

Sperm morphology and ultrastructure of Patagonian blenny (*Eleginops maclovinus*)

Ulloa-Rodríguez, Patricio

Contreras, Pablo

Dumorné, Kelly

Figueroa, Elías

Risopatrón, Jennie

Valdebenito, Iván

Farías, Jorge G.

In this study, the morphology and ultrastructure of *Eleginops maclovinus* spermatozoa were characterized through scanning and electron microscopy. Findings revealed that *E. maclovinus* spermatozoa can be differentiated into three major parts: a spherical head without acrosome (typical for externally fertilizing teleost), a midpiece containing 2-5 spherical mitochondria, and a long flagellum. The mean length of the spermatozoa was $40.08 \pm 2.30 \mu\text{m}$, with flagella accounting for $38.38 \pm 2.08 \mu\text{m}$. The head was $1.31 \pm 0.17 \mu\text{m}$ long, and $1.63 \pm 0.01 \mu\text{m}$ wide. The midpiece was $0.39 \pm 0.05 \mu\text{m}$ in length and $0.95 \pm 0.12 \mu\text{m}$ in width. It was located below the nucleus and contained 2 to 5 spherical mitochondria. The mitochondria were separated from the axoneme by a cytoplasmic canal. There was no evidence of the flagellum membrane forming sidefins, and the axoneme was composed of the typical 9 + 2 microtubular doublet structure enclosed by cell membrane. The present study reveals that