

EFFECT MENIRAN (*Phyllanthus niruri* Linn) ON *Eimeria tenella* INFECTION FEATURES OF (NUMBER AND SIZE) GOBLET CELLS, AND EXPRESSION OF INTERLEUKIN -1 IN BROILER

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ABSTRACT

Overview of research has been conducted number and size of goblet cells and the expression of IL-1 chicken caecum infected *Eimeria tenella* with meniran simplicia (*Phyllanthus niruri* Linn). The purpose of this study was to determine the effect of the meniran simplicia (number and size) caecal goblet cells and the expression of IL-1 on *Eimeria tenella* infected chickens (*Gallus gallus domesticus*). This type of research was experimental using completely randomized design with five experimental treatments, P0 unit (group of chickens dose infected *Eimeria tenella* 5000 oocysts), P1 (control group), P2 (group of chickens that infected *Eimeria tenella* dose 5000 oocysts + meniran simplicia (dose 12.25 mg/ml)), P3 (group infected *Eimeria tenella* dose 5000 oocysts of chicken + meniran simplicia (dose 14.7 mg/ml)), P4 (group of chickens that infected *Eimeria tenella* dose 5000 oocysts + meniran simplicia (dose 24.5 mg / ml). Data were analyzed by ANOVA (*Analysis of Variant*) and tested by test F. If there are significant differences ($p < 0.05$), followed by a test of statistical tests smallest real differences. Results showed a positive correlation and significant differences between meniran dose treatment with 12.25 mg / ml, 14.7 mg / ml and 24.25 mg / ml and without meniran on AB-PAS staining and score of IL-1 positive cell percentage score of 4 (cells positive for more than 80% obtained in treatment (P4)) with painting immunohistochemical Remelle index method.

Key word : Meniran, *Phyllanthus niruri* Linn, *Eimeria tenella*, IL-1, goblet cells