

Ultrastructure of the Tongue of the African Beauty Snake *Psammophis sibilans*

Authors : Mohamed M. A. Abumandour, Neveen E. R. El-Bakary

Abstract : The present work performed on the six tongues of African Beauty snake (*Psammophis sibilans*) that were obtained immediately after their catching, from agricultural fields, Desouk city, Kafrelsheikh Governorate, Egypt. These collected snakes should be from any oral abnormalities or injuries. The lingual surface of the *Psammophis sibilans* was studied by scanning electron microscopy (SEM). The surface of the bifurcated apex was smoother than the lingual body. The median lingual sulcus was deep and contained a number of the taste pores. By the high magnification of SEM of each part of a bifurcated area of the lingual apex have numerous taste buds and no lingual papillae were observed. A few numbers of papillae were observed in the lingual body. The microridges and microvilli distributed in the lingual body helped in spreading of mucus over the epithelial surface. Taste pores and papillae in the tongue indicate the presence of a direct chemo-sensory function for the tongue of these snakes as the chemicals dissolved in the mucus then transferred to Jacobson organ. To conclude, the bifurcation appearance of the snake lingual tip act as a chemical or edge detector help in the process named chemo-mechano-reception.

Keywords : African beauty snake, taste buds, taste pores, tongue, papillae

Conference Title : ICASS 2020 : International Conference on Animals, Science and Society

Conference Location : London, United Kingdom

Conference Dates : March 12-13, 2020