

## A NEW PENENIRMUS SPECIES (MALLOPHAGA)

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Studying the material of the Mallophaga order, which I collected as member of an expedition to the Strandja Mountains in South-east Bulgaria, where we investigated certain centres of epidemics, I was able to establish several new species of this group of insects found as parasites on the birds we investigated in that region. Owing to insufficient material, a final study of these species will have to wait until the collection of additional data. The present paper deals only with one species, of which I possess sufficient material, including material of related species for comparison.

*Penenirmus blagoveshtchenskyi* n. sp. Host: *Emberiza calandra* L. from South-east Bulgaria, in the vicinity of the village of Vesseliyé near Bourgas, on July 9, 1959, and from the village of Groudovo (Sredets), south-west of Bourgas, on July 12, 1959.

Material: 6♂, 10♀ and 5 juv.

Female: The head gradually narrows towards the front, with side edges folded inside in a slightly archlike manner. The front end of the clypeus is almost straight, with rounded tips and a slightly archlike folding. The clypeal lamina with front edge is folded archlike inside, the side edges moving somewhat away to the rear, while the rear end is not too pronounced. The conic growth is very long, chitinized in its rear half and towards the tip, and pigmented in chestnut. The occipital edge protrudes archlike in the middle. The pleural plates of the abdomen are dark brown to chestnut, while the dorsal plates are broad and light chestnut, with the stigmata on the 2—7 segment widely encircled in white, as well as the hairy warts. The terga and sterna have one row of long hair each, which in the latter are particularly long in the middle. The end of the abdomen is divided into two. The general colour is light brown, darker at the periphery.

The head and genital spots are given in Figs. 3 and 4.

Male: The hair on the terga are denser and longer, while on the sterga rarer and short. The abdomen has a narrow archlike end with two long and two short hair.

The adult insect and the genitals are given in Figs. 1 and 2.

The parasites were collected from the head and front part of the neck of the birds. Eggs were found in larger quantities mainly in the corners of the mouth to the ear openings, as well as in the front part of the forehead

Dimensions in mm

No.	Female				Male			
	length		width		length		width	
	head	total	head	abdomen	head	total	head	abdomen
1	0.4884	1.5096	0.4884	0.5920	0.4440	1.3760	0.4440	0.5476
2	0.5328	1.6724	0.5328	0.6068	0.5032	1.5096	0.4884	0.6512
3	0.5180	1.5392	0.4884	0.5772	0.5180	1.5984	0.5180	0.6512
4	0.5180	1.6132	0.5032	0.6512	0.4884	1.5540	0.4884	0.6364
5	0.6216	1.5540	0.5032	0.5476	0.4884	1.3912	0.4440	0.5476
6	0.5180	1.5836	0.5180	0.5920	0.4884	1.3912	0.4588	0.5624
7	0.5180	1.5688	0.4884	0.6216				
8	0.5180	1.6576	0.5032	0.6068				
9	0.5032	1.6428	0.4884	0.6068				
10	0.5180	1.5836	0.5032	0.6216				
Average	0.5254	1.5925	0.5017	0.6024	0.4885	1.4703	0.4736	0.5996

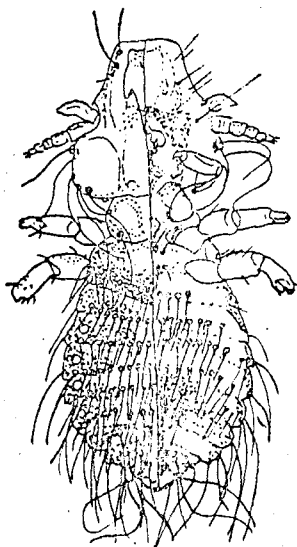


Fig. 1. *Penenirmus blagoveshtchenskyi* n. sp. ♀

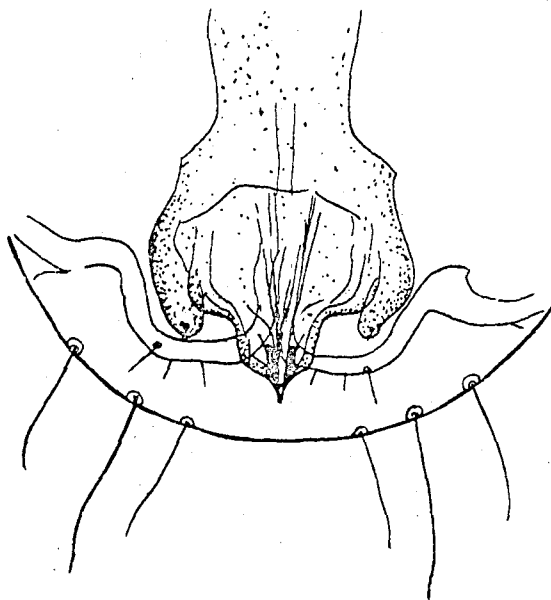


Fig. 2. *P. blagoveshtchenskyi* n. sp. male genitals

and beneath the throat just behind the bill. At the moment of collection the number of hatched eggs exceeded that of unhatched.

I possess rather abundant material on the species belonging to the *Penenirmus* genus in our country, which was used as comparison in the above description of the new species. The differences are pronounced both in the shape of the front clypeal edge and conic growth in the clypeal field, as well as in the genital apparatus of the males and the genital field of the females.

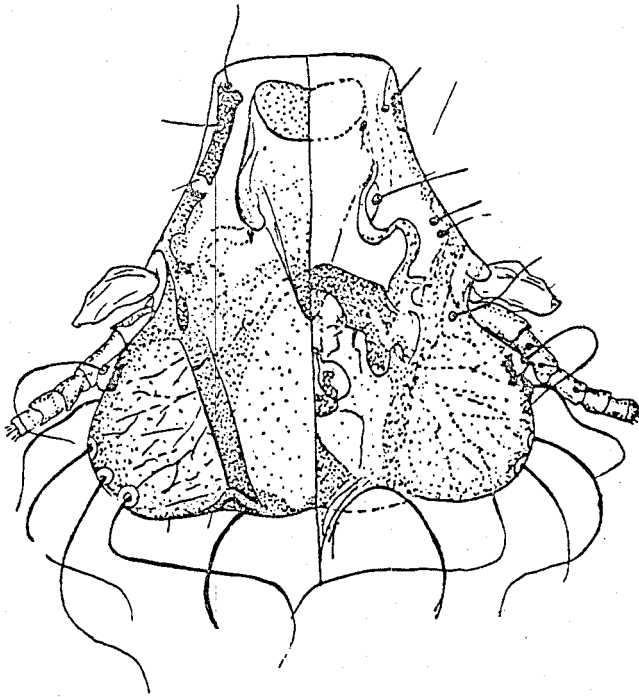


Fig. 3. *P. blagoveshtchenskyi* n. sp. ♀ head

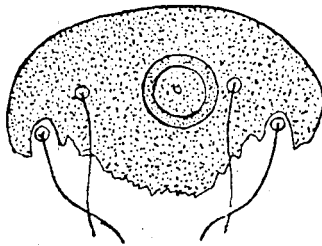


Fig. 4. *P. blagoveshtchenskyi* n. sp. ♀ genital spot

I have named this new species after the distinguished Soviet specialist in the Mallophaga order, D. I. Blagoveshtchensky from the Leningrad Zoological Institute at the Soviet Academy of Science.

# НОВЫЙ ВИД PENENIRMUS (MALLOPHAGA)

К. Тулешков

## РЕЗЮМЕ

В настоящей публикации автор описывает новый для науки вид рода Mallophaga — род *Penenirmus*, наименоывая его в честь известного паразитолога, специалиста по группе *Mallophaga* Зоологического института Академии наук СССР в Ленинграде Д. И. Благовещенского *Penenirmus blagoveshtchenskyi* n. sp.

Хозяином нового вида является *Emberiza calandra* L. Материал собран в Юго-восточной Болгарии, южнее г. Бургас, в районе горного массива Странджа, летом 1959 г.

## REFERENCES

- <sup>1</sup> Д. И. Благовещенский. Паразитол. сб. XIII, 1951. <sup>2</sup> Clay and Meinertz z h a g e n. Entomologist. 71, 1938, 73. <sup>3</sup> G. H. E. Hopkins and Th. Clay. Check List of the Genera and Species of Mallophaga. London, 1952; Additions and corrections, 1953, 1955.