

## **Notes on Congregating Fireflies (Coleoptera, Lampyridae) of Binsulok River, Sabah**

### **ABSTRACT**

A brief survey on congregating fireflies of Binsulok River was conducted on September 9 and 16, 2017. Altogether nine sampling stations were selected among the display trees of *Rhizophora apiculata*. Water quality parameters were also recorded close to each sampling station. This is the first record where all five *Pteroptyx* species recorded in Sabah were found in a single area on one species of display tree. *P. bearni* was the predominant species sampled with 33 male individuals, followed by *P. tener* (5 males), *P. valida* (5 males), *P. gelasina* (2 males) and *P. malaccaae* (1 male). In terms of water quality, only water pH (which was mostly acidic, mean pH  $4.51 \pm 0.03$ ), and low dissolved oxygen (D.O., mean  $3.36 \pm 0.64$  mg/L), can be considered as not suitable for aquatic life, which could contribute to the decreasing population of fireflies, as larvae of fireflies feed on river snails. An aerial survey of the area by a drone showed that there was some encroachment and land use change from its original mangrove forest. However, these results could not be quantifiable but this survey suggested that the land usage could contribute to the decline in firefly population.