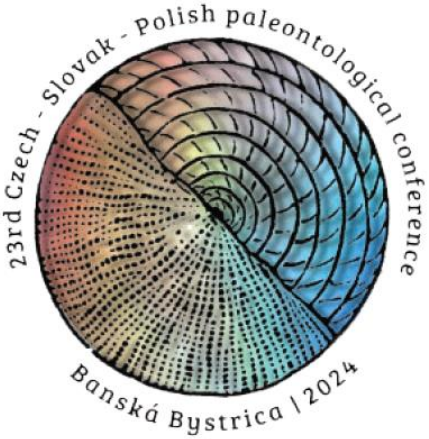
23rd Czech – Slovak – Polish Paleontological Conference

ABSTRACT BOOK



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Palynology of the Upper Triassic deposits from the Poręba outcrop, Upper Silesia (SW Poland)

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Poręba site, located in Upper Silesia west of Zawiercie, is known among paleontologists and paleobotanists for the Upper Triassic vertebrates and plant remains (Sulej et al. 2012; Szulc et al. 2015; Pacyna et al. 2024). Palynostratigraphic research allowed to precise the age of these sediments, belonging to the Patoka Member of the Grabowa Formation, as Norian (Fijałkowska-Mader et al. 2015). The uniqueness of the exposure in Poręba results from the fact that pollen grains appear here not only in disperse form, but also in male cones of conifers. The pollen grains, obtained from male cones, belong to *Brachysaccus*, *Triadispora* and *Classpollis* genera (Pacyna et al. 2024) and are still under study (Pacyna et al. 2024).

Miospore assemblage, recognized in the samples from both the outcrop and the drill core Poręba, represents the *meyeriana* b subzone of the *Corollina meyeriana* zone, which corresponds to the *Granuloperculatipollis rudis* GTS standard zone (Fijałkowska-Mader et al. 2015). The spectrum of disperse forms is strongly dominated by conifer assacate, cheirolepidacean pollen *Classopollis meyeriana* and *C. classoides* as well as voltzialean bisaccate pollen of the *Brachysaccus* (*B. neomundanus, B. ovalis*) and *Triadispora* (*T. crassa, T. polonica, T. suspecta*) genera. Less frequently occur *Duplicisporites granulatus, Lunatisporites* and *Ovalipollis* sp. div. and *Parillinites* pollen grains. Single fern spores are represented by *Verrucosisporites, Cyclotriletes* and *Taurocusporites* (*T. morbeyi, T. verrucatus)* genera, whereas lycopod spores are more taxonomically differentiated and belong to *Anapiculatisporites, Heliosporites, Nevesisporites, Aratrisporites, Polycingulatisporites* and *Neochomotriletes* genera. Moreover, occur single cirumpollens, represented by *Rhaetipollis germanicus* and *Sphaeripollenites* sp.

The miospore assemblage, presented above is typical for coastal plant community existing in dry climate conditions. The macrofossils found in Poręba coming strictly from conifers, also confirm dry environment, whereas presence of lycopod spores and an abundance of phytoclasts, indicates for wetter, coastal milieu.

During our research we had an opportunity to examine pollen obtained from sediments and also from male cones. That part of the work shed much light on the subject of intraspecific diversity, which can lead to pollen grains form the one parent plant species being described as two or more different dispersed sporomorph species.

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