ACTA PALAEONTOLOGICA POLONICA

The early angiosperm *Pseudoasterophyllites cretaceus* from Albian-Cenomanian of Czech Republic and France revisited

Jiří Kvaček, Bernard Gomez, and Reinhard Zetter
Acta Palaeontologica Polonica 57 (2), 2012: 437-443 doi: http://dx.doi.org/10.4202/app.2009.0060

The early halophytic angiosperm *Pseudoasterophyllites cretaceus* from the Cenomanian Peruc Korycany Formation of the Bohemian Cretaceous Basin and from the Late Albian of the Northern Aquitanian Basin is redescribed. The plant is characterized by semi−whorled linear, and heavily cutinized leaves with paracytic stomata. Stamens associated with *P. cretaceus* possess an apically emerging connective that possesses the same epidermal cell pattern as the leaves. The stamens are massive, tetrasporangiate, and contain *Tucanopollis* pollen, thus clearly indicating affinities of *P. cretaceus* to the basal angiosperms. The plants that co−occur with *P. cretaceus* in semi−autochtonous taphocoenoses include the conifer *Frenelopsis alata*, which was likely a halophyte or halo−tolerant glycophyte growing in habitats close to the sea.

Key words: Magnoliopsida, *Pseudoasterophyllites, Tucanopollis*, Cretaceous, Albian, Cenomanian, Bohemia, France.

Jiří Kvaček [jiri.kvacek@nm.cz], National Museum, Prague, Václavské nám. 68, 115 79, Praha 1, Czech Republic; Bernard Gomez [bernard.gomez@univ-lyon1.fr], Université Lyon 1 (Claude Bernard), CNRS-UMR 5125 Paléoenvironnements et Paléobiosphère, 43 Boulevard du 11 Novembre 1918, F-69622 Villeurbanne, France; Reinhard Zetter [reinhard.zetter@univie.ac.at], University of Vienna, Institute of Palaeontology, Althanstrasse 14, A-1090 Vienna, Austria.

This is an open-access article distributed under the terms of the Creative Commons Attribution License (for details please see creativecommons.org), which permits unrestricted use, distribution, and reproduction in any medium, provided the original author and source are credited.


Full text (684.5 kB)