ABSTRACT

ANALYSIS QUALITY OF SIMMENTAL SEMEN USING ANDROMED® EXTENDER WITH VARIATIONS OF PRE FREEZING TIME

By

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The goals of research were to know: 1) the effect of pre freezing time to the frozen semen quality of Simmental; 2) the best time of pre freezing that can preserve the frozen semen quality of Simmental. The completely randomized design was used in this research with 5 treatments (5 minutes; 6 minutes; 7 minutes; 8 minutes; 9 minutes) and 4 times of replication. Parameters measured were percentage of sperm motility and percentage of life sperm. The data were analyzed using analysis of variance at significance level of 1% or 5% and then continued with orthogonal polynomial test at significance level of 1% or 5%.

The results showed that the time of pre freezing did not affect significantly (P > 0.05) on the percentage of sperm motility and the percentage of life sperm after pre freezing, but the effect was significant (P < 0.01) on percentage of sperm motility and percentage of life sperm post thawing. Orthogonal polynomial test also showed that the time of pre freezing did affect significantly (P < 0.01) on the percentage of sperm motility and the percentage of life sperm after thawing. The effect of pre freezing time on the percentage of sperm motility and percentage of life sperm after thawing had linear pattern with each equation those were Y = -28.88+7.38X and Y = -24.97+8.09X. Pre freezing for 9 minutes was able to show the best percentage of sperm motility and percentage of life sperm after thawing.

Keywords: quality of semen, Simmental Bull, pre freezing time