

Oligocene plant assemblage from Rębiszów, Lower Silesia: First “volcanic flora” from Poland

Rafał Kowalski, Grzegorz Worobiec, Elżbieta Worobiec, and Katarzyna Krajewska


Acta Palaeontologica Polonica 65 (2), 2020: 273-290 doi:<https://doi.org/10.4202/app.00686.2019>

Fossil plant macroremains preserved in laminated diatomites from Łysa Góra near Rębiszów, Lower Silesia, have been documented for the first time. The fossil assemblage consists mostly of leaves, but fruits, seeds and sporadic flowers also occur. Forty-three identified taxa represent nineteen plant families: Aceraceae, Berberidaceae, Betulaceae, Cornaceae, Cupressaceae, Elaeocarpaceae, Ericaceae, Fagaceae, Lauraceae, ?Leguminosae, ?Meliaceae, Magnoliaceae, Pinaceae, Rhamnaceae, Rosaceae, Salicaceae, Tilioidae, Ulmaceae, Vitaceae, and one incertae sedis. The prevalence of entire margined leaves, mostly represented by *Majanthemophyllum basinerve* and *Daphnogene cinnamomifolia*, and a significant presence of *Calocedrus suleticensis* and *Liriodendron haueri*, are characteristic features of the Rębiszów flora. The composition of the plant assemblage points to a mesophytic forest with some riparian elements and suggests favourable, warm climatic conditions. Radiometrically dated basalts overlying fossiliferous layers and composition of palynoflora suggest at least Chattian (late Oligocene) age. The lithology and floristic composition link the Rębiszów flora with the so-called volcanic floras of the Nerchau-Flörsheim or Kleinsaubernitz floristic complex (Oligocene) from Germany and Czech Republic with Suletice-Berand flora being especially close.

Key words: Acrogymnospermae, Angiospermae, sporomorphs, volcanic floras, diatomites, Paleogene, Poland.

Rafał Kowalski [rafal.kowalski@mz.pan.pl] and Katarzyna Krajewska (passed away 2011), Museum of the Earth in Warsaw, Polish Academy of Sciences, Al. Na Skarpie 27, 00-488 Warsaw, Poland. Grzegorz Worobiec [g.worobiec@botany.pl] and Elżbieta Worobiec [e.worobiec@botany.pl], W. Szafer Institute of Botany, Polish Academy of Sciences, ul. Lubicz 46, 31-512 Kraków, Poland.

This is an open-access article distributed under the terms of the Creative Commons Attribution License (for details please see creativecommons.org), which permits unrestricted use, distribution, and reproduction in any medium, provided the original author and source are credited.

 [Full text \(2,242.5 kB\)](#)