

## PENGARUH PENAMBAHAN MINYAK ATSIRI YANG BERBEDA DALAM PAKAN TERHADAP NILAI PROFIL HEMATOLOGI AYAM BROILER

Oleh:

**Rr. Adella Alayda Pracoyo**  
**20/460988/SV/18069**

### INTISARI

Ayam broiler mudah terserang penyakit yang disebabkan oleh adanya bakteri dan virus. Salah satu upaya yang dapat dilakukan untuk pencegahan yaitu dengan pemberian *feed additive* berupa *essential oil* dalam pakan. Tujuan dari penyusunan Proyek Akhir ini adalah untuk mengetahui efek penambahan EO dari cengkeh, kunyit, dan serai dalam pakan sebagai *feed additive* terhadap kualitas ketahanan tubuh ayam broiler berdasarkan parameter profil hematologi darah. Perlakuan penelitian menggunakan 75 ekor ayam broiler dibagi ke dalam 5 kelompok perlakuan pakan yaitu kelompok kontrol negatif: Pakan Basal (PB) (T0); kontrol positif: PB+antibiotik 0,05% (T1); perlakuan: PB+EO cengkeh 15% (T2); PB+ EO serai 15% (T3); PB+ EO kunyit 15% (T4) Parameter yang diamati yaitu profil hematologi darah yang meliputi nilai eritrosit, hemoglobin, dan leukosit. Hasil penelitian dianalisis secara deskriptif kuantitatif. Hasil penelitian menunjukkan bahwa nilai eritrosit cengkeh, kunyit, dan serai berturut-turut  $1.1 \times 10^6/\text{ul}$ ,  $1.04 \times 10^6/\text{ul}$ ,  $0.94 \times 10^6/\text{ul}$  kurang dari normal. Hasil analisis hemoglobin cengkeh, kunyit, dan serai adalah 7.5 g/dL sesuai dengan kisaran hemoglobin normal. Hasil analisis leukosit cengkeh, kunyit dan serai berturut-turut 700 sel/mm<sup>3</sup>, 1450 sel/mm<sup>3</sup>, 1250 sel/mm<sup>3</sup> lebih rendah dari kisaran normal. Berdasarkan hasil tersebut dapat disimpulkan pemberian *essential oil*: cengkeh, kunyit, dan serai sebagai bahan tambahan pakan tidak memberikan pengaruh terhadap profil hematologi darah (sel darah merah dan sel darah putih), dan memberikan kondisi normal pada hemoglobin ayam broiler.

Kata kunci: ayam broiler, cengkeh, darah, *essential oil*, profil hematologi darah, kunyit, serai.

## THE EFFECT OF ADDITION DIFFERENT OF ESSENTIAL OIL (EO) IN FEED ON THE HEMATOLOGICAL PROFILE VALUE OF BROILER CHICKENS

By:

**RR. ADELLA ALAYDA PRACOYO**  
**20/460988/SV/18069**

### *ABSTRACT*

Diseases that usually attack broiler chickens are caused by bacteria and viruses. One effort that can be made to prevent disease is by providing feed additives in the form of essential oils in the feed. The aim of preparing this Final Project is to determine the effect of adding EO from cloves, turmeric and lemongrass in feed as a feed additive on the quality of body resistance of broiler chickens with blood hematological profile parameters. The research treatment used 75 broiler chickens divided into 5 feed treatment groups, namely the negative control group: Basal Feed (PB) (T0); positive control: PB+antibiotic 0.05% (T1); PB+EO cloves 15% (T2); PB+ EO lemongrass 15% (T3); PB+ EO turmeric 15% (T4). The parameters observed are the blood hematology profile which includes erythrocyte values, hemoglobin values and leukocyte values. Data The results of the data obtained from the research parameters were analyzed quantitatively descriptively. The results of the study showed that the erythrocyte values for cloves, turmeric and lemongrass were respectively  $1.1 \times 10^6/\text{ul}$ ,  $1.04 \times 10^6/\text{ul}$ ,  $0.94 \times 10^6/\text{ul}$ , less than normal. The hemoglobin analysis results for cloves, turmeric and lemongrass were 7.5 g/dL respectively, in accordance with the normal hemoglobin range. The results of the leukocyte analysis for cloves, turmeric and lemongrass were  $700 \text{ sel}/\text{mm}^3$ ,  $1450 \text{ sel}/\text{mm}^3$ ,  $1250 \text{ sel}/\text{mm}^3$  respectively. Based on these results, it could be concluded that the administration of essential oils: cloves, turmeric and lemongrass as feed additives did not have a significant impact on the hematological profile of the blood (red blood cells and white blood cells), and did not have a negative impact on the hemoglobin levels of broiler chickens.

Keywords: blood, broiler, clove, essential oil, hematological profile of the blood, lemongrass, tumeric.