

## HISTOLOGICAL STUDY OF TONGUE IN *ROUSETTUS AEGYPTIACUS* IN THE SOUTHWEST OF IRAN (JAHROM)

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### ABSTRACT

Bats make up a large proportion of mammalian diversity in Iran. Highest ranking sites for *Rousettus aegyptiacus* presence are located in Jahrom in southwest of Iran. Dominant vegetation in this region is Palm, Jujube, Figure, and Citrus. Ten specimens were captured using mist-net (4 cm mesh). Species were identified according to their morphological characters, and then autopsied and their digestive systems were observed for determination of diet types. Tongues were fixed in 10% formaldehyde, samples were taken from tip, middle and hind tongue and placed in tissue processor and dehydrated in graded series of ethanol (70%-100%), then impregnated with paraffin and serial Sections (4 $\mu$  thickness) were prepared. sections were subjected to Haematoxylin and Eosin (H&E) stains and mounted on binocular microscope and micrographs were taken with digital camera.

Presence of seeds, pieces of leaf and fruit in their gut and feces showed their frugivory diet type. Elongated and movable tongue and fine keratinized epithelium especially on ventral surface of tongue, numerous and different types (4 types) of papilla on the dorsal surface of tongue in different locations and orientation were seen in this species. Hyaline cartilage was observed in tip of tongue.

**KEYWORDS:** Diet Type, Hyaline Cartilage, Lingual Papillae, Pollination