Abstract

This thesis aims to explore the larval development of a bird fluke *Trichobilharzia regenti* in its intermediate hosts, as well as the processes of differentiation of its embryonal cells and the differentiation between sporocystogenesis and cercariogenesis in sporocysts, with the ultimate goal to find out whether it is possible to find multiple generations of daughter sporocysts throughout the development of avian schistosomes in the intermediate hosts, just like in the case of human schistosomes of genus *Schistosoma*.

Five developmental stages of daughter sporocysts, and ten developmental stages of cercariae have been defined. The first developmental stage in both larvae is the germinal cell. It divides and gives rise to a cell agregate. Afterwards an envelope (*primitive epithelium*) is formed around the embryo and subsequently, the embryo elongates. At this stage, the development of the two larvae undergoes different pathways. We can distinguish daughter sporocyst from cercaria in the phase, when the tegument is completed. The daughter sporocyst acquires characteristic vermiform appearance, and its body cavity contains plenty of germinal cells. For cercariae with an developed tegument, presence of the penetration glands is characteristic.

Key words: *Trichobilharzia regenti*, germinal cells, mother sporocyst, daughter sporocyst, cercariae, sporocystogenesis, cercariogenesis