

ABSTRAK

ADITYA RENDY SANJAYA. Tujuan penelitian ini adalah untuk menganalisis kandungan kadar garam mineral, dan nilai pH susu dengan kejadian mastitis subklinis pada kambing sapera. Materi penelitian yang digunakan adalah 30 sampel susu yang terdiri dari 15 sampel dari Siliwangi *Farm* dan 15 sampel dari Gaza *Farm* dengan pengujian *California Mastitis Test* (CMT) dan juga uji *Lactoscan*. Hasil penelitian menunjukkan rata-ran kadar mineral dan nilai pH di Siliwangi *Farm* sebesar $0.586 \pm 0.306\%$ dan 6.373 ± 0.303 , sedangkan Gaza *Farm* menunjukkan rata-ran kadar mineral dan nilai pH sebesar $0.575 \pm 0.294\%$ dan 6.744 ± 0.706 . Kejadian mastitis subklinis di Siliwangi *Farm* yakni total 15 ekor positif mastitis subklinis dari 15 sampel, sedangkan Gaza *Farm* terdapat 9 ekor positif mastitis subklinis dari 15 sampel. Kadar mineral di Siliwangi *Farm* memiliki nilai median, maksimum, minimum, dan standar deviasi ($0,59\%; 0,62\%; 0,54\%; 0,022\%$) sedangkan Gaza *Farm* menunjukkan hasil ($0,58\%; 0,62\%; 0,52\%; 0,054\%$). Nilai pH di Siliwangi *Farm* memiliki nilai median, maksimum, minimum, dan standar deviasi ($6,31; 6,74; 6,16; 0,176$), sedangkan Gaza *Farm* menunjukkan hasil ($6,76; 6,83; 6,63; 0,054$). Hasil uji-T menunjukkan bahwa kadar mineral antara Siliwangi *Farm* dan Gaza *Farm* berbeda tidak nyata ($P > 0.05$) dengan kadar mineral Siliwangi *Farm* dan Gaza *Farm* memiliki nilai sebesar ($0.586 \pm 0.306\%; 0.575 \pm 0.294\%$). Berdasarkan analisis uji-T Siliwangi *Farm* dan Gaza *Farm* menunjukkan angka ($6.373 \pm 0.303; 6.744 \pm 0.706$) dimana terdapat perbedaan yang sangat signifikan ($P < 0.05$). Kejadian mastitis tidak memiliki pengaruh dan tidak berhubungan dengan kadar mineral ($Y = 0,584 - 0,0046x; R^2 = 0,0056; R = 0,075$), sedangkan kejadian mastitis berhubungan signifikan dengan penurunan nilai pH susu ($Y = 6.7883 - 0.2873x; R^2 = 0,2628; R = 0,512$).

Kata Kunci: susu kambing Sapera, kadar mineral, nilai pH, mastitis subklinis

ABSTRACT

ADITYA RENDY SANJAYA. The purpose of this study was to analyze the content of mineral salts, and the pH value of milk with the incidence of subclinical mastitis in sapera goats. The research material used was 30 milk samples consisting of 15 samples from Siliwangi Farm and 15 samples from Gaza Farm with *California Mastitis Test* (CMT) and Lactoscan tests. The results showed that the average mineral content and pH value in Siliwangi Farm were $0.586 \pm 0.306\%$ and 6.373 ± 0.303 , while Gaza Farm showed an average mineral content and pH value of $0.575 \pm 0.294\%$ and 6.744 ± 0.706 . The incidence of subclinical mastitis in Siliwangi Farm was a total of 15 positive subclinical mastitis goats from 15 samples, while Gaza Farm had 9 positive subclinical mastitis goats from 15 samples. The mineral content in Siliwangi Farm has a median, maximum, minimum, and standard deviation value (0.59%; 0.62%; 0.54%; 0.022%) while Gaza Farm shows results (0.58%; 0.62%; 0.52%; 0.054%). The pH value in Siliwangi Farm has a median, maximum, minimum, and standard deviation value (6.31; 6.74; 6.16; 0.176), while Gaza Farm shows results (6.76; 6.83; 6.63; 0.054). The T-test results show that the mineral content between Siliwangi Farm and Gaza Farm is not significantly different ($P > 0.05$) with the mineral content of Siliwangi Farm and Gaza Farm having a value of ($0.586 \pm 0.306\%$; $0.575 \pm 0.294\%$). Based on the T-test analysis of Siliwangi Farm and Gaza Farm, the figures (6.373 ± 0.303 ; 6.744 ± 0.706) showed a very significant difference ($P < 0.05$). The incidence of mastitis had no effect and was not related to mineral levels ($Y = 0.584 - 0.0046x$; $R^2 = 0.0056$; $R = 0.075$), while the incidence of mastitis was significantly related to a decrease in milk pH ($Y = 6.7883 - 0.2873x$; $R^2 = 0.2628$; $R = 0.512$).

Keywords: Sapera goat milk, mineral content, pH value, subclinical mastitis