Re-description and ultra-structural study on Hexangium sigani Goto & Ozaki, 1929 from three different Siganus spp. fishes from red sea, Egypt

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Siganus rivulatus, Siganus luridus and Siganus sutor are common fishes in the red sea. In our study and during a survey of red sea, fish parasites (exactly in the region of northern red sea, of Sharm El-Naga, Makadi Bay, Southern Hurghada, Egypt), 94 fishes were examined (70 Siganus rivulatus, 8 Siganus luridus and 16 Siganus sutor) by routine parasitology methods. 48 out of 94 fishes were found to be naturally infected by Hexangium sigani Goto & Ozaki, 1929 (44 Siganus rivulatus, 2 Siganus luridus and 2 Siganus sutor). The encountered parasites were described morphologically and morphometrically by means of light and scanning electron microscopy. The previous comparison among all described forms of H. sigani revealed some morphological variations confined between absence and presence of tegumental spines, testes arrangement and larger or smaller of body dimensions and ovary size. These differences are considered to be of minor importance. The present study using SEM revealed presence of one main tegumental structures, sensory papillae, which are differentiated into three forms; oral papillae, genital papillae and body papillae. Each form exhibited a moderately wide range of variations both in size and in distribution. The presence of different types of sensory papillae on different locations over body tegument of H. sigani may reflect a variation in the functions they performed. SEM study of this parasite was done for the first time in Egypt with addition of many ultra-structural details; most of which are of taxonomical importance. Also, for the first time, Siganus luridus represented a new record of H. sigani.

Biography

Hoda Saady Mohamadain is an Associate Professor of Parasitology at South valley University, Egypt. She completed her Doctorate degree in Parasitology at Egyptian University. Her research focuses on Helminth parasitic in vertebrates in Egypt and the work focuses on two trends: Diversity and taxonomic studies of helminth parasites and host parasite relationship.

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