

## NANNOPLANKTON CONTENTS OF THE TYPE-MAASTRICHTIAN

a note by Shirley E. van Heck

Following the current views, the type-Maastrichtian at the ENCI-Quarry near Maastricht can be subdivided into two lithological units: the Gulpen Chalk and the Maastricht Chalk, separated by a coprolite layer (ROMEIN, 1962). This subdivision is in accordance with an earlier, more refined lithological subdivision by UHLENBROEK (1912), and correlates as follows:

		Md (+ 15 m.)	
	Maastricht Chalk	Mc (+ 10 m.)	
ROMEIN:		Mb (+ 20 m.)	UHLENBROEK
	Coprolite layer	Ma (5 - 10 cm.)	
	Gulpen Chalk	Cr 4 (3.5 m.)	

Nineteen samples from the type-Maastrichtian have been studied on their nannoplankton contents by SISSINGH (1977). Thorough reinvestigation of these samples (10 cm. per slide, 1200 X magn.) revealed some deviations, which gave reason for this note.

In total 142 species were recognised, several of which have not been described as yet. A selection of 56 species is presented on the distribution chart. To avoid any taxonomical descriptions, only published combinations have been used. The upper six samples (15.00 m. - 33.25 m.) were too poor for a quantitative analysis.

A most interesting result is, that Nephrolithus frequens appears far lower than reported by other authors, be it in very low number. This implies that most of the type-Maastrichtian belongs to the N. frequens Zone. Micula murus was also found, and several of the species described by PERCH-NIELSEN (1973) from the Maastrichtian of Madagascar, e.g. Cribracorona gallica, Eiffellithus parallelus, Markalius perforatus, Prediscosphaera majungae, Rhagodiscus reniformis, Stephanolithion munitum. Moreover, it appears that in many samples reworking is present as is demonstrated by the occurrence of Angulofenestrellithus snyderi, Aspidolithus parvus, Corollithion signum, Eiffellithus eximius and Tranolithus phacelosus from the Campanian, and of Reinhardtites levis from the Lower Maastrichtian.

The limited space in this Newsletter does not allow to elaborate on these results.

### References

- PERCH-NIELSEN, K., 1973., Neue Coccolithen aus dem Maastrichtien von Dänemark, Madagaskar und Ägypten. -Bull. Geol. Soc. Denmark, vol.22, pp.306-333.
- ROMEIN, B.J., 1962., On the type locality of the Maastrichtian (DUMONT 1849), the upper boundary of that stage and on the transgression of Maastrichtian s.l. in Southern Limburg. -Meded. Geol. Sticht., n.ser., vol.15, pp.77-84.
- SISSINGH, W., 1977., Biostratigraphy of Cretaceous calcareous nannoplankton. Geologie en Mijnbouw, vol.56, pp.37-65.
- UHLENBROEK, G.D., 1912., Het Krijt van Zuid-Limburg. Toelichting bij eene geologische kaart van het Krijt-gebied van Zuid-Limburg. -Jaarverslag Rijksopsp. Delfst., 1911, pp.48-57.
- VANGEROV, E.F. & SCHLOEMER, W., 1967., Vergleich des "Vetschauer - Kalkes" des Aachener Kreide mit dem Kreide-Profil von Süd-Limburg anhand von Coccolithen. -Geologie en Mijnbouw, vol.46, pp.453-458.

