ABSTRACT

Spermatozoa’s Quality of Merino Sheep in the Anode Side By the ESS (Electric Separating Sperm) Separation Technique

Amung Logam Saputro

This study is one of new applied science in artificial insemination in sheep in which sperm cells produced by males can be separated in chromosomes X and Y of sex. In this study used the ESS (Electric Separating Sperm) technique as separation methods. Researchers used a new tool to separate sperm cells by using an electric tool that electrified 1.5 volts, which compared to the level of effectiveness with different time is 0 minutes, 3 minutes, 7 minutes, and 10 minutes. Data analysis using LSD forwarded anova with (Turkey) 5% by using 5 replicates per treatment. P0 is the control (0 min), P1 (3 minutes), P2 (7 minutes) and P3 (10 minutes). Data results showed that the motility of P0 52.40\textsuperscript{a} + 1.661, group of P1 51.40\textsuperscript{a} + 2.337\textsuperscript{a}, group of P2 50.40\textsuperscript{a} + 1.778, and group of P3 48.00\textsuperscript{a} + 1.000, cell viability of P0 64.40\textsuperscript{a} + 2.315, group of P1 60.20\textsuperscript{ab} + 2.653, a group of P2 56.00\textsuperscript{ab} + 2.302, and for group P3 54.20\textsuperscript{b} + 2.746, and abnormalities P0 4.60\textsuperscript{a} + 1.435, the P1 of 7.00\textsuperscript{ab} + 1.304, a group of P2 11.00\textsuperscript{ab} + 2.345, and group of P3 11.40\textsuperscript{b} + 1.030. The results showed that the quality of spermatozoa in microscopic observation cells test of motility in all treatment groups showed no significant differences, whereas the viability and abnormality observations indicate that the results between the P1 and P2 control do not have significant differences but significantly different P3.

KeyWord : Separating Spermatozoa, ESS (Electric Separating Sperm), semen quality.