

## A new genus of patellogastropod with unusual protoconch from Miocene of Paratethys

Olga Yu. Anistratenko, Klaus Bandel, and Vitaliy V. Anistratenko *Acta Palaeontologica Polonica* 51 (1), 2006: 155-164

The protoconch and teleoconch morphology of 'Tectura' angulata, 'Tectura' pseudolaevigata from the Sarmatian and 'Tectura' zboroviensis from the Badenian of the Eastern Paratethys have been studied in detail for the first time. The new genus Blinia is established for Sarmatian species which are characterized by a protoconch indicative of lecithotrophic type of early development lacking even a short free-swimming larval stage. In contrary the protoconch of Badenian 'Tectura 'zboroviensis' demonstrates features of the shell typical for planktonic larva. The shape and proportions of a pancake-like protoconch in Blinia species suggest the development of young snails in brood pouch in the mantle cavity of maternal individual. The independence of Blinia gen. nov. from other Patellogastropoda such as Tectura, Patella, and Helcion is supported also by characteristics of shell structure. Typical patellogastropod protoconchs are present in the Badenian and the first half of the early Sarmatian and the protoconchs indicating lecithotrophic development are observed in patellogastropods only from the younger half of early Sarmatian and middle Sarmatian deposits. The change in ontogenetic strategy occurred during time of lowered salinity in the Paratethys. We suggest that the snails reproductive strategy was modified and free larval life was suppressed to cope with salinity change in the ambient water.

**Key words:** Patellogastropoda, *Tectura*, protoconch morphology, ontogeny, Sarmatian, Paratethys.

Olga Yu. Anistratenko anistrat@ln.ua or anistrat@rambler.ru, Institute of Geological Sciences of NAS Ukraine, O. Gontchara Str., 55-b, 01601 Kiev, Ukraine; Klaus Bandel bandel@geowiss.uni-hamburg.de, Geologisch-Paläontologisches Institut und Museum der Universität Hamburg, Bundesstrasse 55, D-20146 Hamburg, Germany; Vitaliy V. Anistratenko anistrat@ln.ua or anistrat@rambler.ru, I.I. Schmalhausen Institute of Zoology of NAS Ukraine, B. Khmelnitsky Str., 15, 01601 Kiev, Ukraine.

Attribution License (for details please see <u>creativecommons.org</u>), which permits unrestricted use, distribution, and reproduction in any medium, provided the original author and source are credited.

