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RESPON PENAMBAHAN EFFECTIVE MICROORGANISM-4 (EM-4) TERHADAP KUALITAS NUTRISI FERMENTASI LIMBAH BAGASSE TEBU UNTUK PAKAN TERNAK

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Abstract

The objective of this research was to obtain the best dosage of using EM-4 in sugar cane waste. This research was done in two processes. First process was fermentation of sugar cane waste within 9 days in "Nutrisi dan Makanan Ternak" Laboratory at Sriwijaya University. Second process was analyzed the nutritive value of sugar cane waste, in Laboratory of ruminant and chemical feed at Faculty of Animal Husbandry, Padjajaran University, Bandung.

A Complete Randomized Design with four treatments and three replications was carried out. The experimental diets were : E0 (control), E1 (waste of sugar cane + 7,5ml EM-4), E2 (waste of sugar cane + 15ml EM-4), E3 (waste of sugar cane + 22,5ml EM-4). Each treatment was added with rice straw 20% of dried weight sugar cane waste. The parameters measured were dry matter, crude fiber, crude protein, NFE and crude fat.

The results of this research showed that the treatment improved significantly to dry matter, crude fiber, crude protein, NFE and crude fat. The conclusion of the research was treatment by addition EM-4 15ml give the best result in all treatments.

Key Words : Effective Organism-4, nutrition quality, fermentation, sugar cane waste.

1. PENDAHULUAN

1.1. Latar Belakang

Peningkatan produktivitas ternak sangat tergantung dari tiga faktor yaitu pakan, pembibitan dan tata laksana. Pakan bagi ternak ruminansia tergantung dari penyediaan hijauan dalam jumlah cukup, berkualitas tinggi dan berkesinambungan sepanjang tahun. Rendahnya nilai gizi dan fluktuasi produksi hijauan pakan sepanjang tahun merupakan masalah penyediaan pakan di Indonesia sampai saat ini. Salah

satu usaha mengatasi masalah tersebut adalah dengan memanfaatkan bahan-bahan pakan inkonvensional seperti limbah pertanian, peternakan dan perkebunan¹⁾.

Pemanfaatan limbah pertanian dan limbah industri pengolahan hasil pertanian yang berserat tinggi diperkirakan mampu menyediakan kira-kira 66% dari total kebutuhan ternak ruminansia²⁾. Potensi yang demikian besar belum dimanfaatkan