SHORT COMMUNICATION

Serological examination of Philippine bats for *Histoplasma capsulatum*

Lauren T. Arayan¹, Alisha Wehdnesday B. Reyes¹, Joseph S. Masangkay¹, Yasuhiro Yoshikawa², Waren N. Baticados¹ and Hope G. Rovira¹*

¹Department of Veterinary Paraclinical Sciences, College of Veterinary Medicine, University of the Philippines Los Baños, College Laguna, Philippines.
²University of Tokyo, Graduate School of Agriculture and Life Sciences, Japan.
Accepted 30 November 2011

ABSTRACT

Histoplasmosis is a disease of medical and veterinary concern. Bats are considered as reservoir hosts of the etiologic agent *Histoplasma capsulatum*, and are therefore used as animal subjects in experimental studies. Thirty six bats, consisting of nine bats (Microchiroptera: Vespertilionidae) from Aklan, 22 bats (Megachiroptera: Pterodidae) from Quezon City and another five bats (Microchiroptera: Vespertilionidae) from Quezon City, Philippines were tested for the presence of precipitating antibodies to *H. capsulatum* using immunodiffusion assay. Results revealed that none of the bats tested were positive for *H. capsulatum* in agar gel precipitation assay. This may be due to no previous exposure of the bats to the pathogen, exposure to the pathogen with insufficient time for seroconversion (infection time < 3 - 5 weeks) prior to capture or the bats were resistant to infection. Any one of the aforementioned factors may have contributed to the absence of antibodies or low undetectable levels of circulating antibodies for *H. capsulatum* in the tested bats. This is the very first attempt at field collecting and monitoring for precipitating antibodies for *H. capsulatum* in Philippine wildlife, particularly in Philippine bats.

**Key words:** Immunodiffusion assay, wildlife, antibodies, Aklan, Quezon City