

**PENGARUH FORTIFIKASI DAN LAMA FERMENTASI TERHADAP
KUALITAS KIMIA DAN KUALITAS FISIK
PASTA ISI RUMEN DOMBA**

RESTU KHALIFA ARDHI
NIM: 15022145

INTISARI^{*)}

Penelitian ini bertujuan untuk mengetahui pengaruh fortifikasi dan lama fermentasi terhadap kualitas kimia dan kualitas fisik Pasta Isi Rumen Domba (PIRD). Penelitian dilaksanakan dari tanggal 25 November 2017 sampai dengan 11 Januari 2018 di Laboratorium Produksi Ternak dan Laboratorium Mikrobiologi, Fakultas Agroindustri, Universitas Mercu Buana Yogyakarta. Penelitian ini menggunakan Rancangan Acak Lengkap (RAL) pola faktorial 3x3 dengan 3 ulangan. Faktor pertama yaitu formula fortifikasi A, B dan C. Faktor kedua yaitu lama fermentasi 2, 3, dan 4 minggu. Data yang diperoleh dianalisis dengan *Analysis of Variance* (ANOVA), jika ada perbedaan nyata dilanjutkan dengan uji *Duncan's New Multiple Range Test* (DMRT). Variabel yang diteliti yaitu uji kualitas kimia (kadar air, protein kasar, lemak kasar, serat kasar, dan kadar abu) dan uji kualitas fisik (TPC, pH, warna, tekstur, dan aroma). Hasil penelitian yang diperoleh menunjukkan terjadi interaksi antara formula fortifikasi dan lama fermentasi berpengaruh nyata ($P < 0,05$) terhadap uji kadar air dan kadar abu PIRD, sedangkan pada uji yang lainnya tidak terjadi interaksi. Formula fortifikasi berpengaruh nyata ($P < 0,05$) terhadap uji kualitas kimia (kadar air, protein kasar, lemak kadar, serat kasar, dan kadar abu) dan kualitas fisik (TPC dan pH). Lama fermentasi berpengaruh nyata ($P < 0,05$) terhadap uji kadar air, protein kasar, dan kadar abu pada PIRD, sedangkan yang lainnya berpengaruh tidak nyata ($P > 0,05$). Berdasarkan hasil dan pembahasan dapat disimpulkan bahwa formula terbaik yaitu C dan lama fermentasi 4 minggu masih dapat mempertahankan kualitas kimia dan fisik PIRD.

Kata kunci : Pasta Isi Rumen Domba (PIRD), kualitas kimia, kualitas fisik, fortifikasi, lama fermentasi

^{*)} Intisari Skripsi Sarjana Peternakan, Program Studi Peternakan, Fakultas Agroindustri, Universitas Mercu Buana Yogyakarta, 2018.

**THE EFFECT OF FORTIFICATION AND FERMENTATION TIME
ON CHEMICAL AND PHYSICAL QUALITY
OF SHEEP RUMEN CONTENT PASTE**

Restu Khalifa Ardhi
15022145

ABSTRACT^{*)}

This study aims to determine the effect of fortification and fermentation time on chemical and physical quality of Sheep Rumen Contents Paste (SRCP). The study was conducted from November 25, 2017 to January 11, 2018 at the Livestock Production Laboratory and Microbiology Laboratory, Agroindustry Faculty, Mercu Buana University Yogyakarta. This study uses Completely Randomized Designs (CRD) 3x3 factorial pattern with 3 replications. The first factor is fortification with A, B, and C. The second factor is fermentation time 2, 3, and 4 weeks. The data obtained were analyzed with Analysis of Variance (ANOVA), if there was any significant difference followed by Duncan's New Multiple Range Test (DMRT) test. The variables studied were proximate test (water content, crude protein, coarse fat, coarse fiber and ash content) and physical quality test (TPC, pH, color, texture, and odor). The result of the research showed that there was interaction formulation fortification and fermentation time significantly ($P < 0,05$) to water content test and ash content of Paste Contents of Sheep Rumen (PIRD), while on the other test there was no interaction. Fortification has significant effect ($P < 0,05$) on chemical quality test (water content, crude protein, fat content, coarse fiber, and ash content) and physical quality test (TPC and pH). The duration of fermentation had significant effect ($P < 0,05$) on water content test, crude protein, and ash content on PIRD, while the others had no significant effect ($P > 0,05$). Based on the results and discussion it can be concluded that the best is C and fermentation time of 4 week can still maintain chemical and physical quality of CPSR.

Keywords: Sheep Rumen Contents Paste (SRPC), chemical quality, physical quality, fortification, fermentation time

^{*)} Abstract from Thesis of Animal Husbandry Degree, Animal Husbandry Program, Faculty of Agroindustry, University of Mercu Buana Yogyakarta, 2018