

Abstract

The manipulation hypothesis deals with the ability of some parasitic organisms to efficiently change the phenotype of their hosts to facilitate their transmission. The parasite thus gains a selective advantage and, compared to non-manipulating species, is more reproductive. This phenomenon can also be observed in some parasitic helminths. The objects of helminth manipulation are most often invertebrates, who serve as intermediate hosts. In infected animals, we can observe striking morphological changes, abnormal movement reactions, or even suicidal tendencies. The objects of helminth manipulation are most often invertebrates, who serve as intermediate hosts. Manipulation can be divided into direct and indirect, depending on whether the parasite is able to act directly on the nervous tissue of the host. The desired behavioral response can be elicited in other ways, for example, by disrupting the host's metabolism or through complex interactions with the immune system. This thesis focuses mainly on the presentation of various strategies that are most often described in helminth manipulators.

Key words: Helminth, host, infection, manipulation, behavioral change, extended phenotype