

**BIOCHEMICAL EFFECT OF LEMONGRASS (*Cymbopogon citratus*) EMULSIFIED
CONCENTRATE ON THE ANTIBODIES AND BLOOD BIOCHEMISTRY OF
NATIVE CHICKENS CHALLENGED WITH *Mycoplasma gallisepticum***

A Special Topic

Presented to

The College of Agriculture, Resources, and Environmental Sciences

Central Philippine University

Jaro, Iloilo City

In Partial Fulfillment

of the Requirements for the Degree of

BACHELOR OF SCIENCE IN AGRICULTURE

By

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April 2024



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ABSTRACT

Mycoplasma gallisepticum is considered a disease of economic importance among the native chicken. It can be prevented and controlled by commercially available antibiotics, but it may lead to resistance to the pathogen's continuous use. Finding a natural source but equally potent antibiotic in controlling this pathogen is a must. Thus, this study was conducted to determine the influence of Lemongrass (*Cymbopogon citratus*) emulsified concentrate on *Mycoplasma gallisepticum*-infected native chicken in terms of the development of antibodies and enhancement of blood biochemistry before and after two weeks of post-exposure. The collected blood of experimental chickens was analyzed using the ELISA microplate reader and biochemistry analyzer. These actual recorded data were presented for analysis and discussion. The result from the study indicated that it did not influence the presence of the antibodies of native chickens, with only three samples increased out of nine samples after being treated with Lemongrass emulsified concentrate, while the biochemical components of native chickens increased the availability of cholesterol, triglycerides, albumin, and total protein. The uric acid, glucose, aspartate transaminase, alanine transaminase, and creatinine recorded significant reductions in the blood levels. Hence, the use of Lemongrass emulsified concentrate on *Mycoplasma gallisepticum*-infected native chickens significantly affects the biochemical component of the blood only.

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