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**Research Article**

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**Bats (chiropteran) reported with *Aspergillus* species from Kubah National Park, Sarawak, Malaysia**

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**ABSTRACT**

A preliminary survey of chiropterans (bats) with potential zoonotic fungi was conducted as part of the Sowell-UNIMAS Expedition 2006. This survey was conducted at Kubah National Park, Matang, Sarawak from 14th to 16th August 2006. The main aim of this survey was to document variety of fungal isolates from bats external (ears) and internal (saliva and anal) swabs. All of the fungi species were subjected to both macroscopic and microscopic observations to characterize their morphology. Out of 23 species of bats observed, 13 (56.5%) species were found to contain 17 fungi isolates of the genus *Aspergillus* from five subgenera, five sections and six species. The fungi isolates were *Aspergillus restrictus*, *A. sydowii*, *A. fumigatus*, *A. niger*, *A. clavatus* and *A. japonicus*. The highest numbers of isolates recorded was for *A. restrictus* with six isolates followed by *A. fumigatus* and *A. sydowii* with two isolates respectively. Where as, *A. niger*, *A. clavatus* and *A. japonicus* each recorded with one isolate only. *Aspergillus fumigatus* was the

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first record isolated from bats the samples (n = 64) from Sarawak. It was reported that this isolate is a pathogenic and thermophilic (able to grow up to 65°C) isolate which was found to be on a lesion near ear opening of *Hipposideros cervinus*. Further work should be done to discover potential mycoflora in wildlife mammals.

**INTRODUCTION**

Wildlife has been an important vector of infectious diseases as they can transmit these diseases to human through direct or indirect contact. Today, zoonoses found in wildlife constitute a major public health problem, affecting all continents. Wild animals seem to be involved in the epidemiology of most zoonoses and serve as major reservoirs for transmission of zoonotic agents to domestic animals and humans (Frederick, 1998; Hilde *et al.*, 2004).

The importance of such zoonoses is increasingly being recognized, and the needs for more attention in this area have been widely expressed (Hilde *et al.*, 2004; Chomel *et al.*,