

PENGARUH LAMA THAWING TERHADAP RECOVERY RATE DAN LONGIVITAS SPERMA BEKU SAPI SIMMENTAL, LIMOUSIN, DAN PERANAKAN ONGOLE

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INTISARI

Tujuan penelitian ini adalah untuk mengetahui pengaruh lama *thawing* terhadap *recovery rate* (RR) dan longivitas sperma beku sapi Simmental, Limousin, dan Peranakan Ongole (PO). Materi yang digunakan adalah sperma dari 6 ekor sapi berbeda pada masing-masing bangsa. RR dan longivitas diamati dan dianalisis menggunakan analisis variansi Rancangan Acak Lengkap (RAL) Pola Faktorial 3x2. RR dan longivitas sperma beku sapi PO, Limousin, dan Simmental berturut-turut masing-masing adalah $67,92 \pm 10,47\%$ dan $3,83 \pm 1,11$ jam, $58,75 \pm 10,39\%$ dan $2,50 \pm 0,52$ jam, serta $54,17 \pm 12,08\%$ dan $2,08 \pm 0,79$ jam. RR dan longivitas sperma beku sapi PO lebih tinggi ($P < 0,05$) dari Limousin dan Simmental, sedangkan RR dan longivitas sperma beku sapi Limousin dan Simmental berbeda tidak nyata. RR dan longivitas sperma beku dengan lama *thawing* 30 detik dan 15 detik berturut-turut masing-masing adalah $68,39 \pm 6,76\%$ dan $3,00 \pm 1,14$ jam serta $52,17 \pm 10,93\%$ dan $2,61 \pm 1,09$ jam. RR dengan lama *thawing* 30 detik lebih tinggi ($P < 0,05$) dari lama *thawing* 15 detik, sedangkan longivitas dengan lama *thawing* 30 detik dan 15 detik berbeda tidak nyata. Berdasarkan hasil tersebut dapat disimpulkan bahwa bangsa mempengaruhi RR dan longivitas sperma beku, sedangkan lama *thawing* hanya mempengaruhi RR sperma beku.

(Kata Kunci : Kualitas Sperma Beku, Bangsa, Lama *Thawing*)

THAWING DURATION EFFECT ON RECOVERY RATE AND LONGEVITY OF SIMMENTAL, LIMOUSIN, AND PERANAKAN ONGOLE FROZEN SEMEN

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ABSTRACT

The aim of the study was to investigate the effect of thawing duration on recovery rate (RR) and longevity of Simmental, Limousin, and Peranakan Ongole (PO) frozen semen. The material used was semen from 6 different cattle in each breed. RR and longevity were observed and analyzed with analysis of variance based on Completely Randomized Design (CRD) Factorial Pattern 3x2. RR and longevity of PO, Limousin, and Simmental frozen semen were $67.92 \pm 10.47\%$ and 3.83 ± 1.11 hours, $58.75 \pm 10.39\%$ and 2.50 ± 0.52 hours, with $54.17 \pm 12.08\%$ and 2.08 ± 0.79 hours, respectively. RR and longevity of PO frozen semen were higher ($P < 0.05$) than Limousin and Simmental, while RR and longevity of Limousin and Simmental frozen semen weren't significantly different. RR and longevity of 30 seconds and 15 seconds thawing duration were $68.39 \pm 6.76\%$ and 3.00 ± 1.14 hours with $52.17 \pm 10.93\%$ and 2.61 ± 1.09 hours, respectively. RR of 30 seconds thawing duration higher ($P < 0.05$) than the 15 seconds thawing duration, while longevity of 30 seconds and 15 seconds thawing duration weren't significantly different. Based on these results can be concluded that the breed affects RR and longevity of frozen sperm, while thawing duration only affects RR of frozen sperm.

(Key Words: Quality of Frozen Sperm, Breed, Thawing Duration)