

IDENTIFIKASI SIKLUS ESTRUS PADA KAMBING SAANEN BERDASARKAN *FERN SALIVA* DI UPT FAKULTAS PETERNAKAN UGM

Mira Tsurayya Masruroh
19/442996/PT/08128

INTISARI

Penelitian ini bertujuan untuk mengidentifikasi siklus estrus berdasarkan karakteristik kristalisasi saliva pada Kambing Saanen. Penelitian ini dilakukan di UPT Fakultas Peternakan Universitas Gadjah Mada. Penelitian ini menggunakan 6 ekor kambing Saanen laktasi tidak bunting dengan BCS 2. Koleksi saliva Kambing Saanen dilakukan setiap 2 hari sekali selama 2-3 siklus estrus sebelum ternak diberi pakan, yaitu pada pukul 08.30 WIB. Koleksi saliva dilakukan dengan mengulaskan *cotton bud*, ke mulut bagian bawah kambing. Preparat apusan saliva dikeringkan pada suhu ruang serta diamati menggunakan mikroskop. Selain itu, dilakukan pengukuran pH vagina menggunakan kertas indikator pH. Parameter yang diamati meliputi pola kristalisasi saliva Kambing Saanen dan pH vagina. Data kemudian dianalisis secara deskriptif dan korelatif menggunakan *Spearman Correlation* untuk melihat hubungan antara *ferning* saliva dan pH vagina. Hasil penelitian menunjukkan terdapat variasi pola *ferning* yang berbeda selama siklus estrus. Pada saat estrus dicirikan oleh adanya kristalisasi saliva yang khas (*typically fern pattern*). Hubungan kedua variabel ini sedang dan searah ($r=0,50$) serta signifikan ($p<0,05$). Semakin tinggi skor *ferning* maka semakin tinggi pula pH vaginanya. Hubungan kedua variabel ini dapat digunakan sebagai penentu siklus estrus pada Kambing Saanen. Disimpulkan bahwa pola *ferning* saliva dapat digunakan untuk mengidentifikasi siklus estrus pada kambing Saanen. Pada saat estrus dicirikan dengan adanya bentuk pakis yang khas (*typically fern pattern*). Panjang siklus estrus pada 6 ekor kambing Saanen yaitu 18-27 hari.

(Kata kunci : Kambing Saanen, Siklus Estrus, *Ferning* Saliva, pH Vagina)

ESTRUS CYCLE IDENTIFICATION IN SAANEN GOATS BASED ON FERN SALIVA AT UPT OF ANIMAL SCIENCE UGM

Mira Tsurayya Masruroh
19/442996/PT/08128

ABSTRACT

This study aimed to determine the estrus cycle based on characteristic of saliva crystallisation in Saanen goats. The research was conducted at the UPT of Faculty of Animal Science, Universitas Gadjah Mada. Six head of lactating non pregnant Saanen goats with Body Condition Score (BCS) 2 were used in this research. Saliva collection from Saanen goats was performed every 2 days for 2-3 estrus cycle before the animals were fed, specifically at 08:30 AM. The saliva collection was carried out by applying moistened cotton bud than swabed on the bottom of mouth. The collected saliva was smeared on an object glass, dried at room temperature, and observed under a microscope. In addition, vaginal pH was measured using pH indicator paper. The data of saliva crystallization pattern and vaginal pH were analyzed descriptively, and the relationship between saliva *ferning* and vaginal pH was determined using Spearman correlation analysis. The result showed variation of saliva crystalization pattern during estrous cycle. The estrous characterized by typically fern pattern. The relationship between these two variables was found to be moderate and positive ($r=0.50$), and statistically significant ($p<0.05$). As the *ferning* score increased, the vaginal pH also increased. This relationship between the two variables could be used as a determinant of the estrus cycle in Saanen goats. It can be concluded that saliva crystalization could be used for identified estrous cycle in Saanen goat. The estrous characterized by typically fern pattern. The length of the estrus cycle in the six Saanen goats were 18-27 days.

(Keyword: Saanen Goat, Estrus Cycle, Salivary Ferning, Superficial)