

Ber. Inst. Erdwiss. K.-F.-Univ. Graz	ISSN 1608-8166	Band 16	Graz 2011
<i>IGCP 596 Opening Meeting</i>		Graz, 19-24 th September 2011	

The distribution of *Zdimir* fauna and age in South China

CHEN, X.-Q.¹ & SUTTNER, T.J.²

(1) Chinese Academy of Sciences, Nanjing Institute of Geology and Palaeontology, Department of Invertebrate Palaeontology, 39 East Beijing Road, Nanjing 210008, China; xqchen@nigpas.ac.cn

(2) Austrian Academy of Sciences (CPSA) c/o University of Graz, Institute for Earth Sciences (Geology & Paleontology), Heinrichstrasse 26, A-8010 Graz, Austria; thomas.suttner@uni-graz.at

The genus *Zdimir* is a special group of large, thick-shelled, strong costate brachiopods which are preserved in dark, rather pure micritic limestones. This brachiopod group and its related fauna is very important for palaeoecological studies, as especially this assemblage could be used as paleoenvironmental marker. It has been reported from South China (Beiliu of Guangxi, Guizhou, Yunnan, Longmenshan of Sichuan), South Tianshan, Japan (Kitakami Mountains), eastern Australia, Belgium and Austria (e.g. BOUCOT & SIEHL 1962, CHEN & LIAO 2006, TAZAWA 1988, WANG & ZHU 1979, BAI & BAI 1988 and BAI *et al.* 1998). Taxa grouped within this genus are restricted in their range from the Late Emsian (*Polygnathus serotinus* Zone) to the Early Eifelian (*Polygnathus c. partitus* Zone) in South China. If this range can be applied for the occurrence of this genus globally, then this taxon would be a good indicator for the Basal Choteč Event (Early Eifelian; *Polygnathus c. costatus* Zone), one of the global big five extinction events. With this knowledge it might become easy to trace the stratigraphic position of shallow marine sequences, when no relevant microfauna can be obtained. Specimens of *Zdimir*, stored in Nanjing Institute are: *Zdimir beiliuensis* (WANG & ZHU), *Z. contractus* (ANDRONOV), *Z. baschkiricus* (VERNEULI), *Z. gorezkii* (ANDRONOV), *Z. guitangensis* (WANG & ZHU), *Z. pseudobaschkiricus* (TSCHERNYSCHEW), *Z. strachovi* (ANDRONOV) and *Z. triangulicostatus* (ANDRONOV).

References

- BAI, Z.Q. & BAI, S.L. (1988): Conodont biostratigraphy of the Devonian *Zdimir* from Bahe, Guangxi, China. - *In*: McMILLAN, N.J., EMBRY, A.F. & GLASS, D.J. (eds.): Devonian of the World, Calgary, 3: 529-534.
- BAI, Z.Q., BAI, S.L. & WANG, P. (1998): Paleoenvironment and Correlation of Devonian Transitional Facies Beds (*Zdimir* Beds) South China. - *In*: Department of Geology, Peking University, ed. collected works of International Symposium on Geological Science held at Peking University, Beijing, China: 373-378 [*in Chinese with English abstract*].
- BOUCOT, A.J. & SIEHL, A. (1962): *Zdimir* Barrande (Brachiopoda) redefined. - Notizblatt des Hessischen Landesamtes für Bodenforschung zu Wiesbaden, 90: 117-131.
- CHEN, X.-Q. & LIAO, Z. (2006): Discovery of the brachiopod *Zdimir* in the West of South Tianshan and its biostratigraphic significance. - Acta Paleontologica Sinica, 45 (3): 351-358.
- TAZAWA, J. (1988): *Zdimir* (Devonian Brachiopoda) from the Kitakami Mountains, northeast Japan and its paleobiogeographical significance. - Journal of the Geological Society of Japan, 94(12): 1013-1016 [*in Japanese*].
- WANG, Y. & ZHU, R.F. (1979): Beiliu (Middle Middle Devonian) brachiopods from South Guizhou and central Guangxi. - Palaeontologia Sinica, New Series B, 158 (15): 1-95 [*in Chinese with English abstract*].