

Dinoflagellate Cysts at the Karpatian/Badenian Boundary of Wagna (Styrian Basin, Austria)

Ali SOLIMAN & Werner E. PILLER

Dinoflagellate cysts are described from the locality Wagna (Karpatian/Badenian, Early/Middle Miocene) for the first time. The detected assemblages include 38 taxa and provide new biostratigraphical as well as palaeoenvironmental information. The Karpatian/Badenian boundary is clearly marked in all three studied sections by the first occurrences of *Operculodinium? borgerholtense* and *Batiacasphaera sphaerica* with the onset of the Badenian. Generally, dinocyst diversity is relatively low in all studied samples but a distinctive decline just below the Karpatian/Badenian boundary is recorded. This is in accordance with foraminiferal data and coincides with the 3rd order sea level fall at the Karpatian/Badenian (Early/Middle Miocene) boundary. In contrast to calcareous planktonic foraminifers, organic-walled dinocysts seem not to be affected by higher nutrient levels, which may have been induced by increased volcanic activities during the Karpatian.

Authors address:

Ali Soliman & Werner E. Piller
University of Graz
Institute for Earth Sciences
Geology and Palaeontology
Heinrichstraße 26
A-8010 Graz
ali.soliman@uni-graz.at

Ali Soliman
Tanta University
Faculty of Science
Department of Geology
ET-31527 Tanta