

ABSTRAK

PENGARUH SUBSTITUSI DAUN SINGKONG DENGAN AZOLLA (*Azolla pinnata*) TERHADAP BERAT JENIS, KADAR LEMAK, DAN BAHAN KERING TANPA LEMAK SUSU KAMBING PERAH PERANAKAN ETAWA

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Penelitian ini bertujuan untuk mengetahui pengaruh substitusi daun singkong dengan azolla terhadap berat jenis, kadar lemak, dan bahan kering tanpa lemak (BKTL) susu kambing perah PE serta menentukan persentase substitusi yang memberikan hasil terbaik. Penelitian dilaksanakan pada Oktober–November 2025 bertempat di Soccer Mania Farm, Desa Sumber Gede, Kabupaten Lampung Timur, Provinsi Lampung. Analisis dilaksanakan di Laboratorium Produksi Ternak, Jurusan Peternakan, Fakultas Pertanian, Universitas Lampung. Penelitian ini menggunakan Rancangan Acak Kelompok (RAK) dengan tiga perlakuan dan tiga kelompok sebagai ulangan. Perlakuan yang diberikan yaitu P0 (70% daun singkong + 30% ampas tahu), P1 (65% daun singkong + 5% azolla + 30% ampas tahu), dan P2 (60% daun singkong + 10% azolla + 30% ampas tahu). Parameter yang diamati meliputi berat jenis, kadar lemak, dan BKTL susu. Data dianalisis menggunakan analisis ragam (ANOVA) pada taraf 5%. Hasil penelitian menunjukkan bahwa substitusi daun singkong dengan azolla tidak berpengaruh nyata ($P>0,05$) terhadap berat jenis, kadar lemak, BKTL susu kambing PE.

Kata kunci: Azolla, Daun singkong, Berat jenis, Kadar lemak, BKTL, Susu kambing PE

ABSTRACT

THE EFFECT OF CASSAVA LEAF SUBSTITUTION WITH AZOLLA (*Azolla pinnata*) ON THE DENSITY, FAT CONTENT, AND SOLID NON-FAT OF PERANAKAN ETAWA DAIRY GOAT MILK

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This research aimed to determine the effect of substituting cassava leaves with azolla on milk density, fat content, and solid non-fat (SNF) of PE dairy goat milk, as well as to identify the most effective substitution level. The research was conducted from October to November 2025 at Soccer Mania Farm, Sumber Gede Village, East Lampung Regency, Lampung Province. Milk analysis was carried out at the Animal Production Laboratory, Department of Animal Husbandry, Faculty of Agriculture, University of Lampung. The experiment employed a Randomized Block Design (RBD) consisting of three treatments and three blocks as replications. The treatments were P0 (70% cassava leaves + 30% tofu by-product), P1 (65% cassava leaves + 5% azolla + 30% tofu by-product), and P2 (60% cassava leaves + 10% azolla + 30% tofu by-product). The observed parameters included milk density, fat content, and SNF. Data were analyzed using analysis of variance (ANOVA) at a 5% significance level. The results indicated that substitution of cassava leaves with azolla had no significant effect ($P > 0.05$) on milk density, fat content, or SNF of PE goat milk.

Keywords: Azolla, Cassava leaves, milk density, Fat content, Solid non-fat, PE goat milk