Structure of the glial cells in the nervous system of parasitic and free-living flatworms

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Abstract

This study is devoted to ultrastructural and immunosytochemical investigation of the nervous system in parasitic and free-living platyhelminthes to learn if glial cells exist in the nervous system of flatworms. We described the ultrastructure of different types of glial cells and the peculiarities of myelinization of gigantic axons; immunoreactivity to the S100b protein is revealed. Comparative analysis of the glia structure of annelids and platods is given; structural, functional, and evolutionary aspects of myelinization of gigantic axons, which are revealed in cestodes, are discussed. © 2010 Pleiades Publishing, Ltd.

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