

Phylum Bacillariophyta

Class Coscinodiscophyceae Round et Crawford, 1990

Order Anaulales F. E. Round et R. M. Crawford, 1990

Family Anaulaceae (Schütt) Lemmermann, 1899

Genus *Anaulus* C. G. Ehrenberg, 1844

1. *A. minutus* Grunow, 1882. Dimensions: valve length 9.8–15.6 μm , height of the valve mantle 4.6–5.6 μm . Benthic-planktonic, M, BTnot. Recorded in epiphyton of *Gongolaria barbata* (June, July) and the seagrass *Zostera marina* (June). $N = 3.6 \cdot 10^3 \text{ cells} \cdot \text{cm}^{-2}$, and $B = 0.0006 \text{ mg} \cdot \text{cm}^{-2}$ in epiphyton of *Z. marina*. $N = 1.3 \cdot 10^3 \text{ cells} \cdot \text{cm}^{-2}$, and $B = 0.0002 \text{ mg} \cdot \text{cm}^{-2}$ in epiphyton of *G. barbata* (July).

Order Coscinodiscales Round et R. M. Crawford, 1990

Family Coscinodiscaceae Kützinger, 1844

Genus *Coscinodiscus* Ehrenberg, 1839

2. *C. janischii* A. Schmidt, 1878. Dimensions: valve diameter 37.1–73.0 μm . Planktonic, colonial, M, BTnot. Noted in epiphyton of *Callithamnion corymbosum* (July), *G. barbata* (July), *Carradoriella denudata* (September), *Ulva intestinalis* (June), and *Ulva linza* (September). Registered in *Z. marina* + *Zannichellia palustris* subsp. *major* association (September). $N = 712 \text{ cells} \cdot \text{cm}^{-2}$, and $B = 0.05 \text{ mg} \cdot \text{cm}^{-2}$ (*U. linza*).

Order Melosirales R. M. Crawford, 1990

Family Melosiraceae Kützinger, 1844

Genus *Melosira* C. A. Agardh, 1824

3. *M. lineata* (Dillwyn) C. Agardh, 1824. Dimensions: frustule diameter 16.0–34.5 μm , height 15.0–37.5 μm . Benthic-planktonic, colonial, BM, oligo-beta-mesosaprobic, ABTnot. Found in epiphyton of *Ceramium arborescens* (March, October), *Ericaria crinita* (October), *C. denudata* (September), and *U. linza* (October), as well as in *Z. marina* + *Z. palustris* subsp. *major* association (September). $N_{\text{max}} = 2.4 \cdot 10^3 \text{ cells} \cdot \text{cm}^{-2}$, and $B_{\text{max}} = 0.4 \text{ mg} \cdot \text{cm}^{-2}$ (*C. arborescens*, October). $N_{\text{min}} = 242 \text{ cells} \cdot \text{cm}^{-2}$, and $B_{\text{min}} = 0.004 \text{ mg} \cdot \text{cm}^{-2}$ (*U. linza*).

4. *M. juergensii* C. A. Agardh, 1824. Dimensions: frustule diameter 11.2–24.8 μm , height 16.2–20.0 μm . Benthic-planktonic, colonial, BM, ABTnot. Recorded in epiphyton of *C. denudata* with $N = 23.4 \cdot 10^3 \text{ cells} \cdot \text{cm}^{-2}$ and $B = 0.14 \text{ mg} \cdot \text{cm}^{-2}$ (September).

5. *M. moniliformis* C. A. Agardh, 1824. Dimensions: frustule diameter 16.0–88.4 μm , height 8.6–38.5 μm . Benthic-planktonic, colonial, year-round, BM, oligo-beta-mesosaprobic, C. Noted in epiphyton of *Bryopsis hypnoides* (January–March), *C. arborescens* (October), *Cladophora liniformis* (July), *E. crinita* (March), *G. barbata* (June), *C. denudata* (September), *U. intestinalis*, and *U. linza* (August, September). Registered in entwined thalli of macroalgae *C. arborescens* + *E. crinita* + *Pyropia leucosticta* (February), *B. hypnoides* + *C. arborescens* + *E. crinita* + *P. leucosticta* (April), and *Cl. liniformis* + *Cladophora sericea* + *U. intestinalis* + *U. linza* (August), as well as in epiphyton of the seagrass

Z. marina (August). $N_{\max} = 15.3 \cdot 10^3 \text{ cells} \cdot \text{cm}^{-2}$ (*Z. marina*), and $B_{\max} = 1.4 \text{ mg} \cdot \text{cm}^{-2}$ (*C. denudata*). $N_{\min} = 27 \text{ cells} \cdot \text{cm}^{-2}$, and $B_{\min} = 0.0001 \text{ mg} \cdot \text{cm}^{-2}$ (*U. linza*, August).

6. *M. moniliformis* var. *subglobosa* (Grunow) Hustedt, 1927. Dimensions: frustule diameter 8.3–36.4 μm , height 7.6–30.6 μm . Benthic-planktonic, colonial, BM, Bor. Found in epiphyton of *B. hypnoides* (April), *C. arborescens* (May), *E. crinita* (April), *C. denudata* (September), and *U. linza* (September), as well as in entwined thalli of macroalgae *C. arborescens* + *E. crinita* + *P. leucosticta* (February) and *B. hypnoides* + *C. arborescens* + *E. crinita* + *P. leucosticta* (April). $N_{\min} = 423 \text{ cells} \cdot \text{cm}^{-2}$ (*C. arborescens*); $N_{\max} = 3 \cdot 10^3 \text{ cells} \cdot \text{cm}^{-2}$ (*E. crinita*). $B_{\min} = 0.001 \text{ mg} \cdot \text{cm}^{-2}$ (*E. crinita*); $B_{\max} = 0.19 \text{ mg} \cdot \text{cm}^{-2}$ (*C. denudata*).

Order Thalassiosirales Glezer et Makarova, 1986

Family Skeletonemataceae Lebour, 1930

Genus *Skeletonema* Greville, 1865

7. *S. costatum* (Greville) P. T. Cleve, 1878. Dimensions: frustule diameter 9.1–12.4 μm , valve mantle 2.9–15.7 μm . Planktonic, colonial, M, C. A species causing algal blooms. Recorded settled on a surface of entwined thalli of macroalgae *C. arborescens* + *E. crinita* + *P. leucosticta* (February) and epiphyton of *B. hypnoides* (February), *E. crinita* (February, March), and *C. arborescens* (March). $B_{\max} = 0.007 \text{ mg} \cdot \text{cm}^{-2}$ (March), $N_{\max} = 12 \cdot 10^3 \text{ cells} \cdot \text{cm}^{-2}$ (February), and $N_{\min} = 715 \text{ cells} \cdot \text{cm}^{-2}$ (March) in epiphyton of *E. crinita*.

8. *S. subsalsum* (Cleve-Euler) Bethge, 1928. Dimensions: frustule diameter 6 μm , valve mantle 7.5 μm . Planktonic, colonial, M, oligo-mesosaprobic, Bor. A species causing algal blooms. Noted in entwined thalli of macroalgae *C. arborescens* + *E. crinita* + *P. leucosticta* (February).

Order Triceratiales Round et Crawford, 1990

Family Triceratiaceae (Schütt) Lemmermann, 1899

Genus *Odontella* C. A. Agardh, 1832

9. *O. obtusa* Kützinger, 1844. Dimensions: frustule length 58.4–92.9 μm , width 10.3–12.0 μm . Benthic, colonial, M, BTnot. Registered in epiphyton of *C. denudata* and *U. linza* (September); in entwined thalli of macroalgae *Cl. liniformis* + *Cl. sericea* + *U. intestinalis* + *U. linza* (August); and in *Z. marina* + *Z. palustris* subsp. *major* association (September). $N = 867 \text{ cells} \cdot \text{cm}^{-2}$, and $B = 0.0026 \text{ mg} \cdot \text{cm}^{-2}$ (*C. denudata*).

Class Fragilariophyceae F. E. Round, 1990

Order Ardissonaeales F. E. Round, 1990

Family Ardissonaeaceae F. E. Round, 1990

Genus *Synedrosphenia* (H. Peragallo) Azpeitia, 1911

10. *S. crystallina* (C. A. Agardh) Lobban et Ashworth, 2022. Dimensions: valve length 145.0–247.3 μm , valve width 8.2–14.0 μm ; frustule width 15.6–22.8 μm . Benthic, colonial, BM, beta-alpha-mesosaprobic, C. Found in epiphyton of *B. hypnoides* (January, April, November), *C. arborescens* (May), *G. barbata* (July), *C. denudata* (September), and *U. linza* (August, September), as well as in epiphyton of *Z. marina* (August, November) and *Z. marina* + *Z. palustris* subsp. *major* association (September). $N_{\max} = 5 \cdot 10^3 \text{ cells} \cdot \text{cm}^{-2}$, and $B_{\max} = 0.5 \text{ mg} \cdot \text{cm}^{-2}$ (*Z. marina*, November). $N_{\min} = 34 \text{ cells} \cdot \text{cm}^{-2}$, and $B_{\min} = 0.0004 \text{ mg} \cdot \text{cm}^{-2}$ (*U. linza*, August).

Order Fragilariales Silva, 1962

Family Fragilariaceae Greville, 1833

Genus *Diatoma* Bory, 1824

11. *D. tenuis* C. A. Agardh, 1812. Dimensions: valve length 19.8 μm , valve width 3.4 μm ; frustule width 5.8 μm . Benthic-planktonic, FB, beta-mesosaprobic, C. Recorded in epiphyton of *U. intestinalis* (May).

Genus *Neosynedra* D. M. Williams et Round, 1986

12. *N. provincialis* (Grunow) Williams et Round, 1986. Dimensions: valve length 63.5–150.0 μm , valve width 4.9–5.7 μm . Benthic-planktonic, colonial, M, Bor. Noted in epiphyton of *B. hypnoides* (November) and *C. arborescens* (March) and in entwined thalli of macroalgae *B. hypnoides* + *C. arborescens* + *E. crinita* + *P. leucosticta* (April). $N_{\text{max}} = 1 \cdot 10^3 \text{ cells} \cdot \text{cm}^{-2}$, and $B_{\text{max}} = 0.005 \text{ mg} \cdot \text{cm}^{-2}$ (*B. hypnoides*). $N_{\text{min}} = 298 \text{ cells} \cdot \text{cm}^{-2}$, and $B_{\text{min}} = 0.0005 \text{ mg} \cdot \text{cm}^{-2}$ (*C. arborescens*).

Genus *Tabularia* (Kützing) D. M. Williams et Round, 1986

13. *T. fasciculata* (C. A. Agardh) Williams et Round, 1986. Dimensions: valve length 56.5–147.9 μm , valve width 4.6–11.5 μm ; frustule width 12.4 μm . Benthic, colonial, BM, beta-alpha-mesosaprobic, C. A species causing algal blooms. Registered in epiphyton of *B. hypnoides* and *C. arborescens* (November), *Cl. liniformis* and *G. barbata* (July), *E. crinita* (October), and *U. linza* (August–October); in entwined thalli of macroalgae *B. hypnoides* + *C. arborescens* + *E. crinita* + *P. leucosticta* (April); and in epiphyton of the seagrass *Z. marina* (November). $N_{\text{max}} = 23 \cdot 10^3 \text{ cells} \cdot \text{cm}^{-2}$, and $B_{\text{max}} = 0.2 \text{ mg} \cdot \text{cm}^{-2}$ (*Z. marina*). $N_{\text{min}} = 597 \text{ cells} \cdot \text{cm}^{-2}$ (*G. barbata*); $B_{\text{min}} = 0.002 \text{ mg} \cdot \text{cm}^{-2}$ (*U. linza*, October).

14. *T. parva* (Kützing) D. M. Williams et Round, 1986. Dimensions: valve length 18.5–43.3 μm , valve width 2.8–5.2 μm ; frustule width 6.3–9.9 μm . Benthic, colonial, BM, ABTnot, alpha-mesosaprobic. Found in epiphyton of *B. hypnoides* (January, April), *C. arborescens* (May), *Cl. liniformis* (July), *Cladosiphon mediterraneus* and *E. crinita* (August), *C. denudata* (September), and *U. linza* (September, October); in entwined thalli of macroalgae *C. arborescens* + *E. crinita* + *P. leucosticta* (February), *E. crinita* + *B. hypnoides* + *C. arborescens* + *P. leucosticta* (April), and *Cl. liniformis* + *Cl. sericea* + *U. intestinalis* + *U. linza* (August); and in epiphyton of the seagrass *Z. marina* (August) and its association with *Z. palustris* subsp. *major* (September). $N_{\text{min}} = 150 \text{ cells} \cdot \text{cm}^{-2}$, and $B_{\text{min}} = 0.00004 \text{ mg} \cdot \text{cm}^{-2}$ (*U. linza*, October). $N_{\text{max}} = 27 \cdot 10^3 \text{ cells} \cdot \text{cm}^{-2}$ (*Z. marina*); $B_{\text{max}} = 0.03 \text{ mg} \cdot \text{cm}^{-2}$ (*C. denudata*).

15. *T. tabulata* (C. A. Agardh) Snoeijs, 1992. Fig. 2E (see <https://marine-biology.ru/mbj/article/view/507>). Dimensions: valve length 29.9–213.0 μm , valve width 2.2–8.0 μm ; frustule width 8.8–14.2 μm . Benthic, colonial, year-round, BM, C. A dominant species causing algal blooms. Recorded in epiphyton of *B. hypnoides* (January–May), *C. arborescens* (March, May, October), *C. mediterraneus* (August), *C. corymbosum* (July), *Cl. liniformis* (July), *E. crinita* (January–April, August), *P. leucosticta* (January), *C. denudata* (September), *U. intestinalis* (April–June), and *U. linza* (August); in entwined thalli of macroalgae *U. linza* + *U. intestinalis* (January), *C. arborescens* + *E. crinita* + *P. leucosticta* (February), *E. crinita* + *B. hypnoides* + *C. arborescens* + *P. leucosticta* (April), and *Cl. liniformis* + *Cl. sericea* + *U. intestinalis* + *U. linza* (August); and in epiphyton of the seagrass *Z. marina* (August) and its association with *Z. palustris* subsp. *major* (September). $N_{\text{min}} = 129 \text{ cells} \cdot \text{cm}^{-2}$ (*U. intestinalis*, June); $B_{\text{min}} = 0.0006 \text{ mg} \cdot \text{cm}^{-2}$ (*P. leucosticta*). $N_{\text{max}} = 140 \cdot 10^3 \text{ cells} \cdot \text{cm}^{-2}$ (*Z. marina*); $B_{\text{max}} = 5.7 \text{ mg} \cdot \text{cm}^{-2}$ (*C. arborescens*, October).

Genus *Falcula* M. Voight, 1960

16. *F. media* var. *subsalina* Proshkina-Lavrenko, 1963. Dimensions: valve length 44.7 μm , valve width 8.3 μm . Benthic-planktonic, M, Bor, alpha-oligo-mesosaprobic. Noted in epiphyton of *C. denudata* (September).

Order Licmophorales Round, 1990

Family Licmophoraceae Kützing, 1844

Genus *Licmophora* C. A. Agardh, 1827

17. *L. abbreviata* C. A. Agardh, 1831. Fig. 2D (see <https://marine-biology.ru/mbj/article/view/507>). Dimensions: valve length 14.5–70.2 µm, valve width 4.1–6.7 µm; frustule width 11.7–31.9 µm. Benthic, colonial, year-round, dominant, M, beta-mesosaprobic, C. A species causing algal blooms. Registered in epiphyton of *C. corymbosum* (July), *Cl. liniformis* (July), *C. mediterraneus* (August), *G. barbata* (July), *C. denudata* (September), *U. intestinalis* (April), and *U. linza* (August); in entwined thalli of macroalgae *Cl. liniformis* + *Cl. sericea* + *U. intestinalis* + *U. linza* (August); and in epiphyton of *Z. marina* (August) and its association with *Z. palustris* subsp. *major* (September). $N_{\max} = 115 \cdot 10^3 \text{ cells} \cdot \text{cm}^{-2}$, and $B_{\max} = 0.05 \text{ mg} \cdot \text{cm}^{-2}$ (*C. denudata*). $N_{\min} = 58 \text{ cells} \cdot \text{cm}^{-2}$ (*U. linza*).

18. *L. dalmatica* (Kützing) Grunow, 1867. Dimensions: valve length 12.0–74.7 µm, valve width 3.2 µm; frustule width 8.3–28.0 µm. Benthic, colonial, M, Bor. Found in epiphyton of *U. linza* and *C. denudata* (September).

19. *L. flabellata* (Greville) C. A. Agardh, 1830. Dimensions: valve length 82.2–116.4 µm; frustule width 18.1–23.6 µm. Benthic, colonial, M, oligo-beta-mesosaprobic, BTnot. A species causing algal blooms. Recorded in epiphyton of *C. corymbosum* and *G. barbata* (July), *C. mediterraneus* and *U. linza* (August), *C. denudata* (September), and *Z. marina* (August). $N_{\max} = 30 \cdot 10^3 \text{ cells} \cdot \text{cm}^{-2}$, and $B_{\max} = 0.12 \text{ mg} \cdot \text{cm}^{-2}$ (*Z. marina*). $N_{\min} = 30 \text{ cells} \cdot \text{cm}^{-2}$, and $B_{\min} = 0.001 \text{ mg} \cdot \text{cm}^{-2}$ (*C. denudata*).

20. *L. hastata* Mereschkowsky, 1902. Dimensions: valve length 47.1–87.0 µm, valve width 10.0–12.3 µm. Benthic, colonial, M, Bor. Noted in epiphyton of *C. arborescens* (October) and *C. mediterraneus* (August). $N = 179 \text{ cells} \cdot \text{cm}^{-2}$, and $B = 0.0004 \text{ mg} \cdot \text{cm}^{-2}$ (*C. mediterraneus*). $N = 188 \text{ cells} \cdot \text{cm}^{-2}$, and $B = 0.002 \text{ mg} \cdot \text{cm}^{-2}$ (*C. arborescens*).

21. *L. paradoxa* (Lyngbye) C. A. Agardh, 1828. Dimensions: valve length 28.0 µm, valve width 9.8 µm. Benthic, colonial, M, C. Registered in epiphyton of *U. linza* with $N = 34 \text{ cells} \cdot \text{cm}^{-2}$ (August).

22. *L. rostrata* Mereschkowsky, 1902. Dimensions: valve length 125.5 µm, valve width 8.7 µm. Benthic, colonial, M, Bor. Found in epiphyton of *C. denudata* (September).

Order Rhabdonematales Round et Crawford, 1990

Family Grammatophoraceae Lobban et Ashworth, 2014

Genus *Grammatophora* C. G. Ehrenberg, 1840

23. *G. angulosa* Ehrenberg, 1840. Dimensions: valve length 36.5 µm, valve width 5 µm. Benthic, colonial, M, C. Recorded in epiphyton of *C. arborescens* (October).

24. *G. marina* (Lyngbye) Kützing, 1844. Fig. 2A (see <https://marine-biology.ru/mbj/article/view/507>). Dimensions: valve length 9.7–56.3 µm, valve width 4.1–6.4 µm; frustule width 6.9–23.6 µm. Benthic, colonial, year-round, dominant, M, beta-mesosaprobic, C. A species causing algal blooms. Noted in epiphyton of *B. hypnoides* (January–May, October, November), *C. arborescens* (March, May, October, November), *E. crinita* (January–April, August, October, November), *G. barbata* (June), *C. denudata* (September), *P. leucosticta* (January), *U. intestinalis* (April), and *U. linza* (September, October); in entwined thalli of macroalgae *C. arborescens* + *E. crinita* + *P. leucosticta* (February), *E. crinita* + *B. hypnoides* + *C. arborescens* + *P. leucosticta* (April), and *Cl. liniformis* + *Cl. sericea* + *U. intestinalis* + *U. linza* (August); in epiphyton of the seagrass *Z. marina* (August, November) and its association with *Z. palustris*

subsp. *major* (September). $N_{\max} = 14 \cdot 10^3 \text{ cells} \cdot \text{cm}^{-2}$, and $B_{\max} = 0.08 \text{ mg} \cdot \text{cm}^{-2}$ (*Z. marina*, August). $N_{\min} = 97 \text{ cells} \cdot \text{cm}^{-2}$ (*G. barbata*).

Genus *Hyalosira* F. T. Kützing, 1844

25. *H. delicatula* Kützing, 1844. Dimensions: valve length 6.9–7.1 μm , valve width 1.5–2.3 μm ; 8.1–9.1 μm frustule width. Benthic, BM, beta-mesosaprobic, ABTnot. Registered in epiphyton of *E. crinita* (August) and in entwined thalli of macroalgae *Cl. liniformis* + *Cl. sericea* + *U. intestinalis* + *U. linza* (August). $N = 684 \text{ cells} \cdot \text{cm}^{-2}$, and $B = 0.0002 \text{ mg} \cdot \text{cm}^{-2}$ (*E. crinita*).

Order Striatellales F. E. Round, 1990

Family Striatellaceae Kützing, 1844

Genus *Striatella* C. A. Agardh, 1832

26. *S. unipunctata* (Lyngbye) C. A. Agardh, 1832. Dimensions: valve length 57.3 μm ; frustule width 12.4 μm . Benthic, colonial, M, C. A species causing algal blooms in the sea. Found in epiphyton of *B. hypnoides* (May).

Class Bacillariophyceae Haeckel, 1878

Order Achnanthales P. C. Silva, 1962

Family Achnanthaceae Kützing, 1844

Genus *Achnanthes* Bory, 1822

27. *A. brevipes* C. A. Agardh, 1824. Dimensions: valve length 31–74.2 μm , valve width 9.5–14.4 μm ; frustule width 17.3–24.8 μm . Benthic, colonial, year-round, BM, beta-mesosaprobic, C. Recorded in epiphyton of *B. hypnoides* (February–May), *C. arborescens* (March, May, October, November), *C. mediterraneus* (August), *Cl. liniformis* (July), *E. crinita* (January–March, August), *G. barbata* (June), *C. denudata* (September), *P. leucosticta* (January), *U. intestinalis* (April, May), and *U. linza* (September); in entwined thalli of macroalgae *B. hypnoides* + *C. arborescens* + *E. crinita* + *P. leucosticta* (April), *C. arborescens* + *E. crinita* + *P. leucosticta* (February), *U. linza* + *U. intestinalis* (January), and *Cl. liniformis* + *C. sericea* + *U. intestinalis* + *U. linza* (August); and in epiphyton of the seagrass *Z. marina* (August) and *Z. marina* + *Z. palustris* subsp. *major* association (September). $N_{\min} = 129 \text{ cells} \cdot \text{cm}^{-2}$ (*G. barbata*); $N_{\max} = 12.2 \cdot 10^3 \text{ cells} \cdot \text{cm}^{-2}$ (*Z. marina*). $B_{\min} = 0.0004 \text{ mg} \cdot \text{cm}^{-2}$ (*U. intestinalis*, April); $B_{\max} = 0.1 \text{ mg} \cdot \text{cm}^{-2}$ (*Z. marina*).

28. *A. brevipes* var. *intermedia* (Kützing) P. T. Cleve, 1895. Dimensions: valve length 35.4–44.1 μm , valve width 6.5–9.2 μm . Benthic, colonial, BM, C. Noted in epiphyton of *E. crinita* with $N = 664 \text{ cells} \cdot \text{cm}^{-2}$ and $B = 0.001 \text{ mg} \cdot \text{cm}^{-2}$ (January).

29. *A. longipes* C. A. Agardh, 1824. Dimensions: valve length 49.7–84.0 μm , valve width 14.8–16.1 μm ; frustule width 18–25 μm . Benthic, colonial, M, beta-mesosaprobic, C. Registered in epiphyton of *C. denudata* and *U. linza* (September), as well as in entwined thalli of macroalgae *B. hypnoides* + *C. arborescens* + *E. crinita* + *P. leucosticta* (April) and *Cl. liniformis* + *Cl. sericea* + *U. intestinalis* + *U. linza* (August). $N = 325 \text{ cells} \cdot \text{cm}^{-2}$, and $B = 0.004 \text{ mg} \cdot \text{cm}^{-2}$ (*C. denudata*).

Genus *Planothidium* Round et L. Bukhtiyarova, 1996

30. *P. delicatulum* (Kützing) Round et Bukhtiyarova, 1996. Dimensions: valve length 13.4 μm , valve width 5.2 μm . Benthic, FB, oligosaprobic, ABTnot. Found in epiphyton of *U. linza* (August).

Family Cocconeidaceae Kützing, 1844

Genus *Cocconeis* C. G. Ehrenberg, 1837

31. *C. neothumensis* Krammer, 1990. Dimensions: valve length 7.1 μm , valve width 4.3 μm . Benthic, Fw, ABTnot. Recorded in epiphyton of *C. arborescens* (October).

32. *C. placentula* var. *euglypta* (Ehrenberg) P. T. Cleve, 1884. Dimensions: valve length 15.6–33.5 μm , valve width 9.2–21.3 μm . Benthic, BM, beta-mesosaprobic, ABT. Noted in epiphyton of *C. denudata* (September), *U. linza* (August), and *Z. marina* (August, November), as well as in *Z. marina* + *Z. palustris* subsp. *major* association (September). $N_{\min} = 54 \text{ cells}\cdot\text{cm}^{-2}$ (*U. linza*); $N_{\max} = 2.6\cdot 10^3 \text{ cells}\cdot\text{cm}^{-2}$ (*Z. marina*, August). $B_{\min} = 0.001 \text{ mg}\cdot\text{cm}^{-2}$ (*U. linza*); $B_{\max} = 0.07 \text{ mg}\cdot\text{cm}^{-2}$ (*Z. marina*, August).

33. *C. scutellum* Ehrenberg, 1838. Fig. 2C (see <https://marine-biology.ru/mbj/article/view/507>). Dimensions: valve length 12.3–57.8 μm , valve width 3.1–35.2 μm . Benthic, year-round, dominant, BM, beta-mesosaprobic, C. Registered in epiphyton of all macrophytes and in entwined thalli of macroalgae. $N_{\min} = 81 \text{ cells}\cdot\text{cm}^{-2}$ (*U. linza*, August); $N_{\max} = 66.2\cdot 10^3 \text{ cells}\cdot\text{cm}^{-2}$ (*Z. marina*, November). $B_{\min} = 0.0002 \text{ mg}\cdot\text{cm}^{-2}$ (*C. mediterraneus*, August); $B_{\max} = 3.6 \text{ mg}\cdot\text{cm}^{-2}$ (*Z. marina*, August).

Order Bacillariales Hendey, 1937

Family Bacillariaceae Ehrenberg, 1831

Genus *Bacillaria* J. F. Gmelin, 1788

34. *B. paxillifera* (O. F. Müller) Hendey, 1951. Dimensions: valve length 68.8–166.6 μm , valve width 5.5–7.8 μm . Benthic-planktonic, colonial, BM, beta-mesosaprobic, C. Found in epiphyton of *B. hypnoides* (January), *C. mediterraneus* (August), *G. barbata* (July), and *U. linza* (October), as well as in *Z. marina* + *Z. palustris* subsp. *major* association (September). $N_{\max} = 1\cdot 10^3 \text{ cells}\cdot\text{cm}^{-2}$, and $B_{\max} = 0.004 \text{ mg}\cdot\text{cm}^{-2}$ (*B. hypnoides*). $N_{\min} = 253 \text{ cells}\cdot\text{cm}^{-2}$, and $B_{\min} = 0.0005 \text{ mg}\cdot\text{cm}^{-2}$ (*U. linza*).

Genus *Cylindrotheca* L. Rabenhorst, 1859

35. *C. closterium* (Ehrenberg) Reimann et J. C. Lewin, 1964. Dimensions: valve length 36.4–124.2 μm , valve width 2.8–7.8 μm . Benthic-planktonic, BM, beta-mesosaprobic, C. A species causing algal blooms. Recorded in epiphyton of *C. corymbosum* and *Cl. liniformis* (July), *E. crinita* (April), *G. barbata* (July), *C. denudata* (September), *U. intestinalis* (May), and *U. linza* (August), as well as in entwined thalli of macroalgae *B. hypnoides* + *C. arborescens* + *E. crinita* + *P. leucosticta* (April) and *C. arborescens* + *E. crinita* + *P. leucosticta* (February). $N_{\max} = 2.1\cdot 10^3 \text{ cells}\cdot\text{cm}^{-2}$, and $B_{\max} = 0.0004 \text{ mg}\cdot\text{cm}^{-2}$ (*Cl. liniformis*). $N_{\min} = 20 \text{ cells}\cdot\text{cm}^{-2}$ (*U. linza*).

Genus *Hantzschia* A. Grunow, 1877

36. *H. marina* (Donkin) Grunow, 1880. Dimensions: valve length 36–55 μm , valve width 10.5–11.1 μm . Benthic, M, oligo-alpha-mesosaprobic, BTnot. Noted in epiphyton of *B. hypnoides* with $N = 323 \text{ cells}\cdot\text{cm}^{-2}$ and $B = 0.002 \text{ mg}\cdot\text{cm}^{-2}$ (January). Also, $N = 162 \text{ cells}\cdot\text{cm}^{-2}$, and $B = 0.004 \text{ mg}\cdot\text{cm}^{-2}$ (*C. arborescens*, November).

Genus *Nitzschia* A. H. Hassall, 1845

37. *N. dissipata* (Kützing) Rabenhorst, 1860. Dimensions: valve length 17.4–51.0 μm , valve width 3.8–6.8 μm . Benthic, Fw, oligosaprobic, C. Registered in epiphyton of *U. linza* and in entwined thalli of macroalgae *Cl. liniformis* + *Cl. sericea* + *U. intestinalis* + *U. linza* (August).

38. *N. distans* Gregory, 1857. Dimensions: valve length 25.4–77.7 μm , valve width 8.2–17.3 μm . Benthic, colonial, BM, alpha-mesosaprobic, BTnot. Found in epiphyton of *C. arborescens* (November), *E. crinita* (January), *G. barbata* (July), and *U. intestinalis* (June), as well as in entwined thalli

of macroalgae *B. hypnoides* + *C. arborescens* + *E. crinita* + *P. leucosticta* (April) and *U. linza* + *U. intestinalis* (January). $N_{\max} = 162 \text{ cells}\cdot\text{cm}^{-2}$, and $B_{\max} = 0.01 \text{ mg}\cdot\text{cm}^{-2}$ (*C. arborescens*). $N_{\min} = 35 \text{ cells}\cdot\text{cm}^{-2}$, and $B_{\min} = 0.0002 \text{ mg}\cdot\text{cm}^{-2}$ (*U. intestinalis*).

39. *N. inconspicua* Grunow, 1862. Dimensions: valve length 9.3 μm , valve width 2.5 μm . Benthic, Fw, ABTnot. Recorded in entwined thalli of macroalgae *Cl. liniformis* + *Cl. sericea* + *U. intestinalis* + *U. linza* (November).

40. *N. hybrida* f. *hyalina* Proschkina-Lavrenko, 1963. Dimensions: valve length 34.8–80.2 μm , valve width 8.0–9.1 μm . Benthic, BM, beta-alpha-mesosaprobic, Bor. Noted in epiphyton of *B. hypnoides* (January), *U. intestinalis* (June), and *U. linza* (August).

41. *N. lanceolata* var. *minor* (Grunow) H. Peragallo et M. Peragallo, 1900. Dimensions: valve length 68.2–91.0 μm , valve width 7.8–10.0 μm . Benthic, Br, beta-mesosaprobic, BT. Registered in epiphyton of *B. hypnoides* and *C. arborescens* (May), *Cl. liniformis* (July), and in entwined thalli of macroalgae *Cl. liniformis* + *Cl. sericea* + *U. intestinalis* + *U. linza* (August). $N = 1.6\cdot 10^3 \text{ cells}\cdot\text{cm}^{-2}$, and $B = 0.003 \text{ mg}\cdot\text{cm}^{-2}$ (*B. hypnoides*).

42. *N. rupestris* Proschkina-Lavrenko, 1963. Dimensions: valve length 60.3 μm , valve width 8.5 μm . Benthic, BM, Bor. Found in epiphyton of *B. hypnoides* with $N = 323 \text{ cells}\cdot\text{cm}^{-2}$ and $B = 0.001 \text{ mg}\cdot\text{cm}^{-2}$ (January).

43. *N. sigma* (Kützing) W. Smith, 1853. Dimensions: valve length 38.4–110.0 μm , valve width 3.1–9.0 μm ; frustule width 5.8–11.9 μm . Benthic-planktonic, Br, alpha-mesosaprobic, ABTnot. Recorded in epiphyton of *B. hypnoides* (March, October), *C. corymbosum* (July), *C. arborescens* (March), *Cl. liniformis* (July), *C. mediterraneus* (August), *E. crinita* (March, April, October), *C. denudata* (September), and *U. linza* (August); in entwined thalli of macroalgae *Cl. liniformis* + *Cl. sericea* + *U. intestinalis* + *U. linza* (August) and *U. intestinalis* + *U. linza* (January); and in epiphyton of *Z. marina* (August) and its association with *Z. palustris* subsp. *major* (September). $N_{\max} = 3.2\cdot 10^3 \text{ cells}\cdot\text{cm}^{-2}$, and $B_{\max} = 0.09 \text{ mg}\cdot\text{cm}^{-2}$ (*Z. marina*). $N_{\min} = 54 \text{ cells}\cdot\text{cm}^{-2}$ (*U. linza*).

44. *N. sigmoidea* (Nitzsch) W. Smith, 1853. Dimensions: valve length 64.1–145.7 μm , valve width 6.1–7.7 μm ; frustule width 6.9–13 μm . Benthic-planktonic, FB, beta-alpha-mesosaprobic, Bor. Noted in epiphyton of *C. mediterraneus* (August), *C. denudata* (September), and *U. linza* (August, September); in entwined thalli of macroalgae *Cl. liniformis* + *Cl. sericea* + *U. intestinalis* + *U. linza* (August); and in epiphyton of the seagrass *Z. marina* (August) and its association with *Z. palustris* subsp. *major* (September). $N_{\max} = 24.5\cdot 10^3 \text{ cells}\cdot\text{cm}^{-2}$, and $B_{\max} = 0.4 \text{ mg}\cdot\text{cm}^{-2}$ (*Z. marina*). $N_{\min} = 162 \text{ cells}\cdot\text{cm}^{-2}$ (*U. linza*, August); $B_{\min} = 0.0006 \text{ mg}\cdot\text{cm}^{-2}$ (*U. linza*, September).

45. *N. spathulata* Brébisson ex W. Smith, 1853. Dimensions: valve length 54.7–63.5 μm , valve width 9.0–16.0 μm . Benthic, M, beta-alpha-mesosaprobic, BT. Registered in epiphyton of *U. linza* (August); in entwined thalli of macroalgae *Cl. liniformis* + *Cl. sericea* + *U. intestinalis* + *U. linza* (August); and in epiphyton of the seagrass *Z. marina* (November). $N = 20 \text{ cells}\cdot\text{cm}^{-2}$ (*U. linza*). Also, $N = 5.5\cdot 10^3 \text{ cells}\cdot\text{cm}^{-2}$, and $B = 0.03 \text{ mg}\cdot\text{cm}^{-2}$ (*Z. marina*).

46. *N. tenuirostris* Mereschowsky, 1901. Dimensions: valve length 64.5 μm , valve width 2.8 μm . Benthic-planktonic, Br, beta-mesosaprobic, Bor. Found in epiphyton of *C. denudata* (September).

47. *N. vermicularis* (Kützing) C. A. Hantzsch, 1860. Dimensions: valve length 135.5 μm , valve width 11.0 μm . Benthic, Br, beta-mesosaprobic, BTnot. Recorded in epiphyton of *E. crinita* with $N = 608 \text{ cells}\cdot\text{cm}^{-2}$ and $B = 0.007 \text{ mg}\cdot\text{cm}^{-2}$ (November).

48. *N. vidovichii* (Grunow) Grunow, 1862. Dimensions: valve length 82.2–84.6 μm , valve width 7.1–7.9 μm . Benthic, M, Bor. Noted in epiphyton of *U. linza* and the seagrass *Z. marina* (August). $N_{\min} = 27 \text{ cells}\cdot\text{cm}^{-2}$ (*U. linza*). $N_{\max} = 6.1\cdot 10^3 \text{ cells}\cdot\text{cm}^{-2}$, and $B_{\max} = 0.02 \text{ mg}\cdot\text{cm}^{-2}$ (*Z. marina*).

Genus *Petroneis* A. J. Stickle et D. G. Mann, 1990

49. *P. humerosa* (Brébisson ex W. Smith) A. J. Stickle et D. G. Mann, 1990. Dimensions: valve length 50.4 μm , valve width 26.5 μm . Benthic, M, C. Registered in epiphyton of *C. denudata* (September).

Genus *Psammodictyon* D. G. Mann, 1990

50. *P. panduriforme* (W. Gregory) D. G. Mann, 1990. Dimensions: valve length 49.5 μm , valve width 20.0 μm . Benthic, M, BTnot. Found in epiphyton of *E. crinita* with $N = 1.2\cdot 10^3 \text{ cells}\cdot\text{cm}^{-2}$ and $B = 0.001 \text{ mg}\cdot\text{cm}^{-2}$ (November).

Genus *Tryblionella* W. Smith, 1853

51. *T. compressa* (J. W. Bailey) M. Poulin, 1990. Dimensions: valve length 43.0 μm , valve width 15.2 μm . Benthic, M, ABTnot. Recorded in entwined thalli of macroalgae *C. arborescens* + *E. crinita* + *P. leucosticta* (February).

52. *T. hungarica* (Grunow) Frenguelli, 1942. Dimensions: valve length 47.5–68.0 μm , valve width 4.8–5.7 μm . Benthic, Br, alpha-oligo-mesosaprobic, C. Noted in epiphyton of *B. hypnoides* (February), *C. arborescens* (May), and *E. crinita* (August).

Order Cymbellales D. G. Mann, 1990

Family Rhoicospheniaceae Topachevs'kyj et Oksiyuk, 1960

Genus *Gomphonemopsis* L. K. Medlin, 1986

53. *G. pseudexigua* L. K. Medlin, 1986. Dimensions: valve length 14.5 μm , valve width 6.8 μm . Benthic, M, ABTnot. Registered in epiphyton of *B. hypnoides* with $N = 590 \text{ cells}\cdot\text{cm}^{-2}$ and $B = 0.0003 \text{ mg}\cdot\text{cm}^{-2}$ (November).

Genus *Rhoicosphenia* Grunow, 1860

54. *Rh. marina* (W. Smith) M. Schmidt, 1889. Fig. 2B (see <https://marine-biology.ru/mbj/article/view/507>). Dimensions: valve length 4.1–26.6 μm , valve width 4–7 μm ; frustule width 9–26.7 μm . Benthic, colonial, year-round, dominant, M, AB. Found in epiphyton of *B. hypnoides* (March, April), *C. corymbosum* (July), *C. arborescens* (March, May, October), *Cl. liniformis* (July), *E. crinita* (January–April, August), *G. barbata* (June, July), *P. leucosticta* (January), *U. intestinalis* (April, June), and *U. linza* (August); in entwined thalli of macroalgae *C. arborescens* + *E. crinita* + *P. leucosticta* (February), *B. hypnoides* + *C. arborescens* + *E. crinita* + *P. leucosticta* (April), and *Cl. liniformis* + *Cl. sericea* + *U. intestinalis* + *U. linza* (August); and in epiphyton of *Z. marina* (June, August). $N_{\max} = 29.1\cdot 10^3 \text{ cells}\cdot\text{cm}^{-2}$ (*Z. marina*, August); $N_{\min} = 20 \text{ cells}\cdot\text{cm}^{-2}$ (*U. linza*). $B_{\max} = 0.009 \text{ mg}\cdot\text{cm}^{-2}$ (*B. hypnoides*, March).

Order Lyrellales D. G. Mann, 1990

Family Lyrellaceae D. G. Mann, 1990

Genus *Lyrella* N. I. Karayeva, 1978

55. *L. abrupta* (Gregory) D. G. Mann, 1990. Dimensions: valve length 54.0 μm , valve width 25.7 μm . Benthic, M, BT. Recorded in epiphyton of *U. linza* with $N = 20 \text{ cells}\cdot\text{cm}^{-2}$ (August).

56. *L. atlantica* (Schmidt) D. G. Mann, 1990. Dimensions: valve length 38.8–53.0 μm , valve width 21.0–38.0 μm . Benthic, M, ABTnot. Noted in epiphyton of *C. denudata* (September), *U. linza* (August), and the seagrass *Z. marina* (August). $N = 918\cdot 10^3 \text{ cells}\cdot\text{cm}^{-2}$, and $B = 0.15 \text{ mg}\cdot\text{cm}^{-2}$ (*Z. marina*).

57. *L. lyra* (Ehrenberg) N. I. Karayeva, 1978. Dimensions: valve length 59.0 μm , valve width 26.5 μm . Benthic, M, oligo-beta-mesosaprobic, BTnot. Registered in epiphyton of *C. denudata* with $N = 325 \text{ cells}\cdot\text{cm}^{-2}$ and $B = 0.008 \text{ mg}\cdot\text{cm}^{-2}$ (September).

58. *L. lyroides* (Hendey) D. G. Mann, 1990. Dimensions: valve length 45.6–46.74 μm , valve width 22.4–24.7 μm . Benthic, M, beta-mesosaprobic, BT. Found in *Z. marina* + *Z. palustris* subsp. *major* association and in epiphyton of *U. linza* (September).

Order Mastogloiales D. G. Mann, 1990

Family Mastogloiaceae Mereschowsky, 1903

Genus *Mastogloia* G. H. K. Thwaites, 1856

59. *M. pumila* (Grunow) Cleve, 1895. Dimensions: valve length 14.0–28.4 μm , valve width 6.0–9.3 μm . Benthic, BM, BTnot. Recorded in epiphyton of *U. linza* (August, September), *Z. marina* (August), and its association with *Z. palustris* subsp. *major* (September). $N = 20 \text{ cells}\cdot\text{cm}^{-2}$ (*U. linza*, August).

60. *M. pusilla* Grunow, 1878. Dimensions: valve length 18.9–29.1 μm , valve width 6.7–8.5 μm . Benthic, BM, BTnot. Noted in epiphyton of *C. denudata* (September) and *U. linza* (August, September), as well as in *Z. marina* + *Z. palustris* subsp. *major* association (September).

Order Naviculales Bessey, 1907

Family Amphipleuraceae Grunow, 1862

Genus *Halamphora* (P. T. Cleve) Z. Levkov, 2009

61. *H. coffeiformis* (C. A. Agardh) Levkov, 2009. Dimensions: valve length 19.2–40.2 μm , valve width 4.8–6.1 μm ; frustule width 10.5–12.5 μm . Benthic, M, oligo-mesosaprobic, C. Registered in epiphyton of *C. mediterraneus* (August), *E. crinita* (August), *G. barbata* (July), *C. denudata* (September), *U. linza* (August), and *Z. marina* (August), as well as in *Z. marina* + *Z. palustris* subsp. *major* association (September). $N_{\min} = 20 \text{ cells}\cdot\text{cm}^{-2}$ (*U. linza*); $N_{\max} = 15\cdot 10^3 \text{ cells}\cdot\text{cm}^{-2}$ (*Z. marina*). $B_{\max} = 0.02 \text{ mg}\cdot\text{cm}^{-2}$ (*E. crinita*).

62. *H. hyalina* Kützinger, 1844. Dimensions: valve length 22.8–43.9 μm , valve width 5.2–6.3 μm ; frustule width 13.2–18.0 μm . Benthic, BM, oligo-mesosaprobic, ABTnot. Found in epiphyton of *C. arborescens* (October), *C. mediterraneus* (August), *C. denudata* (September), *U. linza* (September), and the seagrass *Z. marina* (August, November). $N_{\max} = 9.2\cdot 10^3 \text{ cells}\cdot\text{cm}^{-2}$ (*Z. marina*, November). $B_{\max} = 0.06 \text{ mg}\cdot\text{cm}^{-2}$ (*Z. marina*, August). $N_{\min} = 84 \text{ cells}\cdot\text{cm}^{-2}$ (*U. linza*).

Family Berkeleyaceae D. G. Mann, 1990

Genus *Berkeleya* R. K. Greville, 1827

63. *B. rutilans* (Trentepohl ex Roth) Grunow, 1880. Dimensions: valve length 7.8–34.7 μm , valve width 3.2–5.0 μm ; frustule width 12.1 μm . Benthic, colonial, year-round, BM, ABTnot. A species causing

algal blooms. Recorded in epiphyton of *B. hypnoides* (January, February), *C. arborescens* (March, May), *E. crinita* (January–August), *C. denudata* (September), *P. leucosticta* (January), *U. intestinalis* (May), and *U. linza* (August, September); in entwined thalli of macroalgae *C. arborescens* + *E. crinita* + *P. leucosticta* (February) and *U. linza* + *U. intestinalis* (January); and in epiphyton of *Z. marina* (August) and *Z. marina* + *Z. palustris* subsp. *major* association (September). $N_{\max} = 10.7 \cdot 10^3 \text{ cells} \cdot \text{cm}^{-2}$, and $B_{\max} = 0.02 \text{ mg} \cdot \text{cm}^{-2}$ (*Z. marina*). $N_{\min} = 40 \text{ cells} \cdot \text{cm}^{-2}$ (*U. linza*, August).

64. *B. scopulorum* (Brébisson ex Kützinger) E. J. Cox, 1979. Fig. 2F (see <https://marine-biology.ru/mbj/article/view/507>). Dimensions: valve length 48.8 μm , valve width 3.8 μm . Benthic, M, BTnot. Reported from the Sea of Azov for the first time in epiphyton of *Z. marina* (August).

Genus *Parlibellus* E. J. Cox, 1988

65. *P. delognei* (Van Heurck) E. J. Cox, 1988. Dimensions: valve length 31.9–51.8 μm , valve width 4.6–8.9 μm . Benthic, colonial, M, C. A species causing algal blooms. Noted in epiphyton of *C. corymbosum* (July), *Cl. liniformis* (July), *E. crinita* (January), *G. barbata* (July), *P. leucosticta* (January), and *U. linza* (August). $N_{\max} = 3.5 \cdot 10^3 \text{ cells} \cdot \text{cm}^{-2}$, and $B_{\max} = 0.005 \text{ mg} \cdot \text{cm}^{-2}$ (*Cl. liniformis*). $N_{\min} = 182 \text{ cells} \cdot \text{cm}^{-2}$, and $B_{\min} = 0.0001 \text{ mg} \cdot \text{cm}^{-2}$ (*P. leucosticta*).

Family Diploneidaceae D. G. Mann, 1990

Genus *Diploneis* (C. G. Ehrenberg) P. T. Cleve, 1894

66. *D. didyma* Ehrenberg, 1845. Dimensions: valve length 40.2 μm , valve width 17.8 μm . Benthic, BM, ABTnot. Registered in epiphyton of *B. hypnoides* (January).

67. *D. lineata* (Donkin) P. T. Cleve, 1894. Dimensions: valve length 65.5 μm , valve width 25.8 μm . Benthic, M, BT. Found in epiphyton of *E. crinita* (October).

68. *D. littoralis* (Donkin) P. T. Cleve, 1894. Dimensions: valve length 34.7 μm , valve width 22.7 μm . Benthic, M, oligo-mesosaprobic, ABTnot. Recorded in epiphyton of *C. arborescens* with $N = 162 \text{ cells} \cdot \text{cm}^{-2}$ and $B = 0.03 \text{ mg} \cdot \text{cm}^{-2}$ (November).

69. *D. smithii* (Brébisson) P. T. Cleve, 1894. Dimensions: valve length 30.0–66.9 μm , valve width 12.0–23.5 μm . Benthic, BM, C. Noted in epiphyton of *C. arborescens* (October) and in entwined thalli of macroalgae *C. arborescens* + *E. crinita* + *P. leucosticta* (February).

Family Naviculaceae Kützinger, 1844

Genus *Caloneis* P. T. Cleve, 1894

70. *C. liber* (W. Smith) P. T. Cleve, 1894. Dimensions: valve length 26.0–71.8 μm , valve width 7.5–10.4 μm ; frustule width 16.7 μm . Benthic, M, C. Registered in epiphyton of *B. hypnoides* (February), *Cl. liniformis* (July), *E. crinita* (February, March, August), *G. barbata* (June, July), *C. denudata* (September), and *U. linza*, (August, October); in entwined thalli of macroalgae *C. arborescens* + *E. crinita* + *P. leucosticta* (February) and *Cl. liniformis* + *Cl. sericea* + *U. intestinalis* + *U. linza* (August); and in epiphyton of the seagrass *Z. marina* (August) and its association with *Z. palustris* subsp. *major* (September). $N_{\max} = 9.0 \cdot 10^3 \text{ cells} \cdot \text{cm}^{-2}$, and $B_{\max} = 0.005 \text{ mg} \cdot \text{cm}^{-2}$ (*Z. marina*). $N_{\min} = 115 \text{ cells} \cdot \text{cm}^{-2}$ (*U. linza*, October).

Genus *Haslea* R. Simonsen, 1974

71. *H. subagnita* (Proschkina-Lavrenko) Makarova et Karajeva, 1985. Dimensions: valve length 45.2–45.4 μm , valve width 10.1–10.4 μm . Benthic, BM, Bor. Found in epiphyton of *G. barbata* (June)

and the seagrass *Z. marina* (November), as well as in entwined thalli of macroalgae *Cl. liniformis* + *Cl. sericea* + *U. intestinalis* + *U. linza* (August). $N = 356 \text{ cells}\cdot\text{cm}^{-2}$, and $B = 0.001 \text{ mg}\cdot\text{cm}^{-2}$ (*G. barbata*).

Genus *Navicula* J. B. M. Bory, 1822

72. *N. ammophila* var. *intermedia* Grunow, 1882. Dimensions: valve length 30.1–53.0 μm , valve width 5.2–9.2 μm . Benthic, BM, AB. Recorded in epiphyton of *B. hypnoides* (February), *E. crinita* (August), *U. intestinalis* (June), and *U. linza* (August); in entwined thalli of macroalgae *C. arborescens* + *E. crinita* + *P. leucosticta* (February) and *Cl. liniformis* + *Cl. sericea* + *U. intestinalis* + *U. linza* (August); and in *Z. marina* + *Z. palustris* subsp. *major* association (September). $N_{\text{max}} = 912 \text{ cells}\cdot\text{cm}^{-2}$, and $B_{\text{max}} = 0.001 \text{ mg}\cdot\text{cm}^{-2}$ (*E. crinita*). $N_{\text{min}} = 27 \text{ cells}\cdot\text{cm}^{-2}$ (*U. linza*).

73. *N. cancellata* Donkin, 1872. Dimensions: valve length 47.5–67.1 μm , valve width 9.4–10.1 μm ; frustule width 18.5 μm . Benthic, M, C. Noted in epiphyton of *C. arborescens* (May), *C. corymbosum* (July), *Cl. liniformis* (July), *E. crinita* (October), and *G. barbata* (June, July). $N_{\text{max}} = 987 \text{ cells}\cdot\text{cm}^{-2}$, and $B_{\text{max}} = 0.007 \text{ mg}\cdot\text{cm}^{-2}$ (*Cl. liniformis*). $N_{\text{min}} = 97 \text{ cells}\cdot\text{cm}^{-2}$, and $B_{\text{min}} = 0.0005 \text{ mg}\cdot\text{cm}^{-2}$ (*G. barbata*, June).

74. *N. cancellata* var. *gregoryi* Grunow, 1880. Dimensions: valve length 34.5 μm , valve width 5.8 μm . Benthic, M, Bor. Registered in epiphyton of *B. hypnoides* (January).

75. *N. cryptocephala* Kützinger, 1844. Dimensions: valve length 19.3–70.3 μm , valve width 4.6–11.9 μm . Benthic, FB, beta-alpha-mesosaprobic, C. Found in epiphyton of *C. arborescens* (October) and *U. linza* (September). $N = 188 \text{ cells}\cdot\text{cm}^{-2}$, and $B = 0.0009 \text{ mg}\cdot\text{cm}^{-2}$ (*C. arborescens*). Also, $N = 84 \text{ cells}\cdot\text{cm}^{-2}$, and $B = 0.001 \text{ mg}\cdot\text{cm}^{-2}$ (*U. linza*).

76. *N. directa* (W. Smith) Ralfs, 1861. Dimensions: valve length 32.2–47.3 μm , valve width 7.51–8.59 μm . Benthic, M, C. Recorded in epiphyton of *C. arborescens* (November), *G. barbata* (July), and *Z. marina* (November). $N_{\text{max}} = 5.5\cdot 10^3 \text{ cells}\cdot\text{cm}^{-2}$, and $B_{\text{max}} = 0.007 \text{ mg}\cdot\text{cm}^{-2}$ (*Z. marina*). $N_{\text{min}} = 162 \text{ cells}\cdot\text{cm}^{-2}$ (*C. arborescens*). $B_{\text{min}} = 0.001 \text{ mg}\cdot\text{cm}^{-2}$ (*G. barbata*).

77. *N. dumontiae* Baardseth et Taasen, 1973. Dimensions: valve length 17.5 μm , valve width 5.3 μm . Benthic, M, Bor. Noted in epiphyton of *B. hypnoides* (November).

78. *N. palpebralis* Brébisson ex W. Smith, 1853. Dimensions: valve length 39.1–51.4 μm , valve width 12.0–21.0 μm . Benthic, M, ABTnot. Registered in epiphyton of *C. arborescens* (May) and *U. linza* (August).

79. *N. pennata* var. *pontica* Mereschkowsky, 1902. Dimensions: valve length 35.9–46.0 μm , valve width 5.1–9.2 μm . Benthic, M, beta-mesosaprobic, BT. Found in epiphyton of *E. crinita* (August), *C. denudata* (September), and *U. linza* (August, September), as well as in entwined thalli of macroalgae *Cl. liniformis* + *Cl. sericea* + *U. intestinalis* + *U. linza* (August). $N = 27 \text{ cells}\cdot\text{cm}^{-2}$ (*U. linza*, August).

80. *N. perminuta* Grunow, 1880. Dimensions: valve length 6.0–41.7 μm , valve width 2.1–7.8 μm ; frustule width 4.2–11.3 μm . Benthic, FB, C. Recorded in epiphyton of *B. hypnoides* (March, May), *C. arborescens* (May), *C. corymbosum* (July), *Cl. liniformis* (July), *E. crinita* (August), *G. barbata* (June, July), *C. denudata* (September), *U. intestinalis* (May, June), *U. linza* (August), and the seagrass *Z. marina* (June, August); in entwined thalli of macroalgae *Cl. liniformis* + *Cl. sericea* + *U. intestinalis* + *U. linza* (August); and in *Z. marina* + *Z. palustris* subsp. *major* association (September). $N_{\text{max}} = 41.3\cdot 10^3 \text{ cells}\cdot\text{cm}^{-2}$, and $B_{\text{max}} = 0.02 \text{ mg}\cdot\text{cm}^{-2}$ (*Z. marina*, August). $N_{\text{min}} = 54 \text{ cells}\cdot\text{cm}^{-2}$ (*U. linza*).

81. *N. perrhombus* Hustedt ex Simonsen, 1962. Dimensions: valve length 16.2 μm , valve width 3.2 μm . Benthic, M, BT. Noted in epiphyton of *E. crinita* (April). $N = 1,247 \text{ cells}\cdot\text{cm}^{-2}$, and $B = 0.0001 \text{ mg}\cdot\text{cm}^{-2}$.

82. *N. ramosissima* C. A. Agardh, 1824. Dimensions: valve length 21.0–56.3 μm , valve width 3.9–10.5 μm . Benthic, colonial, year-round, BM, beta-alpha-mesosaprobic, ABTnot. Registered in epiphyton of all macrophytes, in entwined thalli of macroalgae *Cl. liniformis* + *Cl. sericea* + *U. intestinalis* + *U. linza*, and in the seagrass association. $N_{\text{max}} = 67\cdot 10^3 \text{ cells}\cdot\text{cm}^{-2}$, and $B_{\text{max}} = 0.2 \text{ mg}\cdot\text{cm}^{-2}$ (*G. barbata*, July). $N_{\text{min}} = 128 \text{ cells}\cdot\text{cm}^{-2}$ (*U. linza*, August).

Genus *Seminavis* D. G. Mann, 1990

83. *S. ventricosa* (W. Gregory) M. Garcia-Baptista, 1993. Dimensions: valve length 60.6–86.2 μm , valve width 8.4–10.5 μm ; frustule width 16.5–19.0 μm . Benthic, M, C. Found in epiphyton of *E. crinita* (October), as well as *U. linza* and *C. denudata* (September); in entwined thalli of macroalgae *Cl. liniformis* + *Cl. sericea* + *U. intestinalis* + *U. linza* (August); and in epiphyton of *Z. marina* (August) and its association with *Z. palustris* subsp. *major* (September). $N_{\text{max}} = 26\cdot 10^3 \text{ cells}\cdot\text{cm}^{-2}$, and $B_{\text{max}} = 0.2 \text{ mg}\cdot\text{cm}^{-2}$ (*Z. marina*). $N_{\text{min}} = 377 \text{ cells}\cdot\text{cm}^{-2}$ (*U. linza*). $B_{\text{min}} = 0.002 \text{ mg}\cdot\text{cm}^{-2}$ (*E. crinita*).

Genus *Trachyneis* P. T. Cleve, 1894

84. *T. aspera* (Ehrenberg) P. T. Cleve, 1894. Dimensions: valve length 37.5–81.1 μm , valve width 8.7–15.3 μm ; frustule width 12.7–16.9 μm . Benthic, M, C. Recorded in epiphyton of *B. hypnoides* and *E. crinita* (January), *C. mediterraneus* (August), *G. barbata* (July), *C. denudata* and *U. linza* (September), and *U. intestinalis* (April, June), as well as in epiphyton of the seagrass *Z. marina* (June, August, November) and its association with *Z. palustris* subsp. *major* (September). $N_{\text{max}} = 7\cdot 10^3 \text{ cells}\cdot\text{cm}^{-2}$, and $B_{\text{max}} = 0.08 \text{ mg}\cdot\text{cm}^{-2}$ (*Z. marina*, August). $N_{\text{min}} = 119 \text{ cells}\cdot\text{cm}^{-2}$ (*C. mediterraneus*).

Family Plagiotropidaceae D. G. Mann, 1990

Genus *Plagiotropis* E. Pfitzer, 1871

85. *P. lepidoptera* (Gregory) Kuntze, 1898. Dimensions: valve length 66.2–98.2 μm , valve width 12.4–15.1 μm ; frustule width 23.1–26.0 μm . Benthic, M, ABT. Noted in epiphyton of *C. arborescens* (October), *G. barbata* (July), *C. denudata* (September), *U. linza* (August, September), and the seagrass *Z. marina* (August). $N_{\text{max}} = 13\cdot 10^3 \text{ cells}\cdot\text{cm}^{-2}$, and $B_{\text{max}} = 0.19 \text{ mg}\cdot\text{cm}^{-2}$ (*Z. marina*). $N_{\text{min}} = 20 \text{ cells}\cdot\text{cm}^{-2}$ (*U. linza*, August).

Family Pleurosigmaaceae Mereschkowsky, 1903

Genus *Pleurosigma* W. Smith, 1852

86. *P. angulatum* (Queckett) W. Smith, 1853. Dimensions: valve length 115.4 μm , valve width 25.0 μm . Benthic, M, C. Registered in epiphyton of *U. linza* (August).

87. *P. elongatum* W. Smith, 1852. Dimensions: valve length 111.5–148.0 μm , valve width 17.9–25.5 μm . Benthic, BM, beta-mesosaprobic, C. Found in epiphyton of *C. arborescens* (May), *Cl. liniformis* and *G. barbata* (July), and *U. linza* (September). $N_{\text{max}} = 592 \text{ cells}\cdot\text{cm}^{-2}$, and $B_{\text{max}} = 0.01 \text{ mg}\cdot\text{cm}^{-2}$ (*Cl. liniformis*). $N_{\text{min}} = 317 \text{ cells}\cdot\text{cm}^{-2}$, and $B_{\text{min}} = 0.005 \text{ mg}\cdot\text{cm}^{-2}$ (*C. arborescens*).

88. *P. intermedium* W. Smith, 1853. Dimensions: valve length 129.3 μm , valve width 24.2 μm . Benthic, M, ABTnot. Recorded in epiphyton of *G. barbata* (July).

Family Sellaphoraceae Mereschkowsky, 1902

Genus *Fallacia* A. J. Stickle et D. G. Mann, 1990

89. *F. forcipata* (Greville) Stickle et D. G. Mann, 1990. Dimensions: valve length 23.4–32.0 μm , valve

width 10.6–17.4 μm . Benthic, M, ABTnot. Noted in epiphyton of *C. denudata* (September) and *U. linza* (August).

90. *F. pygmaea* (Kützing) Stickle et D. G. Mann, 1990. Dimensions: valve length 16.4 μm , valve width 8.2 μm . Benthic, BM, alpha-oligo-mesosaprobic, BT. $N = 608 \text{ cells}\cdot\text{cm}^{-2}$ in epiphyton of *E. crinita* (November).

Family Proschkiniaceae D. G. Mann, 1990

Genus *Proschkinia* N. I. Karayeva, 1978

91. *P. poretzskiae* (Koretkevich) D. G. Mann, 1990. Dimensions: valve length 44.7 μm , valve width 7.1 μm . Benthic, M, AB. Registered in epiphyton of *E. crinita* (February) and *P. leucosticta* (January). $N_{\text{max}} = 1.7\cdot 10^3 \text{ cells}\cdot\text{cm}^{-2}$, and $B_{\text{max}} = 0.002 \text{ mg}\cdot\text{cm}^{-2}$ (*E. crinita*). $N_{\text{min}} = 182 \text{ cells}\cdot\text{cm}^{-2}$, and $B_{\text{min}} = 0.0002 \text{ mg}\cdot\text{cm}^{-2}$ (*P. leucosticta*).

Order Rhopalodiales D. G. Mann, 1990

Family Rhopalodiaceae (Karsten) Topachevs'kyj et Oksiyuk, 1960

Genus *Rhopalodia* O. F. Müller, 1895

92. *Rh. musculus* (Kützing) O. F. Müller, 1899. Dimensions: valve length 18.0–24.6 μm , valve width 8.3–10.0 μm ; frustule width 12.8 μm . Benthic, BM, beta-mesosaprobic, BT. Found in epiphyton of *B. hypnoides* (November), *C. denudata*, and *U. linza* (September), as well as in *Z. marina* + *Z. palustris* subsp. *major* association (September). $N_{\text{max}} = 2\cdot 10^3 \text{ cells}\cdot\text{cm}^{-2}$, and $B_{\text{max}} = 0.002 \text{ mg}\cdot\text{cm}^{-2}$ (*B. hypnoides*). $N_{\text{min}} = 590 \text{ cells}\cdot\text{cm}^{-2}$, and $B_{\text{min}} = 0.002 \text{ mg}\cdot\text{cm}^{-2}$ (*C. denudata*).

Order Surirellales D. G. Mann, 1990

Family Entomoneidaceae Reimer, 1975

Genus *Entomoneis* Ehrenberg, 1845

93. *E. paludosa* (W. Smith) Reimer, 1975. Dimensions: valve length 59.7 μm ; frustule width 26.3 μm . Benthic-planktonic, BM, beta-alpha-mesosaprobic, C. Recorded in epiphyton of *U. linza* with $N = 20 \text{ cells}\cdot\text{cm}^{-2}$ (August).

Order Thalassiophysales D. G. Mann, 1990

Family Catenulaceae Mereschkowsky, 1902

Genus *Amphora* C. G. Ehrenberg ex F. T. Kützing, 1844

94. *A. laevis* Gregory, 1857. Dimensions: valve length 42.7–46.5 μm , valve width 10.2 μm ; frustule width 20.0 μm . Benthic, M, BTnot. Noted in epiphyton of *U. linza* (August, September).

95. *A. marina* W. Smith, 1856. Dimensions: valve length 35.9–48.4 μm , valve width 7.7–11.8 μm ; frustule width 13.5–20.2 μm . Benthic, M, BTnot. Registered in epiphyton of *C. mediterraneus* and *U. linza* (August), *Cl. liniformis* (July), and the seagrass *Z. marina* (August), as well as in *Z. marina* + *Z. palustris* subsp. *major* association (September). $N_{\text{min}} = 592 \text{ cells}\cdot\text{cm}^{-2}$, and $B_{\text{min}} = 0.002 \text{ mg}\cdot\text{cm}^{-2}$ (*Cl. liniformis*). $N_{\text{max}} = 7\cdot 10^3 \text{ cells}\cdot\text{cm}^{-2}$, and $B_{\text{max}} = 0.04 \text{ mg}\cdot\text{cm}^{-2}$ (*Z. marina*).

96. *A. ovalis* Kützing, 1844. Dimensions: valve length 20.6–44.4 μm , valve width 9.6–18.5 μm ; frustule width 33.9 μm . Benthic, BM, oligo-beta-mesosaprobic, C. Found in epiphyton of *C. denudata* and *U. linza* (September), *C. arborescens* (October), and in entwined thalli of macroalgae *C. arborescens* + *E. crinita* + *P. leucosticta* (February). $N_{\text{max}} = 433 \text{ cells}\cdot\text{cm}^{-2}$, and $B_{\text{max}} = 0.01 \text{ mg}\cdot\text{cm}^{-2}$ (*C. denudata*). $N_{\text{min}} = 188 \text{ cells}\cdot\text{cm}^{-2}$ (*C. arborescens*).

97. *A. proteus* Gregory, 1857. Dimensions: valve length 35.6–63.7 μm , valve width 9.5–10.8 μm ; frustule width 20.1 μm . Benthic, M, beta-mesosaprobic, C. Recorded in epiphyton of *C. denudata* (September) and *U. linza* (August), as well as in *Z. marina* + *Z. palustris* subsp. *major* association (September). $N_{\text{max}} = 433 \text{ cells}\cdot\text{cm}^{-2}$ (*C. denudata*). $N_{\text{min}} = 20 \text{ cells}\cdot\text{cm}^{-2}$ (*U. linza*).

Genus *Undatella* T. B. B. Paddock et P. A. Sims, 1980

98. *U. lineolata* (Ehrenberg) L. I. Ryabushko, 2006. Dimensions: valve length 45.8–56.5 μm , valve width 7.1–7.8 μm ; frustule width 31.4–38.0 μm . Benthic, BM, beta-mesosaprobic, ABT. Noted in epiphyton of *C. corymbosum* (July), *C. denudata* (September), *U. linza* (August), and the seagrass *Z. marina* (November). $N_{\text{min}} = 27 \text{ cells}\cdot\text{cm}^{-2}$ (*U. linza*). $N_{\text{max}} = 109\cdot 10^3 \text{ cells}\cdot\text{cm}^{-2}$ (*C. corymbosum*). $B_{\text{max}} = 0.007 \text{ mg}\cdot\text{cm}^{-2}$ (*Z. marina*).

Note: N, abundance; B, biomass; min, minimum; max, maximum. The relation to the water salinity: M, marine species; Br, brackish; BM, brackish-marine; FB, freshwater-brackish; Fw, freshwater. Phytogeographic elements: AB, arctic-boreal species; Bor, boreal; ABT, arctic-boreal-tropical; BT, boreal-tropical; C, cosmopolitan; BTnot, boreal-tropical-notal; ABTnot, arctic-boreal-tropical-notal.