

## **Termite fauna dynamics in the Sg. Rawog Conservation Area, Sabah**

### **ABSTRACT**

Termites are integral components of ecosystems, influencing soil health, nutrient cycling, and biodiversity. This study investigates the species composition and distribution of termites within Sg. Rawog Conservation Area (SRCA), comparing data from 2018 and 2023. Termites were manually collected using single, standardized 100 m x 2 m belt transect, at locations consistent with the previous survey (Trail 1, 8 and 10). A total of 26 termite species of 18 genera across three families (Kalotermitidae, Rhinotermitidae, and Termitidae), were documented within the forest sites of SRCA. This comprises 21 species from 15 genera of three families identified in 2023, marking an increase from the 14 species represented by 10 genera of two families observed in 2018. Twelve new records were added to the 2023 survey. The majority of the species belonged to the Termitidae (69%) family, encompassing soil-dwelling and wood-dwelling species, inhabiting various environments such as soil, mounds, dead wood, and trees, with wood-dwellers being predominant. Functional groups revealed wood feeders as the most abundant group, 42% of the termites sampled. Disturbed areas exhibited higher wood-feeder prevalence, consistent with previous studies. The findings demonstrate shifts in termite community composition over time, emphasizing the dynamic nature of these ecosystems in response to varying degrees of disturbance. Continued monitoring and research are vital for informed conservation and management efforts.