

Abstract:

Protozoa parasitism has evolved many times independently in the history of eukaryotes. Some organelles were reduced, and specific invasion apparatuses were developed by adapting to the host. These apparatuses help to penetrate host cells and escape the immune system. The thesis summarizes the findings of the invasion apparatus and invasion of four selected unicellular protozoan parasites of genus *Plasmodium*, *Microsporidia*, *Ichthyobodo* and *Rozella*. Each chapter includes general knowledge of the parasite, its structure and life cycle.

Keywords:

Apicomplexa, *Plasmodium*, *Microsporidia*, *Ichthyobodo*, *Rozella*, merozoite, glideosom, moving junction, polar tube, germination, cytostome, zoospore, germ tube;