

LIGHT AND ELECTRON MICROSCOPIC STRUCTURE OF CORPUSCLES OF STANNIUS OF THE FRESH WATER FISH, *NOTOPTERUS NOTOPTERUS*

PRUTHVI RAJ C. BEDJARGI & R. S. KULKARNI

Fish Endocrinology Research Laboratory, Department of Studies in Zoology, Gulbarga University,
Gulbarga, Karnataka, India

ABSTRACT

The corpuscles of *Notopterus. notopterus* spherical in shape, the cells of the gland are usually arranged in strands, separated by septa of connective tissue continuous with outer fibrous capsule. The cyto architecture of the CS in *Notopterus notopterus* shows that four types of arrangement of connective septa and cells. Two principle types of secretory cells are observed. Type-1 (PAS+ve) and Type-2 (PAS-ve). Type-1 cells are round with clear vesicular nucleus and stainable material in the cytoplasm Type-II cells are slender, irregular cell bodies that may contain cytoplasmic processes extending between the type-I cells, A third type-III cells was also noticed. Presence of lipids was detected by Sudan Black-B staining method. The presence of proteins was observed by Mercury-bromophenol-blue staining method. The ultrastructural observation of corpuscles of Stannius in the fish, *Notopterus notopterus* shows basically three types of cells. The identification of three different cells is based on the nuclear structure, morphology of secretory granules and other cytoplasmic components.

KEYWORDS: Electron Microscopic, *Notopterus notopterus*, Teleostean Fishes