

ABSTRACT

HERNANDEZ, PAUL DEO A. Serologic prevalence of Selected Infectious Disease Agents in Blood Samples of Apparently Healthy Common Palm Civets (*Paradoxurus hermaphroditus*) in Selected Coffee Farms in Cavite. Undergraduate thesis. Doctor of Veterinary Medicine Cavite State University, Indang, Cavite. April 2013. Adviser: Dr. Chester Joshua V. Saldaña.

A study was conducted to determine the serologic prevalence of selected infectious disease agents in blood samples of apparently healthy captive common palm civets (*Paradoxurus hermaphroditus*) in selected coffee farms in Cavite and determine the hematologic profile of the sampled animals.

Blood samples from twenty (20) common palm civet cats from four coffee farms were collected and processed. The packed cell volume (PCV), total leukocyte count (WBC) and differential leukocyte count were performed and the collected serum samples were subjected to ELISA based kits specific for each infectious disease agents.

Results revealed that common palm civets sampled were positive for *Toxoplasma gondii* (45%) canine distemper (10%) and corona virus (10%). Lowest serologic prevalence was noted for *Leptospira* spp. with 5%. To date however, this is the first report on the occurrence of canine distemper virus and corona virus as well as *Leptospira* spp. in common palm civets in Cavite.

The hematologic profile of the sampled common palm civets were determined and found out that there was a higher mean WBC count ($9.1 \times 10^3 \mu\text{L}$) for samples that tested positive for the antibody of one or more of the pathogens compared to those samples that tested negative for any antibody for the selected diseases ($7.41 \times 10^3 \mu\text{L}$). On the other hand, the packed cell volume (PCV) of positive samples for the antibody of

one or more of the selected diseases had a lower value (34 %) compared with those that tested negative for any of the disease (39.7 %). The comparison between seropositive and seronegative samples resulted to lower values for PCV, neutrophil, monocyte and eosinophil count while there were higher values for the lymphocyte and total leukocyte count.

The health status of wildlife species, either free living or in captivity is crucial considering their potential role in the transmission of infectious and/or parasitic diseases, and their importance as possible reservoirs. Epidemiological surveillance of infectious diseases in susceptible species is highly important considering public health and the possible involvement of wild species as natural reservoirs. In this sense, the civet cats may be particularly important reservoirs for domestic and wild animals.