

## Abstract

Earthworms belonging to oligochaete annelids have been a model for comparative immunology for over 40 years. They possess various defense mechanisms efficiently recognizing and responding to non-self substances. Among these there are molecules with many biological activities including cytolytic, antimicrobial and proteolytic.

This work is aimed to compare the immunological features of two closely related earthworm species *Eisenia andrei* and *Eisenia fetida*. Due to many morphological and life cycle similarities they have been, until recently, regarded as members of subspecies. Interestingly, their natural habitat varies considerably, and it was of particular interest to investigate how these environmental differences affect the features of innate immunity of both species.

Key words: annelids, innate immunity, *Eisenia andrei*, *Eisenia fetida*, CCF, fetidin, lysenin, lysozyme