

New Barremian rhynchonellide brachiopod genus from Serbia and the shell microstructure of Tetrarhynchiidae

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A new rhynchonellide brachiopod genus *Antulanella* is erected based on the examination of the external and internal morphologies and shell microstructure of '*Rhynchonella pancici*', a common species in the Barremian shallow-water limestones of the Carpatho-Balkanides of eastern Serbia. The new genus is assigned to the subfamily Viarhynchiinae, family Tetrarhynchiidae. The shell of *Antulanella* is small to rarely medium-sized, subglobose, subcircular, fully costate, with hypothyrid rimmed foramen. The dorsal euseptoidum is much reduced. The dental plates are thin, ventrally divergent. The hinge plates are straight to ventrally convex. The crura possess widened distal ends, rarely raduliform or canaliform. The shell is composed of two calcitic layers. The secondary layer is fine fibrous, homogeneous built up of predominantly anisometric anvil-like fibres. Although data on the shell microstructure of post-Palaeozoic rhynchonellides are still incomplete, it is possible to distinguish two types of secondary layer: (i) fine fibrous typical of the superfamilies Rhynchonelloidea and Hemithiridoidea and (ii) coarse fibrous typical of the superfamilies Pugnacoidea, Wellerelloidea, and Norelloidea. The new genus *Antulanella* has a fine fibrous microstructure of the secondary layer, which is consistent with its allocation in the Hemithiridoidea. *Antulanella pancici* occurs in association with other brachiopods showing strong Peritethyan affinity and close resemblance to the Jura fauna (= Subtethyan fauna).

Key words: Brachiopoda, Rhynchonellida, Tetrarhynchiidae, taxonomy, shell microstructure, Cretaceous, Barremian, Serbia.

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