

**PENGARUH PEMISAHAN PLASMA SEMEN
KAMBING KACANG TERHADAP MOTIUTASSPERMATOZOA DALAM
BERBAGAI PENGECER DAN DISIMPAN
PADA SUHU 5° C**

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INTISARI

Penelitian ini bertujuan untuk mengetahui motilitas *spermatozoa* kambing kacang dari semen yang dicuci dengan NaCl fisiologis (0,9) dan diencerkan dengan Lactosa (LS), Susu Skim (SS) dan Kuning telur air Kelapa (KTAK) dan disimpan selama 24 jam pada suhu 5° C. Sperma dari 2 ekor kambing, ditampung dengan menggunakan vagina buatan seminggu 2 kali. Untuk mengetahui kualitas sperma segar segera setelah penampungan dilakukan uji kualitas sperma yang meliputi volume, wama, bau, konsistensi, pH, konsentrasi, persentase motilitas *spermatozoa* hidup dan abnormalitas *spermatozoa*. Volume sperma yang diperoleh dibagi 2 bagian, satu bagian tidak dicuci dan satu bagian lain dicuci dengan NaCl fisiologis. Pencucian dilakukan dua kali dengan metode sentrifugasi. Pengenceran dilakukan setelah pencucian dengan bahan pengeneer LS, SS dan KTAK. Pengamatan motilitas dilakukan segera setelah pengenceran dan sesudah penyimpanan. Data kualitas sperma segar dianalisis dengan analisa statistik mean dan standart deviasi, sedangkan motilitas setelah penyimpanan dengan Racangan Acak Lengkap (RAL) pola faktoria! 2x3x2. Persentase motilitas *spermatozoa* yang dicuci dan diencerkan dengan LS, SS dan KTAK berturut-turut adalah 70 %, 51,25 % dan 57,50 %. Sedangkan tidak dicuci berturut turut adalah 66,25 %, 46,25 % dan 53,75 %. Hasil penelitian dapat disimpulkan bahwa pencucian dapat meningkatkan motilitas ($P < 0,05$). Pengenceran dan penyimpanan berpengaruh berbeda sangat nyata ($P < 0,01$) terhadap motilitas *spermatozoa*. Interaksi ke tiga perlakuan tidak berbeda nyata.

Kata kunci : Motilitas *spermatozoa*, Kambing Kacang, Pencucian, Pengenceran, Penyimpanan

THE EFFECT OF SEPARATION PLASMA SEMINALIS OF MALE GOAT ON MOTILITY OF SPERMATOZOA IN DEFERENT DILUTION AND STORAGE AT 5 °C

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ABSTRACT

The study was conducted to investigate the motility of male goat spermatozoa from which the sperm was washing in NaCl Physiology (0,9 %) and diluted in Lactose, (LS), Skime Milk (SM) and Egg Yolk Coconut Water (EYCW) and storage at 5° C. Sperm was collected from one goats, at the age 3 years, using artificial vagina method twice a week. For its quality such as volume, color, smell, consistence, pH, concentration, percentage of live cell and abnormality were observed directly after collection. Sperm were divided into two part, first part washed twice using NaCl physiology by centrifugation method, the second part was not washed. After washing, the first layer were removed and the residual were diluted with LS, SM and EYCW. The observation of motility immediately after dilution and 24 hours after storage at 5° C. The data of quality of fresh sperm were analyzed using mean and standart deviation, while for motility immediately after dilution and during storage were analyzed using completely randomized design by 2x 3x2 factorial. The result showed the motility of spermatozoa which was washed and diluted using LS, SM and EYCW for 24 hours storage were 70 %, 51,25 % and 57,50 % respectively. Motility of spermatozoa which was not washed and diluted using LS, SM and EYCW for 24 hours storage were 66,25 %, 46,25 % and 53, 75 % respectively. The research could be concluded that washing were significant ($P < 0,05$). Dilution and storage were higly significantly ($P < 0,01$) to sperm motility. The was no interaction among the three treatments studied.

Key words : Spermatozoa, Motility, Kacang Buck, Washing, Dilution, Storage