

## Electron Microscopic Observations on the Bat Salivary Glands

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In a broad sense, bats have omnivorous eating habits. Only few species of bats have been ultrastructurally examined to clarify their salivary glands. The salivary glands of bats exhibit a variety of unusual features, some of which are echoed in the vampire bat salivary gland because it has been evidenced that there is a relationship between the vampire bat saliva and heparin like substance during blood drinking. Any ultrastructural evidences for this relationship were not found in the salivary glands in the present study.

3 lump-nosed bats (*Plecotus auritus*) captured in Ruza near Moscow, Oct. 10, were examined in the present study for the parotid, submandibular and sublingual glands. The parotid gland consist of principally serous acini which are characterized by a system of long tortuous intercellular canaliculi that extend from the acinar lumen to closely approximate the cell base. The submandibular gland consist of principally of serous and mucous(mixed) acini; large part of secretory granules contain the inclusions of complex structures(electron-dense core, dotted feature and homogeneous granules). The sublingual gland consist of serous and mucous(mixed) glands; contents of most of secretory granules varied from vacant to slight electron-dense. The serous demilune are frequently observed but their nuclear contour was irregular, more electron-dense karyoplasm, and an extraordinarily large nucleolus.

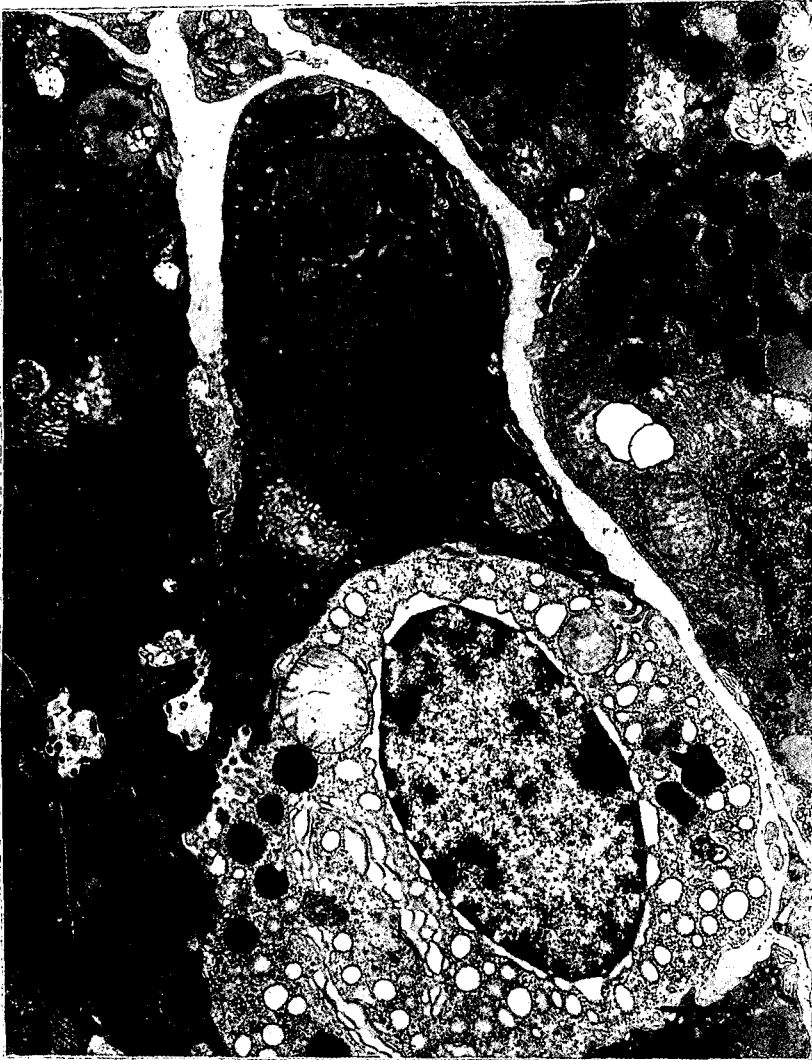


Fig. 1. Electron micrograph of a seromucous demilune in the sublingual gland of the lump-nosed bat (*Plecotus auritus*). Notice more irregular dense nuclear contour of the serous cell, extraordinarily large nucleolus, and extremely well developed rough endoplasmic reticulum. Scale line= 1  $\mu$ m.