

Gastrointestinal parasites of *Nyctalus noctula* (Mammalia: Chiroptera) from urbanized area of Upper Silesia

Elżbieta Dudkiewicz[1], Tomasz Postawa[2], Grzegorz Zaleśny[1]

1 Depratment of Invertebrate Systematics and Ecology, Wrocław University of Environmental and Life Sciences; 2 Institute of Systematic and Evolution of Animals, Polish Academy of Sciences, Krakow, Poland

Forty five species of bats live across Europe, whereas in Poland 22 species have been recovered. Unfortunately, many of European bats are under threat and some have already become extinct in certain countries. For that reason, there exists an evident negative correlation between the number of studies on protection of bats and the number of studies on their helminthfauna. The latter research comes from different parts of the world; however, they are relatively few and usually not contemporary. Up to date, the most comprehensive data on helminths parasitizing bats in Poland is the set of publications of Zdzitowiecki from the 60's and 70's of the twentieth century. For that reason, any new data on helminths of bats in Central Europe largely contribute to the knowledge of this group of parasites.

The aim of our study was to investigate the gastrointestinal parasites of common noctule (*Nyctalus noctula*). In total, 125 bats (85 males and 40 females) were collected from Czechowice-Dziedzice in Upper Silesia, all bats were found dead in the colony estimated to 450 individuals. All animals were subjected to standard parasitological section. The alimentary tract was inspected under stereoscopic microscope; all helminths were removed and preserved in 70% ethanol. All individuals were infected with at least of one helminth species, the mean abundance was very high and reached over 370 specimens of parasite per single host. The most dominant group was Digenea, followed by Nematoda, while the lowest values were observed for Cestoda. In the present study detailed ecological and taxonomical analyses, supported by molecular data, are provided.