

ULTRASTRUCTURE OF MALE GENITALIA OF *SENIORWHITEA PRINCEPS*
WIEDEMANN (DIPTERA: SARCOPHAGIDAE): A FLESH FLIES OF
FORENSIC IMPORTANCE

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Seniorwhitea princeps Wiedemann 1830 (Diptera: Sarcophagidae) (Figure 1) is a forensically important flesh fly species since the larvae are found in association with human cadavers [1]. For flesh flies, species identification of larvae and adults is problematic due to minimal morphological dissimilarities. Only adult males can be identified to species level based on the distinct morphological characters of the genitalia. This study aimed to investigate the morphological characteristics of male genitalia of *S. princeps*, using light and scanning electron microscope. The micrographs displayed the structure of cercus, 5th sternite, and aedeagus. At the cercus, a tuft of long setae is located at the dorsal margin. The 5th sternite appears as X-shaped with the inner margins comprising a group of rounded, lengthwise-grooved sensilla. As for the aedeagus (Figure 2), the SEM image revealed the unique characteristics of globular juxta, membranous median stylus, pointed harpes and claw-shaped of lateral stylus and vesica. Such male genitalia characteristics are useful to identify *S. princeps*.



Figure 1: Light micrograph of male *S. princeps*, lateral view

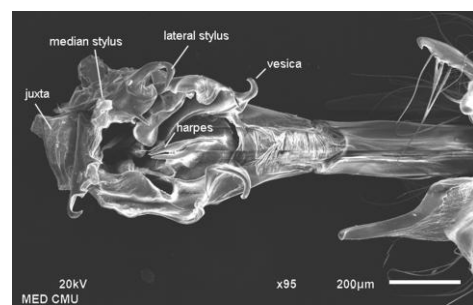


Figure 2: SEM micrograph of aedeagus, ventral view

[1] T.K. Kumara; R.H.L. Disney; A. Abu Hassan, et al., “Occurrence of oriental flies associated with indoor and outdoor human remains in the tropical climate of north Malaysia”, *J. Vector Ecol.*, **37**, 62-68 (2012).