

MITES (*ACARI, MESOSTIGMATA*) OF THE TATRA NATIONAL PARK

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Abstract. The study focuses on the fauna and its aim was to prepare a register of mesostigmatid mites reported from the Tatra National Park. The register was prepared on the basis of literature and the author's own research conducted in the park. The study describes 115 mite species from the order *Mesostigmata* reported from the Tatra National Park. The most numerous were families *Parasitidae* (27 species) and *Zerconidae* (14).

Key words: mites, *Acari*, *Mesostigmata*, Tatra National Park

INTRODUCTION

National parks play an important role as gene banks, they are a form of *in situ* protection of frequently rare species of both fungi, plants and animals. It is for this reason, among others, that it is necessary to discover and register natural reserves. This trend involves acarological studies focused on the fauna and taxonomy that have been conducted in Polish national parks for several years.

The state of the current knowledge on the acarofauna in Polish national parks in comparison with other protected areas in Europe can be regarded as good. Poland is one of the best investigated countries in this respect worldwide [Gwiazdowicz and Skorupski 1996, Wiśniewski 1996]. Thus far there were no systematic studies on mites from the order *Mesostigmata* in the Tatra National Park. Individual studies that were previously conducted include publications by Błaszak [1974 a, b], Błoszyk [1980, 1991], Cichocki [1984], Haitlinger [1980], Żukowski and Szymański [1987], and recently Gwiazdowicz and Cichocki [2002].

OBJECTIVE AND METHODS

The study focuses on the fauna and its aim was to prepare a register of mesostigmatid mites reported from the Tatra National Park. The register was prepared on the basis of literature and the author's own research conducted in the park. In cases when a species was reported as a result of the current study a sample number and the number of specimens of a given gender or a developmental stage were recorded. When a species was reported earlier by other authors bibliographical information was provided.

During field works samples were collected from various, randomly selected microhabitats such as litter, rotting wood, and moss. The collected material was extracted in Tullgren funnels, and then stored in 90% alcohol. The next stage of the research involved the selection of mites from the order *Mesostigmata* and the preparation of wet slides in lactophenol and dry ones in PVA.

Register of samples

During field works conducted in the Tatra National Park between August 26th and August 29th 2003, 100 samples were collected (Table 1). The register includes the sample number, localization (unit, subunit), microhabitat, altitude and the plant community.

Table 1. List of collected samples
Tabela 1. Wykaz zebranych prób

No samples Numer próby	District of forest Oddział	Microhabitat Mikrośrodowisko	Above sea level Wysokość n.p.m. m	Plant communities Zbiorowisko roślinne
1	2	3	4	5
1	209j	moss – mech	980	<i>Fagetum carpaticum</i>
2	209j	litter – ściółka	980	<i>Fagetum carpaticum</i>
3	209j	moss – mech	980	<i>Fagetum carpaticum</i>
4	209j	lichen – porosty	980	<i>Fagetum carpaticum</i>
5	209j	bark – kora	980	<i>Fagetum carpaticum</i>
6	209j	moss – mech	980	<i>Fagetum carpaticum</i>
7	209j	rotting wood – mursz	1 000	<i>Fagetum carpaticum</i>
8	209j	humus – humus	1 000	<i>Fagetum carpaticum</i>
9	211k	moss – mech	1 040	non forest – powierzchnia bezleśna
10	211k	bark – kora	1 040	non forest – powierzchnia bezleśna
11	211k	bracket fungi – huby	1 040	non forest – powierzchnia bezleśna
12	211k	rotting wood – mursz	1 040	non forest – powierzchnia bezleśna
13	211k	bark – kora	1 040	non forest – powierzchnia bezleśna

Table 1 – cont. / Tabela 1 – cd.

1	2	3	4	5
14	216a	moss – mech	1 050	non forest – powierzchnia bezleśna
15	216a	lichen – porosty	1 050	non forest – powierzchnia bezleśna
16	216a	bark – kora	1 050	non forest – powierzchnia bezleśna
17	216a	humus – humus	1 050	non forest – powierzchnia bezleśna
18	216a	rotting wood – mursz	1 050	non forest – powierzchnia bezleśna
19	216d	moss – mech	1 100	<i>Fago calamagrostetum</i>
20	216d	litter – ściółka	1 100	<i>Fago calamagrostetum</i>
21	216d	rotting wood – mursz	1 100	<i>Fago calamagrostetum</i>
22	216d	moss – mech	1 100	<i>Fago calamagrostetum</i>
23	216d	humus – humus	1 100	<i>Fago calamagrostetum</i>
24	211b	humus – humus	1 300	<i>Piceetum tatricum</i>
25	211b	bark – kora	1 300	<i>Piceetum tatricum</i>
26	211b	rotting wood – mursz	1 300	<i>Piceetum tatricum</i>
27	211b	lichen – porosty	1 300	<i>Piceetum tatricum</i>
28	211b	moss – mech	1 300	<i>Piceetum tatricum</i>
29	211b	bark beetles galleries żerowiska owadów	1 300	<i>Piceetum tatricum</i>
30	211b	moss – mech	1 200	<i>Piceetum tatricum</i>
31	211b	moss – mech	1 200	<i>Piceetum tatricum</i>
32	211b	humus – humus	1 200	<i>Piceetum tatricum</i>
33	211b	rotting wood – mursz	1 200	<i>Piceetum tatricum</i>
34	211b	bark – kora	1 200	<i>Piceetum tatricum</i>
35	206d	moss – mech	1 080	<i>Piceetum tatricum</i>
36	206d	moss – mech	1 080	<i>Piceetum tatricum</i>
37	206d	rotting wood – mursz	1 080	<i>Piceetum tatricum</i>
38	206d	bark – kora	1 080	<i>Piceetum tatricum</i>
39	205i	moss – mech	1 100	<i>Fagetum carpaticum</i>
40	205i	moss – mech	1 100	<i>Fagetum carpaticum</i>
41	205i	bark beetles galleries żerowiska owadów	1 100	<i>Fagetum carpaticum</i>
42	205i	bark beetles galleries żerowiska owadów	1 100	<i>Fagetum carpaticum</i>
43	201h	moss – mech	1 000	<i>Fago calamagrostetum</i>
44	201h	moss – mech	1 000	<i>Fago calamagrostetum</i>
45	201h	rotting wood – mursz	1 000	<i>Fago calamagrostetum</i>

Table 1 – cont. / Tabela 1 – cd.

1	2	3	4	5
46	201h	lichen – porosty	1 000	<i>Fago calamagrostetum</i>
47	204l	litter – ściółka	950	<i>Fagetum carpaticum</i>
48	204i	moss – mech	950	<i>Fagetum carpaticum</i>
49	214f	moss – mech	900	non forest – powierzchnia bezleśna
50	214f	litter – ściółka	900	non forest – powierzchnia bezleśna
51	193f	lichen – porosty	1 060	<i>Bazzanio-Piceetum</i>
52	193f	moss – mech	1 060	<i>Bazzanio-Piceetum</i>
53	193f	humus – humus	1 060	<i>Bazzanio-Piceetum</i>
54	193f	lichen – porosty	1 060	<i>Bazzanio-Piceetum</i>
55	193f	litter – ściółka	1 060	<i>Bazzanio-Piceetum</i>
56	181c	rotting wood – mursz	1 060	<i>Bazzanio-Piceetum</i>
57	181c	bark – kora	1 060	<i>Bazzanio-Piceetum</i>
58	181c	moss – mech	1 060	<i>Bazzanio-Piceetum</i>
59	181c	litter – ściółka	1 060	<i>Bazzanio-Piceetum</i>
60	181c	moss – mech	1 060	<i>Bazzanio-Piceetum</i>
61	181c	moss – mech	1 060	<i>Bazzanio-Piceetum</i>
62	181p	humus – humus	1 200	<i>Fago calamagrostetum</i>
63	181p	litter – ściółka	1 200	<i>Fago calamagrostetum</i>
64	181p	lichen – porosty	1 200	<i>Fago calamagrostetum</i>
65	181p	rotting wood – mursz	1 200	<i>Fago calamagrostetum</i>
66	181p	bracket fungi – huby	1 200	<i>Fago calamagrostetum</i>
67	181p	lichen – porosty	1 200	<i>Fago calamagrostetum</i>
68	181p	moss – mech	1 200	<i>Fago calamagrostetum</i>
69	183c	bark – kora	1 200	<i>Fago calamagrostetum</i>
70	183c	humus – humus	1 200	<i>Fago calamagrostetum</i>
71	183c	litter – ściółka	1 200	<i>Fago calamagrostetum</i>
72	183c	moss – mech	1 200	<i>Fago calamagrostetum</i>
73	183c	rotting wood – mursz	1 200	<i>Fago calamagrostetum</i>
74	181j	rotting wood – mursz	1 100	<i>Bazzanio-Piceetum</i>
75	181j	litter – ściółka	1 100	<i>Bazzanio-Piceetum</i>
76	181j	rotting wood – mursz	1 100	<i>Bazzanio-Piceetum</i>
77	181j	moss – mech	1 100	<i>Bazzanio-Piceetum</i>
78	181j	humus – humus	1 100	<i>Bazzanio-Piceetum</i>
79	183a	lichen – porosty	1 100	<i>Bazzanio-Piceetum</i>

Table 1 – cont. / Tabela 1 – cd.

1	2	3	4	5
80	183a	humus – humus	1 100	<i>Bazzanio-Piceetum</i>
81	183a	rotting wood – mursz	1 100	<i>Bazzanio-Piceetum</i>
82	183a	moss – mech	1 100	<i>Bazzanio-Piceetum</i>
83	183a	litter – ściółka	1 100	<i>Bazzanio-Piceetum</i>
84	174f	litter – ściółka	1 060	<i>Fago calamagrostetum</i>
85	174f	humus – humus	1 060	<i>Fago calamagrostetum</i>
86	174f	rotting wood – mursz	1 060	<i>Fago calamagrostetum</i>
87	174f	bark – kora	1 060	<i>Fago calamagrostetum</i>
88	174b	bark – kora	1 060	<i>Abietetum</i>
89	174b	moss – mech	1 060	<i>Abietetum</i>
90	174b	moss – mech	1 060	<i>Abietetum</i>
91	174g	litter – ściółka	1 100	<i>Fago calamagrostetum</i>
92	174g	moss – mech	1 100	<i>Fago calamagrostetum</i>
93	174g	humus – humus	1 100	<i>Fago calamagrostetum</i>
94	174g	rotting wood – mursz	1 100	<i>Fago calamagrostetum</i>
95	174g	bark – kora	1 100	<i>Fago calamagrostetum</i>
96	174c	bark – kora	1 020	<i>Fago calamagrostetum</i>
97	174c	litter – ściółka	1 020	<i>Fago calamagrostetum</i>
98	174g	moss – mech	1 020	<i>Fago calamagrostetum</i>
99	174g	moss – mech	1 020	<i>Fago calamagrostetum</i>
100	174g	litter – ściółka	1 020	<i>Fago calamagrostetum</i>

Register of species

The register of species was prepared in a systematic order. The name of a species is accompanied by the sample number, whereas the number of specimens of a given gender or a developmental stage are provided in brackets (F – female, M – male, D – deutonymph, P – protonymph, L – larva).

MICROGYNIINA

MICROGYNIIDAE

Microsejus truncicola Trägårdh, 1942 – 45 (1M), 56 (1P)

SEJINA

SEJIDAE

Sejus hinangensis Hirschmann et Karczmarek, 1991

Species recorded in Tatra NP by Hirschmann et al. [1991].

GAMASINA**EPICRIIDAE*****Epicrius resiniae*** Karg, 1971 – 60 (1F), 91 (1F, 1M)

Species recorded in Tatra NP by Gwiazdowicz and Cichocki [2002].

Epicrius* sp.** – 30 (1F), 44 (1F)**ZERCONIDAE**Parazercon radiatus*** (Berlese, 1914) – 6 (4F), 17 (2F), 18 (5F), 30 (8F, 1M), 31 (1F), 32 (1F), 52 (2F), 53 (2F), 54 (1F), 80 (2F), 84 (8F), 85 (1M), 87 (1F), 92 (9F)

Species recorded in Tatra NP by Błaszak [1974 a], Gwiazdowicz and Cichocki [2002].

Polonozercon tatrensis (Błaszak, 1974)

Species recorded in Tatra NP by Błaszak [1974 b].

Prozercon fimbriatus (C.L. Koch, 1839)

Species recorded in Tatra NP by Błaszak [1974 a].

Prozercon kochi Sellnick, 1943 – 9 (2F), 44 (7F, 1M), 46 (1F), 47 (1F), 49 (2F, 2M)

Species recorded in Tatra NP by Błaszak [1974 a], Gwiazdowicz and Cichocki [2002].

Prozercon sellnicki Halaškova, 1963

Species recorded in Tatra NP by Błaszak [1974 a].

Zercon arcuatus Trägårdh, 1931 – 13 (2F)

Species recorded in Tatra NP by Błaszak [1974 a].

Zercon berlesei (Sellnick), 1958

Species recorded in Tatra NP by Błaszak [1974 a].

Zercon carpaticus Sellnick, 1958

Species recorded in Tatra NP by Błaszak [1974 a].

Zercon curiosus Trägårdh, 1910 – 9 (1F), 11 (2F, 1M), 13 (3F, 2M, 3D), 16 (3F), 33 (3F, 3M), 36 (2F), 38 (1M), 42 (1M), 50 (1M), 56 (2F), 58 (1F), 66 (1F), 69 (15F, 2M, 11D), 71 (1F), 76 (7F, 13M, 6D), 81 (1F)

Species recorded in Tatra NP by Błaszak [1974 a].

Zercon dampfi Sellnick, 1944

Species recorded in Tatra NP by Błaszak [1974 a].

Zercon peltatus peltatoides Halaškova, 1969 – 14 (2F, 1M, 2D)

Species recorded in Tatra NP by Błaszak [1974 a].

Zercon polonicus Błaszak, 1970

Species recorded in Tatra NP by Błaszak [1974 a].

Zercon romagniolus Sellnick, 1944 – 50 (2F)

Species recorded in Tatra NP by Błaszak [1974 a], Gwiazdowicz and Cichocki [2002].

Zercon triangularis C.L. Koch, 1836 – 2 (2F), 6 (5F, 1M), 8 (5F), 9 (11F, 7M, 5D), 30 (1F), 31 (1F), 36 (1F), 44 (1M), 49 (1F), 50 (1F), 63 (1F), 67 (10F, 1M, 2D)

Species recorded in Tatra NP by Błaszak [1974 a], Gwiazdowicz and Cichocki [2002].

PARASITIDAE**PARASITINAE*****Parasitellus fucorum*** (De Gier, 1778)

Species recorded in Tatra NP by Gwiazdowicz and Skorupski [1996].

Parasitus fimetorum (Berlese, 1904) – 51 (2D)***Parasitus loricatus*** (Wankel, 1861)

Species recorded in Tatra NP by Skalski [1967].

Vulgarogamasus kraepelini (Berlese, 1904) – 28 (2F), 36 (1F), 54 (1F)

Species recorded in Tatra NP by Gwiazdowicz and Skorupski [1996] and Gwiazdowicz and Cichocki [2002].

Vulgarogamasus mashkeae (Willmann, 1936)

Species recorded in Tatra NP by Micherdziński [1969].

Vulgarogamasus oudemansi (Berlese, 1904)

Species recorded in Tatra NP by Gwiazdowicz and Skorupski [1996].

PERGAMASINAE

Holoparasitus calcaratus (C.L. Koch, 1839) – 27 (1M), 28 (1F), 45 (1F), 69 (1F), 96 (1F)

Holoparasitus excisus (Berlese, 1905)

Species recorded in Tatra NP by Micherdziński [1969].

Leptogamasus anoxygenellus (Micherdziński, 1969)

Species recorded in Tatra NP by Micherdziński [1969].

Leptogamasus nudiglobatus Athias-Henriot 1967 – 30 (1M), 48 (1F), 53 (8F, 3M)

Species recorded in Tatra NP by Gwiazdowicz and Cichocki [2002].

Leptogamasus parvulus (Berlese, 1903)

Species recorded in Tatra NP by Micherdziński [1969].

Leptogamasus tatrensis (Micherdziński, 1969) – 25 (1F, 6M), 31 (8F, 12 M), 33 (9F, 6M), 37 (2F, 2M), 46 (7F, 6M)

Species recorded in Tatra NP by Micherdziński [1969].

Leptogamasus tectegynellus (Athias-Henriot, 1967) – 67 (5F, 3M)

***Leptogamasus* sp.** – 31 (1D), 54 (1F, 2M), 72 (1F, 7M, 2D), 77 (2F, 2M)

Paragamasus (Anidogamasus) brevipes (Berlese, 1905) s. Karg, 1971 – 8 (19F, 11M), 30 (1F, 1M), 36 (4F, 4M), 46 (1F, 1M), 48 (4M)

Paragamasus (Anidogamasus) homopodoides (Athias-Henriot, 1967)

Species recorded in Tatra NP by Gwiazdowicz and Cichocki [2002].

Paragamasus (Anidogamasus) misellus (Berlese, 1903).

Species recorded in Tatra NP by Gwiazdowicz and Skorupski [1996] and Gwiazdowicz and Cichocki [2002].

Paragamasus (Paragamasus) robustus (Oudemans, 1902)

Species recorded in Tatra NP by Skalski [1967].

Paragamasus (Anidogamasus) runcatellus (Berlese, 1903).

Species recorded in Tatra NP by Micherdziński [1969], Gwiazdowicz and Cichocki [2002].

Paragamasus (Anidogamasus) runciger (Berlese, 1903) – 52 (2F), 70 (1F), 89 (1F)

Paragamasus (Anidogamasus) vagabundus (Karg, 1968) – 58 (2F, 1M)

Pergamasus (Pergamasus) brevicornis Berlese, 1903 – 2 (1F), 6 (1F), 14 (1M), 16 (1F), 21 (1F, 1M), 26 (1M), 27 (2F, 2M), 28 (3F), 33 (1F), 34 (1M), 49 (1F), 50 (1F), 55 (4F, 4M), 56 (1F), 59 (2F, 1M), 60 (1F), 62 (1F), 63 (2F, 1M), 67 (1F), 75 (2F), 76 (2F, 1M), 77 (1M), 81 (2M), 82 (1F), 83 (3F, 1M), 84 (1F, 1M), 87 (1F), 91 (3F, 2M), 96 (1M), 97 (1M), 100 (1F, 3M)

Species recorded in Tatra NP by Micherdziński [1969], Gwiazdowicz and Cichocki [2002].

Pergamasus (Pergamasus) crassipes (Linne, 1758) s. Micherdziński, 1969 – 41 (1F)

Species recorded in Tatra NP by Gwiazdowicz and Skorupski [1996] and Gwiazdowicz and Cichocki [2002].

Pergamasus (Pergamasus) mediocris Berlese, 1904 – 2 (1F), 8 (1F, 1M), 23 (1F), 26 (2F), 28 (2F), 30 (3F), 55 (1F), 59 (1F), 62 (7F, 5M), 70 (1F), 80 (1F)

Species recorded in Tatra NP by Micherdziński [1969], Gwiazdowicz and Cichocki [2002].

***Pergamasus* sp. 1** – 77 (2F)

***Pergamasus* sp. 2** – 24 (1F)

***Pergamasus* sp. 3** – 24 (1F)

MACROCHELIDAE

Geholaspis longispinosus (Kramer, 1876) – 9 (1F), 20 (1F), 36 (1F, 2D), 50 (2F)

Geholaspis (Longicheles) mandibularis (Berlese, 1904) – 50 (1F)

Macrocheles (Macrocheles) carpathicus Mašán, 2003 – 8 (1F), 48 (1F)

Macrocheles (Macrocheles) montanus (Willmann, 1951) – 1 (2F)

***Macrocheles* sp.** – 36 (1F)

Neopodocinum mrciaki Sellnick, 1968 – 1 (1D), 8 (1F, 1D), 49 (2D), 50 (1D), 52 (1D), 55 (4F, 2M, 9D), 78 (1M), 97 (2F, 2D)

EVIPHIDIDAE

EVIPHIDINAE

Eviphis ostrinus (C.L. Koch, 1836) – 63 (3F, 1D), 84 (1F), 97 (1F)

Species recorded in Tatra NP by Gwiazdowicz and Skorupski [1996] and Gwiazdowicz and Cichocki [2002].

ASCIDAE

ASCINAE

Gamasellodes bicolor (Berlese, 1918) – 81 (1F)

Gamasellodes tatricus Gwiazdowicz et Walter, 2005 – 42 (3F)

Proctolaelaps pygmaeus (Müller, 1860)

Species recorded in Tatra NP by Haitlinger [1980].

***Proctolaelaps* sp.** – 11 (1F)

ARCTOSEIINAE

Arctoseius dendrophilus Karg, 1969 – 13 (2F), 76 (2F)

PLATYSEIINAE

Cheiroseius (Posttrematus) curtipes (Halbert, 1923) – 1 (2M), 22 (1F, 1M)

Cheiroseius (Posttrematus) necorniger (Oudemans, 1903) – 1 (28F, 3M), 22 (11F, 4M)

***Cheiroseius* sp.** – 43 (4F, 1M, 2D)

Platyseius major (Halbert, 1923) – 1 (2F, 1M), 22 (1F, 1M)

LAELAPIDAE

HAEMOGAMASINAE

Eulaelaps stabularis (C. L. Koch, 1839)

Species recorded in Tatra NP by Mohr [1938] and Haitlinger [1980].

Haemogamasus hirsutus Berlese, 1889

Species recorded in Tatra NP by Mohr [1938].

Haemogamasus nidi Michael, 1892

Species recorded in Tatra NP by Haitlinger [1980].

Haemogamus pontiger (Berlese, 1904)

Species recorded in Tatra NP by Żukowski and Szymański [1987].

HIRSTIONYSSINAE

Hirstionyssus isabelinus (Oudemans, 1913)

Species recorded in Tatra NP by Haitlinger [1980].

Hirstionyssus soricis (Turk, 1945)

Species recorded in Tatra NP by Haitlinger [1980].

LAELAPINAE

Androlaelaps casalis (Berlese, 1887) – 53 (1F)

Hyperlaelaps microti (Ewing, 1933)

Species recorded in Tatra NP by Haitlinger [1980].

Hypoaspis sp. – 75 (2M)

Laelaps clethrionomydis Lange, 1955

Species recorded in Tatra NP by Haitlinger [1980].

Laelaps hilaris C.L. Koch, 1836

Species recorded in Tatra NP by Haitlinger [1980].

VEIGALIIDAE

Veigaia cervus (Kramer, 1876) – 36 (2F, 5D), 77 (2F), 83 (1F), 93 (1F)

Veigaia exigua (Berlese, 1916) – 97(1F)

Veigaia kochi (Trägårdh, 1901) – 6 (1F), 23 (1F), 36 (2F), 48(1F), 67(3F), 71 (1F), 84 (2F), 85(1F)

Species recorded in Tatra NP by Gwiazdowicz and Skorupski [1996] and Gwiazdowicz and Cichocki [2002].

Veigaia nemorensis (C.L. Koch, 1839) – 2 (4F, 1D), 6 (1D), 7 (1D), 8 (8F, 6D), 9 (3F, 3D), 14 (2D), 16 (1F), 17 (8F, 7D), 18 (7F, 3D), 20 (1F, 2D), 21 (2F, 1D), 23 (2F, 1D), 25 (1D), 26 (4F, 3D), 27 (1F, 4D), 28 (6F, 12D), 30 (11F, 6D), 31 (3F, 2D), 32 (1F, 3D), 33 (1F, 1D), 36 (1F, 10D), 44 (3F, 5D), 46 (6D), 47 (10F, 6D), 48 (4F, 2D), 49 (3F, 14D), 50 (8F, 4D), 52 (6F, 5D), 53 (1F), 54 (1F, 2D), 55 (6D), 56 (6D), 57 (2F, 5D), 59 (1D), 60 (10F, 15D), 63 (4D), 65 (1D), 67 (10D), 70 (1P), 71 (4F, 15D), 72 (2F, 2D), 75 (1F), 76 (2F, 4D), 77 (3F, 3D), 78 (1D), 80 (1F), 81 (2F, 1D), 82 (1F, 1D), 83 (5F, 10D), 84 (2F, 18D), 85 (1F, 8D), 87 (2D), 88 (7D), 91 (20F, 15D), 93 (2F, 3D), 94 (6D), 95 (1F), 97 (8F, 5D), 98 (4D), 100 (2D)

Species recorded in Tatra NP by Gwiazdowicz and Skorupski [1996] and Gwiazdowicz and Cichocki [2002].

Veigaia transisale (Oudemans, 1902) – 97(1F)

RHODACARIDAE

OLOGAMASINAE

Gamasellus montanus (Willmann, 1936) – 6 (5F, 1M), 21 (4F, 2M, 1D), 25 (2F, 1M, 3D), 27 (3F, 1M), 28 (4F, 4M, 7D), 44 (1F, 2M), 45 (1F, 1M), 52 (17F, 6M, 2D), 53 (1F, 1M), 54 (1F, 1D), 55 (8F, 3D), 56 (1F), 57 (1F, 2D), 59 (1M, 1D), 60 (8F, 3M, 4D), 62 (2F, 2M), 67 (2F, 3M, 4D), 62 (1F), 63 (2F), 75 (1F), 77 (2F), 78 (9D), 81 (1M, 5D), 82 (1F), 88 (5F, 4M, 2D), 92 (3D), 93 (2F, 2M, 3D), 94 (2F, 2M), 95 (1F, 3D), 100 (3F, 5M, 3D)

Species recorded in Tatra NP by Gwiazdowicz and Skorupski [1996] and Gwiazdowicz and Cichocki [2002].

Cyrtolaelaps mucronatus (G. et R. Canestrini, 1881)

Species recorded in Tatra NP by Haitlinger [1980].

PACHYLAELAPIDAE

Pachylaelaps (Pachylaelaps) furcifer Oudemans, 1903 – 63 (1F), 91 (2F), 93 (2F), 97 (1F)

Pachylaelaps (Pachylaelaps) longisetis Halbert, 1915

Species recorded in Tatra NP by Gwiazdowicz and Cichocki [2002].

Pachylaelaps (Pachylaelaps) siculus Berlese, 1921 – 23 (1F)

DIGAMASELLIDAE

Dendrolaelaps (Dendrolaelaps) tenuipilus Hirschmann, 1960

Species recorded in Tatra NP by Hirschmann and Wiśniewski [1982].

Dendrolaelaps (Apophyseodendrolaelaps) apophyseosimilis Hirschmann, 1960

Species recorded in Tatra NP by Hirschmann and Wiśniewski [1982].

Dendrolaelaps (Apophyseodendrolaelaps) disetosimilis Hirschmann, 1960

Species recorded in Tatra NP by Hirschmann and Wiśniewski [1982].

Dendrolaelaps (Foveodendrolaelaps) foveolatus (Leitner, 1949) – 42 (2F)

Dendrolaelaps (Multidendrolaelaps) tetraspinosus Hirschmann, 1960 – 5 (1F)

Dendrolaelaps (Punctodendrolaelaps) arviculus (Leitner, 1949) – 69 (8F, 2M, 4D)

Dendrolaelaps (Punctodendrolaelaps) fallax (Leitner, 1949) – 5 (4F, 1M, 2D)

Dendrolaelaps sp. 1 – 5 (2M, 2D), 11 (1M), 12 (3D)

Dendrolaelaps sp. 2 – 11 (1F)

AMEROSEIIDAE

Ameroseius plumea Oudemans, 1930 – 40 (2F, 1D), 46 (1F)

PHYTOSEIIDAE

Amblyseius sp. – 4 2 (1F), 51 (1F), 100 (1F)

UROPODINA

TRACHYTIDAE

Trachytes aegrota (C. L. Koch 1841) – 2 (2F, 1P), 8 (6F), 17 (2F, 6D), 18 (2F), 23 (2F), 28 (2F, 1L), 30 (9F), 32 (1D), 34 (2F, 1D), 37 (1F), 44 (1D), 47 (21F, 11D, 7P), 48 (1F, 1D), 49 (1F), 50 (13F, 14D, 4P), 52 (1F), 55 (3F, 17D, 2P), 57 (4F, 1D, 1P), 59 (2F, 2D, 1P), 60 (10F, 6D), 63 (7F, 5D), 67 (1D), 70 (1D), 71 (2F, 8D), 72 (1D), 75 (2F, 7D), 77 (2F), 78 (1F), 81 (9F), 82 (5F), 83 (8F, 8D, 4P), 84 (1F, 6D, 7P, 5L), 85 (2D), 88 (3F, 1P), 91 (3F, 2D, 1P), 93 (1D), 95 (1F, 1D), 97 (5F, 3D, 1P), 98 (1D), 100 (1F, 1D, 1L, 5P)

Species recorded in Tatra NP by Wiśniewski [1979], Błoszyk [1980, 1991], Gwiazdowicz and Cichocki [2002], Napierała et al. [2006].

Trachytes irenae Pečina, 1970 – 17 (1F), 28 (1F), 47 (4F, 5M, 1D), 59 (6F, 2M, 5D), 60 (4F, 2M, 1D), 71 (5F, 4M, 1D), 75 (1F), 83 (2F, 1M), 84 (5F, 4M, 8D, 2P), 85 (2M), 91 (2F, 15M, 27D, 8P), 93 (3F, 1M, 1D), 100 (5F, 3M)

Species recorded in Tatra NP by Błoszyk [1980, 1991], Gwiazdowicz and Cichocki [2002], Napierała et al. [2006].

Trachytes minima Trägårdh, 1910

Species recorded in Tatra NP by Napierała et al. [2006].

Trachytes montana Willman, 1953

Species recorded in Tatra NP by Błoszyk [1980, 1991] and Wiśniewski [1982], Napierała et al. [2006].

Trachytes pauperior (Berlese, 1914) – 8 (1F), 17 (3F, 2D), 18 (2F), 20 (1F), 25 (1D), 55 (1F, 1D), 83 (1F, 1D), 84 (3F, 2D), 85 (1F, 2D), 93 (3F, 6D), 97 (2F)

Species recorded in Tatra NP by Błoszyk [1980, 1991], Gwiazdowicz and Cichocki [2002], Napierała et al. [2006].

POLYASPIDAE***Polyaspinus cylindricus*** Berlese, 1916

Species recorded in Tatra NP by Napierała et al. [2006].

Polyaspis sansonei Berlese, 1916 – 30 (1F)**TREMATURIDAE*****Trichouropoda karawaiewi*** (Berlese, 1903)

Species recorded in Tatra NP by Błoszyk [1991], Napierała et al. [2006].

Trichouropoda longiovalis Hirschman et Zirngiebl-Nicol, 1961

Species recorded in Tatra NP by Wiśniewski [1979].

Trichouropoda obscurasimilis Hirschmann et Zirngiebl-Nicol, 1961 – 11 (1M), 42 (5F, 6M, 12D)***Trichouropoda ovalis*** (C.L. Koch, 1839)

Species recorded in Tatra NP by Błoszyk [1991], Napierała et al. [2006].

Trichouropoda polytricha (Vitzthum, 1923)

Species recorded in Tatra NP by Wiśniewski [1979].

Trichouropoda spatulifera (Moniez, 1892)

Species recorded in Tatra NP by Błoszyk [1991], Napierała et al. [2006].

URODINYCHIDAE***Dinychus arcuatus*** (Trägårdh, 1943).

Species recorded in Tatra NP by Błoszyk [1991], Napierała et al. [2006].

Dinychus carinatus Berlese, 1903 – 65 (1F)***Dinychus perforatus*** Kramer, 1886 – 63 (1F, 1M, 5D)

Species recorded in Tatra NP by Błoszyk [1991], Gwiazdowicz and Cichocki [2002], Napierała et al. [2006].

Urodiaspis tecta (Kramer, 1876)

Species recorded in Tatra NP by Błoszyk [1991], Napierała et al. [2006].

Urobowella advena (Trägårdh, 1912)

Species recorded in Tatra NP by Błoszyk [1991], Błoszyk et al. [2004], Dylewska and Błoszyk [2006], Napierała et al. [2006].

Urobowella borealis (Sellnick, 1940)

Species recorded in Tatra NP by Błoszyk [1991], Napierała et al. [2006].

TRACHYUROPODIDAE***Trachyuropoda coccinea*** (Michale, 1891)

Species recorded in Tatra NP by Błoszyk [1991], Napierała et al. [2006].

UROPODIDAE

Uropoda (Phaulodinychus) splendida Kramer, 1882

Species recorded in Tatra NP by Błoszyk [1991], Napierała et al. [2006].

Uropoda (Uropoda) minima Kramer, 1882

Species recorded in Tatra NP by Błoszyk [1991], Gwiazdowicz and Cichocki [2002], Napierała et al. [2006].

Uropoda (Uropoda) misella (Berlese, 1916)

Species recorded in Tatra NP by Błoszyk [1991], Gwiazdowicz and Cichocki [2002], Napierała et al. [2006].

Uropoda (Cilliba) cassideasimillis Błoszyk, Stachowiak et Halliday, 2006

Species recorded in Tatra NP by Napierała et al. [2006].

Uropoda (Cilliba) erlangensis Hirschmann et Zirngiebl-Nicol, 1969

Species recorded in Tatra NP by Napierała et al. [2006].

Uropoda (Cilliba) sp. – 48 (1D)

CONCLUSIONS

On the basis of the author's own research and the research conducted by other authors in the Tatra National Park 119 mite species from the order Mesostigmata have been reported, of which 13 were classified into the genus only and were treated in the register as separate species. The most numerous were families Parasitidae (27 species) and Zerconidae (14).

The analysis of the author's own material leads to the conclusion that the majority of samples feature the following species: *Veigaia nemorensis* (60 samples), *Trachytes aegrota* (40), *Pergamasus brevicornis* (31), *Gamasellus montanus* (30), *Zercon curiosus* (16), *Parazercon radiatus* (14), *Trachytes irenae* (13), *Zercon triangularis* (12), *Pergamasus (Pergamasus) mediocris* (11), *Trachytes pauperior* (11).

The species which featured the highest number of individual specimens were: *Veigaia nemorensis* (437 specimens), *Trachytes aegrota* (285), *Gamasellus montanus* (179), *Trachytes irenae* (132), *Zercon curiosus* (86), *Pergamasus brevicornis* (63), *Leptogamasus tatrensis* (59), *Zercon triangularis* (56), *Parazercon radiatus* (48), *Paragamasus brevipes* (46), *Cheiroseius necorniger* (46).

It is particularly noteworthy that a species new to science from the genus *Gamasselodes* [Gwiazdowicz and Walter 2005] was reported from the Tatra National Park.

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ROZTOCZE (*ACARI, MESOSTIGMATA*) TATRZAŃSKIEGO PARKU NARODOWEGO

Streszczenie. Praca ma charakter faunistyczny, a jej celem było sporządzenie wykazu roztoczy z rzędu *Mesostigmata* stwierdzonych na terenie Tatrzańskiego Parku Narodowego. Wykaz ten sporządzono na podstawie danych literaturowych oraz badań własnych przeprowadzonych na terenie parku. W pracy wyszczególniono 115 gatunków roztoczy z rzędu *Mesostigmata* stwierdzonych na terenie Tatrzańskiego Parku Narodowego. Najliczniej była reprezentowana rodzina *Parasitidae* (27 gatunków) oraz *Zerconidae* (14).

Słowa kluczowe: roztocze, *Acari, Mesostigmata*, Tatrzański Park Narodowy

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