



Research No.	8
---------------------	----------

A new myxozoan parasite, *Myxobolus allami* sp. n. (Myxozoa: Myxobolidae) from the intestinal wall of *Sparidentex hasta* (Valenciennes) in Arabian Gulf

Published date: 28/6/2021

Abstract:

Myxobolus allami sp. n. is described from the intestinal wall of the silvery black porgy, *Sparidentex hasta* (Valenciennes), off Saudi Arabian coast of Arabian Gulf. Two of 20 examined fish were found to be infected with irregular-shaped plasmodia 3–8 mm long \times 2–3 mm wide. Mature myxospores are subspherical to elliptical in the valvular view and oval in the sutural view and are 11–13 (12) μ m long, 7–8 (7.5) μ m wide and 10–12 (10.8) μ m thick. Spores have relatively thin valves and mostly (~ 72%) end with short caudal appendages of ~3 μ m long. The spores also have two polar capsules, which are oval to elliptical and measure 5–7 (5.7) μ m in length and 2–3 (2.7) μ m in width. Polar filaments are coiled, with three turns. Transmission electron microscopy revealed that caudal appendages originated from the sutural edge at the posterior pole of the myxospore with density similar to that of its valves. The SSU rRNA gene sequence of the present species does not match any available sequences in GenBank. Phylogenetically, this species is sister to *Myxobolus khaliji* Zhang, Al-Qurausihy et Abdel-Baki, 2014 within a well-supported clade of *Myxobolus-Henneguya* with species infecting marine fishes. The combination of molecular data and morphological differences

between this and other species of *Myxobolus* Bütschli, 1882 lead us to propose that the present form be established as a new species, *M. allami*. The present study also provides more evidence for the idea that caudal appendages cannot be reliably used to distinguish the species of the genera *Myxobolus* and *Henneguya* Thélohan, 1892.

القائم بأعمال عميد الكلية
أ.د/ صالح عبد العليم العونى

رئيس القسم
أ.د/ ايهاب معاذ أبو زيد