

ABSTRAK

PENGARUH KOMPOSISI BERBEDA CAMPURAN TONGKOL JAGUNG DAN AMPAS TAHU DIFERMENTASI MENGGUNAKAN *Rhizopus oligosporus* TERHADAP KUALITAS FISIK DAN PALATABILITAS

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Penelitian ini bertujuan untuk mengetahui pengaruh komposisi berbeda campuran tongkol jagung dan ampas tahu terfermentasi *Rhizopus oligosporus* terhadap kualitas fisik (warna, aroma, dan tekstur) dan palatabilitas. Penelitian ini dilaksanakan pada Januari 2023--Februari 2023, di Laboratorium Nutrisi dan Makanan Ternak, Jurusan Peternakan, Fakultas Pertanian, Universitas Lampung dan peternakan kambing perah RAS Farm Pringsewu. Penelitian ini menggunakan Rancangan Acak Lengkap (RAL) yang terdiri dari 4 perlakuan dan 5 ulangan. Perlakuan yang diberikan yaitu P0: tongkol jagung 50% + ampas tahu 50% (kontrol), P1: tongkol jagung 50% + ampas tahu 50% + ragi tempe 4%, P2: tongkol jagung 60% + ampas tahu 40% + ragi tempe 4%, dan P3: tongkol jagung 70% + ampas tahu 30% + ragi tempe 4%. Variabel yang diamati meliputi uji organoleptik (warna, aroma, dan tekstur) dan palatabilitas. Data organoleptik yang diperoleh dianalisis menggunakan *Analysis of Variance* (ANOVA) dan dilanjutkan dengan Uji Jarak Berganda Duncan (DMRT), sedangkan untuk data palatabilitas yang diperoleh dianalisis secara deskriptif kuantitatif. Hasil penelitian menunjukkan bahwa komposisi campuran berbeda tongkol jagung dan ampas tahu terfermentasi *Rhizopus oligosporus* berpengaruh nyata ($P < 0,05$) terhadap warna (P0: coklat, P1: putih, P2 putih, dan P3 putih), berbeda nyata ($P < 0,05$) terhadap aroma (P0: khas tongkol jagung, P1: khas fermentasi ragi tempe, P2 : khas fermentasi ragi tempe, dan P3: khas fermentasi ragi tempe) dan berbeda nyata ($P < 0,05$) terhadap tekstur (P0 : lunak berair, P1: lunak menggumpal, P2 : lunak menggumpal, dan P3: lunak menggumpal. Perlakuan terbaik terhadap kualitas fisik (warna, aroma, dan tekstur) yaitu pada P1. Kemudian perlakuan yang memiliki palatabilitas tertinggi yaitu P0 dengan tingkat konsumsi 122 gram/2jam.

Kata kunci : Ampas tahu, kualitas organoleptik, palatabilitas, *Rhizopus oligosporus* dan tongkol jagung.

ABSTRACT

INFLUENCE OF DIFFERENT COMPOSITION OF CORN COB AND TOFU WASTE FERMENTATED USING *Rhizopus oligosporus* ON PHYSICAL QUALITY AND PALATABILITY

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This study aims to determine the effect of different compositions of corn cob and tofu waste fermented by *Rhizopus oligosporus* on physical quality (color, scent, and texture) and palatability. This research was conducted in January 2023-February 2023, at the Animal Nutrition and Food Laboratory, Department of Animal Husbandry, Faculty of Agriculture, University of Lampung and RAS Farm Pringsewu dairy goat farm. This study used a completely randomized design (CRD) consisting of 4 treatments and 5 replicates. The treatments were P0: 50% corn cob + 50% tofu waste (control), P1: 50% corn cob + 50% tofu waste + 4% tempe yeast, P2: 60% corn cob + 40% tofu waste + 4% tempe yeast, and P3: 70% corn cob + 30% tofu waste + 4% tempe yeast. The observed variables included organoleptic test (color, scent, and texture) and palatability. Organoleptic data obtained were analyzed using Analysis of Variance (ANOVA) and continued with Duncan's Multiple Range Test (DMRT), while the palatability data obtained were analyzed descriptiv quantitativ. The results showed that the different composition of corn cobs and tofu waste was a significantly different ($P < 0.05$) on color (P0: brown, P1 : white, P2 : white, and P3 : white), significantly different ($P < 0.05$) on scent (P0 : scent typical of corn cobs, P1 : scent typical of tempe yeast fermentation, P2 : scent typical of tempe yeast fermentation, and P3 : scent typical of tempe yeast fermentation) and significantly different ($P < 0.05$) on texture (P0 : watery soft, P1 : clot soft, P2 : clot soft, and P3: clot soft). The best treatment on organoleptic quality (color, scent, and texture) that is P1. Then the treatment was highest level of palatability is P0 with the consumption 122 gram/2jam.

Keywords: Corn cob, organoleptic quality, palatability, and *Rhizopus oligosporus* and tofu waste.