

Occurrence of synanthropic flies in Tasek Bera Ramsar Site, Pahang

ABSTRACT

A study of the occurrence and species distribution of synanthropic flies species at Tasek Bera Ramsar Site was carried out during the Biodiversity Inventory Program from 10th to 12th May 2014 and 14th to 16th August 2014. A total of 716 synanthropic flies were collected and grouped according to their morphological characteristics. Molecular identification with partial mitochondrial cytochrome oxidase I (COI) gene sequences confirmed the identity of the flies, namely *Chrysomya megacephala*, *Chrysomya rufifacies*, *Hemipyrellia ligurriens*, *Hypopygiopsis infumata*, *Lucilia cuprina*, *Atherigona orientalis*, and *Sarcophaga dux* and one unidentified fly. These flies belong to three main families of synanthropic flies (Sarcophagidae, Calliphoridae and Muscidae) and they are important in forensic studies and veterinary entomology. The most abundant family was Calliphoridae (73.2%), followed by Muscidae (21.1%) and Sarcophagidae (5.7%). The highest number of species and individuals captured came from the family Calliphoridae with *Chrysomya megacephala* as the most prevalent species at 52.7 %.

Keyword: Tasek Bera Ramsar Site; Synanthropic flies; COI gene