

**KUALITAS KOMPOS DAN PENURUNAN KADAR GAS AMONIA
FESES KELINCI DENGAN PENAMBAHAN PRODUK FERMENTASI
BUAH MAJA (*Aegle marmelos*) DAN REBUNG (*Bambusa oldhamii*)**

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INTISARI

Penelitian ini bertujuan untuk mengetahui pengaruh penambahan produk fermentasi buah maja dan rebung terhadap penurunan kadar gas amonia dan kualitas kompos dari feses kelinci. Penelitian ini menggunakan mikroorganisme lokal (MOL) hasil fermentasi buah maja dan rebung. Data yang diperoleh meliputi: parameter fisik fermentasi buah maja dan rebung, pertumbuhan koloni MOL pada medium agar dan cair, pengukuran penurunan gas NH_3 , perhitungan koloni MOL pereduksi gas NH_3 , uji kualitas fisik, kimia, mikrobiologi. Pengukuran penurunan gas NH_3 diamati berdasarkan perbedaan level penambahan larutan MOL dalam manur yaitu 0% (kontrol), 1%, 3%, 5% dari total berat manur. Data hasil fermentasi, pengamatan pertumbuhan MOL koloni MOL dianalisis secara deskriptif, sedangkan data pengukuran penurunan gas NH_3 dan uji kualitas dianalisis dengan analisa Rancangan Acak Lengkap Pola Searah (*One Way Anova*), bila menunjukkan hasil yang signifikan dilanjutkan dengan analisa *Duncan's New Multiple Range Test* (DMRT). Hasil penelitian menunjukkan bahwa penambahan produk fermentasi buah maja dan rebung yang memberikan hasil paling baik dalam menurunkan kadar amonia terdapat pada level penambahan produk fermentasi 5% (P3) dibandingkan dengan kontrol dan level penambahan produk fermentasi yang lain. Hasil uji kualitas kimia menunjukkan bahwa pada level penambahan 5% memberikan pengaruh nyata dengan adanya peningkatan pada kadar N dan penurunan pada rasio C/N, parameter kimia yang didapatkan data diantaranya kandungan air sebesar 4,88%, bahan organik 53,03% , C-organik 30,75%, P total 0,38%, K total 0,59%, N total 4,48% dan C/N Rasio 6,9 %. Kesimpulan dari penelitian ini semakin besar level penambahan produk fermentasi buah maja dan rebung yang digunakan berpengaruh baik dalam menurunkan kadar gas amonia dan terhadap uji kualitas.

Kata kunci : fermentasi, buah maja, rebung, amonia, kompos, feses kelinci, MOL

**QUALITY OF COMPOST AND DECREASING LEVELS OF GASEOUS
AMMONIA FROM RABBIT FECES WITH ADDITION FERMENTATION
PRODUCT OF BAELE FRUIT (*Aegle marmelos*) AND BAMBOO
SHOOTS (*Bambusa oldhamii*)**

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ABSTRACT

This research aims to know the effect of addition fermented product bael fruit and bamboo shoots to decrease of gaseous ammonia and quality of compost from the feces of rabbits. This research use local microorganisms (MOL) from bael fruit and bamboo shoots fermentation. Data obtained include: physic parameter from fermented bael fruit and the bamboo shoots, the observation of growth MOL on the solid medium and liquid medium, gaseous NH_3 reduction measurement, colony calculation of MOL reductant NH_3 , quality of the physical test, chemical, microbiological, and biological. Measurement of the NH_3 gas reduction was observed upon addition of level difference solution of MOL in manur i.e. 0% (control), 1%, 3%, 5% of total weight manur. Fermentation data, observations of growth MOL, and MOL colonies analyzed descriptively, whereas NH_3 gas reduction measurement data were analyzed with Randomized Complete Design analysis Pattern Unidirectional (One-way Anova), when showed significant results continued with the analysis of Duncan's New Multiple Range Test (DMRT). The result of this research show that the addition of fermented product bael fruit and bamboo shoots give best result in decreasing ammonia levels at the addition of 5% fermentation product levels compared the others addition levels. Chemical quality test result show that the addition of 5% has significant impact in total N and C/N ratio with 4,88% content of water, 53,03% organic matters, 30,75% C-organic, 0,38% P total, 0,59% K total, 4,48% N total and 6,9% C/N Ratio. The conclusion of this research, higher the level of addition fermented product from bael fruit and bamboo shoots used make good effect in decreasing levels of ammonia and the quality test.

Keywords: fermentation, bael fruit, bamboo shoots, ammonia, compost, rabbit, MOL