

# Abstract

The present thesis focuses on plant fossils from the Klikov Formation (late Turonian - Santonian). This formation forms the basal part and the most widespread unit of the South Bohemian Basins, containing numerous leaf impressions, fossil plant reproductive structures and diverse pollen spectra. In 2007, extremely well preserved assemblages of fruits, seeds and flowers were found in the Zliv - Řídká Blana locality, preliminarily reported in this work. Plants of the Normapolles complex predominate in the pollen assemblages, as well as in the fossil reproductive structures. This work suggests that *Budvaricarpus* and *Caryanthus*, members of the Normapolles complex, are closely related to extant *Rhoiptelea*, which is a sister group of the recent Juglandaceae. Fossil insect eggs also occur in the Klikov Formation. Due to their similar shape and size, they are easily confused with small fruits and seeds. Two species of fossil insect eggs, *Palaeoaldrovanda splendens* and *Knoblochia cretacea*, were originally misinterpreted as angiosperms seeds. They are revised here - both species are interpreted in this work as fossil insect eggs. Based on characters like perforated walls, and basal and apical projections, they appear most similar to eggs of recent Lepidoptera and Phasmatodea. Palaeoecological evaluation of the flora using CLAMP (Climate Leaf Analysis Multivariate Program), NRL (Nearest Living Relative) and CoA (Coexistence Approach) shows seasonally dry climate; mean annual temperature is believed to have been approximately 15 °C.