

Kladno-Rakovník Basin and especially its western part is well known for its abundant silicified wood, so-called as "araukarity". The occurrence of these fossils is described since the 19th century, however, modern systematic classification is lacking. Araukarity, linked mainly to the Týnec and Líně Formations, are found almost exclusively on the fields, therefore it was difficult to implement any detailed sedimentological conclusions.

The Master Thesis is focused on the western part of the Kladno-Rakovník Basin, where large amount of material was discovered. After a detailed xylotomical study of thin sections and polished cross sections, two different types of wood were discerned. First related to the coniferous and cordaite wood, attributable to the of the morphogenus Araucarioxylon and the second one, rather rare and unknown in the western part of the Kladno-Rakovník Basin represents a calamite wood and it is assigned to the morphogenus Arthropitys.

I was able to partially confirm Skoček's (1970) theory, that so-called black araukarity are linked to the grey (Kladno and Slaný) formations.