Corneto–Crataegetum* and *Thymus serpyllum*, 18.06.2007, 1♀ from soil sample, leg. S. Kalúz (KALÚZ 2009a)

SW–Slovakia, Podunajská rovina plane, Gabčíkovo willage env., Istragov, N–47.50.38., E–17.33.43, *Salici–Populetum*, 121 m, 06.11.1991, 1 ♀ from soil sample, leg. S. Kalúz (KALÚZ 1995a)

Unpublished data

SW–Slovakia, Podunajská rovina plane, Jurová willage env., N–47.56.34, E–17.33.42, *Populetum*, 114 m, 11.07.1989, 1 ♀ from soil sample, leg. S. Kalúz

Armascirus cerris Kalúz, 2009a (Fig. 1a)

Published data

S–Slovakia, Cerová vrchovina Mts., Hostice, N–48.14.46, E–20.05.52, pasture with *Corneto–Crataegetum*, 240 m, 18.06.2007, 1♀, 1N from soil sample, leg. S. Kalúz (KALÚZ 2009 a) – published as *Armascirus* sp. 2 in the paper of KALÚZ (2009b)

Unpublished data

S–Slovakia, Cerová vrchovina Mts., Hostice, N–48.14.46, E–20.05.52, pasture with *Corneto–Crataegetum*, 240 m, 18.06.2007, 1N from soil sample, leg. S. Kalúz

S–Slovakia, Cerová vrchovina Mts., Šurice, Soví hrad, N–48.13.32, E–19.54.45, pasture with *Corneto–Crataegetum*, 246 m, 21.06.2007, 1♀ from grass rhizosphere, leg. S. Kalúz

W–Slovakia, Strážovské vrchy Mts., Trebichava, N–47.50.38., E–17.33.43, *Quercetum*, 480 m, 25.09.2009, 1N from soil sample, leg. S. Kalúz

N–Slovakia, Vysoké Tatry Mts., Križna dolina, N–49.09.29, E–19.5639, mountain meadow, 05.07.2009, 1N from soil sample, leg. S. Kalúz

Armascirus cyaneus Kalúz, 2009a

Published data

SW–Slovakia, Bratislava, Podunajské Biskupice, Nat. Reserve Ostrov Kopáč, N–48.05.43, E–17.09.44, *Quercetum delechampi*, 132 m, 10.08.2006, 1 ♀ from grass rhizosphere, leg. S. Kalúz (KALÚZ 2009a)

S–Slovakia, Cerová vrchovina Mts., Tachty village env., Dolina Gortvy walley, N–48.08.54, E–19.55.24, 20.06.2007, pasture, 316 m, 2♀, from grass on sand dune, leg. S. Kalúz (KALÚZ 2009a) – published as *Armascirus* sp. 1 in the paper of KALÚZ (2009b)

SW–Slovakia, Podunajská rovina plane, Jurová willage env., N–47.56.34, E–17.33.42, *Salici–Populetum*, 114 m, 10.07.1989, 1 ♀ from soil samples, leg. S. Kalúz (KALÚZ 2009a)

Unpublished data

S–Slovakia, Cerová vrchovina Mts., Petrovce village env., Nat. Reserve Fenek, N–48.10.36, E–20.02.48, *Quercetum*, 266 m, 20.06.2007, 1N from soil sample, leg. S. Kalúz

N–Slovakia, Vysoké Tatry Mts., Vyšné Hágy, N–49.07.20, E–20.06.32, mountain meadow, 1175 m, 15.07.2009, 1♀ from soil sample, leg. S. Kalúz

Armascirus fendai Kalúz et Vrabec, 2013

Published data

SW–Slovakia, Borská nížina lowland, Veľké Leváre village env., Nature Reserve Abrod, N–48.31.57, E–17.00.21, *Molinietum caeruleae*, 124 m, 14.09.1999, 1♀, from grass rhizosphere on sands, leg. S. Kalúz (KALÚZ & VRABEC 2013)

SW–Slovakia, Bratislava, Podunajské Biskupice, Nat. Reserve Ostrov Kopáč, N–48.05.43, E–17.09.44, *Quercetum delechampi*, 130 m, 12.06.2006, 2♀ from grass rhizosphere, leg. S. Kalúz (KALÚZ & VRABEC 2013)

W–Slovakia, Strážovské vrchy Mts., Čierna Lehota village env., N–48.52.35, E–18.20.27, 486 m, 26.05.2011, 1♀ from grass rhizosphere on limestones, leg. S. Kalúz (KALÚZ & VRABEC 2013)

N–Slovakia, NP Vysoké Tatry Mts., Vyšné Hágy env., N–49.07.20, E–20.06.32, 1175 m, mountain meadow, 11.07.2008, 1DN; 04.09.2008, 1♀ from grass rhizosphere, leg. S. Kalúz (KALÚZ & VRABEC 2013; KALÚZ et al. 2014)

Armscirus masani Kalúz et Vrabec, 2013

Published data

N–Slovakia, NP Vysoké Tatry Mts., Nová Polianka village env., N–49.07.17, E–20.09.46, 1075 m, mountain meadow, 13.08.2007, 1♂ from grass rhizosphere, leg. S. Kalúz (KALÚZ & VRABEC 2013)

N–Slovakia, NP Vysoké Tatry Mts., Starý Smokovec village env., N–49.08.12, E–20.11.59, 1086 m, mountain meadow, 13.08.2007, 1♂ collected from grass rhizosphere, leg. S. Kalúz (KALÚZ & VRABEC 2013)

Armscirus taurus (Kramer, 1881)

Published data

S–Slovakia, Cerová vrchovina Mts., Drňa, VN Hostice, N–48.14.46, E–20.05.52; 252 m, pasture with *Corneto–Crataegetum*, 18.06.2007, 1N from soil sample, leg. S. Kalúz (KALÚZ 2009a)

S–Slovakia, Cerová vrchovina Mts., Tachty village env., Dolina Gortvy, N–48.08.54, E–19.55.24, pasture, 320 m, 20.06.2007, 1♀ from grass rhizosphere; 02.10.2007, 1♀ from grass rhizosphere, leg. S. Kalúz (KALÚZ 2009a)

S–Slovakia, Cerová vrchovina Mts., Šurice, Soví hrad, N–48.13.32, E–19.54.45, pasture with *Corneto–Crataegetum*, 246 m, 21.06.2007, 1N from grass rhizosphere, leg. S. Kalúz (KALÚZ 2009b)

SE–Slovakia, Slovenský kras, Silica, Jašterkové jazierko, N–48.33.34, E–20.31.42, pasture, 553 m, 27.07.1987, 3♀ from rhizosphere of *Glyceria plicata*, leg. S. Kalúz (KALÚZ 1995b; KALÚZ 1998b)

***Cunaxa* Von Heyden, 1826**

Cunaxa bochkovi Khaustov et Kuznetsov, 1998

Unpublished data

SW–Slovakia, Borská nížina lowland, Veľké Leváre, Nat. Reserve Abrod, N–48.32.01, E–17.00.20, meadow, 152 m, 30.06.1999, 1N from grass rhizosphere, leg. S. Kalúz – published as *Cunaxa bison* (KALÚZ 2003a)

SW–Slovakia, Bratislava, Vajnory env., N–48.12.53, E–17.13.21, *Quercetum*, meadow, 129 m, 20.08.2009, 1♀; 24.09.2009, 2♀ from soil samples, leg. Ľ. Vidlička

S–Slovakia, Cerová vrchovina Mts., Tachty village env., Dolina Gortvy, N–48.08.54, E–19.55.24, pasture, 316 m, 20.06.2007, 2♀; 02.10.2007, 1♀ from grass rhizosphere, leg. S. Kalúz, published as *Cunaxa* sp. 2 (KALÚZ 2009b)

W–Slovakia, Strážovské vrchy Mts., Timoradza, N–48.48.38, E–18.159.31, steppe–grass slope, 433 m, 04.05.2007, 2N from grass rhizosphere, leg. S. Kalúz

The species is new for Slovak acarofauna.

Cunaxa capreolus (Berlese, 1887)

Published data

SW–Slovakia, Bratislava, Podunajské Biskupice, Nat. Reserve Ostrov Kopáč, N–48.05.43.39, E–17.09.45.26, *Quercetum delechampi*, 130 m, 27.08.2006, 1♀; 12.08.2009, 1♀, 1♂, 1 N from grass rhizosphere, leg. S. Kalúz (KALÚZ 2007)

SE–Slovakia, Slovenský kras, Silica, Jašterkové jazierko, N–48.33.34, E–20.31.42, pasture, 553 m, 27.07.1987, 1♀ from soil samples, leg. S. Kalúz (KALÚZ 1995b; KALÚZ 1998b)

SE–Slovakia, Slovenský kras, Turňa village, Turniansky hradný vrch, N–48.36.37, E–20.52.24, xerotherm, 321 m, 02.06.1988, 6♀ from soil samples, leg. S. Kalúz (KALÚZ 2001)

W–Slovakia, Strážovské vrchy Mts., Trebichava, N–48.48.43, E–18.17.51, *Quercetum*, xerotherm, 480 m, 25.09.2009, 5♀, 1♂ from grass rhizosphere, leg. S. Kalúz (KALÚZ 2013)

Unpublished data

N–Slovakia, NP Vysoké Tatry Mts., Nová Polianka, Danielov dom, N–49.07.17, E–20.09.46, mountain meadow, 1075 m, 15.07.2009, 1♂ from grass rhizosphere, leg. S. Kalúz

Cunaxa gordeevae Sergeyenko, 2009

Unpublished data

SW–Slovakia, Brodské, Gbelský les, N–48.41.07, E–17.04.04, *Quercetum*, 176 m, 13.09.2006, 1♀; 22.06.2007, 4♀ from soil samples, leg. S. Kalúz

S–Slovakia, Cerová vrchovina Mts., Belina village env., Nat. Reserve Belinské skaly, N–48.14.12, E–19.51.50, 426 m, 01.10.2007, 1♀, 1N from soil samples, leg. S. Kalúz

N–Slovakia, Malá Fatra Mts., Nat. Reserve Šrámková, N–49.11.11, E–19.07.19, *Petasites alba*, 596 m, 03.06. 1994, 1♀ from soil sample, leg. S. Kalúz

N–Slovakia, NP Vysoké Tatry Mts., Nová Polianka, Danielov dom, N–49.07.17, E–20.09.46, mountain meadow, 1075 m, 13.08.2007, 2♀ from grass rhizosphere, leg. S. Kalúz – published as *Cunaxa taurus* (KALÚZ 2011)

The species is new for Slovak acarofauna.

Cunaxa potchensis Den Heyer, 1979

Unpublished data

SW–Slovakia, Borská nížina lowland, Šaštín, Šaštínsky les, Gazárka, N–48.37.22, E–17.08.36, *Querceto–Pinetum*, 188 m, 22.06.2007, 1♀ from soil sample, leg. S. Kalúz

SW–Slovakia, Bratislava, Podunajské Biskupice, Nat. Reserve Ostrov Kopáč, N–48.05.43, E–17.09.45, *Quercetum delechampi*, 130 m, 12.06.2006, 2♀ from grass rhizosphere, leg. O. Majzlan

S–Slovakia, Cerová vrchovina Mts., Petrovce village env., Nat. Reserve Fenek, N–48.10.36, E–20.02.48, *Quercetum*, 266 m, 02.10.2007, 1N from soil sample, leg. S. Kalúz, published as *Cunaxa* sp. 2 (KALÚZ 2009b)

SE–Slovakia, Slovenský kras, Kečovo, Nat. Reserve Kečovské škrapy, N–48.29.39, E–20.29.12, pasture, 365 m, 27.07.1987, 1♀ from grass rhizosphere, leg. S. Kalúz

SE–Slovakia, Slovenský kras, Silica, Jašterkové jazierko, N–48.33.34, E–20.31.42, pasture, 553 m, 21.10.1987, 1♀, 2N from grass rhizosphere, leg. S. Kalúz

The species is new for Slovak acarofauna.

Cunaxa setirostris (Hermann, 1804) (Fig. 1b)

Published data

SW–Slovakia, Borská nížina lowland, Veľké Leváre, Nat. Reserve Abrod, N–48.32.01, E–17.00.20, meadow, 152 m, 24.05.1999, 2♀ from soil sample, leg. S. Kalúz (KALÚZ & ČARNOGURSKÝ 2000)

SW–Slovakia, Borská nížina lowland, Veľké Leváre, Nat. Reserve Abrod, N–48.32.01, E–17.00.20, *Molinietum caeruleae*, 152 m, 14.09.1999, 1♀ from soil sample, leg. S. Kalúz (KALÚZ & ČARNOGURSKÝ 2000; KALÚZ 2006)

SW–Slovakia, Borská nížina lowland, Vysoká pri Morave, Horniacky včelín, N–48.17.30, E–16.54.26, 139 m, *Salici–Populetum*, 21.03.1996, 1♀; 15.05.1996, 1♀; 27.08.1996, 2♀ from soil sample, leg. S. Kalúz (KALÚZ 2003b)

SW–Slovakia, Bratislava, Devínske jazero, N–48.17.21, E–16.54.41, *Salici–Populetum*, 148 m, 26.07.1996, 1♀ from soil samples, leg. S. Kalúz (KALÚZ 1999)

SW–Slovakia, Bratislava, Devínske jazero, N–48.17.21, E–16.54.41, *Fraxineto–Populetum*, 148 m 19.08.1997, 1♀ from soil samples, leg. S. Kalúz (KALÚZ 1999)

SW–Slovakia, Bratislava, Malé Karpaty Mts., Kamzík, N–48.10.57, E–17.06.05, *Quercetum*, meadow, 200–350 m, 10.08.2009, 1♀; 18.11.2009, 1♀ from grass rhizosphere, leg. M. Vrabec (VRABEC et al. 2012)

SW–Slovakia, Bratislava, Malé Karpaty Mts., Nat. Reserve Devínska Kobyla, N–48.11.44, E–16.58.46, *Quercetum*, meadow, 250 m, 20.04.2001, 1♀ from grass rhizosphere, leg. S. Kalúz (KALÚZ 2005)

- SW–Slovakia, Bratislava, Malé Karpaty Mts., Nat. Reserve Devínska lesostep, N–48.10.07, E–16.59.41, *Quercetum*, meadow, 182 m, 22.05.2001, 1♀ from grass rhizosphere, leg. S. Kalúz (KALÚZ 2005)
- SW–Slovakia, Bratislava, Malé Karpaty Mts., Nat. Reserve Devínsky hradný vrch, N–48.10.25, E–16.58.37, xerotherm, 155 m, 20.04.2001, 1♀ from grass rhizosphere, leg. S. Kalúz (KALÚZ 2005)
- SW–Slovakia, Bratislava, Malé Karpaty Mts., Nat. Reserve Fialková dolina, N–48.10.09, E–17.00.20, *Quercetum*, 240 m, 22.05.2001, 1♀ from litter, leg. S. Kalúz (KALÚZ 2005)
- SW–Slovakia, Bratislava, Podunajské Biskupice, Topoľové, N–48.04.51, E–17.12.07, *Quercetum*, 132 m, 06.11.1991, 2♀, 4N from grass rhizosphere, leg. S. Kalúz (ČARNOGURSKÝ et al. 1994)
- SW–Slovakia, Bratislava, Podunajské Biskupice, Nat. Reserve Ostrov Kopáč, N–48.05.43, E–17.09.44, *Quercetum delechampi*, 130 m, 07.07.2009, 2♀, 1♂; 12.08.2009, 4♀, 3♂; 27.08.2009, 6♀, 2♂; 22.09.2009, 2♀, 2♂; 12.10.2009, 2♀, 1♂, 1N from grass rhizosphere, leg. S. Kalúz (KALÚZ 2009a)
- S–Slovakia, Cerová vrchovina Mts., Belina village env., Nat. Reserve Belinské skaly, N–48.14.12, E–19.51.50, 426 m, 19.06.2007, 1♀, 2N from soil samples, leg. S. Kalúz (KALÚZ 2009b)
- S–Slovakia, Cerová vrchovina Mts., Drňa, VN Hostice, N–48.14.46, E–20.05.52; 252 m, pasture with *Corneto–Crataegetum* and *Thymus serpyllum*, 18.06.2007, 2♀; from from soil sample, leg. S. Kalúz (KALÚZ 2009a)
- S–Slovakia, Cerová vrchovina Mts., Drňa, Nat. Reserve Jalovské vrstvy, N–48.15.20, E–20.07.40, *Quercetum*, sandy slope, meadow, 224 m, 01.10.2007, 14♀ from grass rhizosphere, leg. S. Kalúz (KALÚZ 2009b)
- S–Slovakia, Cerová vrchovina Mts., Gemerské Dechtáre village env., N–48.14.49, E–20.01.29, old vineyard, steppe habitat, 255 m, 18.06.2007, 3♀; 01.10.2007, 3♀ from grass rhizosphere, leg. S. Kalúz (KALÚZ 2009b)
- S–Slovakia, Cerová vrchovina Mts., Hostice, N–48.14.46, E–20.05.52, pasture with *Corneto–Crataegetum*, 240 m, 02.10.2007, 1♀ from grass rhizosphere, leg. S. Kalúz (KALÚZ 2009b)
- S–Slovakia, Cerová vrchovina Mts., Janice village env., N–48.15.50, E–20.13.14, pasture, 192 m, 01.10.2007, 3♀ from grass rhizosphere, leg. S. Kalúz (KALÚZ 2009b)
- S–Slovakia, Cerová vrchovina Mts., Janice village env., N–48.15.50, E–20.13.14, pasture, 192 m, 01.10.2007, 3♀ from grass rhizosphere, leg. S. Kalúz (KALÚZ 2009b)
- S–Slovakia, Cerová vrchovina Mts., Petrovce village env., Nat. Reserve Fenek, N–48.10.36, E–20.02.48, *Quercetum*, 266 m, 02.10.2007, 1♀ from soil sample, leg. S. Kalúz (KALÚZ 2009b)

- S–Slovakia, Cerová vrchovina Mts, Stará bašta, Pohanský hrad, N–48.12.03, E–19.55.25, *Quercetum*, meadow, 573 m, 03.10.2007, 1♀ from grass rhizosphere, leg. S. Kalúz (KALÚZ 2009b)
- S–Slovakia, Cerová vrchovina Mts, Šiatorská Bukovinka, Mačacia, N–48.10.17, E–19.51.43, *Carpinetum*, 463 m, 19.06.2007, 1♀ from grass rhizosphere, leg. S. Kalúz (KALÚZ 2009b)
- S–Slovakia, Cerová vrchovina Mts, Šomoška, N–48.10.17, E–19.51.31, 18.06.2007, *Crataegetum*, 450 m, 1♂ from grass rhizosphere, leg. S. Kalúz (KALÚZ 2009b)
- S–Slovakia, Cerová vrchovina Mts., Šurice, Soví hrad, N–48.13.32, E–19.54.45, pasture with *Corneto–Crataegetum*, 246 m, 21.06.2007, 1♀ from grass rhizosphere, leg. S. Kalúz (KALÚZ 2009b)
- S–Slovakia, Cerová vrchovina Mts., Tachty village env., Dolina Gortvy, N–48.08.54, E–19.55.24, pasture, 320 m, 20.06.2007, 4♀, 3N from grass rhizosphere, 02.10.2007, 1♀ from grass rhizosphere, leg. S. Kalúz (KALÚZ 2009b)
- SW–Slovakia, Podunajská rovina plane, Gabčíkovo willage env., Istragov, N–47.50.38, E–17.33.43, *Salici–Populetum*, 121 m, 06.11.1991, 1♀ from soil sample, leg. S. Kalúz (KALÚZ 1995b)
- SW–Slovakia, Podunajská rovina plane, Hamuliakovo env., N–48.02.49, E–17.14.42, *Salicetum*, 128 m, 06.11.1991, 1♀ from soil sample, leg. S. Kalúz (ČARNOGURSKÝ et al. 1994)
- SW–Slovakia, Podunajská rovina plane, Bodíky env., N–47.54.57, E–17.26.24, 122 m, *Salici–Populetum*, 29.09.1993, 1N; 21.04.1994, 2♀; 30.11.1994, 1♀ from soil samples, leg. S. Kalúz (KALÚZ 1997)
- SW–Slovakia, Podunajská rovina plane, Čičov env., N–47.45.56., E–17.43.21, *Salici–Populetum*, 118 m, 22.10.1997, 3♀ from soil sample, leg. S. Kalúz (KALÚZ 2008)
- SE–Slovakia, Slovenský kras, Kečovo, Nat. Reserve Kečovské škrapy, N–48.29.39, E–20.29.12, xerotherm, 365 m, 27.07.1987, 1♀ from grass rhizosphere, leg. S. Kalúz (KALÚZ 2001)
- SE–Slovakia, Slovenský kras, Silica, Jašterkové jazierko, N–48.33.34, E–20.31.42, pasture, 553 m, 06.05.1987, 1♀ from rhizosphere of *Typha latifolia*, leg. S. Kalúz (KALÚZ 1998b)
- SE–Slovakia, Slovenský kras, Turňa, Turniansky hradný vrch, N–48.36.37, E–20.52.24, xerotherm, 321 m, 04.05.1988, 1♀ from soil samples, leg. S. Kalúz (KALÚZ 2001)
- SE–Slovakia, Slovenský kras, Turňa, Turniansky hradný vrch, N–48.36.37, E–20.52.24, xerotherm, 321 m, 14.10.1988, 1♀ from soil samples, leg. S. Kalúz (KALÚZ 2001)

- SE–Slovakia, Slovenský kras, Turniansky hradný vrch, N–48.36.37, E–20.52.24, xerotherm, 321 m, 14.10.1988, 1♀ from grass rhizosphere, leg. S. Kalúz (KALÚZ 2001)
- W–Slovakia, Strážovské vrchy Mts., Trebichava, N–48.48.43, E–18.17.51, *Pinetum*, moss, 480 m, 25.09.2009, 3♀ from soil samples, leg. S. Kalúz (KALÚZ 2013)
- W–Slovakia, Strážovské vrchy Mts., Timoradza, N–48.48.38, E–18.15.31, forest–steppe, 433 m, 04.05.2007, 2♀, 2♂, 1N from soil samples, leg. S. Kalúz (KALÚZ 2013)
- N–Slovakia, Veľká Fatra Mts., Nat. Reserve Skalná Alpa, N–48.59.08, E–19.11.31, *Acereto–Piceetum*, 1280 m, 30.05.1986, 2♀ from litter, leg. S. Kalúz (KALÚZ & ŽUFFOVÁ 1989)
- N–Slovakia, Veľká Fatra Mts., Nat. Reserve Skalná Alpa, N–48.59.08, E–19.11.31, *Fageto–Aceretum*, 1300 m, 07.08.1986, 2♀ from litter, leg. S. Kalúz (KALÚZ & ŽUFFOVÁ 1989)
- N–Slovakia, Veľká Fatra Mts., Nat. Reserve Skalná Alpa, N–48.59.08, E–19.11.31, *Pinus mugo*, 1322 m, 04.09.1986, 4♀ from litter, leg. S. Kalúz (KALÚZ & ŽUFFOVÁ 1989)
- N–Slovakia, Vysoké Tatry Mts., Nová Polianka village env., N–49.07.17, E–20.09.46, mountain meadow, 1075 m, 13.08.2007, 2♀ from grass rhizosphere, leg. S. Kalúz (KALÚZ & FERENČÍK 2008)
- N–Slovakia, Vysoké Tatry Mts., Nová Polianka village env., N–49.07.17, E–20.09.46, mountain meadow, 1075 m, 15.07.2007, 1♀ from grass rhizosphere, leg. S. Kalúz (KALÚZ & FERENČÍK 2008)
- SW–Slovakia, Žemberovce village env., N–48.14.38, E–18.43.27, vineyard, 265 m, 05.08.1981, 1♀ collected by pitfall traps, leg. S. Kalúz (KALÚZ 1994a)
- Unpublished data**
- SW–Slovakia, Borská nížina lowland, Brodské, Gbelský les, N–48.41.07, E–17.04.04, *Quercetum*, 176 m, 22.06.2007, 1♀ from soil sample, leg. S. Kalúz
- SW–Slovakia, Borská nížina lowland, Šaštínsky les, Gazárka, N–48.37.22, E–17.08.36, *Querceto–Pinetum*, 188 m, 24.04.2006, 3♀ from soil sample, leg. S. Kalúz
- SW–Slovakia, Borská nížina lowland, Šaštínsky les, Gazárka, N–48.37.22, E–17.08.36, *Querceto–Pinetum*, 188 m, 11.12.2006, 2♀ from soil sample, leg. S. Kalúz
- SW–Slovakia, Borská nížina lowland, Veľké Leváre, Nat. Reserve Abrod, N–48.32.01, E–17.00.20, meadow, 152 m, 30.06.1999, 1♂, 2N from soil sample, leg. S. Kalúz
- SW–Slovakia, Bratislava, Čunovo, N–48.02, E–17.10, *Quercetum*, meadow, 133 m, 18.01.2007, 3♀ from grass rhizosphere, leg. S. Kalúz
- SW–Slovakia, Bratislava, Malé Karpaty Mts., Kamzík, N–48.10.57, E–17.06.05, 200–350 m, *Quercetum*, meadow, 18.11.2009, 6♀ from grass rhizosphere, leg. S. Kalúz
- SW–Slovakia, Bratislava, Malé Karpaty Mts., Stupava, N–48.16.28, E–17.04.48, *Quercetum*, meadow, 416 m, 26.09.2009, 1♂ from grass rhizosphere, leg. S. Kalúz

- SW–Slovakia, Bratislava env., Vajnory, N–48.12.53, E–17.13.21, *Quercetum*, meadow, 129 m, 21.07.1994, 2♀; 20.08.2009, 3♀, 3♂, 2N; 24.09.2009, 1♂ from grass rhizosphere, leg. S. Kalúz
- S–Slovakia, Javorie Mts., Dobrá Niva, N–48.27.29, E–19.07.45, *Quercetum*, 450 m, 11.06.1998, 2♀ from litter, leg. S. Kalúz
- S–Slovakia, Kamenica nad Hronom env., N–47.49.33, E–18.44.51, *Quercetum*, 130 m, 09.11.1997, 7♀ from litter, leg. O. Majzlan
- S–Slovakia, Kamenica nad Hronom, N–47.49.33, E–18.44.51, *Quercetum*, 142 m, 26.08.2011, 3♀; 13.10.2011, 2♀; 04.08.2012, 1♀ from moss and plant rhizosphere, leg. S. Kalúz
- SW–Slovakia, Malé Karpaty Mts., Smolenice village env., N–48.30.03, E–17.24.19, *Quercetum*, 430 m, 18.04.2001, 1♀ from grass rhizosphere, leg. S. Kalúz
- SE–Slovakia, Slovenský kras, Kečovo, Nat. Reserve Kečovské škrapy, N–48.29.39, E–20.29.12, xerotherm, 365 m, 27.07.1987, 1♂ from grass rhizosphere, leg. S. Kalúz
- C–Slovakia, Slovenské Rudohorie, Tisovec, N–48.39.51, E–19.56.22, *Fagetum*, 417 m, 12.09.2003, 2♀ from soil sample, leg. S. Kalúz
- W–Slovakia, Strážovské vrchy Mts., Slatinka nad Bebravou village env., N–48.50.59, E–18.14.49, 368 m, 18.08.2011, 1♀ from grass rhizosphere on limestones, leg. S. Kalúz
- W–Slovakia, Strážovské vrchy Mts., Šípkov village env., N–48.51.19, E–18.17.59, 340 m, 18.08.2011, 1♂ from grass rhizosphere on limestones, leg. S. Kalúz
- C–Slovakia, Štiavnické vrchy Mts., Ladzany village env., N–48.17.24, E–18.53.48, *Quercetum*, 322 m, 08.07.2006, 5♀, 1N from grass rhizosphere, leg. S. Kalúz
- S–Slovakia, Štúrovo, Modrý vrch hill N–47.49.12, E–18.39.27, meadow, moss, 183 m, 19.05.1999, 6♀, 3N from soil sample, leg. S. Kalúz
- S–Slovakia, Štúrovo, Modrý vrch hill N–47.49.12, E–18.39.27, meadow, moss, 183 m, 01.05.2003, 2♀, 1N from soil sample, leg. S. Kalúz
- N–Slovakia, Vysoké Tatry Mts., Skalnaté pleso, N–49.11.17, E–20.13.52, *Pinus mugo*, 1762 m, 05.06.2003, 1♂ from grass rhizosphere, leg. S. Kalúz

Cunaxa thessalica Sionti et Papadoulis, 2003

Unpublished data

- SW–Slovakia, Kamenica nad Hronom, N–47.49.33, E–18.44.51, meadow, 26.08.2010, 1♀, 1♂ from grass rhizosphere, leg. S. Kalúz
- W–Slovakia, Strážovské vrchy Mts., Trebichava village env., N–48.48.43, E–18.17.51, steppe–grass, 480 m, 25.09.2009, 4♀ from grass rhizosphere, leg. S. Kalúz
- W–Slovakia, Strážovské vrchy Mts., Timoradza, N–48.48.38, E–18.15.31, steppe–grass, 433 m, 04.05.2007, 2N from grass rhizosphere, leg. S. Kalúz

The species is new for Slovak acarofauna.

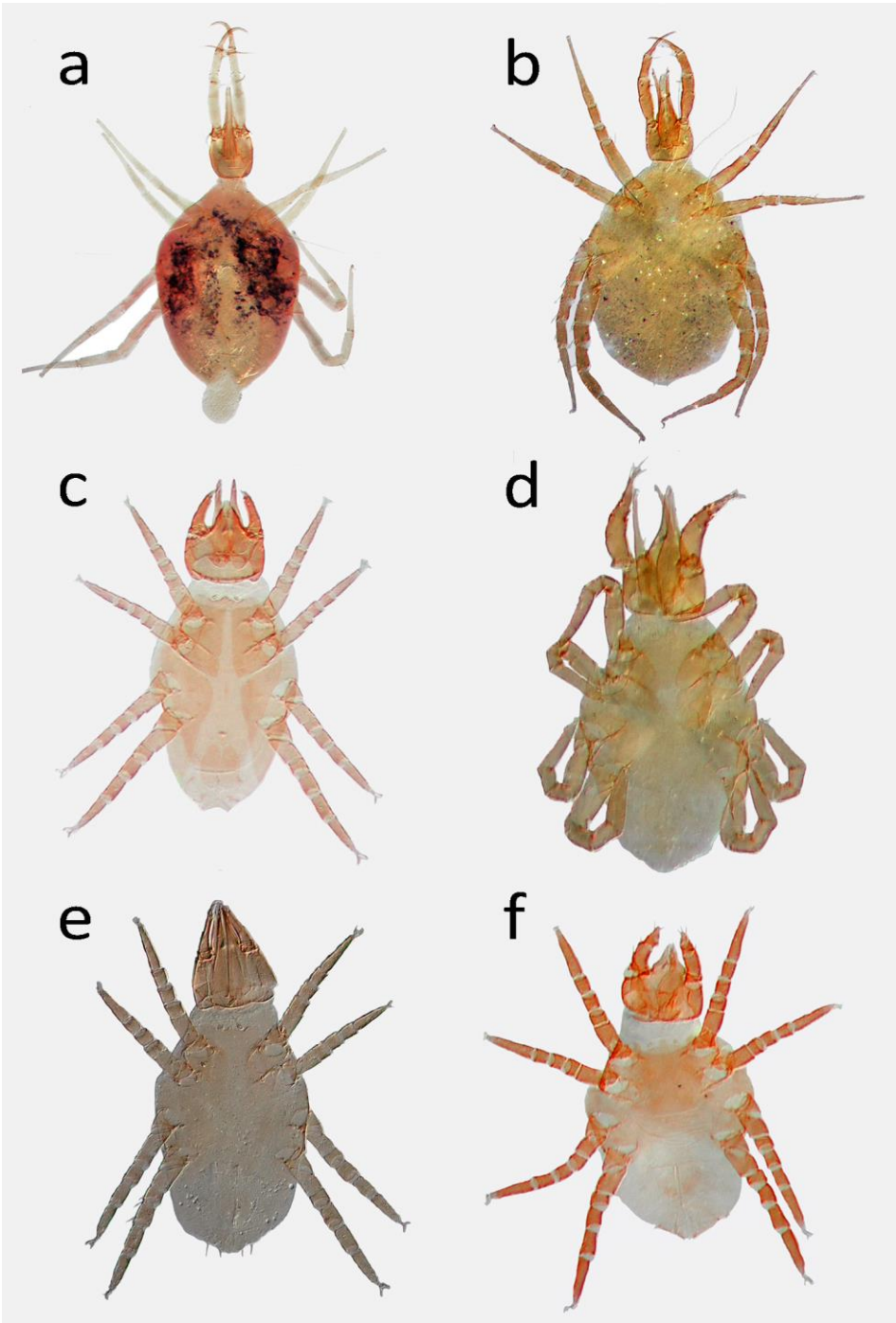


Figure 1. Cunaxid species: a) *Armascirus cerris*, b) *Cunaxa setirostris*, c) *Lupaeus martini*, d) *Neobonzia kuznetsovi*, e) *Pulaeus leonidi*, f) *Scirula papillata*.

Bonzia Oudemans, 1927

Bonzia halacaroides (Oudemans, 1927)

Published data

SW–Slovakia, Borská nížina lowland, Veľké Leváre, Nat. Reserve Abrod, N–48.32.01, E–17.00.20, meadow, 152 m, 24.05.1999, 1♀ from soil sample, leg. S. Kalúz (KALÚZ & ČARNOGURSKÝ 2000)

SE–Slovakia, Slovenský kras, Silica, Jašterkové jazierko, N–48.33.34, E–20.31.42, pasture, 553 m, 06.05.1987, 1♀ from rhizosphere of *Typha latifolia*, leg. S. Kalúz (KALÚZ 1995b, KALÚZ 1998b)

SE–Slovakia, Slovenský kras, Silica, Jašterkové jazierko, N–48.33.34, E–20.31.42, pasture, 553 m, 21.10.1987, 4♀ from rhizosphere of *Typha latifolia*, leg. S. Kalúz (KALÚZ 1995b, KALÚZ 1998b)

Cunaxoides Baker & Hoffmann, 1948

Cunaxoides biscutum (Nesbitt, 1946)

Published data

S–Slovakia, Cerová vrchovina Mts., Belina village env., Nat. Reserve Belinské skaly, *Quercetum*, N–48.14.12, E–19.51.50, 426 m, 19.06.2007, 1♀, from soil sample, leg. S. Kalúz (KALÚZ 2009b)

S–Slovakia, Cerová vrchovina Mts., Drňa, VN Hostice, N–48.14.46, E–20.05.52; 252 m, pasture with *Corneto–Crataegetum* and *Thymus serpyllum*, 18.06.2007, 1N from soil sample, leg. S. Kalúz (KALÚZ 2009a)

N–Slovakia, Vysoké Tatry Mts., Nová Polianka env., N–49.07.17, E–20.09.46, mountain meadow, 1075 m, 13.08.2007, 2♀ from grass rhizosphere, leg. S. Kalúz (KALÚZ & FERENČÍK 2008)

N–Slovakia, Vysoké Tatry Mts., Nová Polianka env., N–49.07.17, E–20.09.46, mountain meadow, 1075 m, 04.09.2007, 2♀ from grass rhizosphere, leg. S. Kalúz (KALÚZ & FERENČÍK 2008)

N–Slovakia, Vysoké Tatry Mts., Smokovce env., N–49.08.04, E–20.12.05, mountain meadow, 1055 m, 13.08.2007, 4♀ from grass rhizosphere, leg. S. Kalúz (KALÚZ 2011)

N–Slovakia, Vysoké Tatry Mts., Smokovce env., N–49.08.04, E–20.12.05, mountain meadow, 1055 m, 04.09.2007, 5♀ from grass rhizosphere, leg. S. Kalúz (KALÚZ 2011)

Cunaxoides kielczewskii Gupta et Ghosh, 1980

Published data

N–Slovakia, Malá Fatra Mts., Nat. Reserve Kľačianska Magura, N–49.09.17, E–18.57.02, mountain meadow, 1342 m, 11.07.1984, 2♀ from grass rhizosphere, leg. S. Kalúz (KALÚZ 1995b) – Published as *Cunaxoides biscutum* (KALÚZ & ŽUFFA 1986)

N–Slovakia, Malá Fatra Mts., Nat. Reserve Šrámková, N–49.11.13, E–19.07.19, mountain meadow, 07.09.1982, 1♀ from grass rhizosphere, leg. S. Kalúz – Published as *Cunaxoides biscutum* (KALÚZ & ŽUFFA 1986)

N–Slovakia, Nízke Tatry Mts., Jasná env., N–48.57.25, E–19.35.13, ski slope, mountain meadow, 1500 m, 14.08.1996, 5♀ from grass rhizosphere, leg. S. Kalúz (KALÚZ 2005b)

N–Slovakia, Vysoké Tatry Mts., Smokovce env., N–49.08.04, E–20.12.05, mountain meadow, 1055 m, 04.09.2007, 1♀ from grass rhizosphere, leg. S. Kalúz (KALÚZ & FERENČÍK 2008)

N–Slovakia, Vysoké Tatry Mts., Smokovce env., N–49.08.04, E–20.12.05, mountain meadow, 1055 m, 15.07.2009, 1♀ from grass rhizosphere, leg. S. Kalúz – Published as *Cunaxoides biscutum* (KALÚZ et al. 2013)

N–Slovakia, Vysoké Tatry Mts., Vyšné Hágy env., N–49.07.20, E–20.06.32, mountain meadow, 1175 m, 27.09.2007, 1♀ from grass rhizosphere, leg. S. Kalúz (KALÚZ & FERENČÍK 2008)

N–Slovakia, Vysoké Tatry Mts., Vyšné Hágy env., N–49.07.20, E–20.06.32, mountain meadow, 1175 m, 27.09.2007, 1♀ from grass rhizosphere, leg. S. Kalúz (KALÚZ & FERENČÍK 2008)

N–Slovakia, Vysoké Tatry Mts., Vyšné Hágy env., N–49.07.20, E–20.06.32, *Piceetum*, 1175 m, 15.07.2009, 1♀ from litter, leg. S. Kalúz – Published as

Cunaxoides biscutum (KALÚZ et al. 2013)

Unpublished data

SW–Slovakia, Bratislava, Podunajské Biskupice, N–48.05.43, E–17.09.44, meadow, 132 m, 27.08.2009, 1♀ from grass rhizosphere, leg. S. Kalúz

W–Slovakia, Strážovské vrchy Mts., Trebichava, N–48.48.43, E–18.17.51, meadow, moss, 420 m, 25.09.2010, 1♀ from moss, leg. S. Kalúz

Cunaxoides paracroceus Sionti et Papadoulis, 2003

Unpublished data

SW–Slovakia, Bratislava, Podunajské Biskupice, Nat. Reserve Kopáč, N–48.05.43.39, E–17.09.45.26, xerotherm, 129 m, 18.06.2009, 1♀ from grass rhizosphere, leg. S. Kalúz

The species is new for Slovak acarofauna.

Cunaxoides parvus (Ewing, 1917)

Published data

SW–Slovakia, Borská nížina lowland, Veľké Leváre, Nat. Reserve Abrod, N–48.32.01, E–17.00.20, meadow, 152 m, *Molinietum coeruleae*, 14.09.1999, 1♀ from plant rhizosphere, leg. S. Kalúz (KALÚZ & ČARNOGURSKÝ 2000)

SW–Slovakia, Bratislava, Malé Karpaty Mts., Nat. Reserve Štokeravská vápenka, N–48.12.05, E–17.00.01, *Quercetum*, meadow, 241 m, 20.04.2001, 1♀ from grass rhizosphere, leg. S. Kalúz (KALÚZ 2005)

SW–Slovakia, Podunajská rovina plane, Hamuliakovo env., N–48.02.49, E–17.14.42, *Salicetum*, 128 m, 12.04.1989, 1♀ from soil sample, leg. S. Kalúz (ČARNOGURSKÝ et al. 1994)

N–Slovakia, NP Vysoké Tatry Mts., Nová Polianka env., N–49.07.17, E–20.09.46, mountain meadow, 1075 m, 13.08.2007, 1♀ from grass rhizosphere, leg. S. Kalúz (KALÚZ & FERENČÍK 2008)

N–Slovakia, NP Vysoké Tatry Mts., Nová Polianka env., N–49.07.17, E–20.09.46, mountain meadow, 1075 m, 27.08.2009, 6♀ from grass rhizosphere, leg. S. Kalúz (KALÚZ 2011)

N–Slovakia, NP Vysoké Tatry Mts., Vyšné Hágy env., N–49.07.20, E–20.06.32, *Piceetum*, 1175 m, 15.07.2009, 1♀ from litter, leg. S. Kalúz (KALÚZ 2011)

Unpublished data

SW–Slovakia, Podunajská rovina plane, Jurová env., N–47.56.34, E–17.33.42, *Populetum*, 114 m, 11.07.1989, 1 ♀; 20.06.1989, agrocenose, 1♀; from soil samples, leg. S. Kalúz

N–Slovakia, NP Vysoké Tatry Mts., Vyšné Hágy env., N–49.07.20, E–20.06.32, mountain meadow, 1175 m, 15.07.2009, 4♀ from plant rhizosphere, leg. S. Kalúz

Cunaxoides ulcerosus Kuznetsov et Livshitz, 1979

Published data

SW–Slovakia, Borská nížina lowland, Devínske jazero, N–48.16.10, E–16.57.06, Šrek, 26.07.1996, meadow, 138 m, 1♀ from grass rhizosphere, leg. S. Kalúz (KALÚZ & ČARNOGURSKÝ 2000)

SW–Slovakia, Bratislava, Malé Karpaty Mts., Kamzík, N–48.10.57, E–17.06.05, *Quercetum*, meadow, 200–350 m, 07.07.2009, 1♀ from grass rhizosphere; 18.11.2009, 1♀ from grass rhizosphere, leg. M. Vrabec (VRABEC et al. 2012)

S–Slovakia, Cerová vrchovina Mts., Belina, Nat. Reserve Belinské skaly, N–48.14.12, E–19.51.50, *Quercetum*, 426 m, 19.06.2007, 1♀ from grass rhizosphere, leg. S. Kalúz (KALÚZ 2009b)

N–Slovakia, Malá Fatra Mts., Nat. Reserve Kľačianska Magura, N–49.09.17, E–18.57.02, mountain meadow, 1342 m, 13.06.1984, 1♀ from soil sample, leg. S. Kalúz (KALÚZ & ŽUFFA 1988)

N–Slovakia, Malá Fatra Mts., Nat. Reserve Rozsutec, N–49.14.09, E–19.05.55, 16.08.1996, *Piceetum*, 1346 m, 1♀ from moss, leg. S. Kalúz (KALÚZ 1998c)

N–Slovakia, Malá Fatra Mts., Nat. Reserve Rozsutec, N–49.13.59, E–19.05.16, mountain meadow, 1128 m, 02.06.1996, 1♀ from grass rhizosphere, leg. S. Kalúz (KALÚZ 1998c)

W–Slovakia, Strážovské vrchy Mts., Timoradza, N–48.48.38, E–18.159.31, forest–steppe, 433 m, 02.05.2007, 1♀ from grass rhizosphere, leg. S. Kalúz (KALÚZ 2013)

Cunaxoides sp.

Published data

SW–Slovakia, Bratislava, Malé Karpaty Mts., Nat. Reserve Devínska lesostep, N–48.10.07, E–16.59.41, *Quercetum*, meadow, 182 m, 20.04.2001, 1♀ from grass rhizosphere, leg. S. Kalúz – published as *Cunaxoides parvus* (KALÚZ 2005a)

Unpublished data

N–Slovakia, Nízke Tatry Mts., Jasná, N–48.57.25, E–19.35.13, ski slope, mountain meadow, 1500 m, 21.10.1998, 1♀ from grass rhizosphere, leg. S. Kalúz

SE–Slovakia, Slovenský kras, Zádiel, Grečov vrch, N–48.40.06, E–20.49.23, pasture, 794 m, 08.08.1988, 1N from rhizosphere of grass, leg. S. Kalúz – published as *Cunaxoides* sp. (KALÚZ 1998a)

The specimens are badly observable and an exact identification would be possible after receiving more specimens.

***Scirula* Berlese, 1887**

Scirula papillata Lin, 1997 (Fig. 1f)

Published data

W–Slovakia, Strážovské vrchy Mts., Trebichava, N–48.48.43, E–18.17.51, *Pinetum*, 450 m, 25.09.2009, 14♀ from moss; 13.10.2009, 6♀ from moss, leg. S. Kalúz (KALÚZ 2013)

***Pulaeus* Den Heyer, 1978**

Pulaeus leonidi Sergeyenko, 2011 (Fig. 1e)

Unpublished data

SW–Slovakia, Borská nížina lowland, Vysoká pri Morave, N–48.18.43, E–16.53.57, flood–plain forest, *Salici–Populetum*, 149 m, 15.05.1996, 1♀ from soil samples, leg. S. Kalúz

S–Slovakia, Cerová vrchovina Mts., Drňa, Nat. Reserve Jalovské vrstvy, N–48.15.20, E–20.07.40, *Quercetum*, meadow, 224 m, 01.10.2007, 3♀ from grass rhizosphere, leg. S. Kalúz

The genus *Pulaeus* is new for Slovak acarofauna.

***Lupaeus* Castro & Den Heyer, 2009**

Lupaeus martini (Den Heyer, 1979) (Fig. 1c)

Unpublished data

SW–Slovakia, Bratislava, Podunajské Biskupice, N–48.05.43, E–17.09.44, meadow, 132 m, 12.08.2009, 2♀ from rhizosphere of *Sedum acre*, leg. S. Kalúz

SW–Slovakia, Malé Karpaty Mts., Stupava env., N–48.16.28, E–17.04.48, meadow, 416 m, 26.09.2009, 1♀ from grass rhizosphere, leg. S. Kalúz

The genus *Lupaeus* is new for Slovak acarofauna.

***Neobonzia* Smiley, 1992**

Neobonzia kuznetzovi (Sergeyenko, 2005) (Fig. 1b)

Unpublished data

SW–Slovakia, Podunajská rovina plane, Jurová willage env., N–47.56.34, E–17.33.42, *Salici–Populetum*, 114 m, 12.04.1989, 2♀; 20.06.1989, agrocenose, 1♀; 10.07.1989, 3 ♀ from soil samples, leg. S. Kalúz

SW–Slovakia, Štiavnické vrchy, Žemberovce, N–48.14.38, E–18.43.27, vineyard, 265 m, 07.10.1981, 1♀ collected by pitfall trap, leg. S. Kalúz

SE–Slovakia, Slovenský kras, Silica, Jašterkové jazierko, N–48.33.34, E–20.31.42, pasture, 553 m, 16.09.1987, 1♀ from soil samples, leg. S. Kalúz

S–Slovakia, Kamenica nad Hronom env., N–47.49.33, E–18.44.51, *Quercetum*, 130 m, 09.11.1997, 9♀ from litter, leg. O. Majzlan

The genus *Neobonzia* is new for Slovak acarofauna.

DISCUSSION

The predatory family Cunaxidae comprises the mites chasing on prey on soil surface or on low vegetation. Recently, a few specialist in the world have been devoting the attention to the taxonomic study of this family, especially in tropical areas. An arising interest on the study of this family causes that more descriptions of a new species have been published mainly during the last 10 years only. Our territory is not an exception when four new species of the genus *Armascirus* were described from Slovakia a few years ago (KALÚZ 2009a; KALÚZ & VRABEC 2013; KALÚZ et al. 2014). When LIN (1997) published the description a new species of the genus *Scirula* (*Scirula papillata*) from China, at that time 3 specimens (holotype and 2 paratypes) were known in the world. It was a very big surprize when more individuals of this species were found in moss of *Pineetum* in Strážovské vrchy Mts. (KALÚZ 2013). Later, another findings of *S. papillata* were presented by SKVARLA et al. (2014) from USA, and recently, this species has been known from 3 localities in the world. Apart from current species of the family Cunaxidae, there are some taxons found in Slovakia that can be considered really scarce or rare. Here belong the genera *Lupaeus* and *Pulaeus*. These genera are mainly occuring in tropical or subtropical countries. The species *Lupaeus martini* is stated from South Africa and Brazilia (CASTRO & DEN HEYER 2009), the findings of this species in Slovakia (this paper) enlarges it's geographic

distribution. The species *Pulaeus leonidi* was described broillery SERGEYENKO (2011) from Crimea (Ukraine) and is known from Crimea aladislav nd Slovakia only. The previous geographic distribution of species of the genus *Cunaxa*, that are new for Slovak acarofauna, includes East Europe – *C. bochkovi* (KHAUSTOV & KUZNETZOV 1998), *C. gordeevae* (SERGEYENKO 2009), Greece – *C. thessalica* (SIONTI & PAPADOULIS 2003b) and South Africa – *C. potchensis* (DEN HEYER 1979). Until recent the species *Cunaxoides paracroceus* was also reported only from Greece (SIONTI et PAPADOULIS 2003a).

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SUMMARY

Predatory mites of the family Cunaxidae were studied in Slovak territory during the last three decades. The results of this research including both published and unpublished data are presented in this paper. The members of the family Cunaxidae in Slovakia such comprises 24 taxons from which three genera – *Lupaeus*, *Pulaeus* and *Neobonzia* belong to the new genera for Slovak acarofauna. Among other species *Pulaeus leonidi*, *Lupaeus martini*, *Neobonzia kuznetzovi*, *Cunaxa bochkovi*, *C. gordeevae*, *C. potchensis*, *C. thessalica* and *Cunaxoides paracroceus* are also stated in the Slovak territory for the first time. Among rare species found in Slovakia there are *Scirula papillata* which is also occuring in China and USA, *Cunaxa bochkovi* and *C. gordeevae* known only from Crimea. Other species of the genus *Cunaxa* were previously stated from Greece (*C. thessalica*) and South Africa (*C. potchensis*). The last new finding of the species *Cunaxoides paracroceus* in Slovakia enlarges the geographis distribution of this species being untill recent found in Greece, only.

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