

**COMPARATIVE SURFACE ARCHITECTURAL STUDY OF PAIRED FINS OF HILL-  
STREAM FISHES *BOTIA ALMORHAE*, *HOMALOPTERA BRUCEI* AND *SCHIZOTHORAX  
RICHARDSONII*: SEM INVESTIGATION**

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**ABSTRACT**

Fins are generally used by fishes to achieve all forms of locomotion, stabilization, balancing, change of direction and brake in the aquatic environment. The epidermis is composed mainly epithelial cells, mucous cell and uncular region. The free surface of epithelial cells are possesses microridges, microridges consisting varied patterns at different location in different fish species. These microridges have been correlated to provide reserve surface area for stretching, when manoeuvring of fish. We describe the adhesive nature of the paired fin (pectoral and pelvic) in the *Botia almorhae*, *Homaloptera brucei* and *Schizothorax richardsonii* as examined by scanning electron microscopy, Many Himalayan fishes demonstrate several unique adaptive modifications.

**KEYWORDS:** Hill Stream Fish, Modification, Paired Fins and SEM