

Distribution of Silurian graptolites in the Kleczanów PIG - 1 well (Holy Cross Mountains, Poland): a preliminary report

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Two distinctive graptolite crises referred to as the Ireviken and Mulde events were recognised worldwide in the Wenlock of the Silurian period. These biological crises can be linked to early and later Wenlock glaciations and climate aridity.

New graptolite material comes from the Kleczanów PIG – 1 borehole (depth 233 – 178 m), and the drill core is composed of dark shales of the Prągowiec Beds. The samples were taken at intervals of approximately one metre. Kleczanów PIG – 1 borehole was drilled in the southern Holy Cross Mountains (Central Poland). According to the geological composition, the Holy Cross Mountains are divided into the Kielce Unit in the south and the Łysogóry Unit in the north. So, Kleczanów PIG – 1 borehole is in the Kielce Unit.

According to preliminary graptolite data, we can distinguish a graptolite biozone sequence from *Monograptus riccartonensis* (lower Wenlock, Sheinwoodian) to *Neodiversograptus nilssoni* (lower Ludlow, Gorstian). It is interesting to note that no *Retiolites* were found in the Kleczanów PIG - 1 borehole. The fossils of retiolitids were also not found in the Upper Homerian interval, where their diversity was very high. *Monograptus ambiguus* Jaeger from the uppermost *Cyrtograptus lundgreni* Biozone was identified for the first time in the Holy Cross Mountains. This species was previously known from Bohemia and Saxothuringia.

Keywords: Lower Silurian, Łysogóry Unit, graptolites, biostratigraphy.