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On an Interesting New Eremella Species (Acari, Oribatei)

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Dr. Z. Kaszab, Director of the Zoological Department of the Hungarian Natural History Museum, sifted the debris of a decaying birch-tree stump in the course of an entomological collecting trip to the marshy region called „Töreki láp" near the Lake Balaton, on 8th May 1953. Accompanying two very interesting Mesostigmata species (*Liroaspis sejiformis* [Bal.] 1938, and *Metagynella carpathica* [Bal.] 1943), I found yet the following well-known Oribatid mites: *Anachipteria ornata* Schuster 1958, *Trichoribates trimaculatus* (C. L. Koch) 1836, *Sphaerozetes orbicularis* (C. L. Koch) 1836, *Ceratozetes mediocris* Berl. 1908, *Galumna obvius* Berl. 1913, *Liebstadia similis* (Mich.) 1885, *Paraleius leontonycha* (Berl.) 1910, and *Protoribates capucinus* Berl. 1908.

Besides these Oribatid mites, I found several specimens of a new *Eremella* species in the material examined. The genus *Eremella* Berl. 1913 is very incompletely known. Berlese created it in 1913, and described and allocated two new species to it: *Eremella vestita* Berl., 1913, and *Eremella induta* Berl., 1913. Both species occur in Java. Corresponding to the state of acarology of those times, Berlese submitted two dorsal figures of the species. The figures are probably not exact enough in all details, but they seem to be sufficient for the identification of the species. No other publication was made of the genus *Eremella* Berl., 1913 to this very day. Balogh described, some years ago (1959), a near ally of the genus from Hungary, namely *Proteremella* Bal. 1959. This genus is highly similar, concerning habitus, to *Eremella* Berl., 1913, differing only in the type of the 7 pairs of dorsal hairs. The dorsal hairs (also 7 pairs) of the two *Eremella*-species from Java conspicuously broaden apically, while *Proteremella* has normal, really hair-like, dorsal hairs. And this is all which was made known of this interesting Oribatid group up to date. Balogh (1961), in his recently published systematical review, united provisionally both genera in the family *Eremellidae* Bal., 1961, allocating it to the superfamily *Oppioidea*.

Accordingly, I was much surprised when I found the new *Eremella* species in Z. Kaszab's material. If we accept Balogh's generic characterization, the new species unquestionably belongs to the genus *Eremella*. Therefore, far from having found the second species of the Hungarian genus *Proteremella* Bal., 1959, we are rather confronted with the first European taxon of the Javanese genus *Eremella* Berl., 1913. From the point of view of zoogeography, the new species is a still greater surprise than was the description of *Proteremella*. I dedicate the new species to Dr. Z. Kaszab, who, in the course of his entomological activities, also regularly collects Oribatids since more than 25 years, and had enriched with many valuable data our knowledge of the acarofauna of Hungary.

Eremella kaszabi sp. n. (Figs. 1—2)

252—271 × 145—147 μ. Sensillus broad, almost fan-shaped, similar to those of *Licnodamaeus* species, bearing short, rigid hairs. Interlamellar hairs small, thin, directed inwards. Lamellar and rostral hairs situated much in front,

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near rostrum, smooth. Starting from bothrydium and almost to bases of lamellar hairs, there extends a costule on each side of prodorsum, converging till middle of prodorsum, from then on divergent. Prodorsum ornamented with irregular chitinous tubercles, connected by reticulate lines between bothrydia.

Articulations of legs with „crispins", tarsi three-clawed, lateral claws much thinner than medium one. Joints of legs with undulating transverse lines.

Notogaster with 10 pairs of hairs. Hairs p_1, p_2 and p_3 minute, not broadening, ciliate on exterior side. Remaining 7 pairs of hairs larger, incrassate toward apices, fusiform, with short, rigid hairs, similarly to sensillus. Notogaster with small, darker tuberculi and a fine, irregularly reticulate structure.

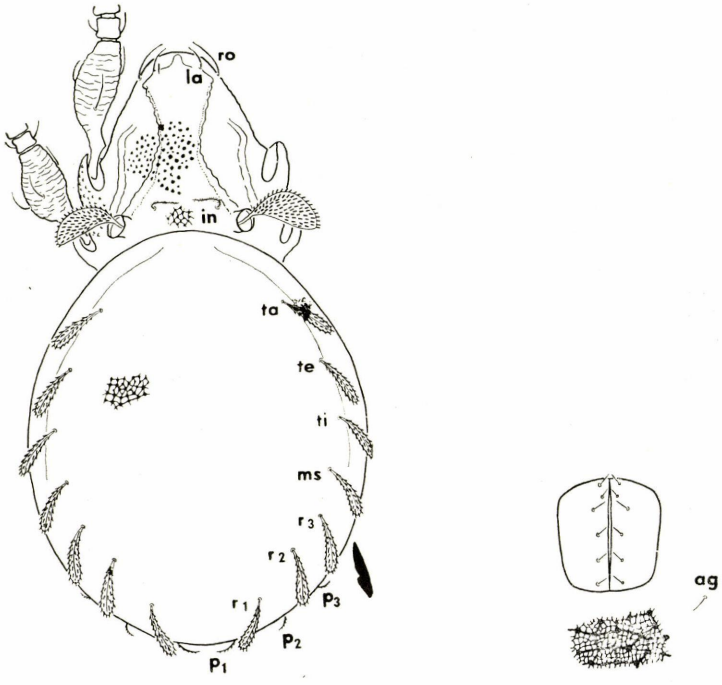

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Fig. 1. *Eremella kaszabi* sp. n.: dorsal view. — Fig. 2. genital region.

Ventral side: Genital and anal plates distant. Number of genital hairs 6, that of anals 2. Ventral plate similar to notogaster, but with a more complex reticulate structure.

Holotype: 1 ex. (252 × 145 μ); paratypes: 4 ex. In the collection of the Zoological Department of the Hungarian Natural History Museum.

Eremella kaszabi sp. n. differs from all known species of the family *Eremellidae* BAL., 1961 in three characters:

1. There are, besides the 7 pairs of marginally situated dorsal hairs, also 3 pairs of minute, not broadening, ciliate *p*-hairs. Neither BERLESE nor BALOGH mentioned any such hairs, even though BERLESE indicates one pair of *p*-hairs on the figure of the species *Eremella vestita* BERL. 1913 (Redia, 9, Tav.

VII, Fig. 78). It is possible that these hairs are present on all species, but they are very small and may have escaped attention. On the other hand, they might have completely reduced in some species.

2. The tarsi are three-clawed in the new species, but the two lateral claws are much thinner than the middle one. Both BERLESE and BALOGH described and figured their species as displaying but one claw. It is again possible that there are 1- and also 3-clawed species in the family, and also that all taxa are 3-clawed but the lateral claws are very thin and might break off in alcohol or lactic acid. This question can be decided by the examination of fresh material only.

3. The new species has 6 pairs of genital hairs; BALOGH mentions in his text and description only 5 pairs, while BERLESE omitted to describe the ventral plate. In all likelihood, all species display 6 pairs of genital hairs, but since the hairs as well as a part of the insertion points are very tiny and hardly visible (especially the first pair), it is quite possible that not all genital hairs can be easily ascertained.

We fail to know anything definite yet of the ecology of the species of the family *Eremellidae* BAL. 1961. However, the accompanying fauna of the new *Eremella* species is very striking. Till very recent times, *Lyroaspis sejiformis* (BAL.) 1938, and *Metagynella carpathica* (BAL.) 1943, have been endemisms of the Carpathian Basin. The former was recently published by Mrs. C. ATHIAS-HENRIOT from Spain, collected by H. FRANZ. The species occurs in Fagetum associations in the Carpathian Ukraine (SSSR) and in some points of Hungary. The latter species was found, according to KRASHINSKAIA (1961), in the Leningrad district (SSSR). The species probably favours the hollows of trees, and generally seems to be xylophilous.

The occurrence of the species *Anachipteria ornata* SCHUSTER, 1958 was, up to now, known from sites in utter contrast with the former one. SCHUSTER described the species from the vicinity of the Neusiedlersee (on the border of Austria and Hungary), from soda fields. It is to be found in like places also in Hungary. The common occurrence of xylophilous (characteristical of Fagetums) and natronophilous species is extraordinary. It is difficult to draw, from this accompanying fauna, any conclusions on the habitat of *Eremella kaszabi*, and the more so if we consider the fact that both known species of the genus *Eremella* live in Java. At the present moment, the occurrence of the species in Central Europe is a zoogeographical surprise and an oecological mystery which might be cleared up only by further researches.

Of the species enumerated above, *Lyroaspis sejiformis* (BAL.) 1938, *Metagynella carpathica* (BAL.) 1943, *Paraleius leontonycha* (BERL.) 1910, and *Galumna obvius* (BERL.) 1913 were hitherto unknown from Hungary.

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