

**THE EFFECT OF ADDING SEAWATER EXTRACT IN EXTENDER
TOWARDS MEMBRANE INTEGRITY AND ACROSOM CAP OF
LIMOUSIN BULL SPERMATOZOA *POST THAWING***

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ABSTRACT

This research was determined membrane integrity and acrosom cap of Limousin bull post thawing after adding seawater extract with different concentrations in extender skim milk and egg yolk to increased frozen semen quality. This research used fresh samples of Limousin bull's semen collected by using artificial vagina, then where divided into 4 treatments and 6 replications. The experimental design that used was Complete Random Design. Analysis of the data using Analysis of Variant (ANOVA) one way then proceed to the Duncan Multiple Range Test to determine significant differences between treatments. The first treatment P0 no seawater extract added as control. The second treatment P1 was treated with 0,109 μ L seawater extract, P2 was treated with 0,426 μ L seawater extract, and P3 was treated with 1,09 μ L seawater extract. The result showed that determine significant different between treatments. The post thawing membrane integrity's result was P0= $22.00 \pm 4,28$, P1= 22.66 ± 3.61 , P2= 25.00 ± 2.75 , and P3= 29.00 ± 1.67 . The post thawing acrosom cap's result was P0= 30.50 ± 1.37 , P1= 31.50 ± 3.27 , P2= 34.83 ± 2.31 , and P3= 38.00 ± 1.41 . The optimum concentration added seawater extract to increased membrane integrity and acrosom cap spermatozoa in this research was 1,09 μ L.

Keywords : Limousin bull, spermatozoa, seawater extract, membrane integrity, acrosom cap