**Table S13.** Environmental data for each habitat during summer. PW DIN, total concentration of NH4+, NO3-+NO2- in the pore water (μM). Percent dry weight of total nitrogen (N tot) and organic carbon (C org) in the sediment. Porosity, water content in sediment (%). Density, density of sediment. Chl *b*, concentration of sediment chlorophyll *b* (mg m-2). Echi, concentration of sediment echinenone (mg m-2). Fuco, concentration of sediment fucoxanthin (mg m-2). Ruppia, dry weight of *Ruppia* *maritima* (mg m-2).

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Habitat | PW DIN | N tot | C C org | Porosity | Density  | Chl *b* | Echi | Fuco | Ruppia |
| Sand 1 | 78.57 | 0.04 | 0.41 | 0.76 | 1.31 | 2.11 | 0.10 | 40.29 | 0 |
| Sand 2 | 72.44 | 0.05 | 0.41 | 0.78 | 1.30 | 3.89 | 0.10 | 46.56 | 0 |
| Sand 3 | 67.8 | 0.05 | 0.46 | 0.76 | 1.31 | 2.65 | 0.10 | 41.54 | 0 |
| Sand 4 | 63.1 | 0.06 | 0.53 | 0.77 | 1.31 | 4.88 | 0.10 | 34.01 | 0 |
| Silt 1 | 265.58 | 0.15 | 1.32 | 0.67 | 0.93 | 2.61 | 1.15 | 32.13 | 0 |
| Silt 2 | 351 | 0.20 | 1.76 | 0.67 | 0.77 | 2.22 | 1.22 | 32.40 | 0 |
| Silt 3 | 350.51 | 0.16 | 1.41 | 0.72 | 0.92 | 3.16 | 3.27 | 37.12 | 0 |
| Silt 4 | 162.17 | 0.17 | 1.47 | 0.50 | 1.13 | 6.06 | 1.29 | 64.17 | 0 |
| Cyano 1 | 595.57 | 0.06 | 0.49 | 0.46 | 1.38 | 27.90 | 3.27 | 199.58 | 0 |
| Cyano 2 | 316.73 | 0.06 | 0.53 | 0.48 | 1.43 | 21.07 | 3.25 | 106.21 | 0 |
| Cyano 3 | 262.85 | 0.06 | 0.55 | 0.62 | 1.28 | 10.18 | 1.88 | 19.07 | 0 |
| Cyano 4 | 392.98 | 0.04 | 0.38 | 0.45 | 1.22 | 33.66 | 16.73 | 237.11 | 0 |
| Ruppia 1 | 121.37 | 0.28 | 2.20 | 0.42 | 1.44 | 2.70 | 0.64 | 13.70 | 28 |
| Ruppia 2 | 67.04 | 0.22 | 1.83 | 0.58 | 1.43 | 3.08 | 0.66 | 15.17 | 23 |
| Ruppia 3 | 26.75 | 0.41 | 3.17 | 0.37 | 1.45 | 2.32 | 0.64 | 20.61 | 30 |
| Ruppia 4 | 24.64 | 0.29 | 2.29 | 0.51 | 1.48 | 2.70 | 0.63 | 14.26 | 26 |