

TERTIARY FOSSIL FLORA FROM THE BROWN COAL MINE BELCHATÓW (CENTRAL POLAND)

by

Leon STUCHLIK

The studied flora comes from a big outcrop — an open pit at Belchatów near Piotrków Trybunalski, Central Poland. The sediments under examination fill out the so called Belchatów tectonic fault, which was established on the border between Oligocene and Miocene. Tertiary sediments such as whole brown coal series with three coal seams, and the main coal seam, as well as mineral sediments alternating with the coal layers were studied palynologically, and for some part of them carpological and leaf analyses have been carried out. As with the results of hitherto examined sediments in various parts of the Neogene deposits the facies changed regularly. The swamp forest facies is more or less similar in all horizons with some differentiation in pollen concentration of *Nyssa*, only. The facies of more dry habitats are very rich and differentiated. In general in the lower part of the profile thermophilous elements characteristic of the lower Neogene prevailed. This group of sporomorphs (*Rhus*, *Engelhardtia*, *Leguminosae*, *Pollenites edmundi* and others) was especially abundant in the main brown coal seam and in some underlying thin coal layers. On the basis of the results of palaeo-botanical studies (1) the Middle Miocene (Karpatian/Badenian) can be suggested for the age of the main brown coal seam, and the Lower Miocene (probably Eggenburgian) for the thin brown coal layers underlying 50-60 m below the main coal seam.

The uppermost brown coal seam could be referred to the youngest Neogene age (Upper Pliocene).

References

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