

## Supplementary plate captions:

Plate S1.

- Fig. 1, *Bacterosira bathyomphala* (Cleve) resting spore (sample M4 upper, No. 32).
- Fig. 2, *Bacterosira bathyomphala* (Cleve) resting spore (sample M4 upper, No. 12).
- Fig. 3, *Bacterosira bathyomphala* (Cleve) vegetative cell (sample M6 upper, No. 42).
- Fig. 4, *Detonula confervacea* (Cleve) (sample Basket 6-2).
- Fig. 5, *Detonula confervacea* (Cleve) (sample M4 upper No. 37).
- Fig. 6, *Minidiscus variabilis* Kaczmarska (sample seawater near Basket 6-2).
- Fig. 7, *Minidiscus* sp. (sample seawater near Basket 6-2).
- Fig. 8, *Porosira glacialis* (Grunow) (sample Basket 6-2).
- Fig. 9, *Thalassiosira nordenskioeldii* Cleve (sample M6 upper, No. 1).
- Fig. 10, *Thalassiosira kushirensis* Takano resting spore (sample M6 upper, No. 32).
- Fig. 11, *Thalassiosira pacifica* Gran and Angst (sample M4 upper No. 24).
- Fig. 12, *Thalassiosira antarctica* Comber (sample M6 upper, No. 42).
- Fig. 13, *Thalassiosira bulbosa* Syvertsen (sample M4 upper No. 37).
- Fig. 14, *Thalassiosira hyalina* (Grunow) (sample Basket 6-2).

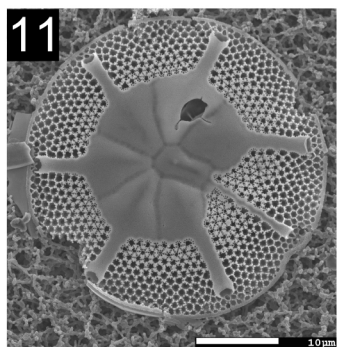
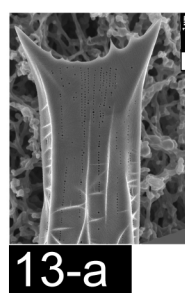
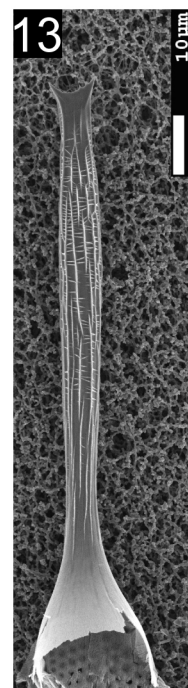
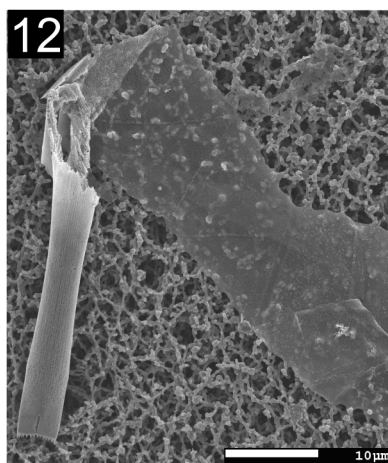
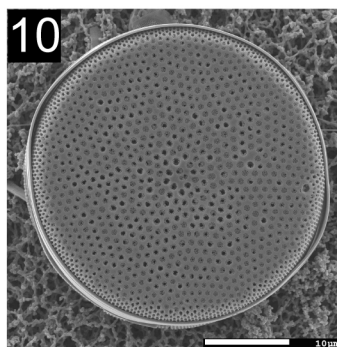
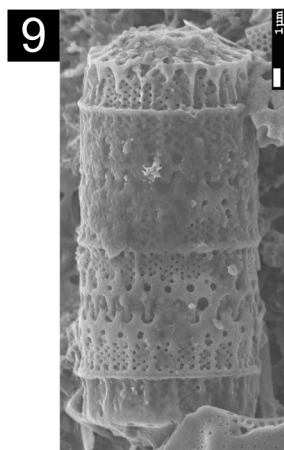
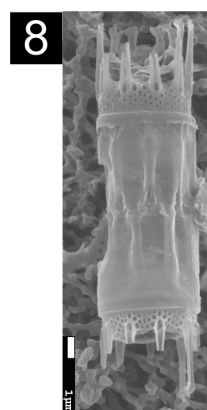
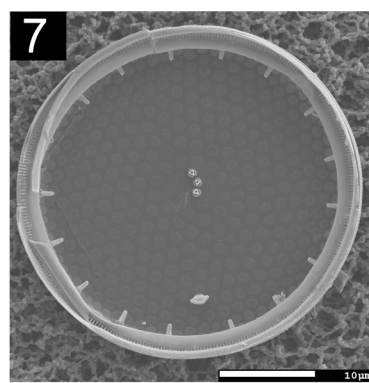
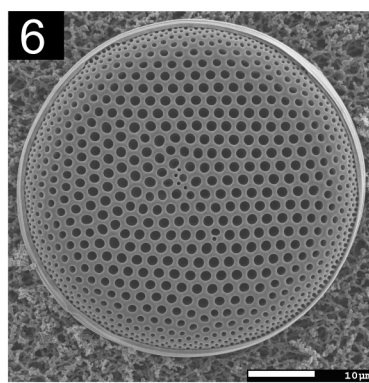
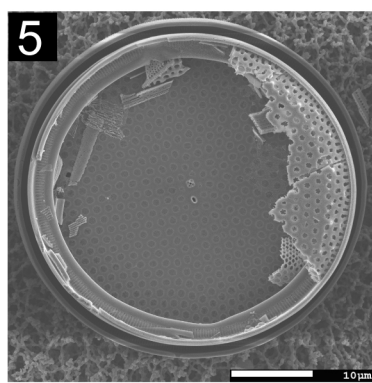
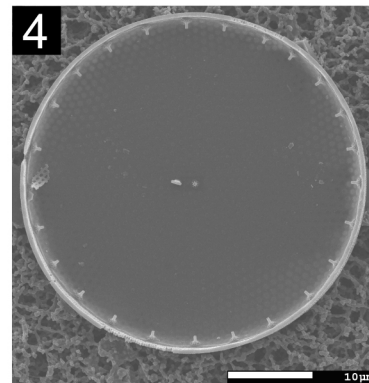
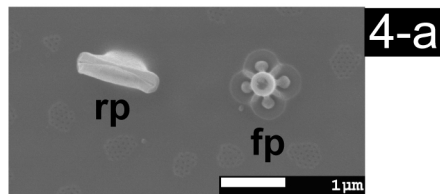
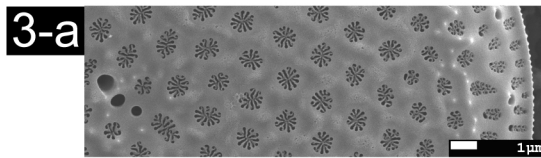
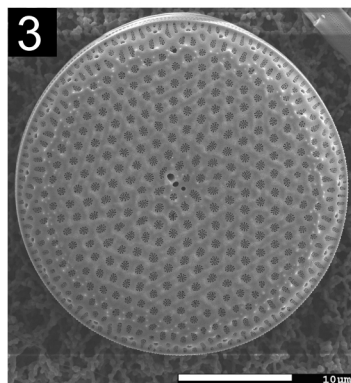
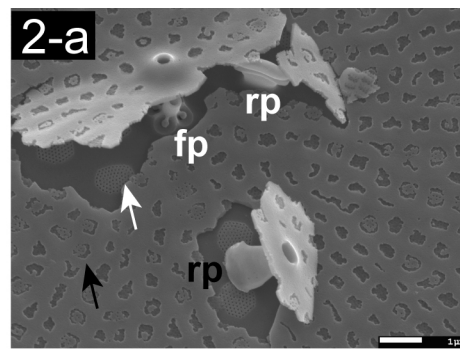
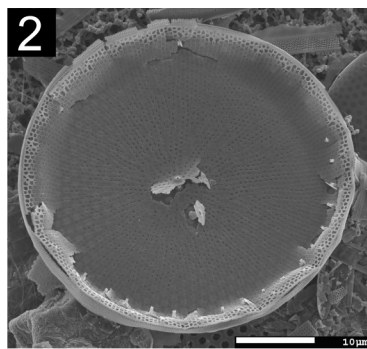
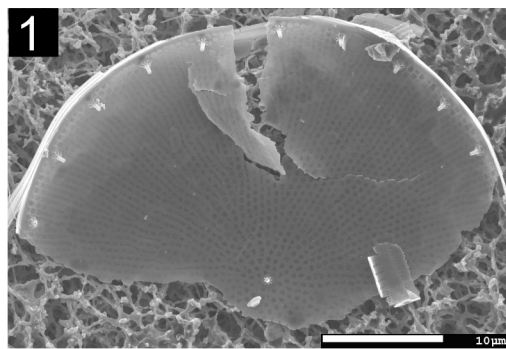


Plate S2.

Fig. 1. *Shionodiscus bioculatus* (Grunow) (sample M6 upper, No. 42).

Fig. 2. *Shionodiscus bioculatus* (Grunow) valve on *Shionodiscus variantius* (Shiono) valve (sample M6 upper, No. 42). Fig. 2-a. Areola of *S. bioculatus* (Grunow) (black arrow) and of *S. variantius* (Shiono) (white arrow). Rimoportulae (rp) and fultoportula (fp) are also shown (sample M6 upper, No. 42).

Fig. 3. *S. variantius* (Shiono) (sample M4 upper No. 22). Fig. 3-a. Areolae structure of *S. variantius* (Shiono) (sample M4 upper No. 22).

Fig. 4. *S. variantius* (Shiono) (sample M4 upper No. 41). Fig. 4-a. Rimoportula (rp) and fultoportula (fp) of *S. variantius* (Shiono) (sample M4 upper No. 41).

Fig. 5. *S. variantius* (Shiono) (sample M4 upper No. 22).

Fig. 6. *Shionodiscus trifultus* (Fryxell) group (sample M4 upper No. 6).

Fig. 7. *S. trifultus* (Fryxell) group (sample M4 upper No. 2).

Fig. 8. *Skeletonema costatum* (Greville) (sample M4 upper No. 41).

Fig. 9. *Paralia marina* (Smith) (sample M6 upper, No. 15).

Fig. 10. *Actinocyclus curvatulus* Janisch (sample M4 upper No. 42).

Fig. 11. *Asteromphalus hyalinus* Karsten (sample M6 upper, No. 27).

Fig. 12. *Proboscia eumorpha* Takahashi, Jordan, and Priddle (sample M4 upper No. 22).

Fig. 13. *Proboscia subarctica* Takahashi, Jordan, and Priddle (sample M4 upper No. 22). 13-a. *P. subarctica* Takahashi, Jordan, and Priddle (sample M4 upper No. 22).

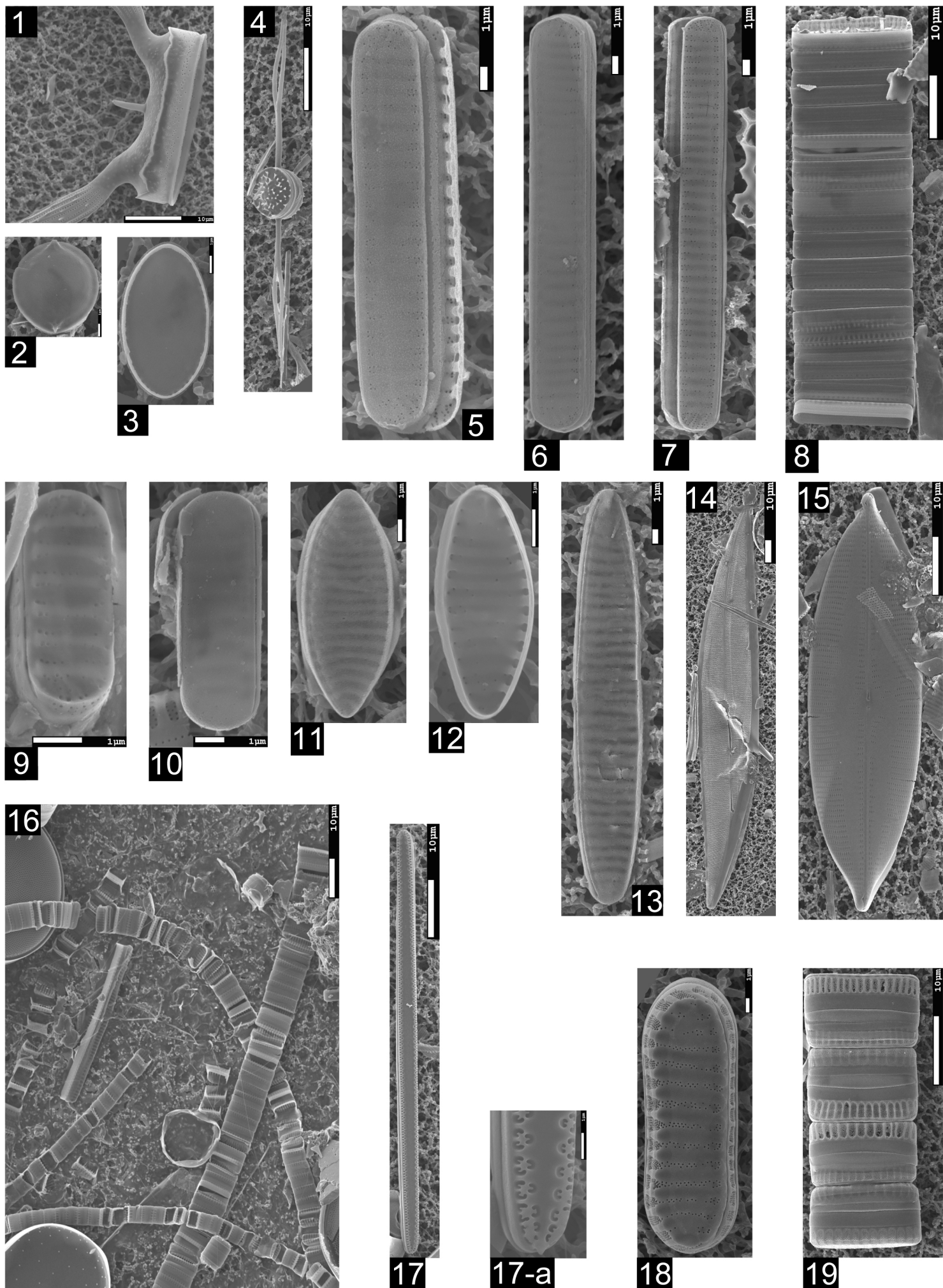


Plate S3.

- Fig. 1. *Chaetoceros atlanticus* Cleve (sample M6 upper, No. 1).
- Fig. 2. *Chaetoceros* resting spore (sample M4 upper No. 24).
- Fig. 3. *Chaetoceros* resting spore (sample M4 upper No. 24).
- Fig. 4. *Chaetoceros* resting spore (sample M4 upper No. 22).
- Fig. 5. *Fragilariopsis cylindrus* (Grunow) (sample M4 upper No. 28).
- Fig. 6. *F. cylindrus* (Grunow) (sample M6 upper No. 37).
- Fig. 7. *F. cylindrus* (Grunow) (sample M6 upper No. 26).
- Fig. 8. *F. cylindrus* (Grunow) (sample M6 upper No. 42).
- Fig. 9. *F. cylindrus* (Grunow) (sample Basket 6-2).
- Fig. 10. *F. cylindrus* (Grunow) (sample M4 upper No. 29).
- Fig. 11. *Fragilariopsis pseudonana* (Hasle) (sample M4 upper No. 42).
- Fig. 12. *Fragilariopsis oceanica* (Cleve) (sample M4 upper No. 12).
- Fig. 13. *Fragilariopsis reginae-jahniae* (Witkowski, Lange-Bertalot, and Metzeltin) (sample M6 upper No. 23).
- Fig. 14. *Pleurosigma* sp. (sample M4 upper No. 41).
- Fig. 15. *Navicula kariana* var. *detersa* Grunow (sample M4 upper No. 41).
- Fig. 16. Chain of *Fragilariopsis cylindrus* (Grunow) in sea-ice sample (sample Basket 6-2).
- Fig. 17. *Thalassionema nitzschioides* (Grunow) (sample M4 upper No. 41). Fig. 17-a. Head pole of *Thalassionema nitzschioides* (Grunow) (sample M4 upper No. 41).
- Fig. 18. *Neodenticula seminae* (Simonsen and Kanaya) (sample M4 upper No. 37).
- Fig. 19. *Neodenticula seminae* (Simonsen and Kanaya) (sample M6 upper No. 1).