Gross morphology of the stomach (proventriculus and ventriculus) of the edible bird's-nest swiftlet (Aerodramus fuciphagus) and house swift (Apus nipalensis)

ABSTRACT

This study was attempted to describe the gross anatomy of the stomach of Edible Birdŝ-Nest Swiftlet (Aerodramusfuciphagus). In addition, the comparison was made with the House Swift (Apusnipalensis). These two aerial insectivorous birds from Apodidae family are feed on similar flying insects group. The stomach of seven Aerodramusfuciphagus and six Apusnipalensis were dissected, examined, the weight and length were measured. The stomach of these two species of the birds comprises of proventriculus or pars glandularis, a glandular stomach and ventriculus or pars muscularis, a muscular stomach. The mean weight of the stomach of Aerodramusfuciphagus and Apusnipalensis were 0.39±0.05 and 1.15±0.08 g, respectively, while the mean length of the stomach of Aerodramusfuciphagus and Apusnipalensiswere 2.87±0.41 cm and 2.53±0.19 cm, respectively. The relative weight of Aerodramusfuciphagus stomach (4.82±0.43 g) was higher than the Apusnipalensis (4.30±0.36 g) stomach, but the difference was not significant at $P<0.05$. Interestingly, the relative length of stomach of Aerodramusfuciphagus (17.88±2.26 mm) was found to be significantly higher than the Apusnipalensis (13.66±0.35 mm) at $P<0.05$. In conclusion, although the Aerodramusfuciphagus is smaller than the Apusnipalensis and these two insectivorous birds are grouped in the same family and consume similar diet, the stomach of Aerodramusfuciphagus is bigger than the Apusnipalensis relative to body weight.

Keyword: Stomach; Gross anatomy; Insectivorous birds; Aerodramusfuciphagus; Apusnipalensis