A comparative study of frog species at streams, ridges and disturbed habitats in Base Camp and Padang Point, Gaya Island

ABSTRACT

The aim of this study was to identify the species of frogs that can be found at streams, ridges and disturbed habitats of Gaya Island. Field sampling was carried out for 16 nights consecutively starting from 18th January until 3rd February 2013. This research was conducted using the standard method of Visual Encounter Survey. The sampling effort for this study was 53 hours. Six sites representing three different frogs' habitats were selected, namely streams, ridges and disturbed areas. The transect line with dimensions of 10m x 100m was used for the sampling survey. The results show that there were five species of frogs from two families that were present in Gaya Island. The five species were Inger's dwarf frog (Ingerana baluensis), Grass frog (Fejervarya limnocharis), Mangrove frog (Fejervarya cancrivora), Green paddy frog (Hylarana erythraea) and Dark-eared tree frog (Polypedates macrotis). The highest number of frogs caught was in the stream area, consisting of 69 individuals, followed by 18 individuals at the disturbed area and two individuals at the ridges. This preliminary study indicated that there was a relationship between frog species diversity with the variety of the habitat sites. These findings present a baseline data for the frog species in Gaya Island. Future studies should be encouraged in order to have an in-depth understanding of the frogs' natural habitats in Gaya Island.