THE EFFECT OF *Lactobacillus acidophilus* AND *Lactococcus lactis* COMBINATION AS ANTIBIOTIC GROWTH PROMOTER REPLACEMENT FOR HAUGH UNIT AND EGG WEIGHT LOSS OF CHICKEN EGG STORED FOR SEVEN DAYS

Ovianty Adelia Hamzah

ABSTRACT

This research was conducted to investigate the effect of *Lactobacillus acidophilus* and *Lactococcus lactis* combination maintain the Haugh unit of egg and reduce egg weight loss stored for seven days. This study used twenty four layer chickens age 25-week-old randomly assigned into three groups. The controlled group fed with basal diet and basal drinking water. Second group was fed with AGP mixed diet and basal drinking water. Third group was fed with basal diet and drinking water mixed with 0.5% *Lactobacillus acidophilus* and 0.5% *Lactococcus lactis*. There was a significant difference (p<0.05) of Haugh Unit valued and egg weight loss among the controlled group with second and third group. It might be related with increasing nutrition absorption from the intestine. The higher Haugh unit values and lower egg weight loss was gained from probiotic treatment but did not give significant difference with AGP treatment. These results suggest that probiotic could be mixed in drinking water as substitute for AGP to maintain the Haugh unit of egg and reduce egg weight loss from the eggs that were stored for seven days.

**Key words:** probiotic, AGP, Haugh Unit, Egg weight loss