

**MITIGATING AMMONIA EMISSION BY DIETARY PROBIOTICS IN
BROILER FINISHING DIETS**

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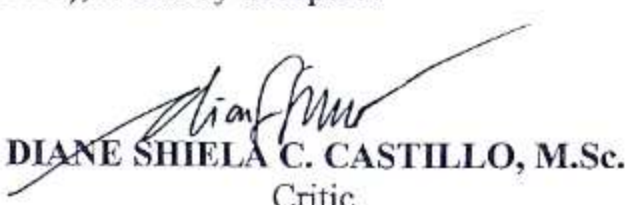
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BIOGRAPHICAL SKETCH

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ABSTRACT

ISOC, NIQEE ROXANNE JOY L., Department of Environmental Science, College of Arts and Sciences, Central Luzon State University, Science City of Muñoz, Nueva Ecija, Philippines, **February 2020, MITIGATING AMMONIA EMISSION BY DIETARY PROBIOTICS IN BROILER FINISHING DIETS**

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A total of ninety, day-old straight-run Cobb 500 broiler chicks, were assessed for their growth, economic performance and manure ammonia emission during the finishing period. Each treatment had 3 replicates at fifteen (15) birds per replicate. The birds were allocated to two dietary treatments, the untreated and treated with probiotics. Cage arrangements per treatment were divided at the center with sack partition for ammonia emission by T-shirt method following a practical odor scale rating. Results indicated that there was no significant difference ($P < 0.05$) on body weight gain, feed intake and feed conversion efficiency. Livability rate was comparable, however, the income over feed and chick cost was lower for the treatment given dietary probiotics. Ammonia emission from manure of experimental birds fed dietary probiotics was mitigated more efficiently compared to the control as shown by an average odor scale rating of 1.64 for the treated and 2.64 from the control during the entire 14-day duration of the experiment. Dietary probiotic inclusion in broilers did not adversely affect their growth performance however, it was effective in mitigating ammonia emission from their manure. Therefore, probiotics can be recommended as an environment friendly feed supplement for broiler diet.

Keywords: Ammonia Emissions; Dietary Probiotics; Ammonia Concentration; Mitigation; Broiler

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