

PENGARUH PEMBERIAN PREPARAT HORMON PELEPAS  
GONADOTROPIN (GnRH) TERHADAP KUANTITAS DAN KUALITAS  
EJAKULAT KAMBING BLIGON

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INTISARI

Penelitian ini bertujuan untuk mengetahui pengaruh pemberian preparat horraon pelepas gonadotropin terhadap kuantitas dan kualitas ejakulat kambing Bligon. Sepuluh ekor kambing Bligon jantan dewasa kelamin dibagi secara acak menjadi dua kelompok, kelompok I sebagai kontrol dan kelompok II sebagai kelompok perlakuan. Kelompok I terdiri dari lima ekor kambing Bligon jantan yang disuntik dengan 2 ml/ekor *aquabidestilata* steril, sedang pada kelompok II disuntik dengan hormon pelepas gonadotropin 0.5 ml/ekor secara subkutan. Perlakuan ini diberikan setiap minggu dua kali selama 71 hari. Evaluasi kuantitas dan kualitas sperma meliputi: volume, warna, bau, konsistensi, derajat keasaman (pH), motilitas, konsentrasi, persentase sel sperma hidup dan persentase sel sperma abnormal. Data yang diperoleh kemudian dianalisis dengan menggunakan metode analisis T-test. Hasil analisis menunjukkan bahwa dengan pemberian preparat hormon pelepas gonadotropin secara subkutan memberi pengaruh nyata ( $P < 0,05$ ) terhadap persentase motilitas ( $78,67 \pm 0,43$  vs  $75,33 \pm 0,36$ ) dan spermatozoa hidup ( $84,85 \pm 0,45$  vs  $80,07 \pm 0,66$ ) dan berbeda tidak nyata terhadap konsentrasi ( $3974,00 \pm 74,71$  vs  $3550,67 \pm 71,97$ ), volume ( $0,67 \pm 0,04$  vs  $0,53 \pm 0,01$ ), dan abnormalitas sperma ( $8,42 \pm 0,06$  vs  $8,38 \pm 0,08$ ). Warna sperma krem seperti susu, bau agak amis, derajat keasaman (pH) 6-7, dan konsistensinya kental. Berdasarkan hasil penelitian ini dapat disimpulkan bahwa dengan pemberian preparat hormon pelepas gonadotropin secara subkutan, secara umum dapat meningkatkan kuantitas ejakulat kambing Bligon. Adapun untuk warna, derajat keasaman (pH), bau, dan konsistensi semua tidak berubah dalam kisaran normal.

(Kata Kunci: Kambing Bligon, Gonadotropin, Kuantitas dan Kualitas Ejakulat)

THE INFLUENCE OF SYNTHETIC GONADOTROPHIN HORMONE  
INJECTION ON THE QUANTITY AND QUALITY OF BLIGON BUCK  
EJACULATE

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ABSTRACT

This experiment was conducted to evaluate the effect of synthetic gonadotrophin releasing hormone injection on quantity and quality of Bligon buck ejaculate. Ten heads of Bligon bucks were randomly divided into two groups, namely first as a control and second group as a treated group. Five heads of Bligon bucks in the control group were injected subcutaneously with 2 ml/head sterile aquabidestilata, and the other five heads of treated group were injected subcutaneously with synthetic gonadotrophin releasing hormone of 0.5 ml/head twice a week for a period of 71 days. The quantity and quality of ejaculate evaluated were: volume, colour, flavor, consistency, acidity (pH), motility, concentration, survival sperm cell percentage, and abnormal sperm percentage, respectively. The collected data were analyzed by student's T-test method. The result showed that synthetic gonadotrophin releasing hormone injection significantly ( $P < 0.05$ ) improved motility ( $78.67 \pm 0.43$  vs  $75.33 \pm 0.36\%$ ) and percentage of survival sperm cell ( $84.85 \pm 0.45$  vs  $80.07 \pm 0.66\%$ ) but non-significant to volume ( $0.67 \pm 0.04$  vs  $0.53 \pm 0.01$  ml), concentration ( $3974.00 \pm 74.71$  vs  $3550.67 \pm 71.79$  million/ml), and abnormal sperm percentage ( $8.42 \pm 0.06$  vs  $8.38 \pm 0.08\%$ ). The data for semen colour was creamy milk, with fishy odour, and a little bit of viscose consistency. Based on the result of this experiment, it was concluded that the injection of synthetic gonadotrophin hormone subcutaneously would significantly improve the quantity of Bligon buck ejaculate, except quality that showed constant as normal.

(Key words: Bligon buck, Gonadotrophin, Quantity and Quality of the Ejaculate)