

## **MANFAAT PENAMBAHAN AIR KELAPA TERHADAP KUALITAS PUPUK CAIR URIN KELINCI DAN MARMUT**

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### **INTISARI**

Penelitian ini bertujuan untuk mengetahui manfaat penambahan air kelapa muda terhadap kualitas pupuk cair dari urin kelinci dan marmut terhadap kualitas fisik, kimia, biologis, dan mikrobiologis. Penelitian dilakukan secara anaerob dengan enam perlakuan yaitu pupuk cair urin kelinci penambahan air kelapa 0%, 10%, 20% dan urin marmut penambahan air kelapa 0%, 10%, 20%. Masing-masing perlakuan kemudian difermentasi selama 14 hari. Setelah difermentasi dilakukan uji kualitas fisik yang meliputi uji suhu, pH, warna, dan bau. Uji kualitas kimia meliputi kadar N total, C-organik, K total, dan P total. Uji biologis menggunakan tanaman sawi kemudian dilakukan pemberian pupuk cair setiap hari selama 28 hari diamati tinggi tanaman, jumlah daun, panjang daun, lebar daun, panjang akar, dan berat akhir. Dilanjutkan dengan uji mikrobiologis untuk mengetahui jumlah koloni bakteri. Rancangan percobaan dalam penelitian ini adalah metode Rancangan Acak Lengkap (RAL) pola faktorial dengan tiga kali ulangan. Apabila data yang dihasilkan pada penelitian ini berbeda nyata  $P < 0,05$  maka akan dilakukan uji Duncan Multiple Range Test. Uji kimia yang dilakukan menunjukkan bahwa N, C dan K urin yang diberi air kelapa 20% memiliki kualitas yang paling baik. Pengaruh perbedaan urin menunjukkan urin marmut memiliki kualitas kimia yang lebih baik dibandingkan urin kelinci. Uji biologis menunjukkan hasil yang cenderung tidak berbeda nyata kecuali untuk panjang daun dan panjang akar yang menunjukkan perbedaan nyata. Pengaruh perbedaan urin menunjukkan bahwa urin marmut memiliki kualitas yang lebih baik dari urin kelinci. Uji mikrobiologi menunjukkan bahwa pupuk cair dengan penambahan air kelapa 20% memiliki jumlah koloni yang paling banyak. Berdasarkan urin yang digunakan tidak menunjukkan perbedaan nyata jumlah koloni pupuk cair urin kelinci dan marmut.

Kata kunci : Urin kelinci, Urin marmut, Air kelapa, Pupuk cair

## **THE ADDITION BENEFITS OF COCONUT WATER ON THE QUALITY OF LIQUID FERTILIZER URINE OF RABBITS AND CAVIA COBAYA**

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### **ABSTRACT**

The purpose of this research was to examine the addition benefits of coconut water on the quality of liquid fertilizer urine of rabbits and cavia cobaya to the physical, chemical, biological and microbiological. The research was done in anaerob condition with six treatments, the addition of liquid fertilizer rabbits urine coconut water of 0%, 10%, 20% and urine cavia cobaya addition of coconut water of 0%, 10%, 20%. Each treatment was then fermented for 14 days. After fermented test physical quality that includes test temperature, pH, color, and odor. Chemical quality testing include the levels of total N, organic C, total K and P total. Biological test using mustard then carried liquid fertilizer application every day for 28 days was observed plant height, leaf number, leaf length, leaf width, root length, and the final weight. Proceed with microbiological testing to determine the number of bacterial colonies. The design of the experiments in this study is completely randomized design (CRD) factorial design with three replications. If the data generated in this study were significantly different  $P < 0.05$  there will be a test of Duncan Multiple Range Test. Chemical test performed showed that the N, C and K urine by 20% coconut water has the best quality. Effect of urine showed urine cavia cobaya have better chemical quality compared to rabbits urine. Biological test showed results that tend to be not significantly different except for the length of the leaf and root length that shows the real difference. Effect of urine showed that the urine of cavia cobaya have a better quality of rabbits urine. Microbiological test showed that the liquid fertilizer with the addition of 20% coconut water has the most number of colonies. Based on the used urine showed no real difference in the number of colonies of liquid fertilizer urine rabbits and cavia cobaya.

**Keywords:** Urine rabbits, Urine cavia cobaya, Coconut water, Liquid fertilizer