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About the oribatid fauna of the Tisza basin /Oribatida, Acari/

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Abstract

The paper contains an enumeration of some oribatid mites discovered during investigation of the soil hardwood and softwood groves. The investigations took place in ten different collecting stations where 53 mite species were discovered. Three species of them: *Epidamaeus affinis*, *Metabelba monilipeda*, *Eupelops uraceus* were so far not demonstrated in the fauna of the Carpathian basin. The paper contains also a short description of these species.

Introduction

Our country can be considered as an area elaborated well enough from oribatidological point of view. From the Great Hungarian Plain, however, we know but a few data, first of all concerning the basin of the Tisza and its tributaries. In this paper the oribatid species discovered in the soil of the inundation groves of the Tisza and Kőrös are described. The results are of faunistical significance but I give to the ecology of the single species also the plant associations where the collections took place.

The species collected are published in taxonomical order, on the basis of B a l o g h's work published in 1963.

Collecting stations

A/1. Szeged-Boszorkánysziget /*Salicetum albae-fragilis* I S S L E R , February 28th 1969.

A/2. Szeged-Boszorkánysziget /*Alopecuretum pratensis-festucetosum pseudovinae*/S O Ó/, February 28th 1969.

B/1. Békéscsaba-Gerla /*Fraxino pannoniacae-Ulmetum pannonicum* S O Ó/, April 8, 1969.

B/2. Békés-Tarhos /*Festuco (pseudovinae)-Quercetum roboris* M Á T H É/, April 26th 1969.

B/3. Gyula-Szanazug /*Festuco(pseudovinae)-Quercetum roboris* M Á T H É/, April 26th 1969.

C/1. Alpár-Tőserdő /*Convallario-Quercetum danubiale* S O Ó/, April 30th 1969.

C/2. Alpár /*Fraxino pannonicae-Alnetum* /Soó et K O M L Ó D I/, April 30th 1969.

D/1. Poroszló /*Salicetum albae-fragilis* I S S L E R/, July 30th 1969.

D/2. Poroszló /*Salicetum albae-fragilis* I S S L E R/, Wood grown by

Vitis silvestris/, August 2nd 1969.

D/3. Poroszló /*Salicetum albae-fragilis* I S S L E R /, young wood, started up from a clearing/, August 2nd 1969.

List of species collected

H Y P O C H T H O N I I D A E B E R L E S E, 1910
Hypochthonius luteus O U D E M A N S, 1913. B/2, B/3, C/2.

E N I O C H T H O N I I D A E G R A N J E A N, 1947.
Eniochthonius minutissimus B E R L E S E, 1904. B/1, B/2, B/3, C/1.

P H T H I R A C A R I D A E P E R T Y, 1841.
Stegnacarus striculus C. L. K O C H, 1836. A/1, C/2.
Phthiracarus piger S C O P O L I, 1763. B/2, C/2,
Phthiracarus anonimum G R A N D J E A N, 1933. B/2, B/3, C/2, D/1, D/2.

E U P H T H I R A C A R I D A E J A C O T, 1930
Rhysotritia ardua C. L. K O C H, 1841. A/1, A/2, B/1, B/3, D/1, D/3.

N O T H R I D E A B E R L E S E, 1896
Nothrus biciliatus C. L. K O C H, 1844. B/2, C/2, D/3.

C A M I S I I D A E O U D E M A N S, 1900
Camisia horrida H E R M A N N, 1804. C/2, D/1.
Camisia biurus C. L. K O C H, 1840. D/2.
Platynothrus peltifer C. L. K O C H, 1839. A/1, A/2, B/3, C/1, C/2, D/1.

T R H Y P O C H T H O N I I D A E W I L L M A N N, 1931
Trhypochthonius excavatus W I L L M A N N, 1919. D/1.

N A N H E R M A N N I I D A E S E L L N I C K, 1928.
Nanhermannia elegantula B E R L E S E, 1913. C/2.

D A M A E I D A E B E R L E S E, 1896
Damaeus /Spatiodamaeus/verticillipes N I C O L E T, 1855.
A/1, A/2, B/1, B/2, B/3, C/2, D/1, D/2, D/3.

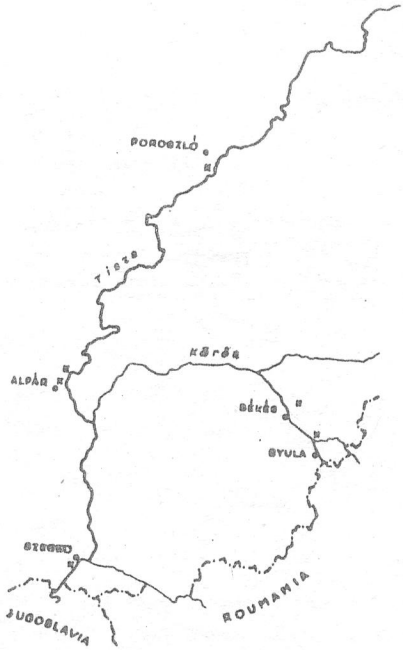

Fig.1. Map of collecting stations

Epidamaeus affinis B U L A N O V A - Z A C H V A T K I N A, 1957. A/1, C/2, D/1.

It is a new species for the fauna of the Carpathian basin. It is an animal of dark brown. The parastigmal apophyses are similar, narrow, parallel with each other. The protrusion of *propodosoma* between legs I. and II is rounded, low. There are two pairs of propodosomal tubercles, the internal one taking place under the anterior exostigmal hair, the external one under the *bothrydium*. The external propodosomal tubercle is stronger developed than the internal one, and is "V"-or crescent-shaped; the inner one extends from the tubercle till the *bothrydium*. The *sensillus* is a strong, long bristle, covered with small hair, being straight or broken at its root a little forwards or upwards. The anterior exostigmal hair is needle-shaped, straight, pointing backwards; the posterior one is short, standing forwards and being curved. There is a long, narrow *spinae adnatae*, pointing to the middle-line of the body. The *notogaster* is of spherical form. The hair of *notogaster* is long, thin, smooth, and lying in two longitudinal lines. The anterior four pairs of hair point forwards, the other ones backwards /Fig. 2/.

Length: 670 µ., width: 410 µ.

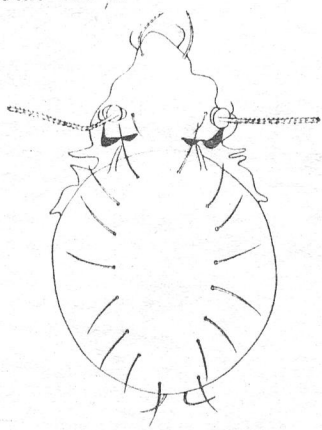

Fig. 2. *Epidamaeus affinis* BULANOVA-ZACHVATKINA, 1957

The species is described from the environs of Moscow where it was recovered in the leaf-litter of a mixed wood /B u l a n o v a - Z a c h v a t - k i n a, 1957/.

Metabelba pulverulenta C. L. K O C H, 1840. A/1, A/2, B/1, B/2, B/3, C/1, D/3.

Metabelba papillipes NICOLET, 1855. B/1, B/2.

Its colour is dark brown. The protrusion of proterosoma between leg-pairs I and II is well-developed, pointing forwards. There are a pair of propodosomal tubercles, opposite to which there are a pair of tubercles on the *hysterosoma*, too. The sensillus is getting gradually thinner, whip-shaped, it is increased about threefold as compared with the anterior exostigmal hair. The parastigmal apophyses are not equal, the anterior one /a.p.a./ is narrow, pointed, standing at side; the posterior one /a.a.p./ is thick, its point stands at right angles to the former one. The *hysterosoma* is of spherical form. The back-hair is smooth, equally long, standing radiating in two longitudinal lines. *Tibia* IV is shorter than the *femur* /Fig.3/.

Length: 450 µ, width: 280 µ.

Finding places were so far: Kursk, Sub-Carpathia /B u l a n o v a - Z a c h - v a t k i n a 1965/. Szemenye and Székesfehérvár /Balogh, Kassai and Mahunka 1965/.

Metabelba monilipeda B U L A N O V A - Z A C H V A T K I N A, 1965. C/2.

It is a new species for the fauna of the Carpathian basin. It is a dark brown animal. The protrusion of *propodosoma* between legs I and II is blunt, undeveloped. The fore-part of *rostrum* is cut, its corners are rounded. It

has a pair of propodosomal tubercles, their points touching a pair of hysterosomal tubercles. The posterior exostigmal hair is long, whip-like, its length is hardly shorter than the sensillus. The *sensillus* is whip-like. The lamellahair is much stronger than the rostral one, and is serrated. Among the parastigmal apophyses there is a triangle-shaped exsection pointing outwards with its tip, and thus the tips of the apophyses get to each other. The back-hair is smooth, ordered in two longitudinal lines, standing radiated /Fig.4/.

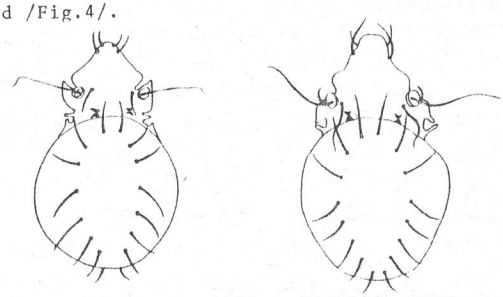

Fig. 3. *Metabelba papillipes* NICOLET, 1855
Fig. 4. *Metabelba monilipeda* BULANOVA-ZACHVATKINA, 1965.

Length: 480 u, width: 300 u.
Described by B u l a n o v a - Z a c h v a t k i n a from a pine-wood, in Teberd /1965/.

E R E M A E I D A E S E L L N I C K, 1928

Eremaeus oblongus C.L. K O C H, 183 . C/2, D/3.

M E T R I O P P I D A E B A L O GGH, 1943

Ceratoppia bipilis HERMANN, 1840. B/1, B/3, C/2, D/1, D/2, D/3.
Ceratoppia sexpilosa WILLMANN, 1938. B/1.

L I A C A R I D A E S E L L N I C K, 1928

Liacarus coracinus C. L. K O C H, 1840. A/1, A/2, C/1.
Xenillus tegeocranus HERMANN, 1804. C/2.

T E N U I A L I D A E J A C O T, 1929

Hafenrefferia gilvipes C. L. K O C H, 1840. C/2.

C A R A B O D I D A E C. L. K O C H, 1837

Carabodes labyrinthicus M I C H A E L, 1879. C/2.

TECTOCEPHEIDAE GRANDJEAN, 1954.

Tectocepheus sarekensis TRAG., 1910. A/1, B/2, B/3, C/1, C/2, D/2, D/3.

OPPIIDAE GRANDJEAN, 1954

Oppia ornata OUDEMANS, 1900. A/1, B/1, B/2.
Oppia splendens C. L. KOCH, 1840. A/1, D/1, D/2, D/3.
Oppia nitens C. L. KOCH, 1836. D/2.
Oppia subpectinata OUDEMANS, 1901. B/2, B/3, C/1.
Oppia unicarinata PAOLI, 1908. B/1, C/2.
Oppia bicarinata PAOLI, 1908. C/2, D/2.
Oppia clavipectinata MICHAEL, 1885. B/2.
Quadroppia quadricarinata MICHAEL, 1885. C/2.

SUCTOBELBIDAE GRANDJEAN, 1954

Suctobelba sp. C/1.

PELOPIDAE EWING, 1917

Eupelops tardus C. L. KOCH, 1836. A/1. A/2.
Eupelops uraceus C. L. KOCH, 1840. C/2.
It is a new species for the fauna of the Carpathian basin. Its colour is dark brown. The *lamellae* are pointed leaf-shaped, bending somewhat towards one another, overlapping the *rostrum*, their root being covered with the wavy-edged collar of the *hysterosoma*. The *bothrydium* is at the contact of this projection and the *pteromorpha*, not entirely covered.
The *sensillus* is somewhat thicker, spindle-like, with a rounded end. The back is covered with thick *excreta*, engraved with an irregular drawing. Hair S3 and R3 is thickenned, barbed, the other back-hair simple.

It is not identical with *Phenopelos uraceus*, contained in Sellnick's /1960/ determination. I have determined it according to Willmann /1931/ /Fig.4./

Length: 680 u, width: 510 u.

Described from Regensburg /Willmann, 1931/.
Eupelops sp. B/2, B/3, C/1.

ACHIPTERIIDAE THOR, 1929

Achipteria coleopterata LINNAE, 1758. A/2, C/1, C/2.
Parachipteria punctata NICOLET, 1855. B/2, B/3, C/1, C/2.
Anoribatella ornata SCHUSTER, 1958. A/1.

ORIBATELLIDAE JACCOT, 1925

Oribatella reticulata B E R L E S E, 1916. B/2, A/1, A/2.
Ophidiotrichus connexus S E L L N I C K, 1908. C/2.

T E G O R I B A T I D A E G R A N D J E A N, 1954

Lepidozetes singularis B E R L E S E, 1910. A/1.

M Y C O B A T I D A E G R A N D J E A N. 1954.
Minuthozetes pseudofusiger S C H W E I Z E R, 1922. C/2.

C H A M O B A T I D A E G R A N D J E A N, 1954
Chamobates cuspidatus M I C H A E L, 1884. C/2.

G A L U M N I D A E G R A N D J E A N, 1956
Galumna lanceata O U D E M A N S, 1900. B/2, B/3.
Pergalumna nervosa B E R L E S E , 1914. C/1, C/2.
Pergalumna sp. C/2, D/1.
Pilogalumna tenuiclava B E R L E S E, 1908. B/1, C/1.

O R I B A T U L I D A E T H O R, 1929
Oribatula tibialis N I C O L E T, 1855. C/2, D/3.
Liebstadia similis M I C H A E L, 1888. C/1, C/2, D/1, D/3.
Scheloribates laevigatus C. L. K O C H, 1836. A/1, A/2, B/2, C/1, C/2, D/1, D/2, D/3.

H A P L O Z E T I D A E G R A N D J E A N, 1936
Protoribates capucinus B E R L E S E, 1908. A/1, A/2.

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