Доклады Болгарской Академии Наук Comptes Rendus de l'Académie Bulgare des Sciences Tome 10, № 5, Septembre—Octobre 1957



A NEW LOUSE SPECIES CYCLOPHTHIRUS FERRISI N. SP. (ANOPLURA) ON CITELLUS CITELLUS L. IN BULGARIA

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ZOOLOGIE

A NEW LOUSE SPECIES CYCLOPHTHIRUS FERRISI N. SP. (ANOPLURA) ON CITELLUS CITELLUS L. IN BULGARIA

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Two louse species, Enderleinellus suturalis Osborn and Neophaematopinus laeviusculus Grube, found on various species of the Citellus genus in Eastern Asia and North America, have been described.

Quite common in Bulgaria, Yugoslavia, Rumania, Hungary, Czechoslovakia, Southeast Germany and West Ukraine is the species Citellus citellus L., on which no parasite of the Anoplura order had been found so far.

Yet when examining a large number of susliks, mainly from the Dobrudja, Rhodope mountains, directly below Bialmeken Peak, and Sofia region, I discovered quite a few parasites belonging to that order.

On two susliks, caught near the village of Bistritsa, Sofia county, I collected quite a number of adult and young lice belonging to the *Polyplax* genus. Since the species of this genus occur as parasites on rodents of the *Murudae* family, I was of the opinion that the suslik may be an untypical host. This can be checked after finding new stock. The parasites found by me were close to the P. spinulosus species. I described them as a new species *Polyplax bureschi* Tul. in my article "*Anoplura* on Wild Mammals in Bulgaria", published in the Bulletin of the Zoological Institute at the Bulgarian Academy of Science,

vol. VI, 1957.

I gathered 67 lice, of which 30 female, 19 male and 18 young, on 12 susliks, caught in Sofia valley near Kremikovtsi — XI. 1955 and 2. III. 1956, near Gintsi — 1. X. 1955, near Elin Pelin — 6. VII. 1956, and in the Rhodopes below Bialmeken Peak — 26. VII. 1956. By the structure of their two anterior pairs of legs these lice belong to the Enderleinellinae subfamily. But by the structure of the head, the location of the mouth, and the shape of the claws on the two anterior pairs of legs etc. these could not be classified under the Enderleinellus genus, as described by Fahrenholz in his article "Diagnosen neuer Anopluren" — Zool. Anz. Bd. 39, S. 54—56, although it is close to the Enderleinellus suturalis Osborn species. In his study "A Manual of External Parasites", written in 1929, H. Ewing, dividing the Enderleinellus genus into a number of genera, classifies E. suturalis in the newly-described Cyclophthirus genus. Our stock differs considerably from E. suturalis and, according to me, belongs to a new species. To make sure of my conclusion, I sent figures of the male genitals, sternal plate, head and anterior pair of legs to the well-known specialist on parasites, G. F. Ferris. He is of the opinion that the species is indeed new but could be classified under the Cyclophthirus Ewing genus. Accepting this opinion, I describe this new species by the name of Cyclophthirus ferrisi n. sp. in honour of the specialist on the Anoplura class, who helped me so much in my work on these parasites by sending me his works on this question.

Cyclophthirus ferrisi n. sp.

Female: Length of body — 0.67-0.83 mm. Head: width — 0.148 mm, length — 0.22 mm. Looked at from above, she has a regular ellipsoid rounded outline. The clypeal suture is inclined downwards

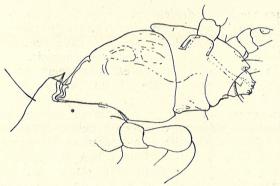


Fig. 1. Ciclophthirus ferrisi n. sp. Profile of head

at an angle of about 30°, hence the mouth, located terminally, remains below (Fig. 1). The temples behind the antennae subparallel with slight narrowing backward. The occipital edge is irregularly rounded and comprised by a cuneiform regular depression of the prothorax. Little hair, mainly along the anterior clypeal edge with four shorter and one longer hair on each side, a little thorn down to the base of the antennae and a small hair right before the clypeofrontal groove, another right behind it, one in the anterior part of the temple edge and a second in its middle and a tiny one in front of the occipital edge.

The two anterior pairs of legs are of equal size, their tarsus ending in thin, long, sharp claws which have a dent at the inner tip and look split (Fig. 2).

The sternal plate is non-pigmented and transparent and has a specific shape (Fig. 3).

The abdomen is elliptic; its length is 0.549 mm and its width 0.471 mm. The pleural plates have round wings, the second and third have hairs (Fig. 4). The second abdominal segment has features charac-

teristic of the Enderleinellinae subfamily with lengthened chitinous

Male: Length — 0.58-0.78 mm. Antennae same as in female. Abdomen rounder. The last abdominal segment is round and has two

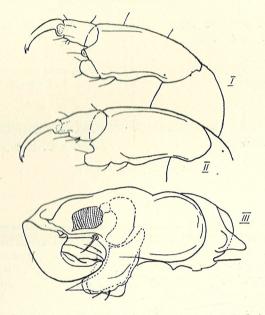


Fig. 2. Cyclophthirus ferrisi n. sp. Tarsus of 1st, 2nd & 3rd pairs of legs

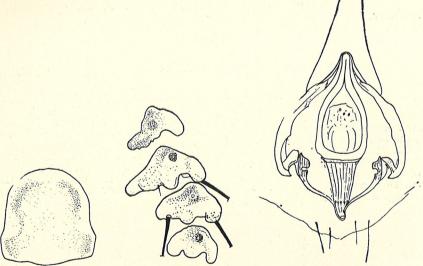


Fig. 4. Cyclophthirus ferrisi n. sp. Pleural plates

Fig. 3. Cyclophthirus

ferrisi n. sp. Steral

plate

Fig. 5. Ciclophthirus ferrisi n. sp. Male genitalia

long hairs, in between which there are two shorter hairs and two pairs of thorns, one of which is lateral to the long hairs and the other between the short hairs. The genital organ is reproduced in Fig. 5. The parameres terminate in a hooklike acute tip which is strongly twisted.

Cholotype # 62/98 from Kremikovtsi, Sofia county Genotype # 61/98 " " " "

> Zoological Garden of the Bulgarian Academy of Science

НОВЫЙ ВИД ВШИ *CYCLOPHTHIRUS FERRISI* N. SP. (*ANOPLURA*) У *CITELLUS CITELLUS* L. В БОЛГАРИИ

Кр. Тулешков

РЕЗЮМЕ

Автор обнаружил у Citellus citellus L. эктопаразиты из отряда Anoplura из которых один из рода Polyplax. С известным сомнением относительно хозяина, этот вид описан как Polyplax bureschi Tul. и опубликован в Известиях Зоологического Института в кн. VI, 1958 г.

Вши, собранные у сусликов из окрестностей гор. Софии, подножия Стара пл. и пика Коларов в Родопах, он описывает как *Cyclophthirus ferrisi* п. sp. в честь видного энтомолого, специалиста по отряду *Anoplura* G. F. Ferris. Этот вид принадлежит к группе *Enderleinellus suturalis* Osborn.

Свои описания автор иллюстрирует соответствующими рисунками.

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