THE EFFECT OF MENIRAN (*Phyllanthus niruri Linn*) EXTRACT AS IMMUNOMODULATOR ON SPLEEN WHITE PULP SIZE OF BROILER CHICKENS INFECTED *Escherichia coli*

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ABSTRACT

The purpose of this study was to determine the effect of *Phyllanthus niruri,*. Linn extract supplementation on diameter of spleen white pulp of broiler chickens were infected by *Escherichia coli*. Twenty five of broiler chickens at 22 days old of *Cobb 500* were randomized into 5 treatment groups. Group PO- was fed basal and not infected by *Escherichia coli* as a control group. Group PO+ was fed basal and infected by 10^6 *Escherichia coli*. Group P1 was fed basal and infected by 10^6 *Escherichia coli* before supplemented by 20% of *Phyllanthus niruri* at 23 days old. Group P2 was fed basal and infected by 10^6 *Escherichia coli* before supplemented by 25% of *Phyllanthus niruri* at 23 days old. Group P3 was fed basal and infected by 10^6 *Escherichia coli* before supplemented with 30% of *Phyllanthus niruri* at 23 days old. All of broiler chickens were sacrified at 30 days old. Data was obtained from spleen white pulp diameter and analyzed by ANOVA followed by Duncan test, while the histology of spleen white pulp data were viewed and analyzed by *OptiLab Viewer* with *Image Raster* software. The results showed that *Phyllanthus niruri* can effect on diameter of spleen white pulp infected by *Escherichia coli*.

Keywords: Phyllanthus niruri, immunomodulator, Escherichia coli, white pulp, broiler