

# PENGARUH LEVEL INOKULUM *ASPERGILLUS NIGER* TERHADAP KANDUNGAN NUTRIEN ONGGOK FERMENTASI

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## INTISARI<sup>1</sup>

Penelitian ini bertujuan untuk mengetahui level yang terbaik inokulum *Aspergillus niger* pada fermentasi onggok terhadap kandungan nutriennya. Penelitian ini menggunakan Rancangan Acak Lengkap (RAL) dengan 6 macam perlakuan level inokulum *Aspergillus niger* yaitu P1 (0%), P2 (2%), P3 (4%), P4 (6%), P5 (8%), dan P6 (10%). Variabel yang diamati meliputi kadar air, abu, protein kasar, lemak kasar, dan serat kasar. Data yang diperoleh dianalisis dengan *Analisis of Variant* (ANOVA) apabila hasil uji berbeda nyata maka dilanjut dengan *Duncan's Multiple Range Test* (DMRT). Hasil penelitian menunjukkan rerata kadar air P1: 6,85%; P2: 5,64%; P3: 5,93%; P4: 7,14%; P5: 6,62% dan P6: 5,47%, abu P1: 7,03%; P2: 7,00%; P3: 6,97%; P4: 7,71 %; P5: 8,30% dan P6: 7,02%, protein kasar P1: 8,69%; P2: 9,89%; P3: 8,92%; P4: 10,35%; P5: 11,19% dan P6: 11,28%, lemak kasar P1: 1,53%; P2: 1,12%; P3: 1,19%; P4: 1,00%; P5: 0,88% dan P6: 0,27%, serat kasar P1: 32,05%; P2: 14,74%; P3: 13,06%; P4: 12,62%; P5: 12,31 dan P6: 12,27%. Berdasarkan hasil uji *Analisis of Variant* (ANOVA) menunjukkan bahwa level inokulum *Aspergillus niger* pada fermentasi onggok berpengaruh nyata ( $P < 0,05$ ) terhadap semua variabel. Disimpulkan bahwa level inokulum terbaik pada fermentasi onggok dengan *Aspergillus niger* adalah 10% dengan kadar protein kasar tertinggi, dan kadar serat kasar terendah.

Kata kunci : Inokulum, *Aspergillus niger*, Nutrien, Onggok, Fermentasi

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<sup>1</sup> Intisari Skripsi Sarjana Peternakan, Program Studi Peternakan, Fakultas Agroindustri, Universitas Mercu Buana Yogyakarta, 2017

# THE EFFECT OF *ASPERGILLUS NIGER* INOKULUM LEVEL ON NUTRIENT CONTENT OF FERMENTED “ONGGOK”

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## ABSTRACT<sup>2</sup>

This study is to investigate the effect of the best *Aspergillus niger* level on nutrient content of fermented *onggok* or cassava pulp. Completely randomized design (CRD) was applied on 6 level of *Aspergillus niger* inoculum as treatments, there were P1 (0%), P2 (2%), P3 (4%), P4 (6%), P5 (8%), dan P6 (10%). Observed variables were moisture, ash, crude protein, crude fat, and crude fiber content. The data analyzed using Analysis of Variant (ANOVA), followed by Duncan's Multiple Range Test (DMRT) when the difference was significant. Result showed that average moisture content were P1: 6,85%, P2: 5,64%, P3: 5,93%, P4: 7,14%, P5: 6,62% and P6: 5,47%, ash of P1: 7,03%, P2: 7,00%, P3: 6,97%, P4: 7,71%, P5: 8,30% and P6: 7,02%, crude protein of P1: 8,69%, P2: 9,89%, P3: 8,92%, P4: 10,35%, P5: 11,19% and P6: 11,28% crude fat of P1: 1,53%, P2: 1,12%, P3: 1,19%, P4: 1,00 %, P5: 0,88% and P6: 0,27%, and crude fiber of P1: 32,05%, P2: 14,74%, P3: 13,06%, P4: 12,62%, P5: 12,31% and P6: 12,27%. Analysis of Variant (ANOVA) test indicated that *Aspergillus niger* level was significantly different on *onggok* fermentation ( $P < 0,05$ ) on all variables. It can be concluded that the best *Aspergillus niger* level on fermented *onggok* it was 10% with highest crude protein and lowest crude fiber.

Keywords: *Aspergillus niger*, fermentation, inoculum, nutrient, cassava pulp

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<sup>2</sup> Abstract Skripsi of S1 Animal Husbandry, Agroindustry Faculty, Fakultas Agroindustri, Mercu Buana University Yogyakarta, 2017