BLOOD MICROFILARIA AMONG WATER BUFFALOES (*Bubalus bubalis*) IN INSTITUTIONAL HERDS AND COOPERATIVES OF THE PHILIPPINE CARABAO CENTER

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BIOGRAPHICAL SKETCH

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ABSTRACT

PARAGUISON, DIANE ERIKA B., College of Veterinary Science and Medicine, Central Luzon State University, Science City of Munoz, Nueva Ecija, Philippines, **June 2019, BLOOD MICROFILARIA AMONG WATER BUFFALOES (*Bubalus bubalis*) IN INSTITUTIONAL HERDS AND COOPERATIVES OF THE PHILIPPINE CARABAO CENTER.**

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Economic losses associated with filarial nematodes have rendered them amongst the significant parasites in domestic animals. These worms flourish in the host body at the expense of its tissues and body fluids and may prove fatal. Generally, the study was conducted to detect the presence of *Setaria cervi* among water buffaloes in various institutional herds and cooperatives of the Philippine Carabao Center (PCC); specifically, it aimed to determine the positivity rate of the blood microfilariae in water buffaloes using Polymerase Chain Reaction (PCR). A total of 991 blood samples from water buffaloes were collected regardless of age and sex. The blood samples were subjected to microscopic blood examination and confirmed by PCR.

The study findings have shown to detect the presence of blood microfilaria in the institutional herds and cooperatives of the PCC with a positivity rate of 8.07%; however, the PCR findings have shown negative results in the detection of *Setaria cervi*. The four major location-group of institutional herds and cooperatives of the PCC has positivity rates of 20.87%, 2.22% to 11.40% and 1.75% in Mindanao, Nueva Ecija and La Union, respectively.

Using PCR primers specific in the detection of *Setaria cervi* in water buffaloes is recommended. Furthermore, prevalence of *Setaria cervi* among water buffaloes in the institutional herds and Cooperatives of the PCC should be established including its spatio-temporal distribution.

Keywords: Microfilaria, *Setaria cervi*, Water Buffalo, Polymerase Chain Reaction, Philippine Carabao Center.

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