

## THE SIZE OF THE COCCOLITHS OF *DICTYOCOCCITES PERPLEXA* BURNS

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*Dictyococcites perplexa* Burns (1975) is a reticulofenestrid species which was first described from the Miocene of DSDP Site 265 in the south-east Indian Ocean. There is contradictory information concerning coccolith size in the species' protologue. The description refers to a "medium-sized" placolith; the long diameter of the coccoliths (distal surface) is mentioned to be 18-20  $\mu\text{m}$ ; using the stated magnification factors of the SEM-photographs (oblique views), I measured apparent distal surface lengths of about 1.50  $\mu\text{m}$  (holotype) and 2.35  $\mu\text{m}$  (paratype). In a comment in the INA Newsletter (1981, vol.3(1), p.40), Backman was of the opinion that *Dictyococcites perplexa* Burns is a senior synonym of *Dictyococcites antarcticus* Haq, the latter species showing coccolith lengths between 4 and 8  $\mu\text{m}$  (Haq, 1976).

I wrote to Dr. Burns about the discrepancy. The contents of Dr. Burns' letter of reply (25th November 1981) are reproduced here with his permission. It appears that, due to an editorial error, the stated magnification factors of the photographs of *D. perplexa* are incorrect. Quote: "The corrected magnification for Fig. 20 therefore is X1662 which gives the specimen in the figure an apparent length of 19.85  $\mu\text{m}$  (? B.D.). However, due to the arched form of the coccolith and the angle involved in SEM work, it is impossible to take accurate measurements from SEM pictures. The size range quoted for the species was therefore taken from specimens viewed in the light-microscope."

In summary, *Dictyococcites perplexa* is a species with very large coccoliths (18-20  $\mu\text{m}$ ). As to coccolith size, the species clearly differs from *Dictyococcites antarcticus* Haq.

### REFERENCES

- Burns, D.A. 1975 - Distribution, abundance, and preservation of nannofossils in Eocene to Recent Antarctic sediments. *New Zealand Journ. Geol. Geophys.*, vol.18(4), pp.583-595.
- Haq, B.U. 1976 - Coccoliths in cores from the Bellingshausen Abyssal Plain and Antarctic Continental Rise (DSDP Leg 35). In: Hollister, C.D., Craddock, C. et al., *Init. Rep. DSDP*, vol.35, pp.557-567.