ULTRASTRUCTURE MORPHOLOGY OF *ASCARIS SUUM* AND *ASCARIS LUMBRICOIDES* EGGS BY *SCANNING ELECTRON MICROSCOPE* (SEM) METHOD

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ABSTRACT

The aim of this study was to describe the ultrastructure morphology of the eggs surface of *Ascaris suum* and *Ascaris lumbricoides* in more detail by *Scanning Electron Microscope* (SEM). This study was based on resistance of *Ascaris sp.* eggs againts chemical materials. This chemical resistance is a result of the lipid layer of their eggs shell, which contains *ascarosides*. This study used adult female *A.suum* and *A.lumbricoides*, worm of both Ascaris species were maintained in 0,9 % saline solution (physiological saline) at 37^0C for 24 hr. Eggs were released then collected for morphological examination using *optilab camera microscope* and *Scanning electron microscope* (SEM). The result showed there was significantly different ($p \leq 0.05$) in the *protein coat* thickness, length and width of eggs, whereas *chitinouse shell* and *lipoid layer* exhibit no difference. *A.suum* and *A.lumbricoides* eggs measure 61,98±0,95 μm x 46,02±2,52 μm and 54,78±5,90 μm x 45,02±1,82 respectively. In the eggs of *A.suum* and *A.lumbricoides*, the ridges are similar shape, but they are more pronounced in the eggs of *A. suum*. *Operculum* structures were observed in the surface of both Ascaris species. *Operculum* and *depression area* of *A.suum* have larger area than the *A.lumbricoides*.

Key words: ultrastructure, eggs, *A.suum, A.lumbricoides,* SEM