

STEREO AND SCANNING ELECTRON MICROSCOPIC STUDIES OF THE THIRD STAGE LARVAE OF *ANISAKIS SIMPLEX*

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Abstract. This study was to demonstrate the surface anatomy of the third stage larvae of *Anisakis simplex* in marine fish using stereo and scanning electron microscopes (SEM). The round worm is slender, elongated and of cylindrically shaped. The head of this worm is a globular structure. The mouth is triangularly shaped and surrounded by three lips. A boring tooth projects dorsally at the anterior end. There are four pairs of tactoreceptors, the labial papillae, enclosing the lips. The tail end is blunt and acquires a distinct slender process, the mucron. Stereomicroscopy revealed the esophagus is elongated, bulbous and club shaped, subdivided into an anterior muscular part and a posterior glandular part or ventriculus. The intestine is a long straight tube where the digestion and absorption occur. Waste pass through the intestine and is stored in the rectum until excreted via the anus. A SEM is a powerful tool in distinguishing worm species, as was seen when examining that the mouth of *Anisakis simplex*, which is triangular shaped and enclosed by three lips with one boring tooth; other species are different. The mucron projection at the distal end is another distinctive structure revealed by SEM.

Keyword: L3 *Anisakis simplex*, surface anatomy, SEM

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