

**EFFECT OF CITRIC ACID AND DEXTROSE ON THE
PRODUCTION PERFORMANCE OF LAYERS
THAT INFECTED BY *Escherichia coli***

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ABSTRACT

This research aims to know the effect to citric acid and dextrose on the production performance of layers that infected by *Escherichia coli*. The experimental animal used were 24 layers aged 26 weeks. P0 treatment was not given citric acid, dextrose and infected by *Escherichia coli*, P0- treatment was given citric acid and dextrose 1 g/2.5 liter of drinking water but not infected by *Escherichia coli*, P0+ treatment was infected by *Escherichia coli* as much as 2 ml/head/oral but not given citric acid and dextrose in drinking water, P1 treatment was infected by *Escherichia coli* as much as 2 ml/head/oral and given citric acid and dextrose 1 g/1.25 liter of drinking water, P2 treatment was infected by *Escherichia coli* as much as 2 ml/head/oral and given citric acid and dextrose 1 g/2.5 liter of drinking water, P3 treatment was infected by *Escherichia coli* as much as 2 ml/head/oral and given citric acid and dextrose 1 g/3.75 liter of drinking water. This research was conducted for 4 weeks and data collection was taken in the last 10 days. Every day in the last 10 days the feed consumption and egg production were calculated, then the feed conversion ratio was calculated using the formula for feed consumption divided by egg production. The result was analyzed with *Analysis of Variance* (ANOVA) and followed by *Duncan's Multiple Range Test* (DMRT). The results of this research state that citric acid and dextrose can increase of egg production, decrease of feed conversion ratio but does not affect feed consumption ($p < 0.05$) in layers that infected by *Escherichia coli*.

Keywords: *Escherichia coli*, citric acid, dextrose, production performance