

## **ABSTRAK**

### **PENGARUH SUPLEMENTASI MINERAL MIKRO ORGANIK Zn DAN Cu TERHADAP KUALITAS FISIK SUSU KAMBING JAWARANDU DI MULIA FARM**

**Oleh**

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Penelitian ini bertujuan untuk mengetahui dosis terbaik dari pengaruh pemberian suplementasi mineral mikro organik terhadap kualitas fisik susu kambing Jawarandu. Penelitian ini dilaksanakan pada April 2022 di Mulia Farm, Desa Sukabanjar, Kec. Gedong Tataan, Kab. Pesawaran dan di lanjutkan dengan analisa sampel susu di Laboratorium Produksi Ternak, Jurusan Peternakan, Fakultas Pertanian, Universitas Lampung. Penelitian ini menggunakan Rancangan Acak Kelompok (RAK) yang terdiri dari 4 perlakuan dengan 3 ulangan. Perlakuan yang diberikan yaitu, R<sub>0</sub>: Ransum Basal; R<sub>1</sub>: Ransum Basal + (Zn 20 ppm, Cu 5ppm); R<sub>2</sub>: Ransum Basal + (Zn 40 ppm, Cu 10ppm); dan R<sub>3</sub>: Ransum Basal + (Zn 60 ppm, Cu 15ppm). Peubah yang diamati meliputi berat jenis susu, pH susu, derajat keasaman (<sup>o</sup>SH), dan uji alkohol. Suplementasi mineral mikro organik berupa Zn 20 ppm, 40 ppm, dan 60 ppm, dan Cu 5 ppm, 10 ppm, dan 15 ppm menunjukkan hasil yang tidak berpengaruh nyata ( $P>0,05$ ) terhadap berat jenis susu (1,029--1,031), pH susu (6,11--6,23), derajat keasaman (8,87--9,6<sup>0</sup>SH), dan uji alkohol (positif) susu kambing Jawarandu. Suplementasi mineral mikro organik Zn dan Cu pada level berbeda tidak memberi pengaruh terhadap kualitas fisik baik berat jenis, pH, dan derajat keasaman susu kambing Jawarandu. Tidak ada level terbaik dari suplementasi mineral mikro organik Cu dan Zn pada berbagai perlakuan yang diberikan terhadap kualitas fisik (berat jenis, pH, derajat keasaman, dan uji alkohol) susu kambing Jawarandu

**Kata kunci** : Kambing Jawarandu, Kualitas fisik susu, Mineral mikro

## **ABSTRACT**

### **THE EFFECT OF Zn AND Cu MICRO ORGANIC MINERAL SUPPLEMENTATION ON THE PHYSICAL QUALITY OF JAWARANDU GOAT MILK IN THE MULIA FARM**

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The aim of this study was to determine the effect and the best dose of micro organic mineral supplementation on the physical quality of Jawarandu goat milk. This research was conducted in April 2022 at Mulia Farm, Sukabandar Village, Gedong Tataan District, and Pesawaran Regency, and continued with the analysis of milk samples at the Animal Production Laboratory, Department of Animal Husbandry, Faculty of Agriculture, University of Lampung. This study used a randomized block design (RBD), which consisted of 4 treatments with 3 replications. The treatment given are : R0: basal ration; R1: basal ration + (Zn 20 ppm, Cu 5 ppm); R2: basal ration + (Zn 40 ppm, Cu 10 ppm); and R3: basal ration + (Zn 60 ppm, Cu 15 ppm). Variables observed included density of milk, milk pH, soxlet henkel (°SH), and alcohol test. Supplementation of micro organic minerals in the form of Zn at 20 ppm, 40 ppm, and 60 ppm and Cu at 5 ppm, 10 ppm, and 15 ppm showed no significant effect ( $P > 0,05$ ) on the density of milk (1,029--1,031), pH of milk (6,11--6,23), soxlet henkel (8,87--9,6°SH), and alcohol test (positive) of Jawarandu goat milk. Supplementation of the micro organic minerals Zn and Cu at different levels had no effect on the physical quality, either in terms of density of milk, pH, soxlet henkel, or alcohol test of Jawarandu goat's milk. There is no the best level of supplementation micro organic minerals Zn and Cu in various treatments given to the physical quality (density of milk, pH, soxlet henkel, and alcohol test) of Jawarandu goat milk.

**Key words** : Jawarandu goat, Micro minerals, Physical quality of milk