

**PERBANDINGAN KUALITAS PUPUK ORGANIK CAIR HASIL
FERMENTASI URIN MARMUT (*Cavia cobaya*), SAPI
PERANAKAN ONGOLE, DOMBA EKOR TIPIS DAN
KELINCI *Flemish Giant***

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INTISARI

Penelitian ini bertujuan untuk mengetahui kualitas pupuk organik cair hasil fermentasi urin beberapa spesies yaitu marmut dan kelinci sebagai hewan monogastrik, domba dan sapi sebagai hewan poligastrik. Fermentasi urin dilakukan dengan memberikan bahan yaitu EM4 5% dan molasses 5%. Data yang diperoleh terdiri dari uji fisik meliputi suhu, pH, warna dan bau, uji kimia meliputi kadar N total, P total, K total dan C-organik, uji mikrobiologis dilakukan penghitungan CFU/ml, uji biologis meliputi tinggi tanaman, jumlah daun, luas daun, panjang akar dan berat panen. Data hasil peneliti dianalisis dengan rancangan acak lengkap pola searah dan *Duncan's New Multiple Range Test* (DMRT). Hasil penelitian menunjukkan bahwa hasil kimia terbaik dihasilkan oleh pupuk organik cair dari fermentasi urin kelinci dengan kadar N total 0,82%, P total 0,050%, C-organik 14,02% sedangkan K total tertinggi terdapat pada pupuk cair organik dari urin marmut. Uji biologis menunjukkan jumlah koloni terbanyak pupuk organik cair dari urin kelinci dengan $2,24 \times 10^6$ CFU/ml. Uji biologis menunjukkan bahwa pupuk organik cair dari urin kelinci memberikan pengaruh nyata ($P < 0,05$) terhadap tinggi tanaman, jumlah daun, luas daun, panjang akar dan berat panen tanaman sawi. Kesimpulan kualitas pupuk organik cair dari hewan monogastrik terutama kelinci lebih baik dari hewan ruminansia seperti domba dan sapi dilihat dari parameter kimia, mikrobiologis dan biologi.

Kata kunci : Urin Fermentasi, Pupuk organik cair, Urin kelinci, Tanaman sawi

COMPARISON OF LIQUID ORGANIC FERTILIZER QUALITY MADE FROM GUINEA PIG (*Cavia cobaya*), CROSSED ONGOLE CATTLE, THIN TAIL SHEEP AND FLEMISH GIANT RABBIT URINE FERMENTATION

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ABSTRACT

The purpose of this research was to examine the comparison of liquid organic fertilizer quality from fermented urine of some species include guinea pig and rabbit which categorize as monogastric animals, sheep and cattle as poligastric. The research was accomplished by roviding same treatments by giving 5%EM4 and5% molasses. Collected data were physical quality include temperature, pH, color and odor. Chemical observation include total N, total P, total K and C-organic. Microbiology examination by counting of bacterial CFU/ml. Biological examination were height, leaf number, leaf area, root length and weight of the harvest plant. The result of chemical examination, biological and microbiology were analyzedusing completed randomized variance analysis unidirectional pattern and if there is differences, it would be continued by the different test Duncan's new multiple range test (DMRT). The result showed that liquid organic fertilizer fermented from rabbit urine are the best of the chemical quality include 0,82% N, 0,050% P, C-organic 12,02%, while the highest total K contained in liquid organic fertilizer from the urine of guinea pig. Micrological examination showed that the highest number of colonies was liquid organic fertilizer made from urine of rabbits with $2,24 \times 10^6$ CFU/ml. Biological examination showed that liquid organic fertilizer from the urine of rabbits was significantly effect ($P < 0.05$) on plant height, number of leaves, leaf area, root length and weight of the harvest of mustard. Conclusions of this research of quality liquid organic fertilizer from monogastric animals urine, especially rabbits better than ruminant animals urine such as sheep and cattle seen from a chemical, microbiological and biological.

Keywords: Urine fermentation, liquid organic fertilizer, rabbiturine, mustard plant