PALYNOSTRATIGRAPHY OF THE POŁOMIA FORMATION (SOUTHERN POLAND)

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Three samples were taken from the mudstones of the Polomia Formation from a gravel pit at Kamienica Śląska (Upper Silesia). Presently this is the biggest outcrop of the Polomia Formation in Southern Poland with a total thickness of about 30 m. Thick gravel complexes are separated by four mudstone horizons: lowermost (M1), lower (M2), upper (M3) and uppermost (M4).

The sample from M1 horizon does not contain any palynomorphs whereas the samples coming from the two other mudstone beds M2 and M3 contain relatively reach miospore assemblages representing a palynological subzone c of the C. meyeriana zone distinguished in the Zbązynów Beds by Orlowska-Zwolińska (1985) and dated as late Norian–early Rhaetian. The precise determination of the age of the subzone c is difficult due to problems with stratigraphy of the Norian–Rhaetian in the German Basin. Kürscher and Herngreen (2010) correlated the whole zone C. meyeriana with the Norian zone G. rudis as shown in Figure 2, whereas in the text (p. 76) they correlated the c subzone with the zone R. germanicus. Szulc et al. (2015, Fig. 18) have also suggested the late Norian age of this subzone. Based on presence of the Rhaetipollis germanicus Schulz Fijałkowska-Mader et al. (2015) have correlated the c subzone with lower part of the Rhaetian R. germanicus zone of Herngreen (Kürscher and Herngreen, 2010).

Due to the problems mentioned above, the age of the Polomia Formation can be determined as the late Norian–early Rhaetian what remarkably limits the previously suggested wide stratigraphic range of this formation reaching from the Keuper to the Middle Jurassic (Jakubowski, 1977).

References


