ABSTRACT

ANGELINA NOVITA TETHOOL. Characteristic reproduction of males Bandicoot (Echymipera kalubu). Under direction of RADEN IIS ARIFIANNTINI and SRIHADI AGUNGPRIYONO

Bandicoot (Echymipera kalubu) is one of endemic species in Papua, which has various benefits for the people in Papua. The purpose of this research was to study male reproductive organs characteristics, the quality of cauda epididymal spermatozoa and spermatogenesis processes. This study used 21 males E. kalubu in three different stages of age. Sperm morphology was assessed by using carbofuchsin (William’s stain) and the stages of spermatogenesis was analyzed by using Periodic Acid Schiff (PAS) stain. The results showed that reproductive organs comprised of gonad (testis), accessory glands and penis. Testis were ellipsoid in shape, the accessory glands consisted of prostat gland and Cowper gland, and the penis was bhipid. Epididymal sperm concentration and motility increased with sperm maturity. The length of sperm head, midpiece and principal piece were 2.91±0.40 μm, 13.99±0.87 μm and 145.59±5.38 μm, respectively and the total length of spermatozoa was 162.51±5.12 μm. Finally, E. kalubu had nine stages of spermatogenesis with ten step development of spermatids into spermatozoa.

Key word: Bandicoot (Echymipera kalubu), spermatozoa, spermatogenesis