

Histologic study of ovarian changes during the reproductive cycle of female Yellowfin Seabream, *Acanthopagrus latus*

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Abstract:

This study was done to investigate the macroscopic and microscopic structure of the ovary of *Acanthopagrus latus* and their changes during sexual maturation cycle from October 2011 to May 2012. 80 *A. latus* from Mussa Greek (North West of Persian Gulf) were captured and transferred to the laboratory. After biometry, gonads were removed, were weighted and fixed in Bouin's Fluid. Samples were dehydrated, clarified, embedded and sections were prepared. After staining with H&E these slides were studied under light microscopy. Gonadosomatic indices, macroscopic and microscopic changes in the ovary during different months were recorded. The minimum value of GSI were measured in May, (0.31 ± 0.01) while its maximum was seen in March (9.9 ± 3.1). Cyclic changes in ovarian maturity were divided into six stages, including immature, premature, mature, ripe, spawning and resting. *A. latus* had asynchronous spawning that was occurred from February up to March.

Keywords: *Acanthopagrus latus*, histology, spawning, ovary, Corresponding author