Swiftlets and edible bird's nest industry in Asia

ABSTRACT

Swiftlets are small insectivorous birds which breed throughout Southeast Asia and the South Pacific. Among many swiftlet species, only a few are notable to produce edible bird's nests (EBN) from the secreted saliva during breeding seasons. The taxonomy of swiftlets remains one of the most controversial in the avian species due to the high similarity in morphological characteristics among the species. Over the last few decades, researchers have studied the taxonomy of swiftlets based on the morphological trade, behavior, and genetic traits. However, despite all the efforts, the swiftlet taxonomy remains unsolved. The EBN is one of the most expensive animal products and frequently being referred to as the "Caviar of the East." The EBN market value varies from US$1000.00 to US$10,000.00 per kilogram depending on its grade, shape, type and origin. Hence, bird's nest harvesting is considered a lucrative industry in many countries in Southeast Asia. However, the industry faced several challenges over the decades such as the authenticity of the EBN, the quality assurance and the depletion of swiftlet population. Furthermore, there is limited scientific evidence regarding EBN's medical benefits as claimed by manufacturers. This paper reviews the taxonomy of swiftlets, its morphological characteristics, the challenges currently encountered by the industry, and finally the composition and medical benefits of EBN.

Keyword: Edible bird's nests (EBN); Swiftlets; Swiftlet farming industry; Taxonomy