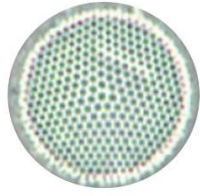


PLATE 1

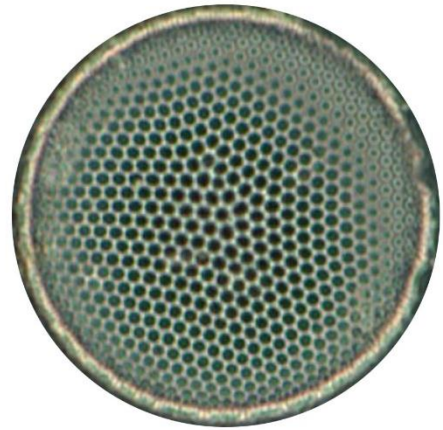
Light microscope (LM) images of diatoms from IODP Expedition 385

Figure 1-11: scale bar equals 10 μ m

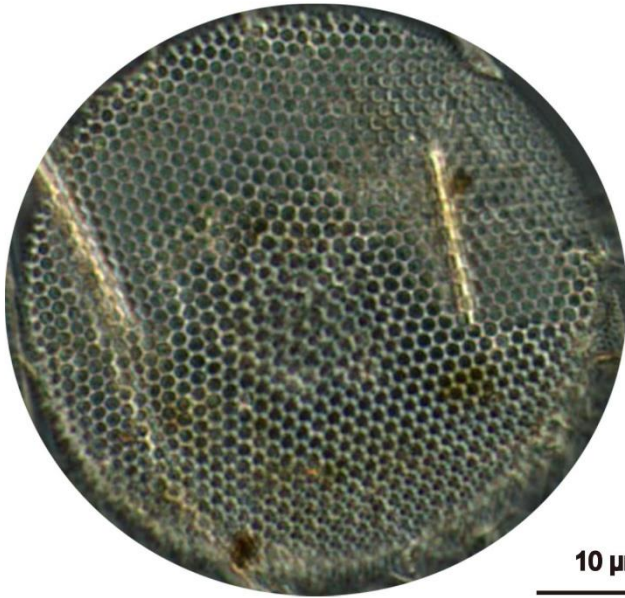
- Figure 1-3 *Thalassiosira eccentrica* (Ehrenberg) Cleve
1. Sample U1545A-1H-CC
2. Sample U1545A-17F-CC
3. Sample U1546A-1H3-A, 62/62 cm
- Figure 4 *Thalassiosira pacifica* Gran & Angst, Sample U1545A-17F-CC
- Figure 5-8 *Thalassiosira oestrupii* (Ostenfeld) Hasle, Sample U1546A-56X1-A, 70/70 cm
- Figure 9-11 *Thalassiosira leptopus* (Grunow) Hasle & Fryxell
9. Sample U1546A-56X1-A, 70/70 cm
10-11: Sample U1546A-38F3-A, 50/50cm



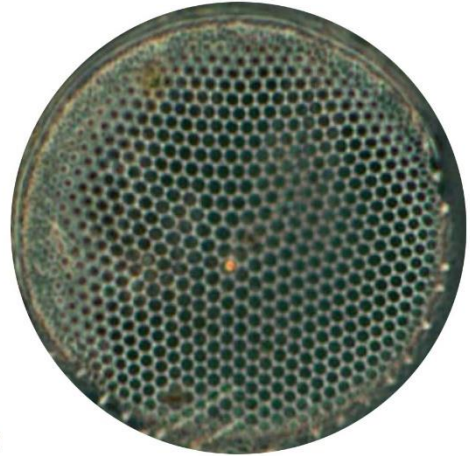
1



2



3



4

10 μm



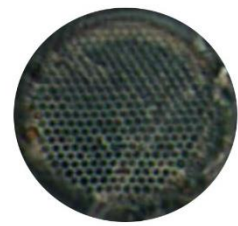
5



6



9



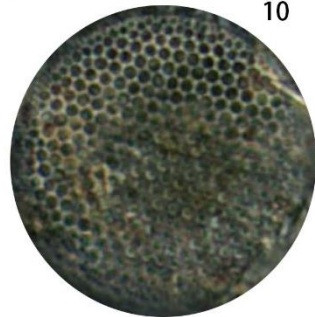
10



7



8



11

PLATE 2

LM images of diatoms from IODP Expedition 385

Figure 1-8: scale bar equals 10µm

- Figure 1-6 *Azpeitia nodulifera* (Janisch ex A. Schmidt) G. Fryxell & T.P. Watkins
1. Sample U1546A-39F3-A, 50/50 cm
2. Sample U1547A-3H-CC
3. Sample U1546a-28F3-W, 70/70 cm
4, 5. Sample U1546A-38F3-A, 50/50cm
6. Sample U1547B-6H6-A, 14/14cm
- Figure 7 *Hemidiscus cuneiformis* Wallich
7. Sample U1547A-1H4-W, 67/67cm
- Figure 8 *Coscinodiscus radiatus* Ehrenberg
8. Sample U1546A-56X1-A, 70/70 cm

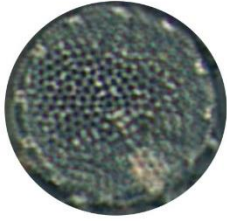


PLATE 3

LM images of diatoms from IODP Expedition 385

Figure 1-7: scale bar equals 10µm

- Figure 1 *Azpeitia neocrenulata* (VanLandingham) G. Fryxell & T.P. Watkins
1. Sample U1546A-29F-3-W, 50/50cm
- Figure 2,3 *Thalassiosira nodensioeldii* Cleve
2. Sample U1547A-6H-CC
3. Sample U1546A-12H-7-W 70/70
- Figure 4,5,6 *Actinocyclus ocotanarius* Ehrenberg
4. Sample U1547A-3H7-w, 70/70cm
5. Sample U1545A-1H-CC
6. Sample U1546A-19H-7-W, 70/70cm
- Figure 7 *Actinocyclus curvatulus* Janish
7. Sample U1546A-19H-7-W, 70/70cm



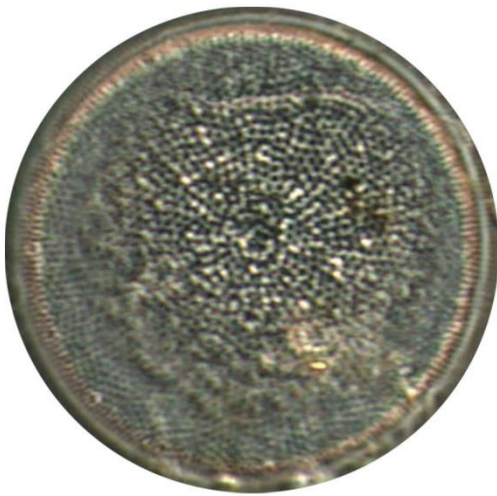
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2



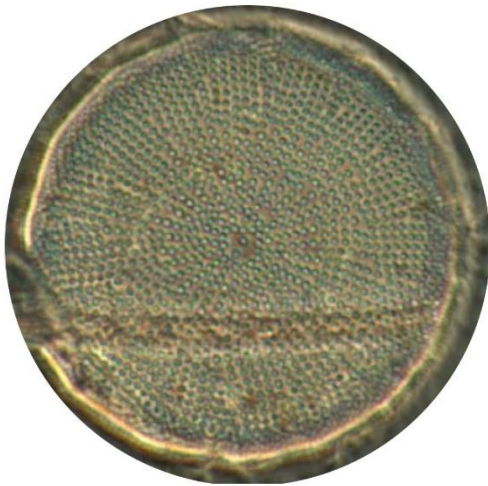
3



3

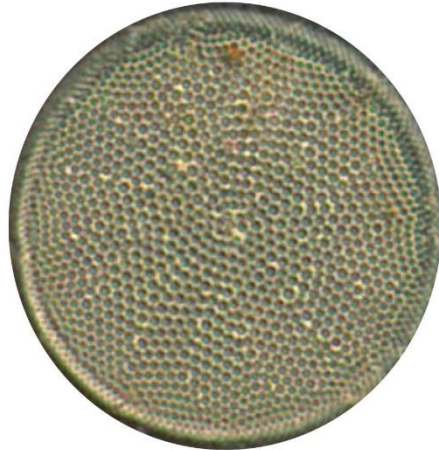


4



5

10 μ m



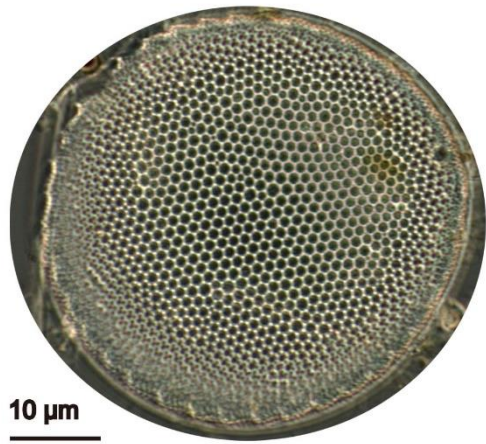
6

PLATE 4

LM images of diatoms from IODP Expedition 385

Figure 1-13: scale bar equals 10 μ m

- Figure 1-2 *Roperia tessellata* (Roper) Grunow ex Pelletan 1,2. Sample U1547A-2H-CC
- Figure 3 *Cyclotella stylilorum* Brightwell 3. Sample U1546A-1H-CC
- Figure 4-5 *Cyclotella striata* (Kuetz.) Grunow 4,5. Sample U1546A-1H-3-A, 62/62 cm
- Figure 6 *Paralia sulcata* (Ehrenberg) Cleve 6. Sample U1546A-58X1-70/70 cm
- Figure 7-8 *Actinoptychus senarius* Ehrenberg 7. Sample U1546A-1H-3-A, 62/62 cm 8. Sample U1546A-58X-1-W 70/70 cm
- Figure 9-10, 12-13 *Actinoptychus parvus* Mann 9. Sample U1546A-1H-3-A, 62/62 cm 10. Sample U1545A-17H-CC 12. Sample U1545A-1H-CC 13. Sample U1547A-5H7-W, 70/70 cm
- Figure 11 *Actinoptychus minutus* Greville 11. Sample U1545A-1H-CC



1



2



3



4



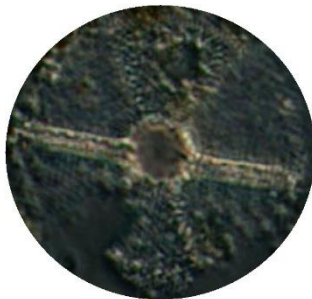
5



6



7



8



9



10



11

10 μm



12



13

PLATE 5

LM images of diatoms from IODP Expedition 385

Figure 1-11 scale bar equals 10 μ m

- Figure 1-5 *Fragilariopsis doliulus* (Wallich) Medlin & Sims
1. Sample U1545A-34F-CC
 2. Sample U1545A-38F-CC
 3. Sample U1545A-1H-CC
 4. Sample U1547A-1H4-W, 67/67 cm
 5. Sample U1546A-1H3-A, 62/62 cm
- Figure 6-7 *Thalassionema nitzschioides* (Grunow) Mereschkowsky
6. Sample U1546A-39F-3-A 50/50 cm
 7. Sample U1546A-1H-3-A 62/62 cm
- Figure 8 *Diploneis* spp.
8. Sample U1546A-39F3-A, 50/50 cm
- Figure 9 *Bidduphia alternus* (Bailey) Van Heurck
9. Sample U1545A-38F-CC
- Figure 10 *Grammatophora* spp.
10. Sample U1546A-56X1-A, 70/70 cm
- Figure 11 *Triceratium junctum* A. Schmidt
11. Sample U1545A-41F-CC

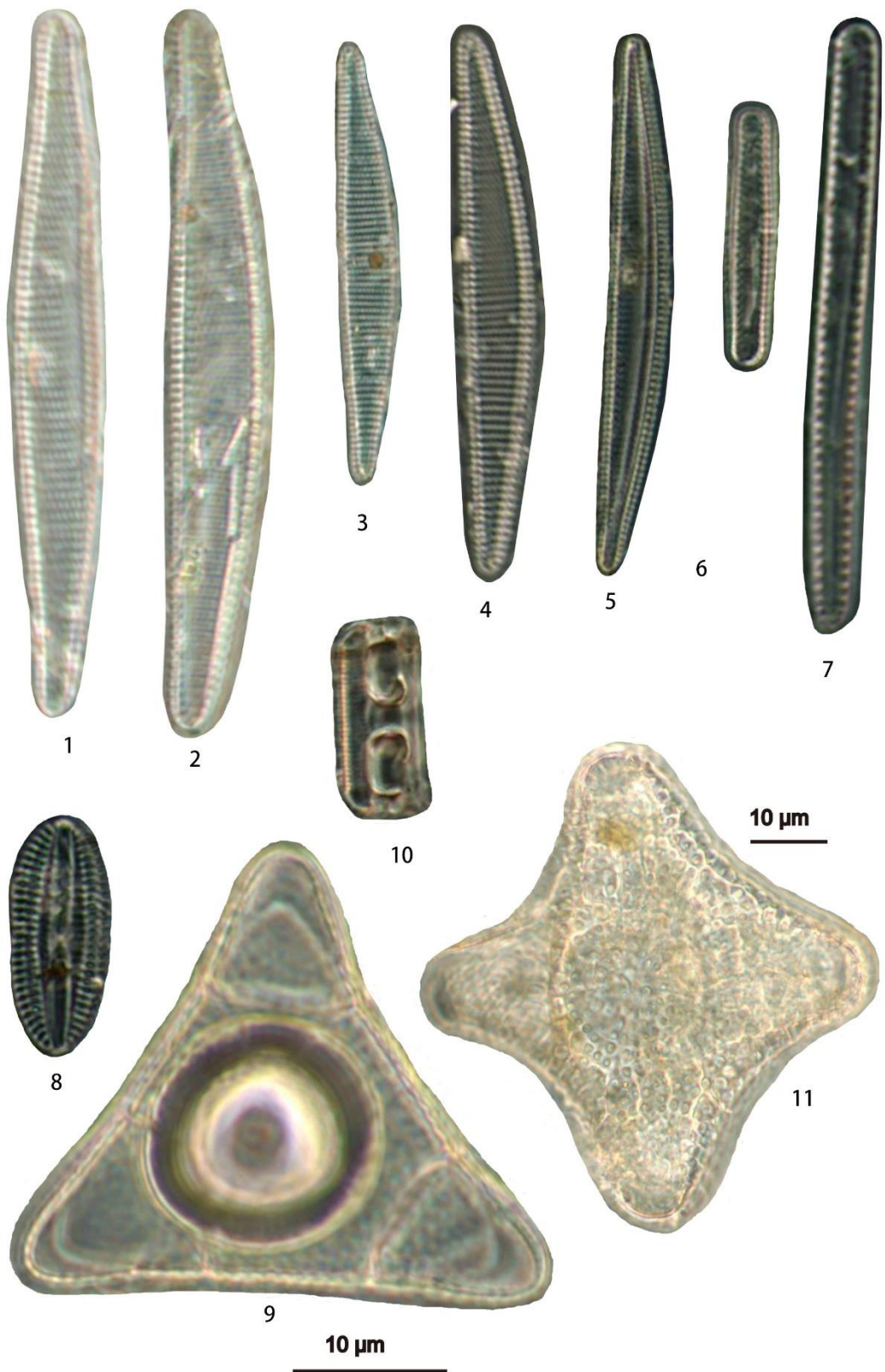


PLATE 6

LM images of diatoms from IODP Expedition 385

Figure 1-10: scale bar equals 10 μ m

- Figure 1-2 *Rhopalodia* spp.
1-2. Sample U1549A-7H7-W, 137/137 cm
- Figure 3-4 *Cymbella* spp.
3-4. Sample U1549A-7H7-W, 137/137 cm
- Figure 5 *Gomphonema* spp.
5. Sample U1549A-7H7-W, 137/137 cm
- Figure 6-7 *Eunotia* spp.
6. Sample U1549A-7H7-W, 137/137 cm
7. Sample U1550-23X1-W, 32/32 cm
- Figure 8 *Bidduphia bidduphiana* J. E. Smith
8. Sample U1549A-6H7-W, 90/90 cm
- Figure 9 *Craspedodiscus coscinodiscus* Ehrenberg fossil
9. Sample U1549A-7H7-W, 137/137 cm
- Figure 10 *Synedra* spp.
10. Sample U1549A-6H7-W, 90/90 cm



1



2



3



5



4



6



7



8



9



10

10 μm

PLATE 7

SEM images of diatoms from IODP Expedition 385

- Figure 1 *Actinoptychus senarius* Ehrenberg
Sample U1545A-9H-CC
- Figure 2-3 *Actinoptychus parvus* Mann
Sample U1545A-11H-CC
- Figure 4 *Actinoptychus minutus* Greville
Sample U1545A-1H-CC
- Figure 5-6 *Azpeitia nodulifera* (Janisch ex A. Schmidt) G. Fryxell
& T.P. Watkins
5. Sample U1545A-9H-CC
6. Sample U1545A-1H-CC
- Figure 7-8 *Coscinodiscus radiatus* Ehrenberg
Sample U1545A-1H-CC
- Figure 9-10 *Thalassiosira eccentrica* (Ehrenberg) Cleve
9. Sample U1545A-1H-CC
10. Sample U1546A-mudline
- Figure 11-12 *Thalassiosira leptopus* (Grunow) Hasle & Fryxell
Sample U1545A-1H-CC
- Figure 13 *Thalassiosira oestrupii* (Ostenfeld) Hasle
Sample U1545A-36H-CC
- Figure 14-15 *Actinocyclus ocotanarius* Ehrenberg
14. Sample U1545A-1H-CC
15. Sample U1546A-1H-CC

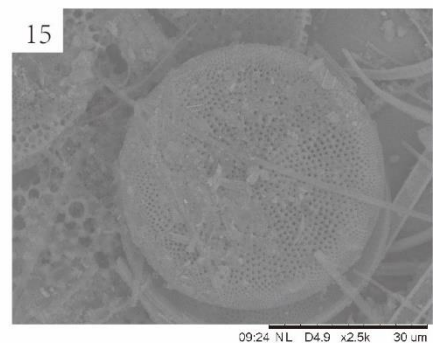
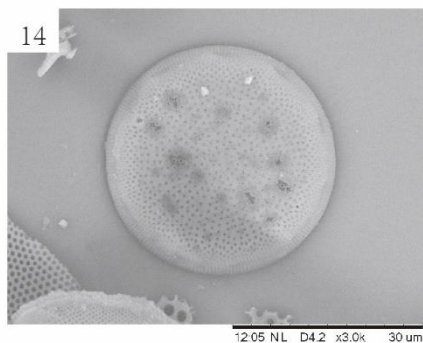
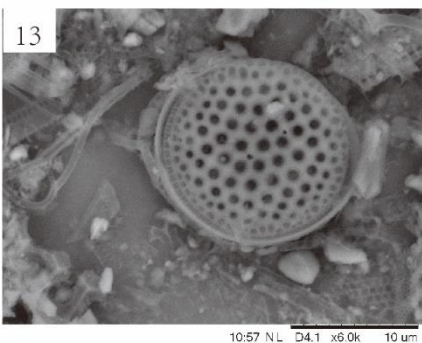
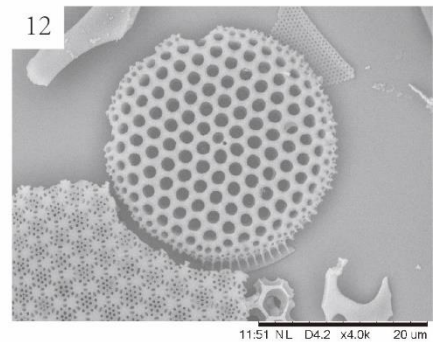
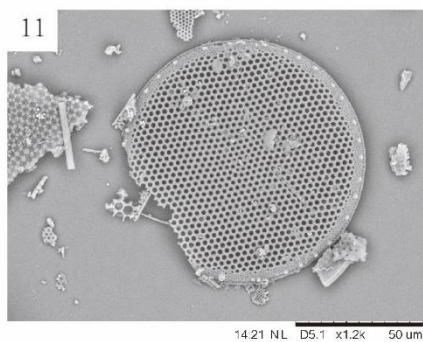
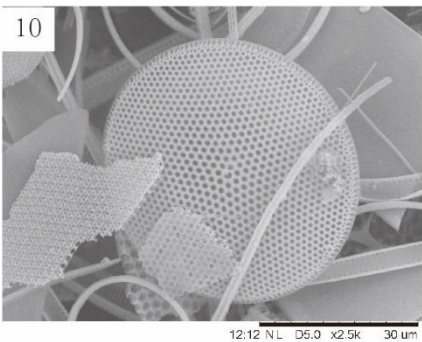
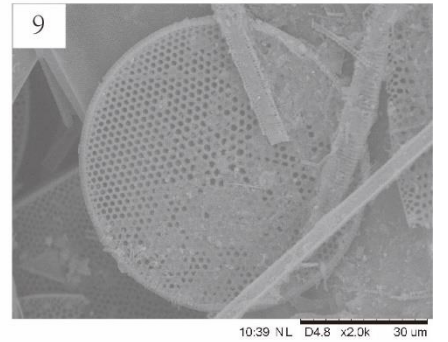
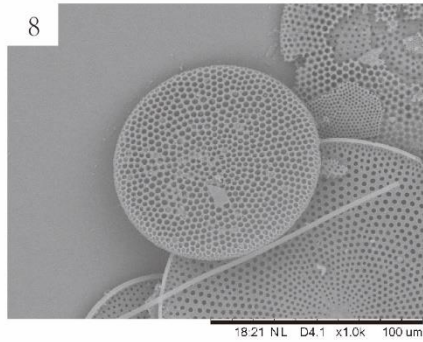
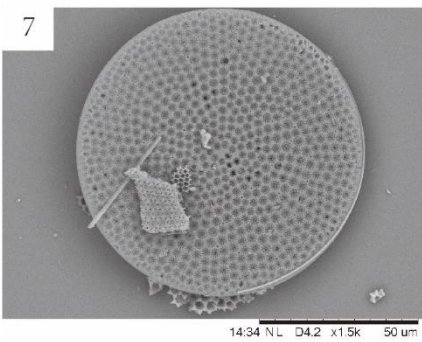
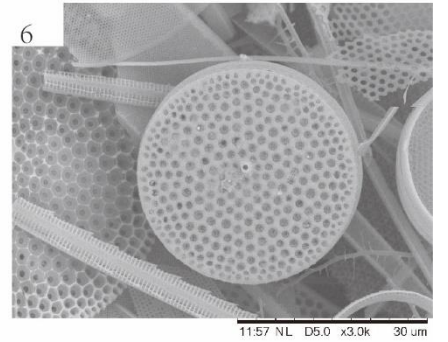
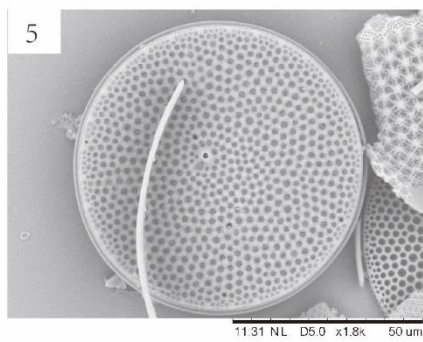
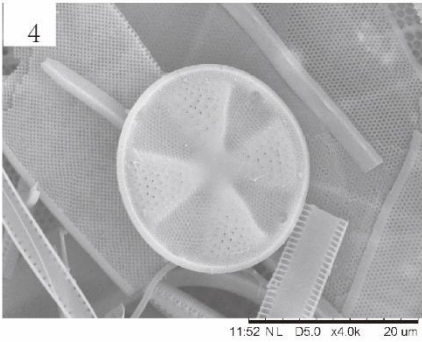
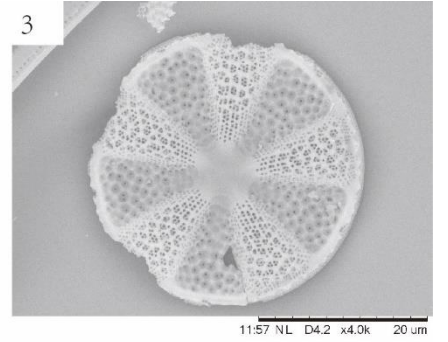
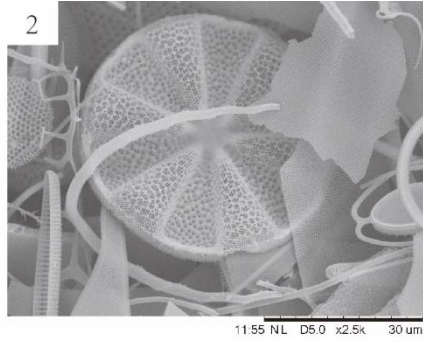
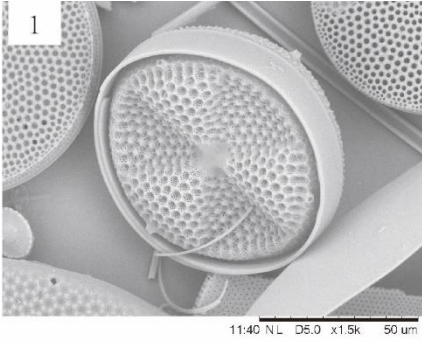


PLATE 8

SEM images of diatoms from IODP Expedition 385

- Figure 1-2 *Fragilariopsis doliolus* (Wallich) Medlin & Sims
Sample U1546A-57X-CC
- Figure 3 *Chaetoceros cinctus*
Sample U1545A-1H-CC
- Figure 4-5 *Thalassionema nitzschioides* (Grunow) Mereschkowsky
Sample U1545A-1H-CC
- Figure 6 *Cyclotella striata* (Kuetz.) Grunow
Sample U1545A-1H-CC
- Figure 7 *Cyclotella stylorum* Brightwell
Sample U1545A-1H-CC
- Figure 8-9 *Hemidiscus cuneiformis* Wallich
Sample U1545A-1H-CC
- Figure 10 *Nitzschia marina*
Sample U1545A-1H-CC
- Figure 11 *Paralia sulcata* (Ehrenberg) Cleve
Sample U1545A-1H-CC
- Figure 12 *Bacteriastrum cosmosum*
Sample U1545A-9-CC
- Figure 13 *Nitzschia* spp.
Sample U1545A-36H-CC
- Figure 14 *Surirella* spp.
Sample U1545A-1H-CC
- Figure 15 *Diploneis* spp.
Sample U1545A-1H-CC

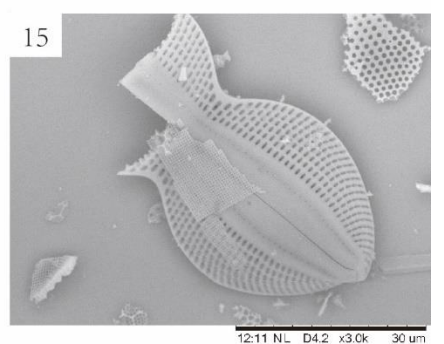
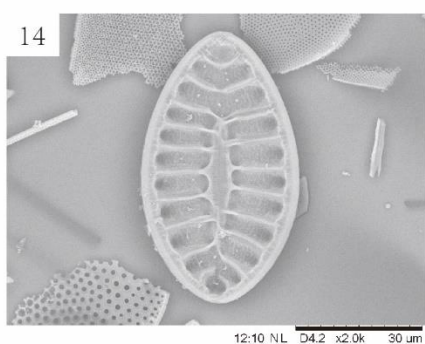
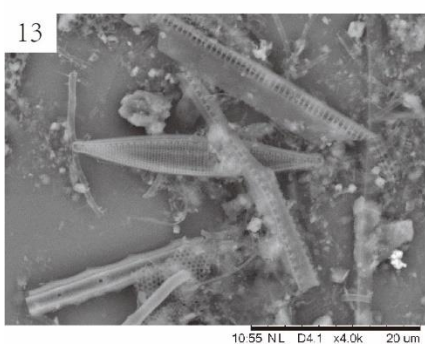
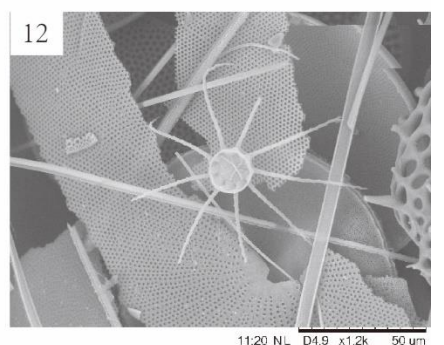
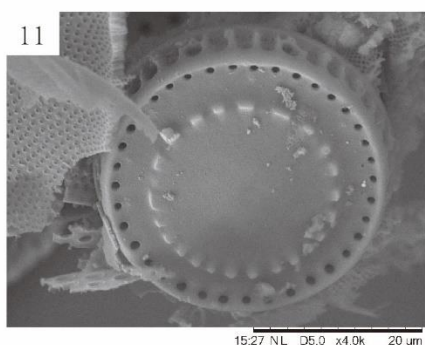
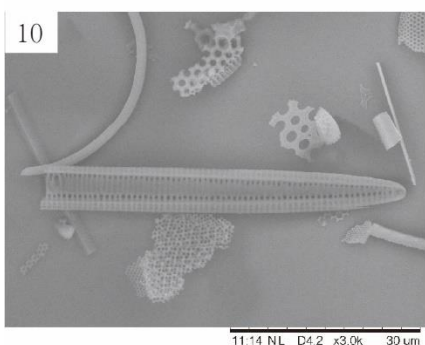
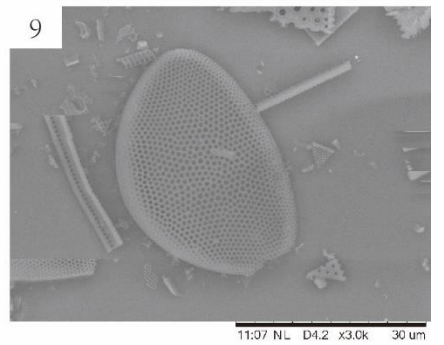
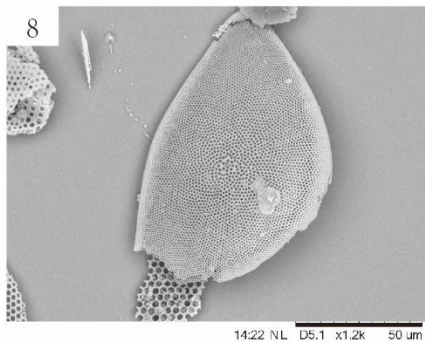
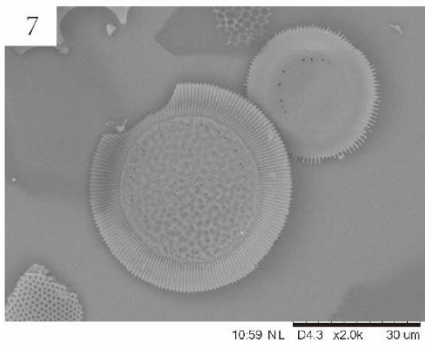
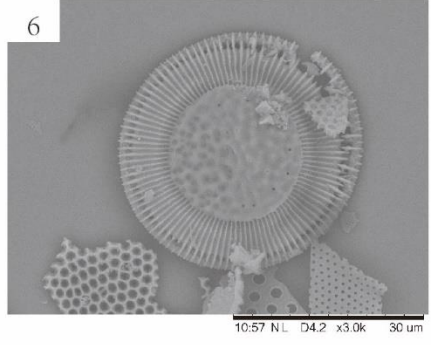
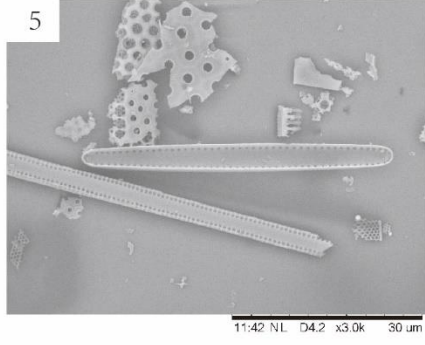
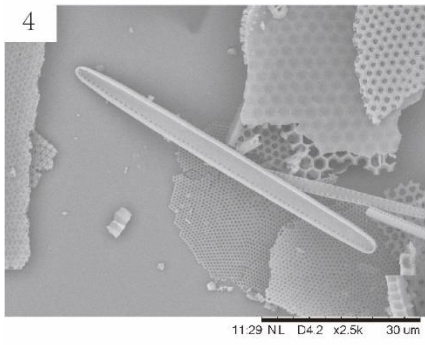
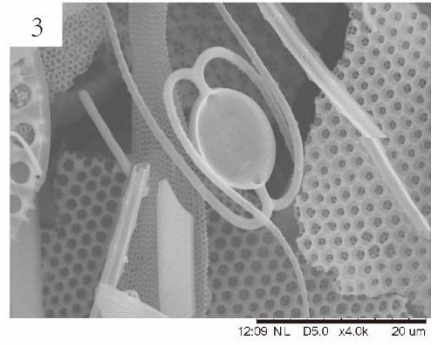
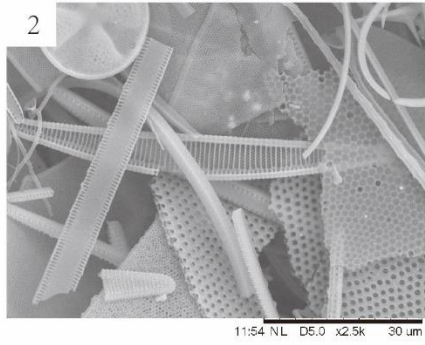
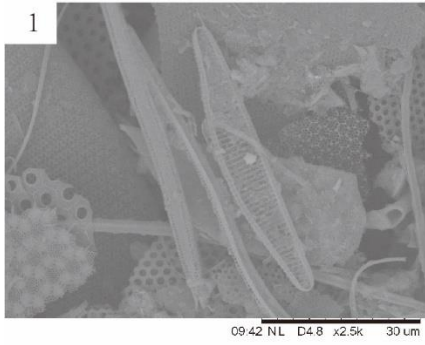


PLATE 9

Microscope images of IODP Expedition 385

- Figure 1 LM images of sample with abundant diatoms,
Sample U1546A-21H-7W, 70/70 cm
- Figure 2 LM images of sample with barren diatom,
Sample U1546A-59X-1W, 70/70 cm
- Figure 3 SEM images of sample with abundant diatoms,
Sample U1545A-20F-2A, 118/118 cm
- Figure 4 SEM images of sample with barren diatom,
Sample U1545A-53X-CC
- Figure 5 SEM images of diatom with opal-CT,
Sample U1546A-57X-CC
- Figure 6 SEM images of diatom fragment with opal-CT,
Sample U1546A-57X-CC

