

## Taxonomic note: New calcareous nannofossil taxa from Shatsky Rise (ODP Leg 198, NW Pacific Ocean)

Paul R. Bown, Jackie A. Lees\*

Department of Earth Sciences, University College London, Gower Street, London, WC1E 6BT, UK; \*j.lees@ucl.ac.uk

Manuscript received 24th August, 2006; revised manuscript accepted xxth August, 2006

### 1. Introduction

Last year, a total of 23 new calcareous nannofossil taxa were discovered at Shatsky Rise (Ocean Drilling Program Leg 198, NW Pacific; Figure 1). One new genus, *Mattiolia*, and 13 new species (*Gartnerago ponticula*, *Haqius peltatus*, *Helicolithus leckiei*, *Kokia stellata*, *Mattiolia furva*, *Rhagodiscus adinfinitus*, *R. amplus*, *R. robustus*, *R. sageri*, *Tubodiscus bellii*, *T. frankiae*, *Zeugrhabdotus clarus* and *Z. petrizzoae*) were described from the tropical Early Cretaceous by Bown (2005a) and Bown & Hampton (in Bown, 2005a). In addition, *Assipetra terebodontarius youngii* and *Haqius ellipticus* were emended. Lees & Bown (2005) described seven new species from the tropical to subtropical Late Cretaceous: *Ahmuellerella alboradiata*, *Ceratolithoides perangustus*, *C. sagittatus*, *Micula clypeata*, *M. premolisilvae*, *Tegumentum lucidum* and *Uniplanarius clarkei*. They also recombined three taxa: *Cribrocorona* (*Cylindralithus*) *echinus*, *Loxolithus* (*Crepidolithus*) *thiersteinii* and *Rotelapillus* (*Cylindralithus*) *biarcus*. Finally, from the Palaeogene, Bown (2005b) described *Sphenolithus arthuri* and *Fasciculithus fenestrellatus*.

Here, in summary form (Plates 1, 2), we reproduce the original holotype illustrations of these new taxa, along with some of the newly combined and emended species and some taxa that are rarely recorded, or that are useful for comparison. All of the original articles, containing 35 plates of light microscope illustrations in total, are freely available online (see references for web-addresses). Ages for the samples in the plates are provided in the Appendix.

### References

- Bown, P.R. 2005a. Early to Mid-Cretaceous Calcareous Nannoplankton from the Northwest Pacific Ocean, Leg 198, Shatsky Rise. In: T.J. Bralower, I. Premoli Silva & M.J. Malone (Eds). Proc. ODP, Sci. Results, 198: 1-82. Available online at [www-odp.tamu.edu/publications/198\\_SR/VOLUME/CHAPTERS/103.PDF](http://www-odp.tamu.edu/publications/198_SR/VOLUME/CHAPTERS/103.PDF)
- Bown, P.R. 2005b. Cenozoic Calcareous Nannofossil Biostratigraphy, ODP Leg 198 Site 1208 (Shatsky Rise, Northwest Pacific Ocean). In: T.J. Bralower, I. Premoli Silva & M.J. Malone (Eds). Proc. ODP, Sci. Results, 198: 1-44. Available online at [www-odp.tamu.edu/publications/198\\_SR/VOLUME/CHAPTERS/104.PDF](http://www-odp.tamu.edu/publications/198_SR/VOLUME/CHAPTERS/104.PDF)
- Lees, J.A. & Bown, P.R. 2005. Upper Cretaceous Calcareous Nannofossil Biostratigraphy, ODP Leg 198 (Shatsky Rise, Northwest Pacific Ocean). In: T.J. Bralower, I. Premoli Silva & M.J. Malone (Eds). Proc. ODP, Sci. Results, 198: 1-60. Available online at [www-odp.tamu.edu/publications/198\\_SR/VOLUME/CHAPTERS/114.PDF](http://www-odp.tamu.edu/publications/198_SR/VOLUME/CHAPTERS/114.PDF)

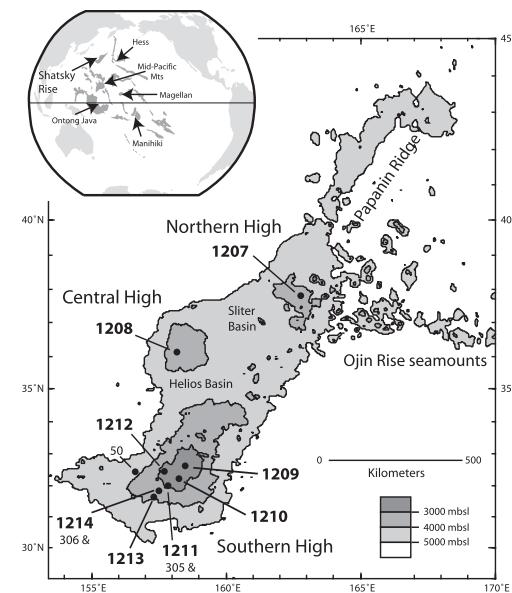
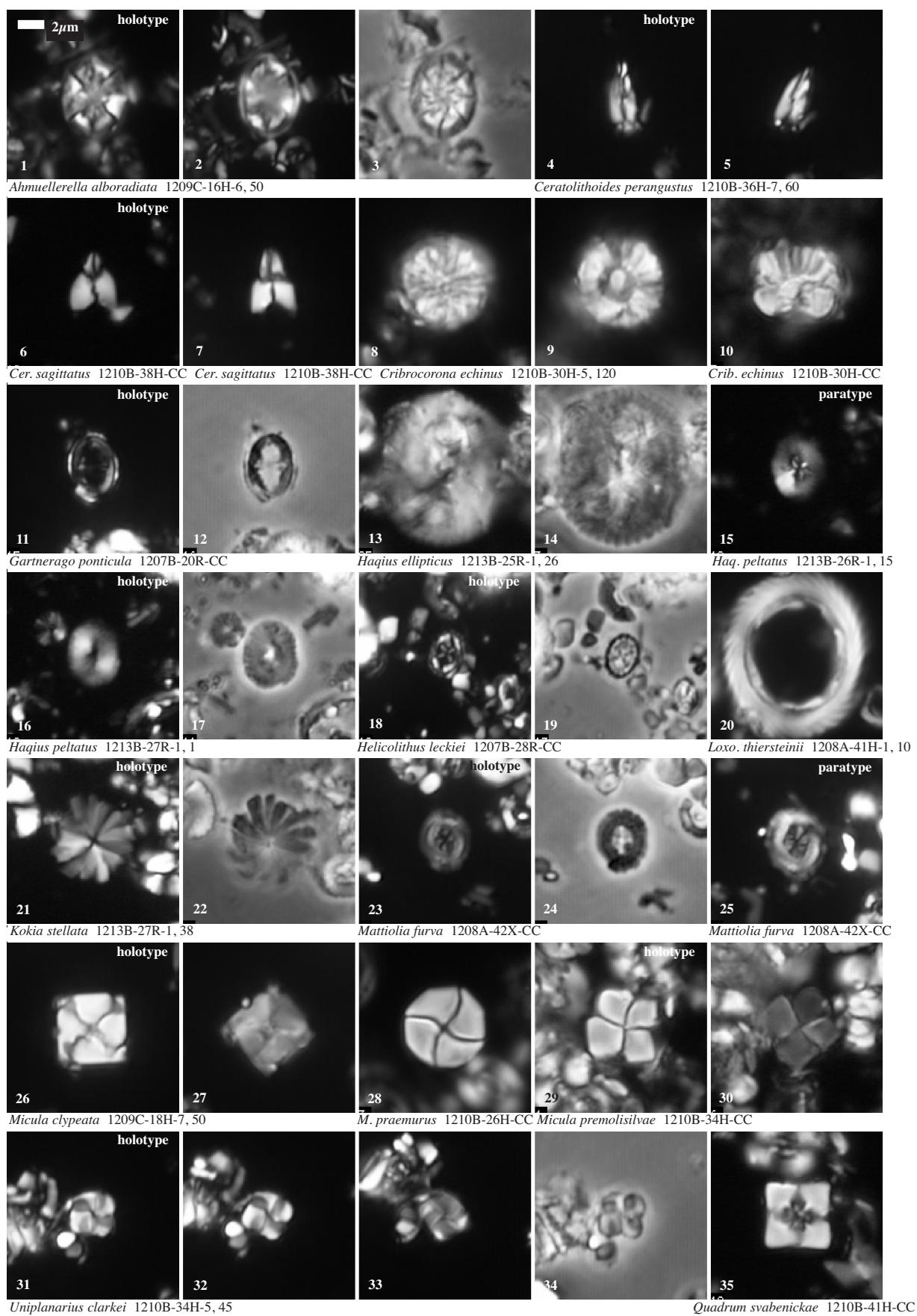


Figure 1: Bathymetry and location of Shatsky Rise and ODP Leg 198 sites, NW Pacific Ocean. After Lees & Bown (2005)

### Appendix

- 198-1207B-6R-CC - Early Campanian, UC14dTP-15aTP  
198-1207B-20R-CC - Middle/Upper Cenomanian, UC3/4  
198-1207B-28R-CC - Late Albian, NC10a  
198-1207B-29R-CC - Late Albian, NC9b  
198-1207B-39R-CC - Aptian, NC7  
198-1207B-42R-CC - Aptian, NC7  
198-1208A-36X-2, 99cm - Early Eocene, CP9  
198-1208A-36X-CC, 1.5cm - Early Eocene, CP9b  
198-1208A-36X-CC, 12cm - Late Palaeocene, CP8  
198-1208A-41H-1, 10cm - Early Campanian, UC15bTP  
198-1208A-42X-CC - Albian, NC8c/9a  
198-1209C-16H-6, 50cm - Late Maastrichtian, UC20bTP  
198-1209C-18H-7, 50cm - Late Maastrichtian, UC20bTP  
198-1210B-26H-CC - Late Maastrichtian, UC20aTP  
198-1210B-30H-5, 120cm - Late Campanian/Early Maastrichtian, UC17  
198-1210B-30H-CC - Late Campanian/Early Maastrichtian, UC17  
198-1210B-34H-5, 45cm - Late Campanian, UC16  
198-1210B-34H-CC - Late Campanian, UC16  
198-1210B-36H-7, 60cm - Late Campanian, UC16  
198-1210B-38H-CC - Late Campanian, UC15dTP-15eTP  
198-1210B-41H-CC - Early Campanian, UC15bTP  
198-1213A-12R-CC - Early Cenomanian, UC1  
198-1213A-20R-CC - Late Albian, NC8c-9  
198-1213B-4R-1, 48cm - Early Albian, NC8a/b  
198-1213B-20R-1, 31cm - Berriasian, NK2a  
198-1213B-23R-1, 20cm - Berriasian, NK2a  
198-1213B-25R-1, 26cm - Berriasian, NK2a  
198-1213B-26R-1, 15cm - Berriasian, NK2a  
198-1213B-27R-1, 1cm - Berriasian, NK1  
198-1213B-27R-1, 38cm - Berriasian, NK1  
198-1214A-19R-1, 37cm - Early Albian, NC8a/b

## Plate 1



## Plate 2

