

THE USE OF COMBINATION OF PROBIOTICS *Lactococcus lactis* AND *Lactobacillus acidophilus* AS A SUBSTITUTE OF ANTIBIOTICS IN HEN INFECTED BY *Escherichia coli* ON PERFORMANCE AND FEASIBILITY

Hana Cipka Pramuda Wardhani

ABSTRACT

Escherichia coli is a normal flora in the digestive system of hens that are non-pathogenic, which can change into pathogens and decrease egg productions. So the combination of *Lactococcus lactis* and *Lactobacillus acidophilus* probiotics is expected to be able to overcome *E. coli* and become a substitute for the antibiotics (Virginiamycin) in animal feed. This study aims to determine business analysis including *Break Event Points* (BEP), *Revenue Cost Ratio* (R / C Ratio), *Payback Period* (PP) and *Return On Investment* (ROI). The best results obtained for the calculation of the highest feed consumption in the a0b0 treatment amounted to 113.95g the lowest in the treatment a1b0 113.40g, the highest Hen Day Production (HDP) in the a0b2 treatment of 98.33%, the lowest at a1b0 treatment at 71.00%, weight the highest egg at a0b2 treatment was 61.38g, the lowest at a0b0 treatment of 57.80g, the highest Feed Conversion Ratio (FCR) in treatment a1b0 of 2.7 was reduced in a0b1 and a0b2 treatment of 1.90, Break Event Point (BEP) at a0b2 treatment with BEP of Rp. 17,587.24 with BEP production on a1b2 amounting to 14.36 kg, Revenue Cost Ratio (R / C Ratio) produces a value of 1,543 for a0b2 treatment, Payback Period (PP) results in a value of 1 year 3 months 9 days and Return On Investment (ROI) yields a value of 3. It is concluded that the a0b2 treatment has good results to be developed.