

**ANTHELMINTIC EFFECT AND PHYTOCHEMICAL ASSAY OF SELECTED
GRASSES AGAINST *Fasciola* spp. IN WATER BUFFALO (*Bubalus bubalis*)**

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An Undergraduate Thesis Submitted to the Faculty of the College of Veterinary
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DOCTOR OF VETERINARY SCIENCE AND MEDICINE

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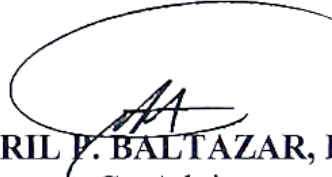
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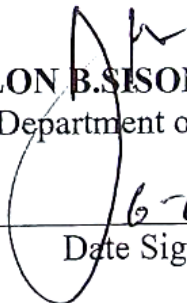
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BIOGRAPHICAL SKETCH

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In 2019 after 2nd IVSA Philippine conference the author is elected as National President of International Veterinary Students' Association, (IVSA)- Philippines.

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ABSTRACT

REYES, ARJAY B., College of Veterinary Science and Medicine, Central Luzon State University, Science City of Munoz, Nueva Ecija, Philippines. **June 2019, ANTHELMINTIC EFFECT AND PHYTOCHEMICAL ASSAY OF SELECTED GRASSES AGAINST *Fasciola* spp. IN WATER BUFFALO (*Bubalus bubalis*)**

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This study aimed to determine the effect of Guinea grass (*Panicum maximum*), Napier grass (*Pennisetum purpureum*) and Para grass (*Brachiaria mutica*) extract against adult liver flukes in buffaloes. Aqueous ethanol extract (10mg/ml) such grasses were prepared for anthelmintic trial against *Fasciola* spp. in buffaloes.

In all the treatments, Guinea grass leaf extract caused a significant mortality against adult liver flukes with percent mortality of 33.33%. Napier grass leaf extracts has a mean mortality of 26.67% has comparable anthelmintic effect with Guinea grass. On the other hand, para grass at 6.67% showed significantly lower fluke mortality than Guinea grass and Napier grass. All the plant treatments are not comparable with the positive control which had a mortality of 100%.

Histopathological changes such as vacuole formation, damage parenchyma and disruption of tegument were seen under microscope. Phytochemical screening of Guinea grass leaf extract showed presence of, saponins, this phytochemical constituent is responsible in the anthelmintic action of the extract. These findings indicate that the *Fasciola* spp. is vulnerable to selected grasses.

Keywords: Anthelmintic effect, *Fasciola* spp., In-vitro, Plant extracts, Saponins

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