Review of Malaysian black flies (Diptera: Simuliidae): note on new record on Simulium kalimantanense from Sabah ABSTRACT

Black flies are the two-winged, small-bodied (3mm to 6mm) and blood-sucking insects of medical and veterinary importance. Female of certain species play a role as a vector of several disease agents including, Onchocerca volvulus, causative agent of human onchocerciasis. Despite their medical significance, the biodiversity of black flies in the Borneo part of Malaysia as well as other Southeast Asian countries (except Thailand, Vietnam and Indonesia) are unknown. Our recent visit to the Kangkawat Reserve within the Imbak Canyon Conservation Area (ICCA) has successfully discovered one new record from Malaysia, Simulium kalimantanense of the S. banauense species-group and one from Sabah, Simulium sarawakense of the S. epistum species-group. Based on these current findings, the total number of species and species-group of black flies inhabiting Malaysia has increased to 96 and 22 respectively.