

Effect of Lactobacillus sp. dan Bacillus sp. Probiotics on Macroscopic Quality of Free-Range Chicken Semen Under Intensive Maintenance

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ABSTRACT

This research was conducted for four months, namely in August-November two thousand twenty four. The research location was in the chicken coop of the Academic Support Unit (UPA) of Jember State Polytechnic, the Feed Technology Laboratory of the Animal Husbandry Department of Jember State Polytechnic, and the Animal Production Laboratory of the Animal Husbandry Department of Jember State Polytechnic. The method used in this study was the Completely Randomized Design (CRD) method with four treatments were given alternately (rolling) to six chickens, so that each chicken received all the research treatments. Each treatment was given for one week, then continued with a neutralization period for one week before being given the next treatment, macroscopic semen quality testing was carried out on the 7th day after treatment. P0 = Feed + zero% Probiotics (control), Pone = one% or one ml Probiotic Bacillus sp. for 100g of feed (single strain), P2 = one% or 1ml of probiotic Lactobacillus sp. for 100g of feed (single strain), P3 = one% or one ml of a combination of Bacillus sp. dan Lactobacillus sp. probiotics for 100g of feed. The parameters of semen volume, pH, color, and aroma were measured quantitatively. Data were analyzed using the Analysis of Variance (ANOVA) method. Of significant differences were found ($P < 0,05$), the Duncan Multiple Range Test (DMRT) was used. The data analysis tool used was SPSS. The results showed that the addition of Lactobacillus sp. dan Bacillus sp. probiotics to feed on the semen quality of free – range chickens did not affect semen volume, pH, color, or aroma.

Keywords: free-range chicken, effect probiotic, macroscopic quality, semen.