

A new giant discinoid brachiopod from the Lower Devonian of Algeria

Michal Mergl and Dominique Massa Acta Palaeontologica Polonica 50 (2), 2005: 397-402

A new discinoid brachiopod *Gigadiscina* gen. nov., with the type species *G. lessardi* sp. nov. is described from the Lower Devonian (Siegenian) of the Tamesna Basin (South Ahaggar Massif, South Algeria). It is characterised by large size and convexo-planar profile of the shell, with a subcentral pedicle foramen. Micro-ornament is typically discinoid, with small circular pits in radial rows on the post-larval shell surface. Related species of Malvinokaffric Realm origin from South Africa, Falkland Islands, Antarctica, South America, and Libya are reviewed, including the poorly known *Discina anomala* from the Lower Devonian of Germany. The giant size and convexo-planar shells of these discinoids, remarkably similar to recent limpets, are interpreted as adaptation to a habitat in proximity of sandy and gravel beaches in a high-energy environment. Most likely, the conical dorsal valve suppressed drag in turbulent waters, whereas fixation of shell by large, sucker-like pedicle eliminated peeling from substrate.

Key words: Brachiopoda, Discinoidea, Devonian, Algeria, Germany.

Michal Mergl [mmergl@kbi.zcu.cz], Department of Biology, University of West Bohemia, Klatovska 51, 30614, Plzeň, Czech Republic; Dominique Massa, 6 Rue J.J. Rousseau, Suresnes, 92150 France.

This is an open-access article distributed under the terms of the Creative Commons 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.

