

PENGARUH PENAMBAHAN *HIGH QUALITY FEED SUPPLEMENT* (HQFS) TERHADAP PERTUMBUHAN DAN BERAHI DOMBA EKOR TIPIS

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INTISARI

Penelitian ini bertujuan mengetahui pertumbuhan dan intensitas berahi domba ekor tipis yang diberi penambahan *high quality feed supplmenet* (HQFS). Limabelas ekor domba ekor tipis (umur 2-3 tahun, BCS 3) dibagi dalam 3 kelompok perlakuan ransum. Ransum kelompok A yaitu kangkung kering 40%, konsentrat 60%, B yaitu kangkung kering 40%, konsentrat 50%, HQFS 10%, dan C yaitu kangkung kering 40%, konsentrat 40%, HQFS 20%. Setelah 2 pekan perlakuan pakan dilakukan sinkronisasi berahi menggunakan cloprostenol[®] dengan dosis 0,5 mL per ekor. Data yang diamati meliputi pertambahan berat badan, intensitas berahi (vulva bengkak, warna vulva, dan sekresi lendir), respon berahi, nilai pH, suhu vagina, populasi sel superfisial, awal berahi, dan lama berahi. Data dianalisis dengan metode *one-way* ANOVA yang dilanjutkan dengan uji Tukey. Hasil penelitian tidak menunjukkan perbedaan nyata ($P > 0.05$) terhadap pertambahan berat badan, kebengkakan dan warna vulva, sekresi lendir, suhu dan pH vagina, populasi sel superfisial, dan awal birahi antar kelompok penambahan HQFS dalam pakan. Rerata pertambahan berat badan domba ekor tipis dengan penambahan 0%, 10%, dan 20% HQFS berurutan $3960 \pm 2114,35$; $7020 \pm 5323,95$; dan $8220 \pm 1741,62$ g. Rerata skor kebengkakan dan warna vulva pada masing- masing perlakuan $2,40 \pm 0,55$; $2,60 \pm 0,55$; 3,00 dan $2,40 \pm 0,55$; $2,40 \pm 0,55$; $2,60 \pm 0,55$. Rerata skor sekresi lendir secara berurutan $1,80 \pm 0,44$; $2,00 \pm 0,71$; dan 2,00. Rerata suhu dan pH vagina pada masing- masing perlakuan adalah $39,08 \pm 0,11$; $39,02 \pm 0,42$; $38,96 \pm 0,58^{\circ}\text{C}$ dan $8,30 \pm 0,45$; $8,40 \pm 0,55$; $8,70 \pm 0,67$. Rerata populasi sel superfisial dan awal berahi pada masing- masing perlakuan $67,20 \pm 2,77\%$; $70,40 \pm 3,58\%$; $69,80 \pm 2,17\%$ dan $38,4 \pm 5,36$; $33,6 \pm 5,36$; $35,2 \pm 5,49$ jam. Hasil menunjukkan perbedaan nyata ($P < 0,05$) terhadap lama berahi antar kelompok penambahan HQFS dalam pakan. Rerata lama berahi domba ekor tipis secara berurutan adalah $26,8 \pm 3,89$, $42,2 \pm 8,67$, dan $55,4 \pm 6,30$ jam. Disimpulkan bahwa penambahan HQFS berpengaruh pada lama berahi namun tidak berpengaruh pada pertumbuhan dan intensitas berahi.

(Kata kunci: Intensitas berahi, Domba ekor tipis, *High quality feed supplement*)

EFFECT OF HIGH QUALITY FEED SUPPLEMENT (HQFS) SUPPLEMENTATION TOWARDS GROWTH AND ESTRUS ON THIN TAILED EWES

ABSTRACT

The study aims to determine the growth and estrus intensity of thin tailed sheep which were given the addition of high-quality feed supplement (HQFS). This study was conducted by using 15 thin tailed ewes (age 2-3 years, BCS 3) which was divided in 3 groups. Group A consisted of 40% dry kale, 60% concentrate; group B consisted of 40% dried kale, 50% concentrate, 10% HQFS, and group C consisted of 40% dried kale, 40% concentrate, 20% HQFS. After 2 weeks of treatment, the ewes then synchronized by cloprostenol® with 0.5 mL dose for each ewe. The observed data were weight gain, estrus response, estrus intensity (reddening of vulva, swelling of vulva, and mucus secretion), vaginal pH value, vaginal temperature, superficial cell population, onset estrus, and estrus duration. All of the obtained data were analyzed by using one way ANOVA which then continued with Tukey's test. The results didn't show a significant difference ($P>0.05$) between feed supplementation groups for weight gain, reddening of vulva, swelling of vulva, mucus secretion, vaginal temperature, vaginal pH value, superficial cell population, and onset estrus data. The obtained average weight gain in thin-tailed ewes were 3960 ± 2114.35 ; 7020 ± 5323.95 ; and 8220 ± 1741.62 g for the 0, 10, and 20% HQFS supplementation groups respectively. The swelling of vulva scores was 2.40 ± 0.55 ; 2.60 ± 0.55 ; and 3.00; whereas the reddening of vulva scores was 2.40 ± 0.55 ; 2.40 ± 0.55 ; and 2.60 ± 0.55 respectively. The scores of mucus secretion were 1.80 ± 0.44 ; 2.00 ± 0.71 ; and 2.00 respectively. The vaginal temperature were 39.08 ± 0.11 ; 39.02 ± 0.42 ; and 38.96 ± 0.58 °C and its vaginal pH value were 8.30 ± 0.45 ; 8.40 ± 0.55 ; 8.70 ± 0.67 respectively. The mean of superficial cells populations were $67.20\pm2.77\%$; $70.40\pm3.58\%$; $69.80\pm2.17\%$ respectively and the onset estrus were 38.4 ± 5.36 ; 33.6 ± 5.36 ; 35.2 ± 5.49 hours respectively. The results showed a significant difference ($P<0.05$) between supplementation groups for the duration of estrus. The average duration of estrus were 26.8 ± 3.89 , 42.2 ± 8.67 , and 55.4 ± 6.30 hours respectively. Therefore, it was concluded that the HQFS supplementation on given feed would affect the duration of estrus but not for the growth and estrus intensity.

(Keywords: Estrus intensity, Thin-tailed ewes, High quality feed supplement)