

**KUALITAS SEMEN BEKU KAMBING PERANAKAN ETAWA DAN
SAANEN DENGAN WAKTU THAWING BERBEDA PADA SUHU 37°C DI
BALAI INSEMINASI BUATAN LEMBANG**

**VANNI KUSUMANINGARUM HARYONO
NIM : 200220056**

INTISARI*)

Tujuan Penelitian untuk mengetahui kualitas semen beku kambing PE dan kambing Saanen pasca thawing dengan waktu thawing berbeda di BIB Lembang. Penelitian dilaksanakan tanggal 31 Maret - 12 April 2022. Materi penelitian berupa semen beku kambing PE dan kambing Saanen produksi BIB Lembang. Penelitian menggunakan metode eksperimental Rancangan Acak Lengkap (RAL) pola faktorial 2×3 dengan perlakuan 2 bangsa dan 3 waktu thawing pada suhu 37°C. Variabel penelitian meliputi motilitas, gerak massa, viabilitas dan abnormalitas spermatozoa. Data yang diperoleh dianalisis dengan *Analysis of Variance* (Anova). Hasil penelitian menunjukkan bahwa rata-rata kualitas semen beku kambing PE untuk motilitas $37,22 \pm 4,41\%$, gerak massa >2 plus, viabilitas $56,28 \pm 3,96\%$ dan abnormalitas $0,50 \pm 0,61\%$ sedangkan rata-rata kualitas semen beku kambing Saanen untuk motilitas $36,67 \pm 5,00\%$, gerak massa spermatozoa 2 plus, viabilitas hidup spermatozoa $58,33 \pm 4,22\%$ dan abnormalitas spermatozoa $0,28 \pm 0,26\%$. Untuk perlakuan waktu thawing P1 terhadap motilitas, gerak massa, viabilitas hidup dan abnormalitas secara berturut-turut yaitu $31,67 \pm 4,08\%$, 2 plus, $59,33 \pm 4,06\%$ dan $0,58 \pm 0,74\%$ pada P2 yaitu $39,17 \pm 2,04\%$, 2 plus, $55,58 \pm 3,47\%$ dan $0,25 \pm 0,27\%$ serta pada P3 yaitu $40,00 \pm 0,00\%$, >2 plus, $57,00 \pm 4,51\%$ dan $0,33 \pm 0,26\%$. Disimpulkan bahwa bangsa kambing pejantan PE dan Saanen dengan waktu thawing berbeda pada suhu 37°C menghasilkan kualitas semen beku pasca thawing yang berbeda tidak nyata kecuali terhadap motilitas spermatozoa ($P < 0,05$). Terdapat interaksi yang signifikan antara bangsa kambing dengan waktu thawing berbeda terhadap kualitas semen beku pada gerak massa kambing PE.

Kata Kunci : Abnormalitas, Gerak Massa, Kambing, Motilitas, Viabilitas

*Intisari Skripsi Sarjana Peternakan, Program Studi Peternakan, Fakultas Agroindustri, Universitas Mercu Buana Yogyakarta, 2022

**FROZEN SEMEN QUALITY OF ETAWAH AND SAANEN CROSSTRAINED
GOAT WITH DIFFERENT THAWING TIMES AT 37⁰ C IN LEMBANG
ARTIFICIAL INSEMINATION CENTRE**

**VANNI KUSUMANINGARUM HARYONO
NIM : 200220056**

ABSTRACT*

The aim of the study was to determine the frozen semen quality of PE and Saanen goats after thawing with different thawing times at BIB Lembang. The research was carried out on March 31 - April 12, 2022. The research material was frozen semen of PE goats and Saanen goats produced by BIB Lembang. The study used an experimental method of Completely Randomized Design (CRD) 2x3 factorial pattern with treatment of 2 nations and 3 thawing times at 37⁰ C. The research variables included motility, mass movement, viability and abnormalities of spermatozoa. The data obtained were analyzed by Analysis of Variance (ANOVA). The results showed that the average quality of frozen semen of PE goats for motility was 37,22±4,41%, mass motion was >2 plus, viability was 56,28±3,96% and abnormality was 0,50±0,61% while the average The mean quality of frozen semen of Saanen goat for motility was 36,67±5,00%, spermatozoa mass movement was 2 plus, spermatozoa viability was 58,33±4,22% and spermatozoa abnormalities were 0,28±0,26%. For the treatment of P1 thawing time on motility, mass movement, viability of life and abnormalities, respectively, namely 31,67±4,08%, 2 plus, 59,33±4,06% and 0,58±0,74% in P2 is 39,17±2,04%, 2 plus, 55,58±3,47% and 0,25±0,27% and in P3 is 40,00±0,00%, >2 plus, 57,00±4,51% and 0,33±0,26%. It was concluded that the PE and Saanen male goat breeds with different thawing times at 37⁰C produced frozen semen quality after thawing which were not significantly different except for the motility of spermatozoa ($P<0,05$). There was a significant interaction between goat breeds with different thawing times on the quality of frozen semen on mass movement of PE goats.

Keywords : Abnormality, Mass Movement, Goat, Motility, Viability

*Abstract Thesis of Bachelor of Animal Husbandry, Animal Husbandry Study Program, Faculty of Agroindustry, Mercu Buana Yogyakarta University, 2022