

## DINOCYSTS AND AMMONOIDS OF UPPER CRETACEOUS SEDIMENTS OF THE PEMBERGER QUARRY (KRAPPFELD, CARINTHIA, AUSTRIA)

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Upper Cretaceous sediments of the Krappfeld in Carinthia (Austria) yield numerous ammonoids and dinoflagellate cysts as well as benthic foraminifera (Schreiber, 1979, 1980). Earlier investigations on the macro- and microfauna were done by Thiedig and Wiemann in 1976.

In general, the investigated deposits belong to the Gosau Group and cover a surface of about 100 km<sup>2</sup> with a thickness up to 1500 m of flyschoid limestone and marl within the Krappfeld area (compare Thiedig & Wiemann 1976). According to the foraminifera Lower Maastrichtian was suggested for the investigated deposits belonging to the Krappfeld-Group by Schreiber (1980). This age can more or less be confirmed by the micro- and macrofossils of recent investigations, as some of the fossil remnants hint to Late Campanian age.

Abundant and diverse dinoflagellate cyst assemblages from the sampled log of the Pemberger Quarry are reported, e.g. *Dinogymnium* spp., *Florentinia* spp., *Xiphoridinium* spp., *Fromea* spp., *Hystriosphæridium* spp., *Palaeoperidinium* spp., *Pervosphæridium* spp., *Surculosphaeridium* spp. and *Kleithriosphæridium* spp. Due to the presence of *Florentinia mayii* (79.01-71.86 Ma), *Cannosphæropsis utinensis* and *Cerodinium diebelii* (Williams et al., 2004) Campanian age is suggested for the investigated sequence.

Ammonoids collected by Thiedig in 1976 are *Pseudokossmaticeras brandti*, *Pseudokossmaticeras tercense*, *Pseudokossmaticeras galicianum* and *Pachydiscus carinthiacus*. Additional specimens, which might belong to a new genus were found within the uppermost part of the Cretaceous sequence.

The fauna has been dated by ammonites as Early Maastrichtian by THIEDIG & WIEMANN (1976). This seems to be outdated through the wrong use of *P. brandti* for indicating Early Maastrichtian (Hancock & Kennedy, 1993).

Recent findings show that the ammonoid fauna (*Pseudokossmaticeras tercense* (Seunes, 1892) indicates a Late Campanian age of the upper part of the Cretaceous at the Krappfeld. The ammonoid specimens are accompanied by lamellaptychi, belemnites, bivalves, serpulides, fish remains, trace fossils and plant debris.

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