

EFFECT OF *L.acidophilus* AND *Bifidobacterium sp.* AS ANTIBIOTIC GROWTH PROMOTERS REPLACEMENT FOR EGG WEIGHT LOSS AND HAUGH UNIT OF CHICKEN EGG STORED IN ROOM TEMPERATURE FOR SEVEN DAYS

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ABSTRACT

Market demand for animal protein needs such as eggs, chicken and meat, continues to increase. Antibiotic usage in poultry industry can increase growth and production of egg. Based on law No.18 of 2009 in conjunction with law No.41 of 2014 concerning in animal husbandry and animal health, the use of food mixed with certain hormones and/or feed supplement antibiotics is prohibited. This research aims to find the effect of probiotics *L. acidophilus* and *Bifidobacterium sp.* or AGP (Antibiotic Growth Promoters) on egg weight loss and haugh unit of egg stored in room temperature for seven days. Twenty four layers at 25 weeks of age were randomized into 3 treatments with 8 reiterations. The treatment consists of P0 with no treatment of probiotic and antibiotic, P1 with antibiotic *Virginiamycin* 0,025%, and P2 with *L. acidophilus* 0,5% and *Bifidobacterium sp.* 0,5%. Analysis of Variance (ANOVA) result shows that there are significant differences ($p < 0.05$) in egg weight loss percentage and ($p < 0.05$) in haugh unit of egg. In conclusion, probiotic can replace AGP with reduction in egg weight loss percentage and addition in egg haugh unit value for egg stored in room temperature for seven days.

Key words: *L.acidophilus*, *Bifidobacterium sp.*, AGP, weight loss, haugh unit.