New data on the classic "Callovian" locality in Babiarzowa Klippe (Pieniny Klippen Belt, Poland)

Ján SCHLÖGL¹, Andrzej WIERZBOWSKI² & Marián GOLEJ³

¹Comenius University, Department of Geology and Paleontology; Mlynska dolina, Pav. G, SK-842 15 Bratislava, Slovakia; e-mail: schlogl@nic.fns.uniba.sk ²University of Warsaw, Institute of Geology; Al. Żwirki i Wigury 93, 02-089 Warszawa;

e-mail: Andrzej.Wierzbowski@uw.edu.pl

³Slovak Academy of Sciences, Geological Institute;

Dúbravská cesta 9, P.O. Box 109, SK-840 05 Bratislava, Slovakia;

e-mail: geolmgol@savba.sk

The rediscovery of the classic Babiarzowa Klippe locality was announced by Polish and Slovak team in 2005 (Wierzbowski et al. 2005). The fauna occurring here in red laminated limestones representing the infilling of neptunian dyke appeared similar to that of Callovian age described by Uhlig (1878, 1881), mainly concerning gastropods and bivalves. However, after the preparation of very small-sized, but well preserved ammonites, it has been clear that the fauna in question is of Late Bathonian age. Some ammonites recognized as Epistrenoceras sp. and Hemigarantia sp. are indicative of the Upper Bathonian, and more precisely the Julii Subzone of the Retrocostatum Zone. Thus, the rediscovered fauna is older than that originally described by Uhlig (op.cit). The Callovian age of the original fauna described by Uhlig (1878, 1881) was based mainly on the occurrence of "Perisphinctes" curvicosta Oppel (see Uhlig 1881, pl. 7: 3ab) known from the Callovian in famous locality of Balin. Another interesting form was a small kosmoceratid ammonite referred to as Reineckeia greppini Oppel by Uhlig (1881, pl. 7: 6ab). It represents a small-sized microconch with two rows of tubercles and flattened mid-ventral area, morphologically similar to some less densely ribbed, and more evolute morphotypes of Kepplerites (Toricellites) lahuseni (Parona & Bonarelli). Both these ammonites have not been recognized in the fauna studied.

New research has been undertaken by the present authors in June 2008, about 50 metres to the north from the previous locality, at the edge of an old overgrown quarry. Red limestones, representing the infilling of neptunian dyke were uncovered in a similar stratigraphic

ABSTRAKTY 207

position, sandwiched within the crinoidal limestones of the Smolegowa Limestone Formation. Lithologically, the dyke shows the same characteristics as the first one (see Wierzbowski et al. 2005), however, it is thicker, attaining up to 90 cm. Lower part of the dyke is represented by finally laminated pink to red micritic limestone, and the upper part is more massive, without lamination. One level in the upper part of the dyke yielded numerous beautifully preserved gastropod fauna, accompanied by less abundant bivalves, ammonites, brachiopods, solitary corals and shark teeth. The fauna is just under preparation and a more precise palaeontological data should be presented during the symposium. The field observations suggest that the recently sampled place was a subject of extensive collecting many years ago. The site is covered by edgy, fresh rubble over which a thick horizon of soil is developed. In such a field conditions corresponding to the very exposed site situated on the edge of the quarry with sparse vegetation, the soil cover of such thickness needs decades to be developed. It should be remembered thus, that the place could correspond to that in the Babiarzowa Klippe where the fossils have been collected in XIX century by L. Kamieński, who sent the palaeontological material to Vienna to V. Uhlig (cf. Uhlig 1881).

Literatura

- Uhlig V., 1878. Beträge zur Kenntniss der Juraformation in den karpatischen Klippen. *Jahrbuch k. k. geol. Reichsanstalt*, 28, 4, 641–658.
- Uhlig V., 1881. Ueber die Fauna des rothen Kellowaykalkes der penninischen Klippe Babierzówka bei Neumarkt in West-Galizien. *Jahrbuch k. k. geol. Reichsanstalt*, 31, 3, 383–422.
- Wierzbowski A., Schlögl J., Aubrecht R. & Krobicki M., 2005. Rediscovery of the classic locality of Callovian in Babiarzowa Klippe (Pieniny Klippen Belt, Poland). *Tomy Jurajskie*, 3, 11–14.