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

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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.

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