

**IN VIVO EFFICACY OF LEMONGRASS (*Cymbopogon citratus*) EMULSIFIED
CONCENTRATE ON COLONY COUNT OF *Mycoplasma gallisepticum*
AND HEMATOLOGY OF INFECTED NATIVE CHICKENS**

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By

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ABSTRACT

Mycoplasma gallisepticum is widely recognized as the causative agent of chronic respiratory diseases in chickens. Antibiotics are commonly used to prevent or control such diseases, but eventually might lead to resistance of bacteria with continued use. It has been recognized that discovering an antibiotic derived from natural sources, yet possessing comparable effectiveness in combating this infection, is detected. Thus, this study was conducted to determine the efficacy of Lemongrass (*Cymbopogon citratus*) emulsified concentrate against *Mycoplasma gallisepticum*-infected native chicken in terms of number of colonies of the bacteria and enhancement of blood samples for hematology before and after two weeks of post-exposure. The collected data was analyzed using colony counter and hematology analyzer. The data that was obtained was handed over for analysis and discussion. The result from the study indicated that there were reduction of colony forming unit after treated with Lemongrass emulsified concentrate in both throat and cloaca of native chickens, while the blood parameters of native chickens increased the availability of lymphocytes, mean corpuscular hemoglobin, and mean corpuscular hemoglobin concentration. The white blood cell, red blood cell, hemoglobin, hematocrit, and mean corpuscular volume recorded significant reduction in the blood levels. Hence, the use of Lemongrass essential oil on *Mycoplasma gallisepticum*-infected native chickens significantly affect the number of colonies of *Mycoplasma gallisepticum* only.

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