

Composite prismatic structure in bivalve shell

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Composite prismatic structure has been examined in Nuculidae, Lucinidae, Cardiidae, Tellinidae, Psammobiidae, Donacidae and Veneridae. This microstructure is divided into three basic structural varieties: typical composite prismatic, characteristic of Nuculidae (*Nucula*); fibrous composite prismatic, observed in Cardiidae, Tellinidae, Psammobiidae; and compound composite prismatic mainly characteristic of Donacidae and Veneridae. The observed differences within the structure, the orientation of prisms and the growth pattern are genetically determined. They may considerably supplement the criteria on which the taxonomy of the group is based. At the same time there exist phenotypic, environmentally controlled structural differences.

Key words: Bivalves, shell microstructure, prismatic layer.

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