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SHORT COMMUNICATIONS

RHADINOPSYLLA (ACTENOPHTHALMUS) MESOIDES SMIT, 1957 (SIPHONAPTERA, HYSTRICHOPSYLLIDAE) IN CZECHOSLOVAK WESTERN CARPATHIANS

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Abstract. A series of 50 specimens of *Rhadinopsylla mesoides* was found among fleas of small rodents in the western Carpathians. According to variability of some characters in *Rh. mesoides* from the High Tatras the authors consider the subspecies *Rhadinopsylla mesoides skuratowiczi* Bartkowska, 1972 to be a synonym of *Rhadinopsylla mesoides* Smit, 1957.

The ectoparasites of small mammals and inhabitants of their nests were collected by the workers of the Zoology Department, Natural History Faculty, Comenius University (Bratislava) and the workers of the Institute of Parasitology, Czechoslovak

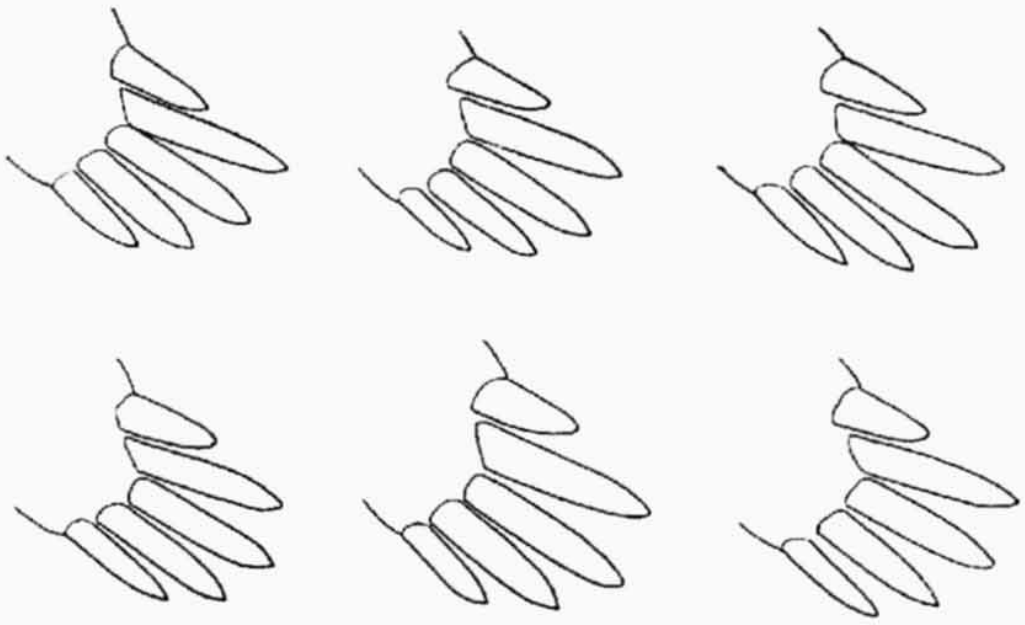

Fig. 1. *Rhadinopsylla mesoides*, structure of genal ctenidium in specimens from northern Moravia (environs of Velké Karlovice).

Academy of Sciences (Praha) between 1959 and 1960 in the mountain ranges Vsetínské kopce and Javorníky (environs of the village Velké Karlovice) and between 1960 and 1966 in the High Tatras. The flea material collected from the environs of Velké Karlovice was evaluated in detail in a separate paper (Ryba et al. 1975). The flea

material found in the western Carpathians exceeds 3,500 specimens, including 30 species. The finding of a series of specimens of the species *Rhadinopsylla mesoides* contributes to the knowledge on ecology, distribution and taxonomic position of this species and to the evaluation of some diagnostic characters in the subgenus *Actenophthalmus*.

Rhadinopsylla (Actenophthalmus) mesoides Smit, 1957 = *Rhadinopsylla mesoides skuratowiczi* Bartkowska, 1972 Syn. nov.

Material studied: 1♀ from *Clethrionomys glareolus*, Makytka (near Velké Karlovice), 9. 12. 1960; 1♀ from the nest of *C. glareolus*, Dyněák (near Velké Karlovice), 16. 7. 1960; 4♂ from the nest of same host from same locality, 17. 7. 1960; from the High Tatras: 1♂ from *Microtus arvalis*, near

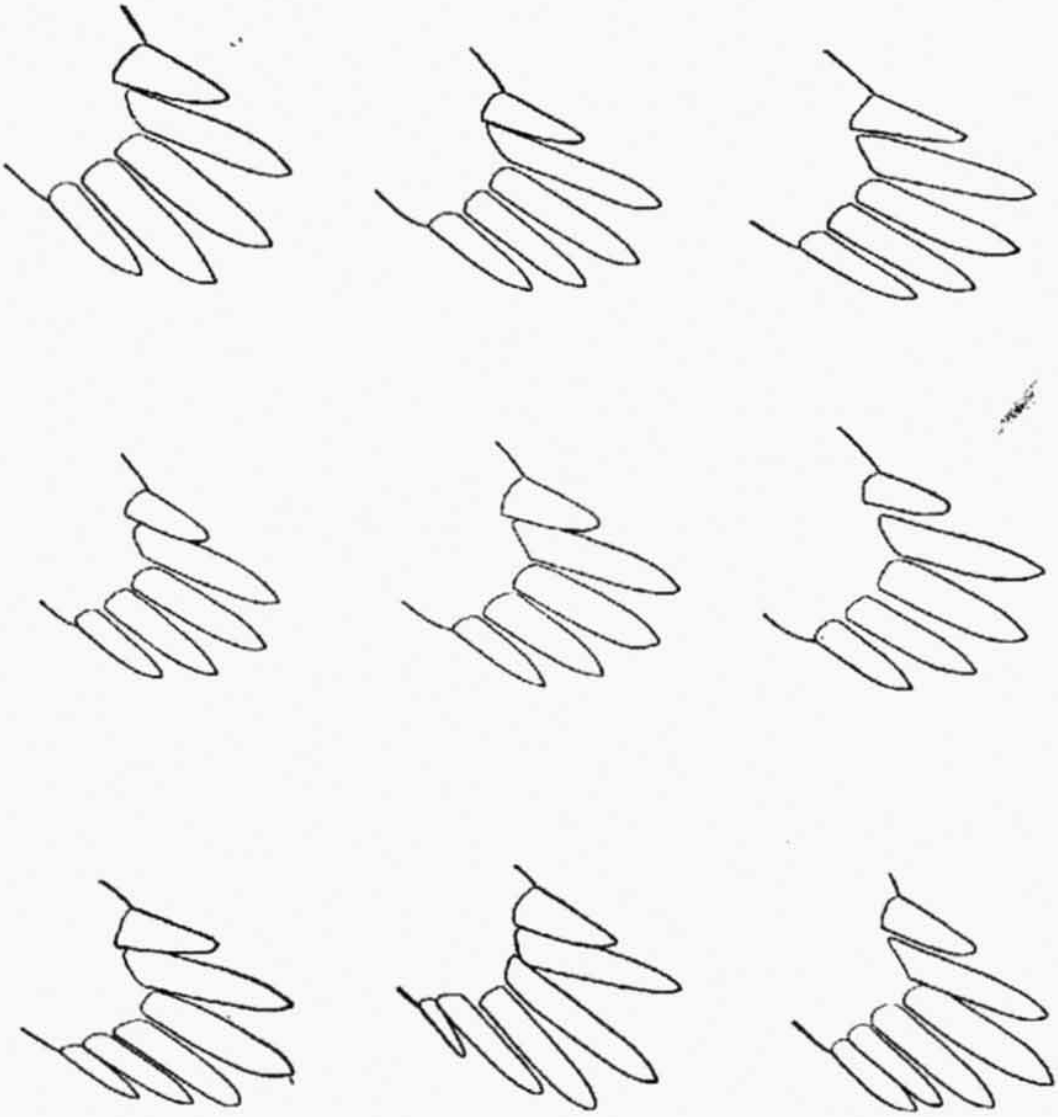

Fig. 2. *Rhadinopsylla mesoides*, structure of genal ctenidium in specimens from the High Tatras.

Lysá Polana, 21. 11. 1962; 2♂ from 2 *C. glareolus*, confluence of Mengušovská and Mlynická valleys, 17. 10. 1962; 1♀ from *C. glareolus*, near Starý Smokovec, 12. 12. 1962; 1♀ from *Microtus nivalis*, Mengušovská valley (below Hinc lakes, 1800 m), 11. 1948, lgt. J. Hanzák; 2♂ from *C. glareolus*, waterfalls below the Kamzík Chalet, 19. 12. 1956, lgt. B. Rosický; 11♂ and 10♀ from the nest of *Apodemus flavicollis*, the upper part of the Furkotská Valley, 25. 7. 1963; 2♂ and 9♀ from the nest of *Microtus agrestis?*, near Lysá Polana, 4. 8. 1961; 2♂ and 2♀ from the nest of *C. glareolus*, Mengušovská Valley, 13. 7. 1963; 1♀ from the nest of *C. glareolus*, Červená dolina, 17. 6. 1962.

Rh. mesoides has been so far reported from the mountains of France, Greece, Romania and Poland; from Czechoslovakia it was recorded by Rosický (1950) and Jurík (1960) as *Rh. mesa* J. & R. 1920. In our Carpathians this species occurs from the sub-

montane zone—the timber line seems to be the most suitable environment for it (most localities in the High Tatras)—to the alpine zone. It occurs more frequently in the nests than on hosts themselves; females with developed ovaries were found in the nests of *A. flavicollis*, *C. glareolus* and *M. agrestis?* in July and August. Markevich and Yurkina (1972), reported the occurrence of *Rhadinopsylla mesa mentschuli* (nomen nudum) in the Ukrainian Carpathians as one of the endemic species of the Carpathian mountain system. Most probably this undescribed taxon is identical with *Rh. mesoides* Smit.

From the Polish Tatras Bartkowska (1972) described the subspecies *Rhadinopsylla mesoides skuratowiczi* on the basis of a different structure of the genal ctenidium.

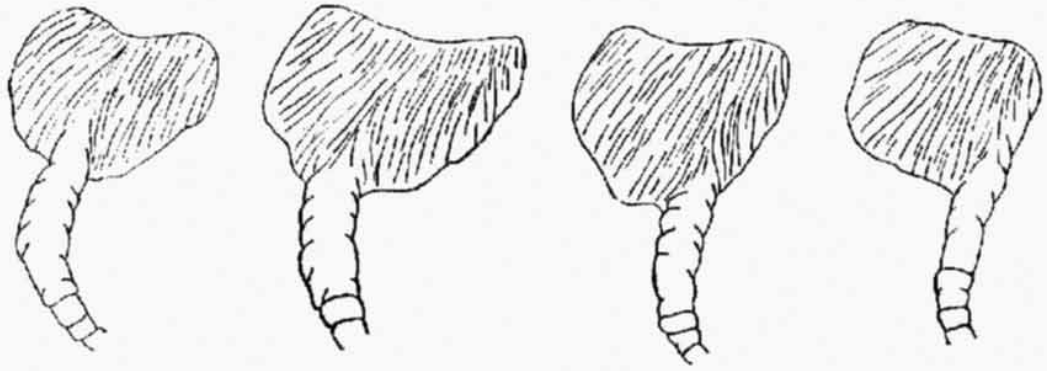

Fig. 3. *Rhadinopsylla mesoides*, spiraculum of tergum VIII in males from the High Tatras.

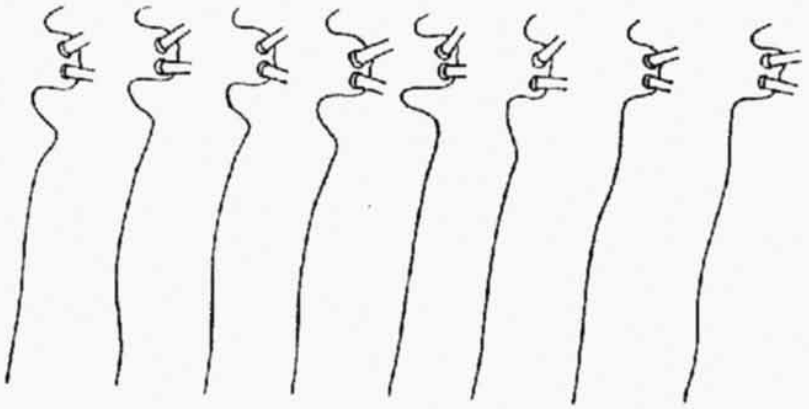

Fig. 4. *Rhadinopsylla mesoides*, outlines of the upper portion of tergum VII in females from the High Tatras.

In contrast to the holotype *Rh. mesoides* Smit, the Polish specimens are characterized by the uppermost spine of genal ctenidium which is broader than its neighbour (at the base and in the middle) and about 1.3 times as broad as the lowest spine. There are also small differences in other characters (e.g. shape of spiraculum and chaetotaxy of the eighth segment in males). The structure of genal ctenidium in *Rh. mesoides*, however, is an variable character, similarly as e.g. in *Rh. (Actenophthalmus) integella*. In the specimens from the Tatras the uppermost spine of genal ctenidium is broader (at the base and in the middle) than its neighbour in several cases only. In most cases it is broader than the lowest spine, but it is the same characteristic of females depicted by Beaucournu and Bernard (1972) from southern France.

Two specimens from the Tatras possess 6 spines in the genal ctenidium (in one on both sides, in the other on one side only—see the last three outlines in Fig. 2). Quite a variable character is the number of setae on sternum VIII in males: in specimens from Poland

and Greece 6—8, in holotype 5; in specimens from the High Tatras 6 setae on the average, less frequently 5, exceptionally 4 or 7. Polish specimens differ from the Greek ones in the shape of spiraculum on tergum VIII in males; variability of this character is given in Fig. 3.

The sinus and projecting lobe below antesensilial setae on tergum VII in female of Polish specimens are somewhat more marked than in females from southern France. This character is not constant either, as shown in Fig. 4. Spermatheca and sternum VII do not differ from the specimens from Poland and France.

Quite variable are also some other characters, e.g. number of setae in submarginal frontal row (in holotype 6 each side): in our specimens 5 on the average, more rarely 4, singly 6 on one side.

The pronotal ctenidium mostly consists of 20—21 spines, exceptionally of 22—23, in one case of 25, the lowest spine is much reduced and frequently does not attain the size of tergal spinelets. Sternum VII in females usually bears 4 long setae, less often 3 or 5.

As our localities of *Rh. mesoides* in the High Tatras are only a few kilometers distant from terra typica of the new subspecies described by Bartkowska we have probably to do with the same regional population. After comparing the characteristic features of our specimens with the data of Bartkowska (1972) and Beaucournu and Bernard (1972) we recommend to consider *Rhadinopsylla mesoides skuratowiczi* Bartkowska, 1972 as a synonym of *Rhadinopsylla mesoides* Smit, 1957. In view of the considerable variability of diagnostic characters in *Rhadinopsylla (Actenophthalmus)*, the description of subspecies appears to be inadvisable in this subgenus.

Acknowledgements. The authors thank all workers who have participated in the expeditions to the western Carpathians, particularly Professor M. Mreiak, head of the Department of systematic and ecologic zoology, Natural History Faculty of the Comenius University in Bratislava, for making available the material from the High Tatras as a basis of this study. The authors are also grateful to Mr. F. G. A. M. Smit of the British Museum (Natural History), London, for valuable suggestions and for examining our specimens of *Rh. mesoides*.

RHADINOPSYLLA (ACTENOPHTHALMUS) MESOIDES SMIT, 1957 (*SIPHONAPTERA, HYSTRICHOPSYLLIDAE*) В ЗАПАДНЫХ КАРПАТАХ ЧЕХОСЛОВАКИИ

Й. Рыба и Б. Росицкий

Резюме. Среди блох мелких млекопитающих в Западных Карпатах авторами обнаружена серия 50 особей вида *Rhadinopsylla mesoides*. Ввиду вариабильности некоторых признаков у *Rh. mesoides* из Высоких Татр авторы рекомендуют считать подвид *Rhadinopsylla mesoides skuratowiczi* Bartkowska, 1972 синонимом вида *Rhadinopsylla mesoides* Smit, 1957.

REFERENCES

BARTKOWSKA K., *Rhadinopsylla mesoides skuratowiczi* ssp. n. (Siphonaptera) z Tatr. Pol. Pismo ent., Wroclaw 42: 807–816, 1972.

BEAUCOURNU J. C., BERNARD M. R., Description de la femelle vraisemblable de *Rhadinopsylla* (*Actenophthalmus*) *mesoides* Smit, 1957 (Siphonaptera, Hystrichopsyllidae). Cah. O.R.S.T.O.M., sér. Ent. méd. et Parasitol. 10: 57—61, 1972.

JURÍK M., Aphaniptera drobných cicavcov Badínskeho pralesa (Kremnické hory). Biológia (Bratislava) 15: 847—849, 1960.

MARKEVICH A. P., YURKINA V. I., The ecological and geographical peculiarities of the flea fauna (Siphonaptera) of the Ukraine. Abstracts 14th Int. Congr. Ent., Canberra, p. 195, 1972.

ROSICKÝ B., Predbežný katalog bĺch (Aphaniptera) z územia Slovenska. Prírod. sborn. 5: 155—176, 1950. C

RYBA J., ROSICKÝ B., DANIEL M., MRCIAK M., Siphonaptera of small terrestrial mammals and their nests in the Western Carpathians. Folia parasit. (Praha) 22: 45—56, 1975.

SMIT F. G. A. M., New Hystrichopsyllid Siphonaptera. Bull. Brit. Mus. (Nat. Hist.) Ent. 6: 47-75, 1957

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NOMENCLATORIC NOTE ON SOME FEATHER MITE TAXA (SARCOPTIFORMES: ANALGOIDEA)

Shumilo, Černý and Tichon (Parazity zhivotnykh i rasteniy (Kishinev) 9: 192—208, 1973) after consultation with Dr Gaud (Rennes) listed in their paper concerning feather mites from Moldavia and the Ukraine some genera and species in belief that the descriptions would be published in the same year. This did not happen. Hence, some comments to the names used must be made.

1) The generic names *Aetacarus* Gaud et Atyeo, 1973, *Anepigynia* Gaud et Atyeo, 1973 and *Paragabucinia* Gaud, 1973 should be considered as nomina nuda. All these names were published as new taxa as late as in 1975 by Gaud and Atyeo (Acarologia 16: 522—561) as members of a new family — Gabuciniidae.

2) On the basis of a letter of Dr Gaud the species *Gabucinia nisi* was referred to as *Aetacarus nisi*. But in the revision of Gaud and Atyeo (l.c.) this species was selected as a type-species of the new genus *Hieracolichus*. Hence, the combination *Aetacarus nisi* is incorrect.

3) The name *Paragabucinia cardiura* Gaud, 1973 for a parasite of *Caprimulgus europaeus* continues to be nomen nudum, because in the description of the new genus *Paragabucinia* only its type-species *P. petitoti* (Gaud et Mouchet, 1954) was mentioned.

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