

ARTIFICIAL INFECTION OF THE LOBSTER COCKROACHES WITH THELASTOMID NEMATODES FROM THE MADAGASCAR HISSING COCKROACHES: A PRELIMINARY STUDY

Anna Yalova, Sofiia Shapoval, Anastasiia Tsymbaliuk, Nataliia Shliakhtova, Bohdan Yuriev,
Natalia Matushkina

Educational and Scientific Center "Institute of Biology and Medicine", Taras Shevchenko National University of Kyiv,
Ukraine
annnortis@knu.ua

The host specificity is an important characteristic of most parasitic species, which reflects the general evolutionary strategy of parasitism. Parasitic nematodes of the order Oxyurida (Nematoda: Oxyuroidea) comprise among other the family Thelastomatidae, which are the parasites of invertebrates. The oxyurid nematodes have a simple life cycle: eggs laid by the adult females are spread with feces of the host; ingestion of the eggs by new host individuals leads to their infection. The nematodes of the family Thelastomatidae parasitize more than 40 species of cockroaches that do not reflect their host/parasite co-speciation. In absence of genotypic characterizations, it is still unknown whether these nematodes present one species with a wide host range or several host-specific cryptic species. Here, we show preliminary results of an artificial infection of the nematode-free lobster cockroaches (*Nauphoeta cinerea*) with thelastomid nematodes collected from feces of infected Madagascar hissing cockroaches (*Gromphadorhina portentosa*). Our preliminary data indicate that eggs of thelastomid nematodes are able to infect unspecific hosts and develop until larval stages.