

**PENGARUH MACAM STARTER DAN LAMA FERMENTASI  
TERHADAP KANDUNGAN NITROGEN, POSPOR, DAN KALIUM URIN  
SAPI**

**NAVISATUL MUNAWAROH**

**NIM. 15021099**

**INTISARI\***

Penelitian ini bertujuan untuk mengetahui kandungan Nitrogen, Fospor, Kalium urine sapi, jenis starter dan lama fermentasi yang terbaik. Penelitian menggunakan metode eksperimental dengan 2 faktor. Faktor 1 jenis starter yaitu starter pabrik dan starter lokal. Faktor 2 lama fermentasi yaitu 0 hari, 7 hari, 14 hari dan 21 hari. Rancangan percobaan yang digunakan adalah Rancangan Acak Lengkap pola faktorial dan dianalisis dengan analisis variansi pola faktorial 2 X 4, jika ada perbedaan nyata dilanjutkan dengan uji *Duncan's Multiple Range Test* (DMRT). Parameter yang diukur pada penelitian ini adalah N, P, K. Metode yang digunakan untuk analisis kadar N menggunakan metode Kjeldahl, analisis kadar P menggunakan metode spektrofotometri sedangkan analisis kadar K menggunakan metode Spektrofotometer Serapan Atom (SSA). Hasil penelitian menunjukkan bahwa jenis starter dan lama fermentasi berpengaruh nyata ( $P \leq 0,05$ ) terhadap kandungan N dan P, namun tidak berpengaruh nyata terhadap K. Disimpulkan bahwa pemberian starter lokal dalam urine sapi yang difermentasi selama 21 hari menunjukkan kandungan NPK yang terbaik.

Kata kunci : NPK, starter pabrik, starter lokal, urine sapi, fermentasi

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\*Intisari Skripsi Sarjana Peternakan, Program Studi Peternakan, Fakultas Agroindustri, Universitas Mercu Buana Yogyakarta, 2019.

**THE EFFECT OF STARTER KIND AND FERMENTATION DURATION  
ON NITROGEN, PHOSPOR, AND KALIUM CONTENT OF CATTLE  
URINE**

**NAVISATUL MUNAWAROH**

**NIM. 15021099**

**ABSTRACT\***

This research was conducted to determine the contents of nitrogene, phosporus, potassium (NPK) cow urine, type of starter and the best duration fermentation. The research used an experimental methode with 2 factors. First factor is type of starter , that is an factory starter and local starter. Second factor is duration of fermentation, that is 0 days, 7 days, 14 days and 21 days. The experimental design used completely randomized factorial pattern and it was analyzed by a variance analysis of 2 x 4 factorial patterns. The result was significantly different, then continued with Duncan's Multiple Range Test (DMRT). The parameters that measured in this research are N, P, K. The method used for N level analysis using the kjeldahl method, while the analysis of P level using the spectrophotometry method, while the analysis of K level using the Atomic Absorption Spectroscopy (AAS) method. The research result showed that the type of starter and duration of fermentation had a significant effect ( $P \leq 0,05$ ) on the level of N and P, but did not significantly affect to K. It was concluded that the administration of local starter in cow urine which was fermented for 21 days showed the best NPK content.

Keywords : NPK, factory starter, local starter, Cow Urine, Fermentation

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\*Thesis Bachelor of Animal Husbandry, Faculty of Agroindustri, Mercu Buana University of Yogyakarta, 2019.