Zoologicheskii Zhurnal 2015 vol.94 N11, pages 1243-1248

Ultrastructure of aflagellate spermatozoa in rhabdocoel turbellarian provortex karlingi (neorhabdocoela, dalyellioida)

Shafigullina E., Gazizova G., Zabotin Y. Kazan Federal University, 420008, Kremlevskaya 18, Kazan, Russia

Abstract

© 2015 r. The ultrastructure of spermatozoa and spermatids in a the rhabdocoel turbellarian Provortex karlingi from the White Sea is described for the first time. Among the unusual morphological features of spermatozoa, the absence of flagellae and the presence of perinuclear condensation of electron-dense granules are notified. The examples of reduction of flagellae in male gametes of various groups of flatworms are discussed. New data support the monophyly of the turbellarian genus Provortex, which is characterized by the number of some unique synapomorphies.

http://dx.doi.org/10.7868/S0044513415090159

Keywords

Aflagellate spermatozoa, Neorhabdocoela, Phylogeny, Spermiogenesis, Ultrastructure