SCREENING OF *BUNYAVIRIDAE* IN RODENTS FROM KLANG VALLEY, MALAYSIA

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Abstract

Pest rodents, such as *Rattus rattus* (black rat) and *Rattus norvegicus* (Norway rat), are common in urban and rural environments which are in close proximity to human populations. Rodents serve as important reservoirs for a wide range of diseases. In Asia and Europe, hantaviruses from the *Bunyaviridae* family are commonly associated with rodent-borne zoonotic viruses that cause hemorrhagic fever with renal syndrome (HFRS) in humans. Studying these rats for rodent-borne zoonotic viruses offers unique advantages due to their ecological relevance, natural exposure to pathogens, and interactions with human habitats. Little information is known about the diversity of zoonotic viruses circulating among rodent species in Malaysia, especially *Bunyaviridae*. Exploring this will contribute to better future preparedness and response strategies for emerging infectious diseases, particularly in Malaysia. In this study, a total of 130 rodents were captured and screened for *Bunyaviridae* families using RT-PCR assays. However, none of the samples tested positive for this virus family. These results suggest that bunyavirus is not circulating in the studied rodent populations in the Klang Valley, Malaysia. However, since pest rodents often interact with wildlife and domestic animals, as well as humans, this turns out making them among the important nodes in disease transmission networks.

Keywords: *Bunyaviridae, Prevalence, Rodent-borne zoonotic viruses, RT-PCR*