Abstract

The porcelain disease is a disease affecting crayfish caused by the microsporidium *Thelohania contejeani*. This intracellular parasite attacks muscle cells of the host and fills them with spores. This leads to white or opaque colouration of the abdominal muscle of crayfish, which is characteristic for this disease. The parasite gradually attacks more muscle fibers which probably leads to decrease of locomotor activity of affected crayfish and finally may result in their death. *T. contejeani* at low prevalences does not represent a real danger to crayfish populations and thus it is not as serious threat as crayfish plague. However, it has been associated with several cases of mass mortalities too. This thesis summarizes essential findings about infection by this parasite, analyzes its impacts to the host and factors that can influence transmission and progress of this disease. It also describes a life cycle of *T. contejeani*, summarizes records of the occurrence of this parasite and evaluates risks which it poses to crayfish populations. Finally, methods used to detect infection are described.

Keywords: *Thelohania contejeani*, porcelain disease, crayfish, microsporidia, parasite, muscle