

EVALUASI KUALITAS SUSU SEGAR KAMBING PERANAKAN ETAWAH DI KELOMPOK TERNAK MAJU MAPAN DESA NGLANGGERAN PATUK GUNUNGKIDUL DAN *GARAGE FARM* TLOGOADI MLATI SLEMAN

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INTISARI

Penelitian ini bertujuan untuk mengevaluasi kualitas susu segar kambing Peranakan Etawah (PE) yang diambil dari 2 lokasi peternakan kambing perah yang berbeda yaitu di Kelompok Ternak Maju Mapan Desa Nglanggeran, Patuk, Gunungkidul dan *Garage Farm* Tlogoadi, Mlati, Sleman. Materi penelitian ini yaitu susu segar dari 4 ekor kambing PE di Kelompok Ternak Maju Mapan dan 18 ekor kambing PE di *Garage Farm*. Pengujian kualitas susu meliputi uji fisik (uji alkohol, nilai pH, kadar keasaman, diameter globula lemak), uji mikrobiologis (*somatic cell count* dan jumlah bakteri) dan uji organoleptis (cita bau, cita rasa manis dan cita rasa asam serta uji daya terima) susu segar kambing PE. Hasil penelitian menunjukkan bahwa kualitas fisik susu segar kambing PE masih normal dengan nilai pH di Kelompok Ternak Maju Mapan yaitu $6,59 \pm 0,06$ dan di *Garage Farm* yaitu $6,40 \pm 0,02$ yang berbeda antara kedua lokasi ($p < 0,05$), ukuran diameter globula lemak pada Kelompok Ternak Maju Mapan sebesar $1,97 \pm 0,08 \mu\text{m}$ dan *Garage Farm* yaitu sebesar $2,37 \pm 0,06 \mu\text{m}$ ($p < 0,05$). Kualitas mikrobiologis meliputi SCC memberikan hasil yang normal di Kelompok Ternak Maju Mapan yaitu sebesar $55 \times 10^2 \pm 0,09$ sel/ml dan pada *Garage Farm* sebesar $29 \times 10^2 \pm 0,04$ sel/ml ($p < 0,05$) dan jumlah bakteri pada Kelompok Ternak Maju Mapan sebesar $29 \times 10^6 \pm 0,01$ CFU/ml serta *Garage Farm* sebesar $22 \times 10^6 \pm 0,02$ CFU/ml ($p < 0,05$) yang melebihi batas normal terhadap lokasi yang berbeda. Kualitas sensoris yang terdiri dari cita bau, cita rasa manis dan cita rasa asam serta daya terima memberikan hasil yang normal pada susu segar kambing PE dari *Garage Farm*. Kesimpulan penelitian ini adalah kualitas fisik, mikrobiologis dan organoleptis susu segar kambing PE dari *Garage Farm* memiliki kualitas yang lebih baik daripada Kelompok Ternak Maju Mapan.

Kata kunci: Kambing Peranakan Etawah, Susu segar, Kualitas fisik, Kualitas mikrobiologis, Organoleptis.

EVALUATION OF FRESH MILK QUALITY OF ETAWAH CROSSBREED GOATS IN MAJU MAPAN FARMER GROUP NGLANGGERAN PATUK GUNUNGGIDUL AND GARAGE FARM TLOGOADI MLATI SLEMAN

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ABSTRACT

This study aims to evaluate of fresh milk quality of Etawah Crossbreed goats taken from 2 different dairy goat farm locations at Maju Mapan farmer group, Nglanggeran, Patuk, Gunungkidul and Garage Farm, Tlogoadi, Mlati, Sleman. The research material is PE goat's fresh milk taken from 4 PE goats of Maju Mapan farmer group and 18 PE goats of Garage Farm. Milk quality includes physical tests (alcohol test, pH value, acidity, fat globule size), microbiological tests (somatic cell count and bacterial count), and organoleptic tests (odor, sweet taste, sour taste, and acceptability test). The results showed that the physical quality of PE goat's fresh milk were normal, pH value at Maju Mapan farmer group was $6,59 \pm 0,06$ while at Garage Farm was $6,40 \pm 0,02$. It was different between two locations ($p < 0,05$). The size of fat globules at Maju Mapan farmer group was $1,97 \pm 0,03 \mu\text{m}$, significantly different ($p < 0,05$) from Garage Farm which was $2,37 \pm 0,06 \mu\text{m}$. Somatic cell count at Maju Mapan farmer group was $55 \times 10^2 \pm 0,09$ cells/ml, significantly different ($p < 0,05$) from Garage Farm which was $29 \times 10^2 \pm 0,04$ cells/ml while the number of bacteria at Maju Mapan farmer group was $29 \times 10^6 \pm 0,01$ CFU/ml and Garage Farm was $22 \times 10^6 \pm 0,02$ CFU/ml ($p < 0,05$). Both of them exceeded the normal limit. Sensory qualities of PE goat's fresh milk from Garage Farm was normal while from Maju Mapan farmer group was not normal. This study concluded that from the point of view of physical, microbiological, and organoleptic quality of PE goat's fresh milk from Garage Farm is better than Maju Mapan farmer group.

Keywords: Etawah Crossbreed goat, Fresh milk, Physical quality, Microbiological quality, Organoleptic.