

ABSTRAK

PENGARUH PEMBERIAN VITAMIN C, VITAMIN E, DAN KOMBINASINYA TERHADAP KUALITAS MIKROSKOPIS SEMEN KAMBING JAWARANDU

Oleh

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Penelitian ini bertujuan untuk mengetahui pengaruh pemberian vitamin C, vitamin E, dan kombinasi keduanya terhadap kualitas mikroskopis semen (motilitas, viabilitas, dan abnormalitas) kambing Jawarandu. Penelitian ini dilaksanakan pada Januari – Maret 2025 bertempat di Sinau Farm, Karangrejo, Metro Utara. Penelitian ini menggunakan Rancangan Acak Lengkap (RAL) dengan 4 perlakuan dan 3 ulangan. Perlakuannya adalah P0; ransum basal, P1; ransum basal + vitamin C 100 mg/ekor/hari, P2: ransum basal + vitamin E 50 IU/ekor/hari, P3: ransum basal + vitamin C 100 mg + vitamin E 50 IU. Data yang diperoleh dianalisis ragam dengan taraf 5% kemudian dilanjutkan dengan uji Beda Nyata Terkecil (BNT) untuk peubah yang berpengaruh nyata. Hasil penelitian menunjukkan bahwa pemberian vitamin C, vitamin E, dan kombinasi keduanya berpengaruh nyata ($P < 0,05$) terhadap viabilitas spermatozoa, namun tidak berpengaruh nyata ($P > 0,05$) terhadap motilitas dan abnormalitas spermatozoa. Hasil penelitian menunjukkan bahwa nilai motilitas, viabilitas, dan abnormalitas spermatozoa kambing Jawarandu dengan pemberian vitamin C, vitamin E, dan kombinasinya dalam kisaran normal.

Kata kunci: Kambing Jawarandu, Kualitas Mikroskopis Spermatozoa, Vitamin C, Vitamin E

ABSTRACT

THE EFFECT OF GIVING VITAMIN C, VITAMIN E, AND THEIR COMBINATION ON THE MICROSCOPIC QUALITY OF JAWARANDU GOAT SEMEN

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This study aims to determine the effect of vitamin C, vitamin E, and a combination of both on the microscopic quality of semen (motility, viability, and abnormalities) of Jawarandu goats. This study was conducted in January - March 2025 at Sinau Farm, Karangrejo, North Metro. This study used a Completely Randomized Design (CRD) with 4 treatments and 3 replications. The treatments given were P0; basal ration, P1; basal ration + vitamin C 100 mg/head/day, P2: basal ration + vitamin E 50 IU/head/day, P3: basal ration + vitamin C 100 mg + vitamin E 50 IU. The data obtained were analyzed by analysis of variance at the 5% level and then continued with the Least Significant Difference (LSD) test on variables that had a significant effect. The results showed that the administration of vitamin C, vitamin E, and a combination of both had a significant effect ($P < 0.05$) on spermatozoa viability, but did not have a significant effect ($P > 0.05$) on spermatozoa motility and abnormalities. The results of the study showed that the motility, viability, and abnormality values of Jawarandu goat spermatozoa with the vitamin C, vitamin E, and their combinations were within the normal range.

Keywords: Jawarandu Goat, Microscopic Quality of Sperm, Vitamin C, Vitamin E