

## PERBANDINGAN KOMPOSISI KIMIA DAN KADAR KALSIMUM SUSU KAMBING PERANAKAN ETAWAH DENGAN PERANAKAN AFRICAN DWARF

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### INTISARI

Penelitian ini bertujuan untuk mengetahui perbedaan komposisi kimia dan kadar kalsium susu kambing Peranakan Etawah dan Peranakan *African Dwarf* pada bulan Februari 2022 – Desember 2022 dengan menggunakan 10 ekor kambing PE dan PAD pada laktasi kedua periode *mid lactation* (2 – 4 bulan setelah beranak). Analisis proksimat meliputi uji kadar air, protein, lemak, dan abu serta analisis kadar kalsium. Komposisi kimia dan kadar kalsium dianalisis menggunakan uji *independent sample T Test* dan ditampilkan secara deskriptif. Hasil penelitian menunjukkan pada susu kambing PE dan PAD memiliki kadar lemak masing-masing  $5,27 \pm 0,78\%$  dan  $7,23 \pm 0,89\%$ , berbeda nyata ( $P < 0,05$ ); kadar protein masing-masing  $3,79 \pm 0,44\%$  dan  $4,13 \pm 0,40\%$ , berbeda tidak nyata; kadar bahan kering masing-masing  $14,59 \pm 0,96\%$  dan  $17,89 \pm 0,94\%$ , berbeda nyata ( $P < 0,05$ ); kadar abu masing-masing  $0,78 \pm 0,07\%$  dan  $0,75 \pm 0,08\%$ , berbeda tidak nyata; dan kandungan kalsium masing-masing  $901,99 \pm 68,96$  ppm dan  $796,64 \pm 61,72$  ppm, berbeda nyata ( $P < 0,05$ ). Dapat disimpulkan bahwa komposisi kimia dan kandungan kalsium dalam susu kambing PE dengan kambing PAD meliputi kadar lemak, kadar bahan kering, dan kadar kalsium menunjukkan perbedaan yang nyata, sedangkan kadar protein dan kadar abu menunjukkan kesamaan.

**Kata kunci:** Komposisi Susu Kambing, Mineral Kalsium, Peranakan Etawah, dan Peranakan *African Dwarf*

## CHEMICAL COMPOSITION AND CALCIUM CONTENT OF THE MILK OF ETAWAH CROSSBREED AND AFRICAN DWARF CROSSBREED

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### ABSTRACT

This study aimed to determine difference in the chemical composition and calcium contents of milk of Etawah crossbreed and African Dwarf crossbreeds in February 2022 – December 2022 using 10 PE and PAD goats in the second lactation mid lactation period (2 – 4 months after calving). Proximate analysis includes tests for water, protein, fat, and ash content as well as analysis of calcium levels. Chemical composition and calcium contents were analyzed using the independent sample T test and displayed descriptively. The results showed that PE and PAD goat milk had fat content of  $5.27 \pm 0.78\%$  and  $7.23 \pm 0.89\%$ , respectively, significantly different ( $P < 0.05$ ); protein content  $3.79 \pm 0.44\%$  and  $4.13 \pm 0.40\%$ , respectively, not significantly different; dry matter content respectively  $14.59 \pm 0.96\%$  and  $17.89 \pm 0.94\%$ , significantly different ( $P < 0.05$ ); ash content respectively  $0.78 \pm 0.07\%$  and  $0.75 \pm 0.08\%$ , not significantly different; and calcium content respectively  $901.99 \pm 68.96$  ppm and  $796.64 \pm 61.72$  ppm, significantly different ( $P < 0.05$ ). It can be concluded that the chemical composition and calcium contents in the milk of PE goats and PAD goats including fat content, dry matter content, and calcium content showed significant differences, while protein content and ash content showed similarities.

**Keywords:** Goat milk composition, calcium mineral, Etawah Crossbreed, and African Dwarf Crossbreed