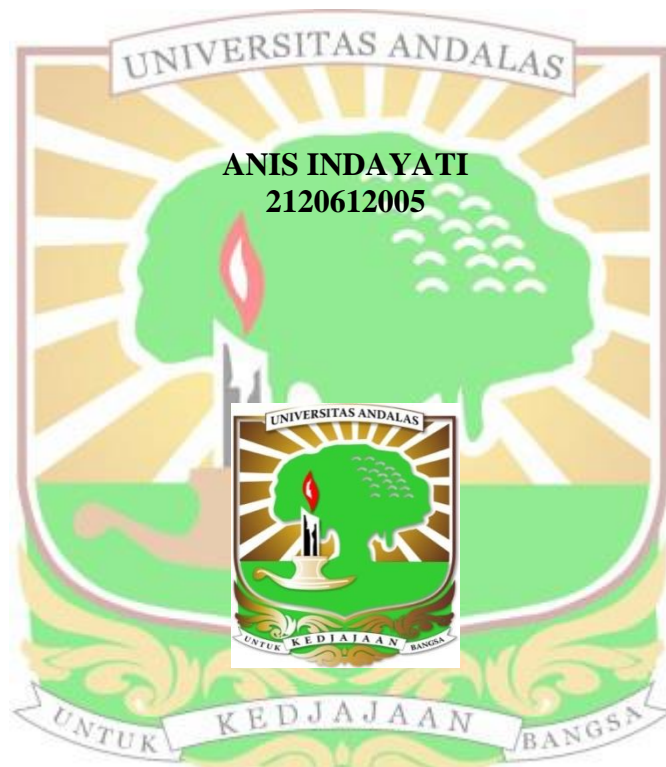


**FERMENTASI CAMPURAN ONGGOK DAN AMPAS TAHU DENGAN
Trichoderma viride DAN PENGARUHNYA TERHADAP
PERFORMA BEBEK PEDAGING *FINISHER***

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FERMENTASI CAMPURAN ONGGOK DAN AMPAS TAHU DENGAN *Trichoderma viride* DAN PENGARUHNYA TERHADAP PERFORMA BEBEK PEDAGING *FINISHER*

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Abstrak

Penelitian ini bertujuan mendapatkan kombinasi terbaik komposisi substrat (onggok dan ampas tahu) dan lama fermentasi menggunakan kapang *Trichoderma viride* untuk menurunkan serat kasar dan menaikkan protein kasar, dan menemukan level persentase campuran produk fermentasi terbaik pada ransum terhadap performa bebek Multi Farmindo Jaya 202 (MFJ 202). Penelitian ini terdiri dari 2 tahap. Tahap 1 yaitu menemukan kombinasi komposisi substrat dan lama fermentasi berbeda menggunakan *Trichoderma viride* ($9,2 \times 10^8$ CFU/g) sebanyak 4% dari substrat. Rancangan yang digunakan adalah Rancangan Acak Lengkap (RAL) Faktorial 3 x 3 dengan 3 kali ulangan. Faktor A komposisi substrat (onggok dan ampas tahu): A1 = 80%:20%, A2 = 60%:40%, A3 = 40%:60% dan faktor B (waktu fermentasi): B1 = 3 hari, B2 = 5 hari, B3 = 7 hari. Parameter yang diamati adalah kandungan protein kasar dan serat kasar dalam produk fermentasi. Penelitian tahap 2 adalah penggunaan produk fermentasi dengan 4 level berbeda yaitu P0 (0%), P1 (10%), P2 (20%), dan P3 (30%) produk fermentasi dalam ransum bebek MFJ 202. Parameter yang diamati adalah performa konsumsi ransum, penambahan bobot badan, konversi ransum, bobot hidup, bobot karkas dan persentase karkas bebek MFJ 202. Hasil penelitian tahap 1 menunjukkan bahwa interaksi komposisi substrat 60%:40% dan waktu fermentasi 7 hari berpengaruh sangat nyata ($p < 0,01$) dalam meningkatkan protein kasar dan menurunkan serat kasar. Hasil penelitian tahap 2 menunjukkan bahwa penggunaan produk fermentasi sebanyak 30% dalam ransum berpengaruh sangat nyata ($p < 0,01$) pada penurunan performa bebek MFJ 202. Kesimpulan penelitian ini adalah interaksi komposisi substrat onggok dan ampas tahu (60%:40%) dan lama fermentasi 7 hari menggunakan *Trichoderma viride* sebanyak 4% dari substrat meningkatkan protein kasar 127,59% dari 9,35% menjadi 21,28% dan menurunkan serat kasar 14,25% yang semula 18,36% menjadi 16,07%. Produk fermentasi dapat digunakan sampai 20% dalam ransum dengan rata-rata konsumsi ransum 3465.52 g/ekor selama penelitian, penambahan bobot badan 1087.12 g/ekor selama penelitian, konversi ransum 3.19, bobot hidup 1925.60 g/ekor, bobot karkas 1200.00 g/ekor, dan persentase bobot karkas 62.32 %.

Kata Kunci : Onggok, Ampas Tahu, *Trichoderma viride*, Bebek Pedaging

FERMENTATION MIXTURE OF TAPIOCA BY-PRODUCTS (ONGGOK) AND TOFU DREGS WITH *Trichoderma viride* AND THE EFFECT ON PERFORMANCE FINISHER BROILER DUCKS

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Abstract

This research aims to obtain the best combination of substrate composition (tapioca by-products and tofu dregs) and fermentation time using *Trichoderma viride* mold to reduce crude fiber and increase crude protein, and find the percentage level of the best fermented product mixture in the ration on the performance of Multi Farmino Jaya 202 (MFJ 202) ducks. This research consists of 2 stages. Stage 1 is finding different combinations of substrate composition and fermentation time using *Trichoderma viride* (9.2×10^8 CFU/g) as much as 4% of the substrate. The design used was a 3 x 3 Factorial Completely Randomized Design (CRD) with 3 replications. Factor A substrate composition (tapioca by-products and tofu dregs): A1 = 80%:20%, A2 = 60%:40%, A3 = 40%:60% and factor B (fermentation time): B1 = 3 days, B2 = 5 days, B3 = 7 days. The parameters observed were the crude protein and crude fiber content in the fermented product. Phase 2 of the research was the use of fermented products with 4 different levels, namely P0 (0%), P1 (10%), P2 (20%), and P3 (30%) fermented products in the MFJ 202 duck feed. The parameters observed were the performance of ration consumption, body weight gain, ration conversion, live weight, carcass weight and carcass percentage of MFJ 202 ducks. The results of phase 1 research showed that the interaction of 60%:40% substrate composition and 7 days fermentation time had a very significant effect ($p < 0.01$) in increasing crude protein and lower crude fiber. The results of phase 2 research showed that the use of fermented products as much as 30% in the ration had a very significant effect ($p < 0.01$) on reducing the performance of MFJ 202 ducks. The conclusion of this research is that the interaction of the substrate composition of tapioca by-products and tofu dregs (60%:40%) and the fermentation time of 7 days using *Trichoderma viride* as much as 4% of the substrate increased crude protein 127.59% from 9.35% to 21.28% and reduced crude fiber 14.25% from 18.36% to 16.07%. Fermented products can be used up to 20% in the feed with an average ration consumption 3465.52 grams per duck during the research; body weight gain 1087.12 grams per duck during the research; ration conversion 3.19, live weight 1925.60 g, carcass weight 1200.00 g, and carcass weight percentage 62.32%.

Keywords: Onggok, Tofu Dregs, *Trichoderma viride*, Broiler Duck