THE EFFECT OF THAWING TIME ON FROZEN SEMEN OF BREED ETAWA GOATS IN ANDROMED® DILUTER TO MOTILITY, VIABILITY AND PLASMA MEMBRANE OF SPERMATOZOA

Lia Febri Anggraeni

ABSTRACT

Improper thawing will cause damage to spermatozoa resulting in lower semen quality. The purpose of this research was to determine the best of thawing time so that percentage of motility, viability and plasma membrane integrity of spermatozoa still high. Frozen semen were taken from BIB Ungaran Semarang and examined microscopically to determine the post-thawing semen quality seen from the percentage motility, viability and plasma membrane integrity of spermatozoa. First treatment (P1) semen was thawed for 15 seconds, second treatment (P2) semen was thawed for 20 seconds, third treatment (P3) semen was thawed for 25 seconds and fourth treatment (P4) semen was thawed for 30 seconds. Results of motility were 33.00 ± 2.74 (P1), 29.00 ± 4.18 (P2), 28.00 ± 2.74 (P3) and 27.00 ± 5.70 (P4). Results of viability were 43.22 ± 1.86 (P1), 39.70 ± 3.74 (P2), 38.08 ± 3.31 (P3) and 37.42 ± 3.68 (P4). Results of plasma membrane integrity were 37.46 ± 5.45 (P1), 35.02 ± 4.82 (P2), 34.22 ± 2.83 (P3) and 33.04 ± 4.17 (P4). The conclusion of this study showed that thawing 15 seconds could maintain the quality of goats frozen semen.

Key words: frozen semen, breed etawa goats, thawing, AndroMed®.