Morphology comparison of Swiftlet species from natural and man-made habitats in Malaysia

ABSTRACT

In Malaysia, nests of Aerodramus fuciphagus (white-nest swiftlet) and Aerodramus maximus (black-nest swiftlet) are harvested for commercial purposes, as one of the most valuable animal products. The taxonomy of a species is crucial, as delineating species boundaries is fundamental to discover life's diversity. However, swiftlet taxonomy has been controversial, due to numerous undefined parameters. Although there are these limitations, morphological taxonomy cannot be the unique approach for species identification and it is a valuable component in taxonomy studies. We have undertaken a morphological approach to analyse community relationships among species of swiftlets. In this study, we selected three different swiftlet species to generate two sets of comparisons: Within species and among different habitats. This study found that A. fuciphagus from man-made habitats is generally larger in size compared to the natural habitat and A. maximus is larger compared with A. fuciphagus. We postulate the difference in body size is due to dietary behaviour and genetic variations of the swiftlets.

Keyword: Black-nest swiftlet; Habitats; Morphology; Species; White-nest swiftlet