

## A review of Ukrainian Acanthocephala: fauna, ecology and distribution

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Ukrainian fauna includes 59 species of acanthocephalans (AC). They belong to 3 classes: Archiacanthocephala (13 species of 6 genera, 4 families, and 4 orders), Eoacanthocephala (3 species 2 genera, 2 families, and 2 orders), and Palaeacanthocephala (43 species of 6 genera, 4 families, and 4 orders). Ukrainian Acanthocephalans have been found in 197 vertebrate species: 17 species of fish, 3 species of amphibians, 31 species of birds, and 4 species of mammals. Intermediate hosts are known for 32 acanthocephalan species from Ukraine (crustaceans of Ostracoda, Amphipoda, aquatic Isopoda for aquatic AC; terrestrial Isopoda and Coleoptera for terrestrial AC). Paratenic hosts – fish, amphibians, reptiles, and mammals – are involved in the transmission of 5 species of the aquatic AC and of 12 species of terrestrial AC. Acanthocephala do not demonstrate a strict specificity as for the definitive hosts; 5 species are family-specific parasites: *Eptorhynchoides plagicephalus* in Acipenseridae, *Mediorhynchus empodius*, and *M. petrotschenkoi* in Phasianidae, *Macracanthorhynchus hirudinaceus* in Suidae, and *M. catulinus* in Canidae.

Distribution of aquatic AC is associated with river basins and seas, terrestrial Acanthocephala – with natural geographical areas. The largest diversity of aquatic AC is observed in marine ecosystems (16 species in the Black Sea), and in the basins of major rivers (17 species). The terrestrial AC are the most diverse in the steppe zone (15 species), the least diverse in the Carpathians (6 species). *Pseudoacanthocephalus caucasicus* from toads and *Centrorhynchus aluconis* from birds of prey are distributed only in the forest ecosystems. *C. globocaudatus* from birds of prey and representatives of the genus *Mediorhynchus* from Galliformes and Passeriformes are found in arid ecosystems of steppe and less often of forest-steppe.

Acanthocephalan fauna of Ukraine is heterogeneously by its composition and origins. A total of four chorological groups of species are represented: Palearctic (35 species), Holarctic (8 species), a group of species that are distributed in two or three zoogeographical areas (6 species), and cosmopolitans (4 species). Palearctic species are the core of the fauna of Acanthocephala of Ukraine, the majority of them are parasites of birds (20) and fish (13). The group includes at least two subgroups: Transpalearctic (22 species) and European (13 species). The territory of Ukraine is a margin of the areas for several AC species. For *M. catulinus*, *P. caucasicus*, and *M. petrotschenkoi* it is the western part of the areas, for *Acanthocephalus falcatus*, *A. gracilacanthus*, *Golvanacanthus blenni*, *Empodiuis taeniatus* it is the eastern part.