

PENGARUH PENCAMPURAN ASAM SITRAT DAN ZEOLITE PADA LITTER TERHADAP PRODUKTIVITAS AYAM BROILER DI KANDANG CLOSED HOUSE

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INTISARI

Penelitian yang dilakukan bertujuan untuk mengetahui pengaruh penambahan asam sitrat dan *zeolite* pada *litter* di kandang *closed house* terhadap produktivitas ayam broiler. Perlakuan yang dilakukan sebanyak 3 perlakuan dengan 5 kali pengulangan. Setiap perlakuan menggunakan 27 ekor ayam sehingga total ayam yang digunakan selama penelitian sebanyak 405 ekor ayam. PS : sekam padi tanpa tambahan, PAS : sekam padi yang di tambahkan dengan 240 g asam sitrat/m², PZL : sekam padi yang di tambahkan dengan 1.200 g *zeolite*/m². Data yang diamati dalam penelitian ini yaitu konsumsi pakan, bobot badan, konversi pakan, mortalitas, dan indeks performans. Data yang diperoleh dianalisis dengan ANOVA (analisis variansi) dalam rancangan acak lengkap pola searah dan apabila terdapat perbedaan antar perlakuan dilanjutkan dengan uji beda mean menggunakan *Least Significant Difference* (LSD). Hasil penelitian menunjukkan bahwa rerata konsumsi pakan PS, PAS, dan PZL berturut-turut 1.898,91; 1.914,27; dan 1.861,55 g/ekor. Hasil penelitian menunjukkan bahwa rerata bobot badan akhir PS, PAS, dan PZL berturut-turut 1.266,98; 1.296,06; dan 1.252,83 g/ekor. Hasil penelitian menunjukkan bahwa rerata konversi pakan PS, PAS, dan PZL berturut-turut 1,55; 1,52; dan 1,54. Hasil penelitian menunjukkan bahwa rerata mortalitas PS, PAS, dan PZL berturut-turut 9,63; 13,33; dan 8,89%. Hasil penelitian menunjukkan bahwa rerata indeks performa PS, PAS, dan PZL berturut-turut 266,60; 263,49; dan 265,79. Hasil analisis statistik menunjukkan bahwa penambahan asam sitrat dan *zeolite* pada *litter* tidak berpengaruh nyata terhadap nilai konsumsi pakan, bobot badan akhir, konversi pakan, mortalitas, dan indeks performa ($P>0,05$). Penelitian ini dapat disimpulkan bahwa penambahan asam sitrat dan *zeolite* tidak memberikan pengaruh yang nyata terhadap konsumsi pakan, bobot badan akhir, konversi pakan, mortalitas, dan indeks performa.

Kata kunci : *Litter*, Produktivitas, *Zeolite*, Asam Sitrat, Ayam Broiler

THE EFFECT OF CITRIC ACID AND ZEOLITE ADDITION TO LITTER ON GROWTH PERFORMANCE OF BROILER CHICKENS

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ABSTRACT

This study aimed to determine the effect of adding citric acid and zeolite to litter on the production performance of broiler chickens. The study was carried out in 3 treatments with 5 replications. Each treatment used 27 chickens. PS: rice husk without addition, PAS: rice husk added with 240 g/m² citric acid, and PZL: rice husk added with 1.200 g/m² zeolite. Observations on broiler chickens included feed consumption, final body weight, feed conversion ratio, mortality, and index performance. All collected data were analyzed using ANOVA (analysis of variance) in a completely randomized design. All data with significant differences were further tested by LSD (Least Significant Difference). The research results showed that the average consumption of PS, PAS, and PZL were 1.898,91; 1.914,27; and 1.861,55 g/head. The results showed that the final mean body weights of PS, PAS, and PZL were 1.266,98; 1.296,06; and 1.252,83 g/head. The research results showed that the average feed conversion for PS, PAS, and PZL is 1,55; 1,52; and 1,54. The results of the study showed that the mean mortality of PS, PAS, and PZL were 9,63; 13,33; dan 8,89%. The research results showed that the average index performance of PS, PAS, and PZL are 266,60; 263,49; dan 265,79. The results of statistical analysis showed that the addition of citric acid and zeolite to litter had no significant effect on feed consumption value, final body weight, feed conversion, mortality, and performance index ($P > 0.05$). This research concludes that the addition of citric acid and zeolite did not affect feed consumption, final body weight, feed conversion, mortality, and performance index.

Keywords : *Litter*, Production performance, *Zeolite*, Citric Acid, Broiler Chickens