

Appendix A. Depth limits of selected species

Perennial macroalgae, stoneworts and higher plant taxa observed in more than 50 transects were selected for depth limit studies. Crustose algae, land plants, bryophytes, free floating taxa and helophytes were excluded. Each selected taxon was classified according to main substrate preference (hard, soft or ambiguous) to make it possible to exclude substrate limited observations of depth limits (Table 1). Some taxa were grouped before analysis in order to reduce taxonomic differences between time periods and different divers, e.g. *Fucus radicans* was recently separated from *F. vesiculosus* and is grouped as *F. vesiculosus*. All groupings are reported in Table 1.

Table 1 Taxa selected for depth distribution studies. Substrate preference H = hard bottom species, S = soft bottom species and A = ambiguous (species living on both hard and soft substrates). Taxa marked with X in the column MSMDI are included in the current Swedish assessment method. Taxon groupings are illustrated by the small number to the right of the taxon name; 1 includes *F. radicans*, 2 includes *R. cirrhosa* and *R. marina*, 3 includes *Zannichellia*, *Z. palustris* var. *major*, *Z. palustris* var. *repens*, 4 includes *M. sibiricum*, 5 includes *Rhodomela*, 6 includes *Furcellaria* and 7 includes *Coccotylus truncatus* and *Phyllophora pseudoceraoïdes*.

Group	Taxon	Substrate preference	MSMDI
Phaeophyceae	Desmarestia aculeata	H	
Phaeophyceae	Ascophyllum nodosum	H	
Phaeophyceae	Fucus serratus	H	X
Phaeophyceae	Fucus vesiculosus ¹	H	X
Phaeophyceae	Halidrys siliquosa	H	X
Phaeophyceae	Sargassum muticum	H	
Phaeophyceae	Laminaria digitata	H	
Phaeophyceae	Laminaria hyperborea	H	
Phaeophyceae	Saccharina latissima	H	X
Phaeophyceae	Battersia arctica	H	X
Phaeophyceae	Chaetopteris plumosa	H	
Chlorophyta	Aegagropila linnaei	A	X
Chlorophyta	Cladophora rupestris	H	X
Magnoliophyta	Potamogeton gramineus	S	
Magnoliophyta	Potamogeton pectinatus	S	
Magnoliophyta	Potamogeton perfoliatus	S	X
Magnoliophyta	Ruppia ²	S	
Magnoliophyta	Zannichellia palustris ³	S	
Magnoliophyta	Zostera marina	S	X
Magnoliophyta	Eleocharis acicularis	S	
Magnoliophyta	Callitriche hermaphroditica	S	
Magnoliophyta	Ranunculus peltatus ssp. baudotii	S	
Magnoliophyta	Myriophyllum spicatum ⁴	S	
Rhodophyta	Ahnfeltia plicata	H	
Rhodophyta	Ceramium virgatum	H	
Rhodophyta	Delesseria sanguinea	H	X
Rhodophyta	Membranoptera alata	H	
Rhodophyta	Phycodrys rubens	H	X
Rhodophyta	Odonthalia dentata	H	
Rhodophyta	Polysiphonia elongata	H	
Rhodophyta	Polysiphonia fucoides	H	
Rhodophyta	Polysiphonia stricta	H	
Rhodophyta	Rhodomela confervoides ⁵	H	X

Group	Taxon	Substrate preference	MSMDI
Rhodophyta	Plumaria plumosa	H	
Rhodophyta	Corallina officinalis	H	
Rhodophyta	Cystoclonium purpureum	H	
Rhodophyta	Dilsea carnosa	H	
Rhodophyta	Furcellaria lumbricalis ⁶	A	X
Rhodophyta	Chondrus crispus	H	X
Rhodophyta	Coccotylus/Phyllophora ⁷	A	X
Rhodophyta	Polyides rotundus	H	
Charophyceae	Chara aspera	S	
Charophyceae	Chara baltica	S	X
Charophyceae	Chara globularis	S	

Before analysis depth limits that were truncated, were substrate limited or lacked substrate information were excluded. In Table 2 the total number of transects with depth limits for each selected species are shown together with the number of excluded depth limits due to the different reasons.

Table 2 Number of depth limits (transects) for each taxon selected for plotting of depth limits. Total number of depth limits is shown together with the number of excluded depth limits due to different reasons. Column OK show the number of depth limits that are used in the plots. Columns East and West show the number of OK depth limits on each side of Sweden (excluding open sea). West represents data from national type 1-6 and 25 and east data from national typ 7-24.

Taxon	No substrate info	Substrate limited	Truncated	OK	Total	East	West
Desmarestia aculeata	45	2	20	41	108		41
Ascophyllum nodosum	13	1		42	56		42
Fucus serratus	88	15	101	538	742	348	188
Fucus vesiculosus	284	143	425	2339	3191	2126	210
Halidrys siliquosa	130	2	12	157	301		157
Sargassum muticum	5	6	10	39	60		39
Laminaria digitata	131	2	35	146	314		146
Laminaria hyperborea	44	1	4	9	58		9
Saccharina latissima	154	10	47	180	391		180
Battersia arctica	38	198	824	314	1374	312	1
Chaetopteris plumosa	18	1	18	19	56		19
Aegagropila linnaei			27	101	128	101	
Cladophora rupestris	58	14	103	774	949	592	180
Potamogeton gramineus			3	56	59	56	
Potamogeton pectinatus	106	103	412	1048	1669	1048	
Potamogeton perfoliatus	63	51	218	643	975	643	
Ruppia	37	56	195	392	680	385	7
Zannichellia palustris	94	92	305	763	1254	762	1
Zostera marina	262	58	279	307	906	288	19
Eleocharis acicularis		1	9	55	65	55	
Callitriche hermaphroditica	3	3	57	174	237	174	
Ranunculus peltatus ssp. baudotii	13	8	14	122	157	122	
Myriophyllum spicatum	1	28	140	450	619	450	
Ahnfeltia plicata	120		17	216	353	9	207

Taxon	No substrate info	Substrate limited	Truncated	OK	Total	East	West
<i>Ceramium virgatum</i>	182	27	181	407	797	181	222
<i>Delesseria sanguinea</i>	99	29	160	93	381		93
<i>Membranoptera alata</i>	90	3	21	115	229		115
<i>Phycodrys rubens</i>	122	24	154	73	373		73
<i>Odonthalia dentata</i>	65	4	36	60	165		60
<i>Polysiphonia elongata</i>	100	17	68	122	307	4	118
<i>Polysiphonia fucoides</i>	200	230	1401	764	2595	580	179
<i>Polysiphonia stricta</i>	104	6	47	124	281	1	123
<i>Rhodomela confervoides</i>	176	44	708	645	1573	500	136
<i>Plumaria plumosa</i>	84	1		68	153		68
<i>Corallina officinalis</i>	89		12	119	220		119
<i>Cystoclonium purpureum</i>	155	8	55	155	373		155
<i>Dilsea carnosa</i>	66	4	25	60	155		60
<i>Furcellaria lumbricalis</i>	261		1557	1129	2947	899	220
<i>Chondrus crispus</i>	163	12	69	222	466		222
<i>Coccotylus/Phyllophora</i>	114		956	552	1622	383	162
<i>Polyides rotundus</i>	15	3	12	73	103	20	53
<i>Chara aspera</i>		13	56	282	351	282	
<i>Chara baltica</i>		2	22	56	80	56	
<i>Chara globularis</i>	1	6	13	55	75	55	

Deeper living species like *Battersia arctica*, *Delesseria sanguinea*, *Furcellaria lumbricalis* and *Polysiphonia fucoides* have higher rates of truncated depth limits. Several of the west coast species depth limits lack associated substrate information making it impossible to assess substrate limitation, e.g. *Laminaria spp* and *Saccharina latissima*. Substrate limitation is not common reason for exclusion with the methods we have used, highest rate is observed for the deep living *Battersia arctica*.

Within this appendix there is one section with graphs for each selected species. The geographic distribution of the depth limits is shown on a map where yellow represents truncated depth limits, orange represents substrate limited depth limits, red represents depth limits without substrate information and green the remaining depth limits. Grey color represents sites where the species is found but no depth limits are measured, e.g. point occurrence data. The number of transects within each group is illustrated in a pie graph with the same color scheme as used in the map.

Distribution of maximum depth limits of single specimens within each national type is shown in a box plot (national types are illustrated in Figure 1). In each box the number of depth limits within that national type is given. Only depth limits that have substrate information and not are substrate limited or truncated are included in the box plots and the following scatter plots. National type 0 represents open sea (offshore banks) all around the coast. Data from open sea is rare due to few sampling occasions and few areas shallow enough for vegetation.

In the scatter plots depth limits are plotted against selected eutrophication factors, secchi depth, total nitrogen, total phosphorus, chlorophyll a and the selected natural gradients latitude, salinity and exposure. A linear regression line is given just to show the tendency in the relationships. Please note that not all depth limits have been possible to relate to all environmental data, i.e. in some cases nutrients, secchi, chl a or salinity is missing. All depth limits are related to latitude and exposure.

If a species has a significant number of observations on both the west and east coast of Sweden separate scatterplots for only east and west coast data are also given.

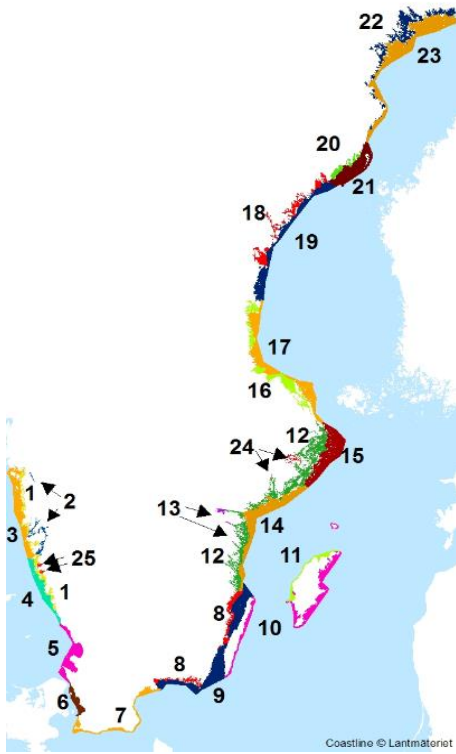
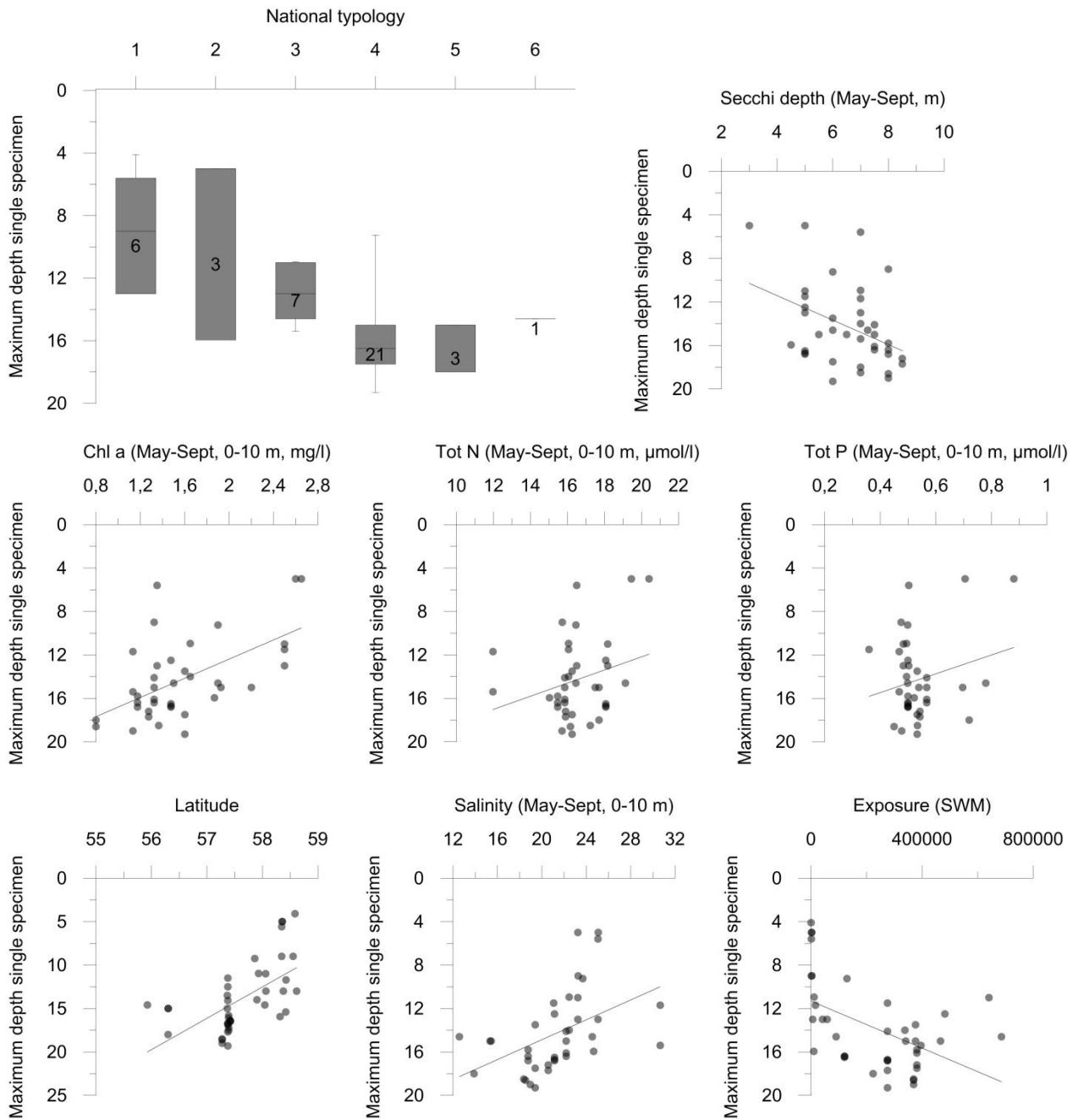
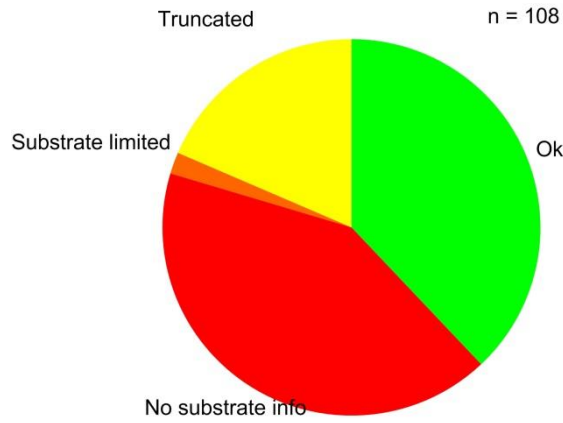
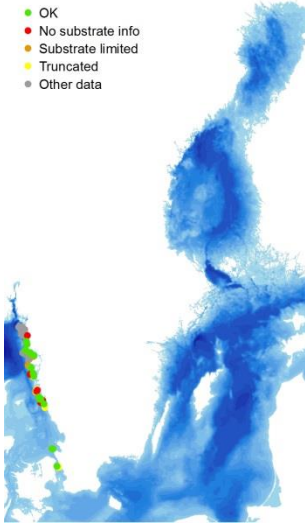


Figure 1 Swedish national types according to NFS2006:1. Map from Leonardsson et al 2009. Coastline copyrighted by Lantmäteriet.

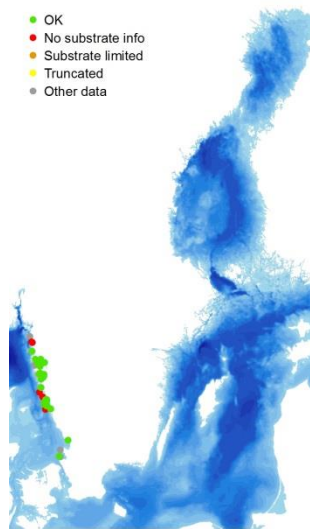
Desmarestia aculeata

- OK
- No substrate info
- Substrate limited
- Truncated
- Other data

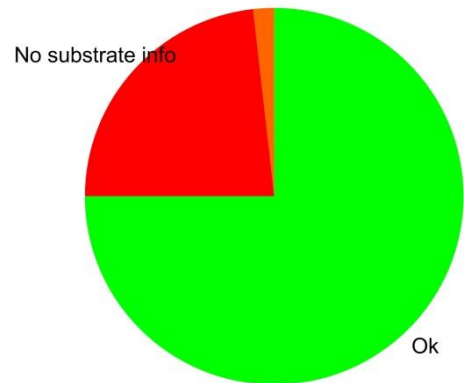


Ascophyllum nodosum

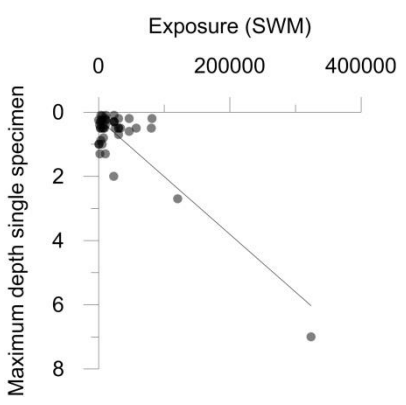
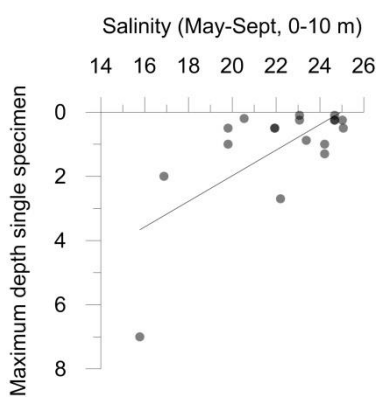
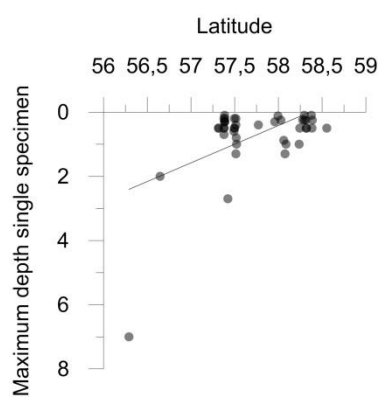
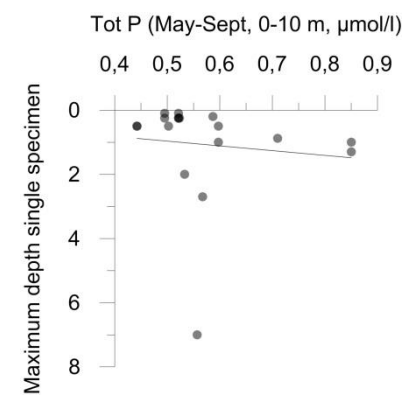
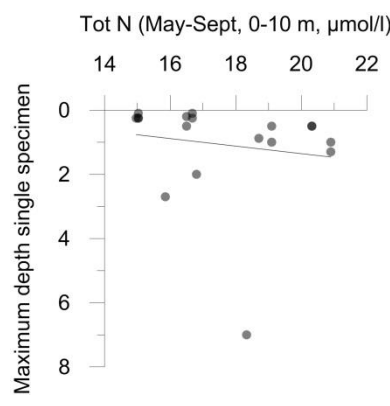
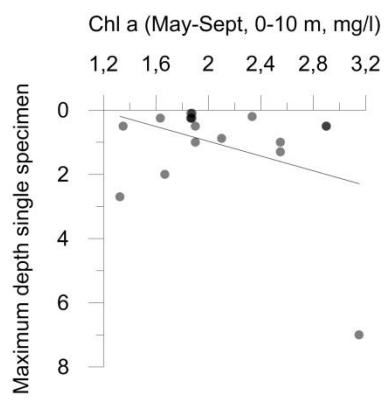
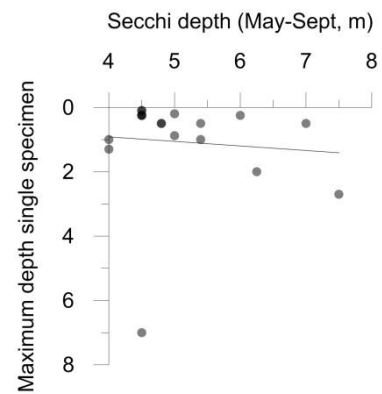
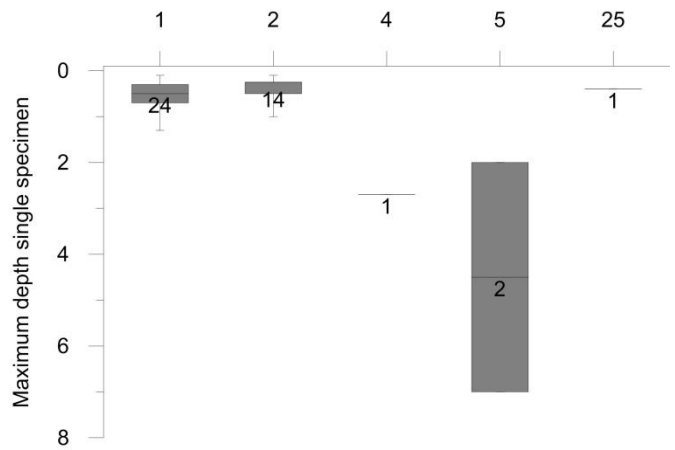
- OK
- No substrate info
- Substrate limited
- Truncated
- Other data



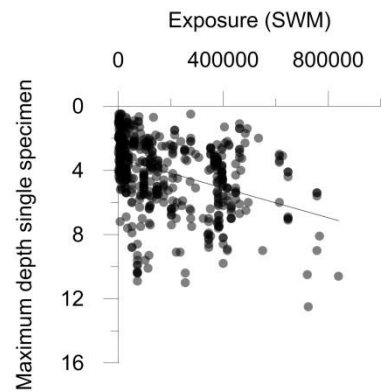
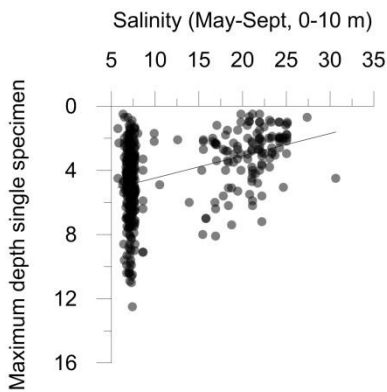
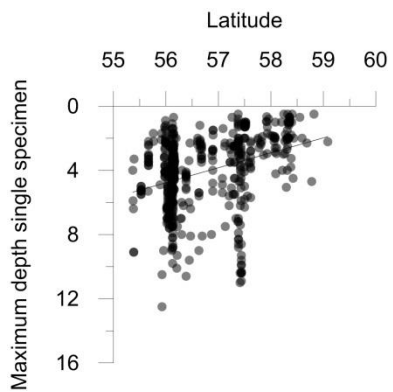
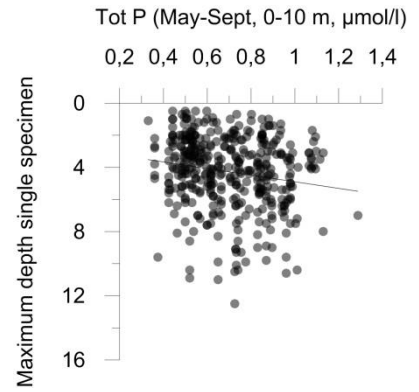
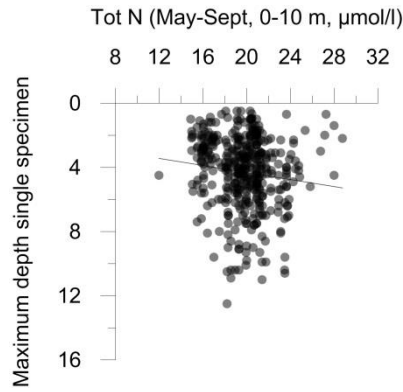
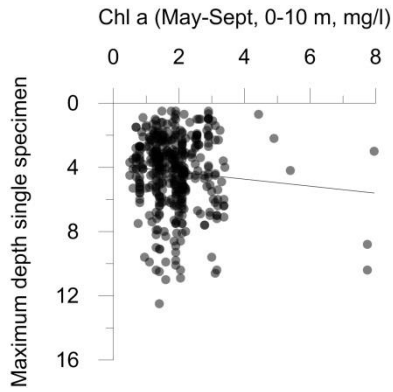
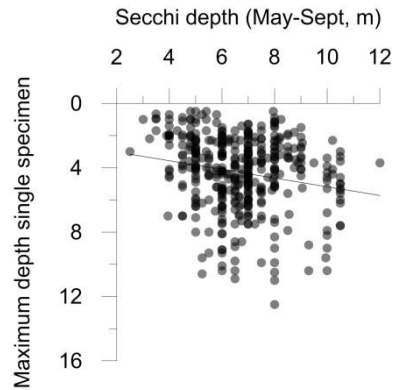
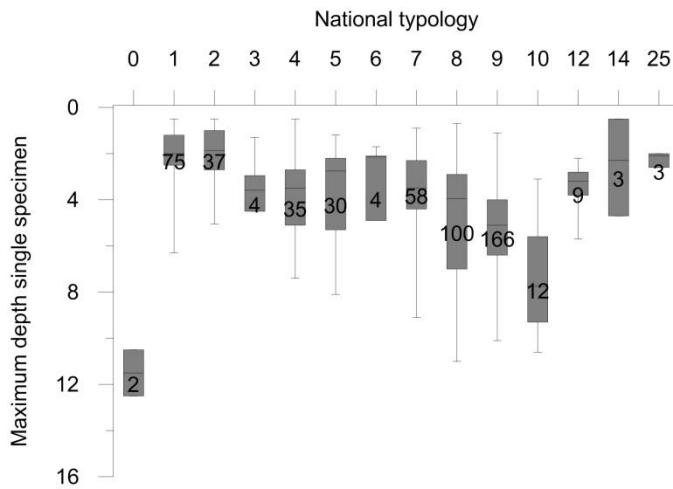
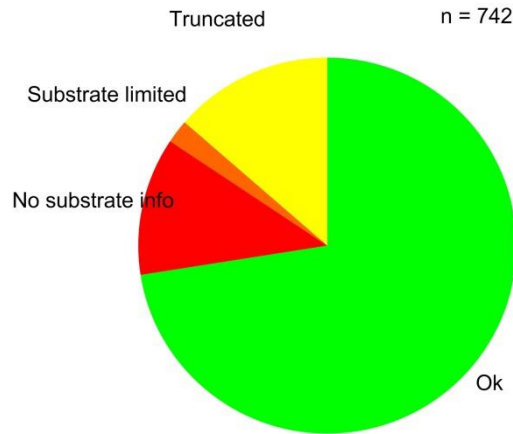
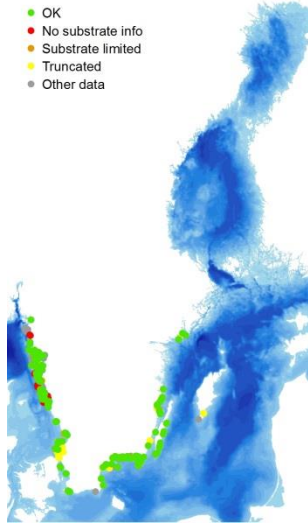
Substrate limited n = 56



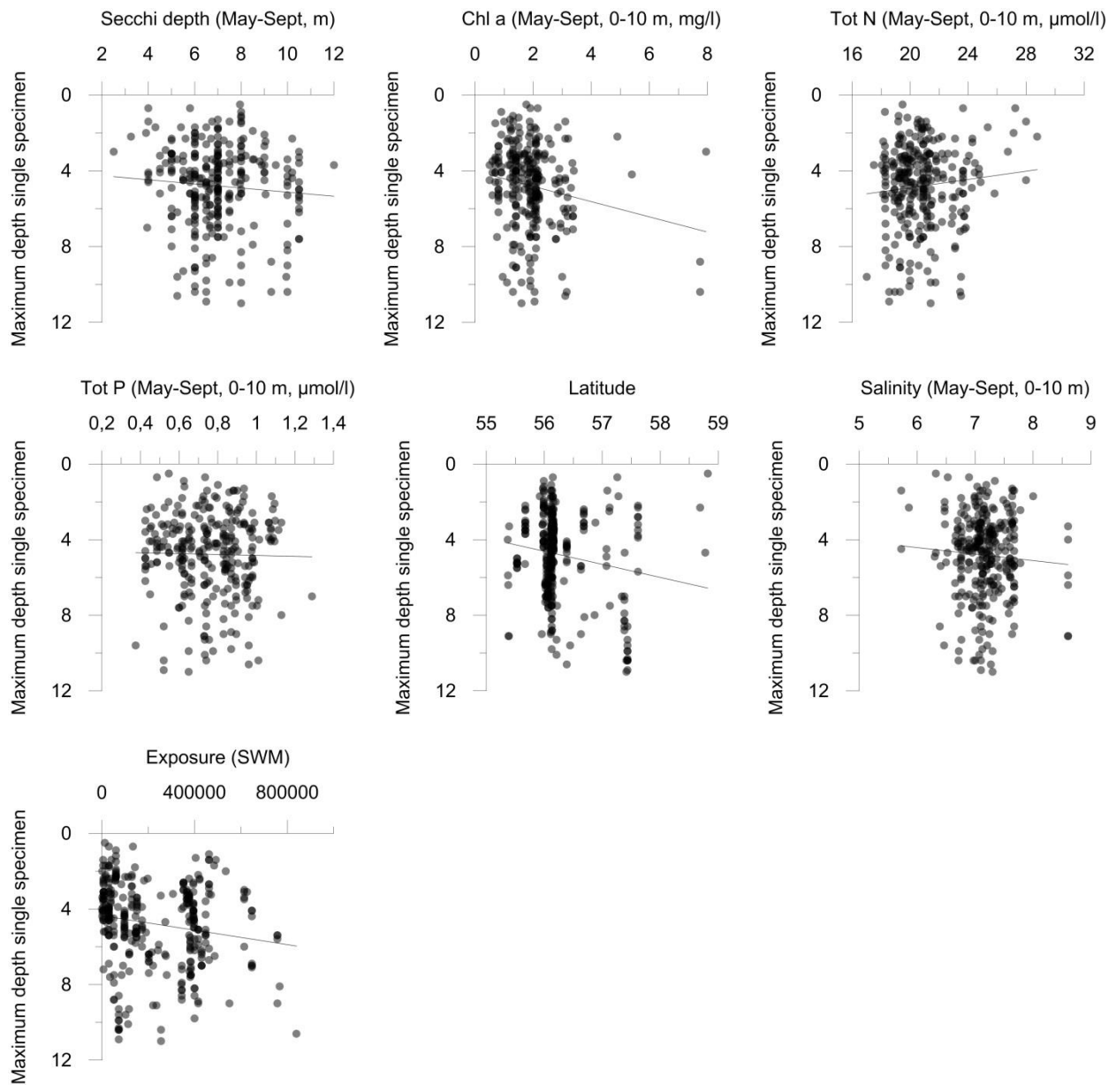
National typology



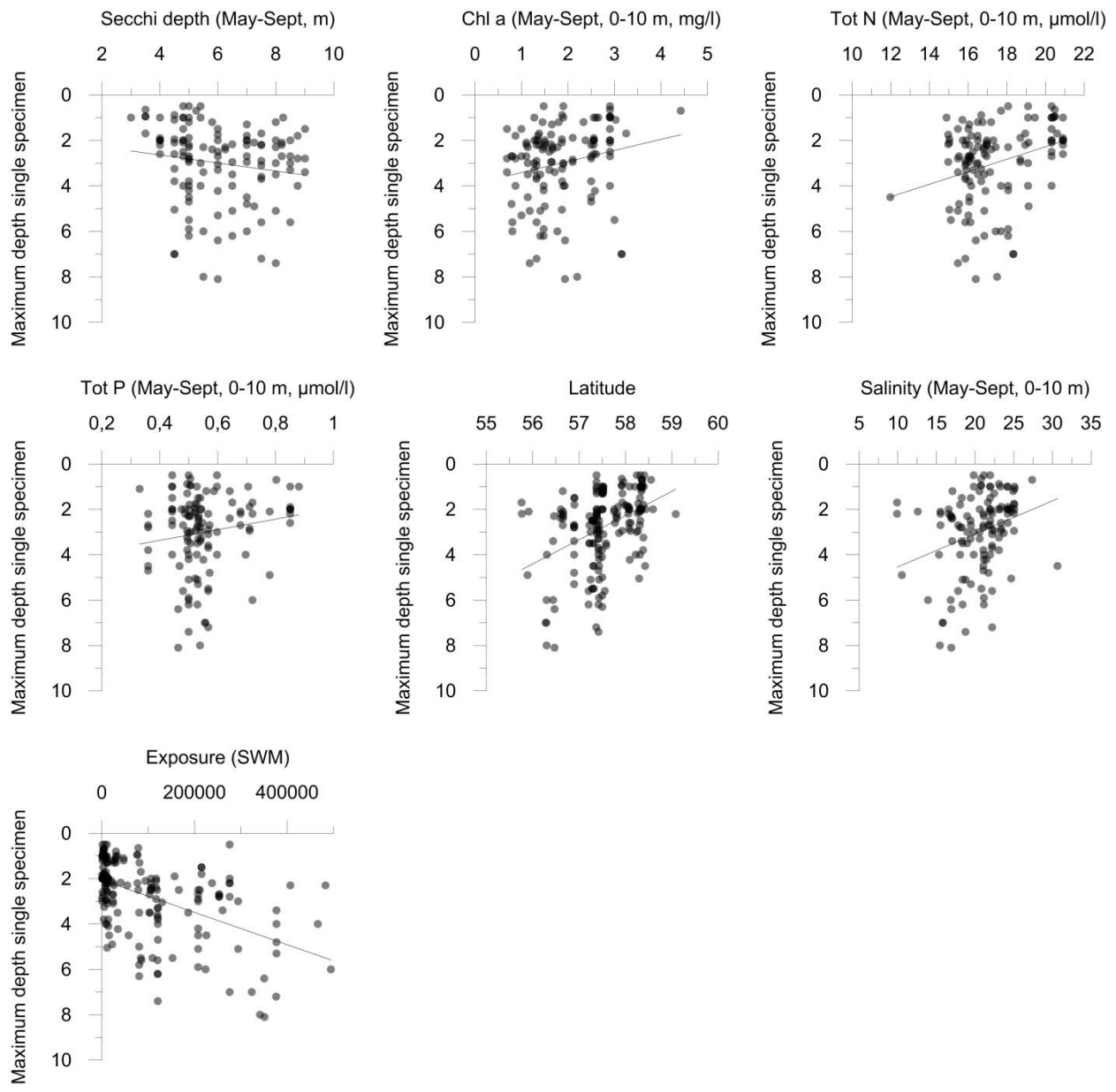
Fucus serratus



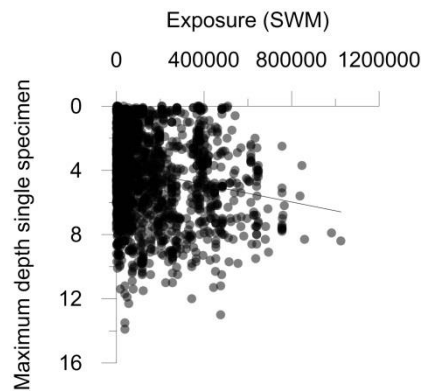
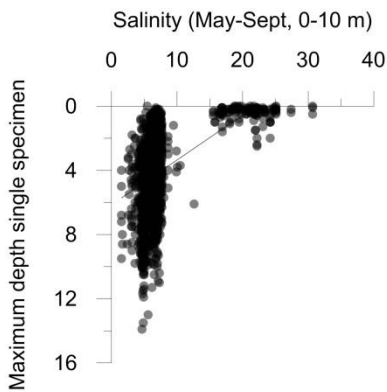
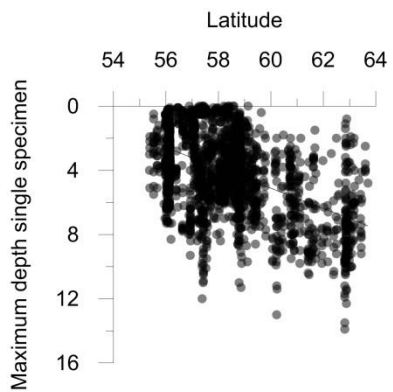
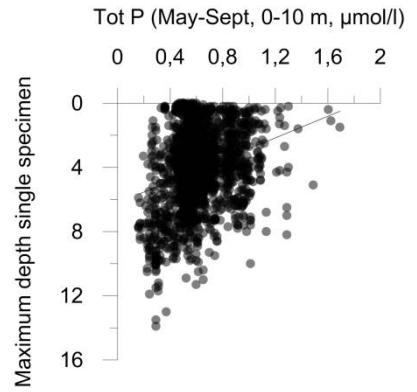
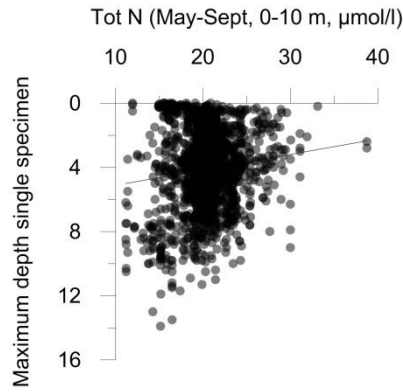
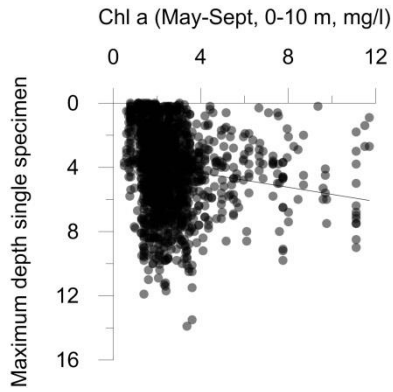
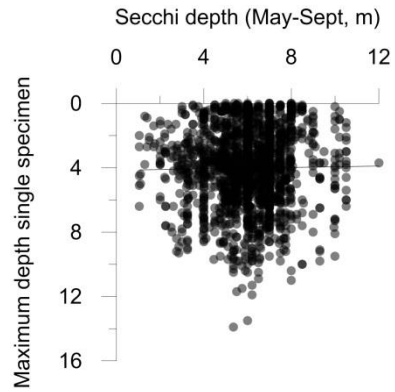
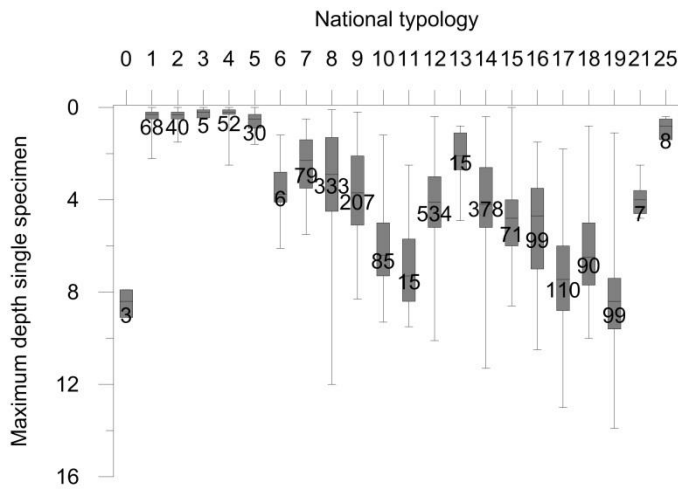
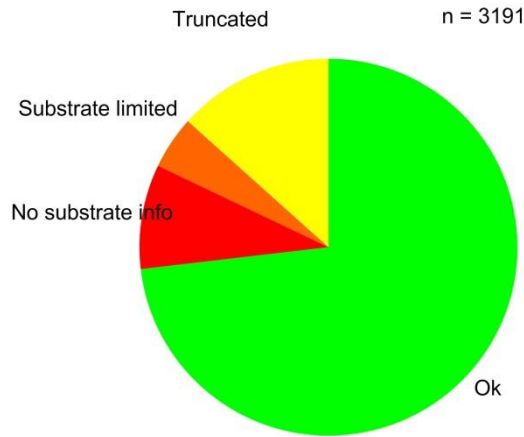
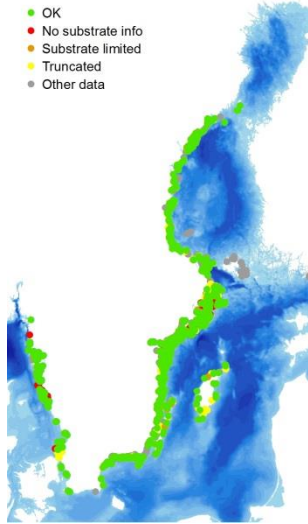
Fucus serratus east coast (type 7-24)



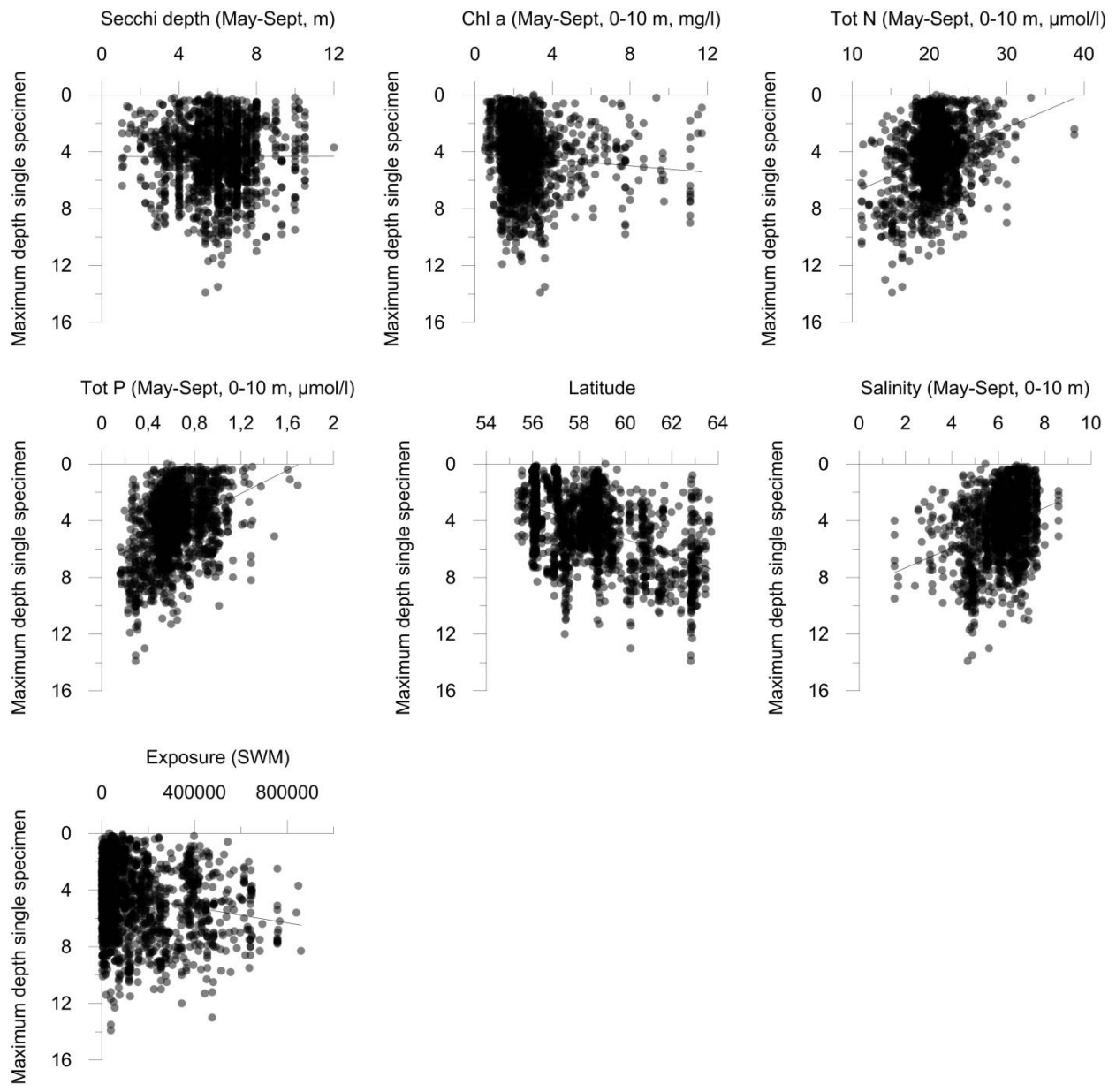
Fucus serratus west coast (type 1-6 and 25)



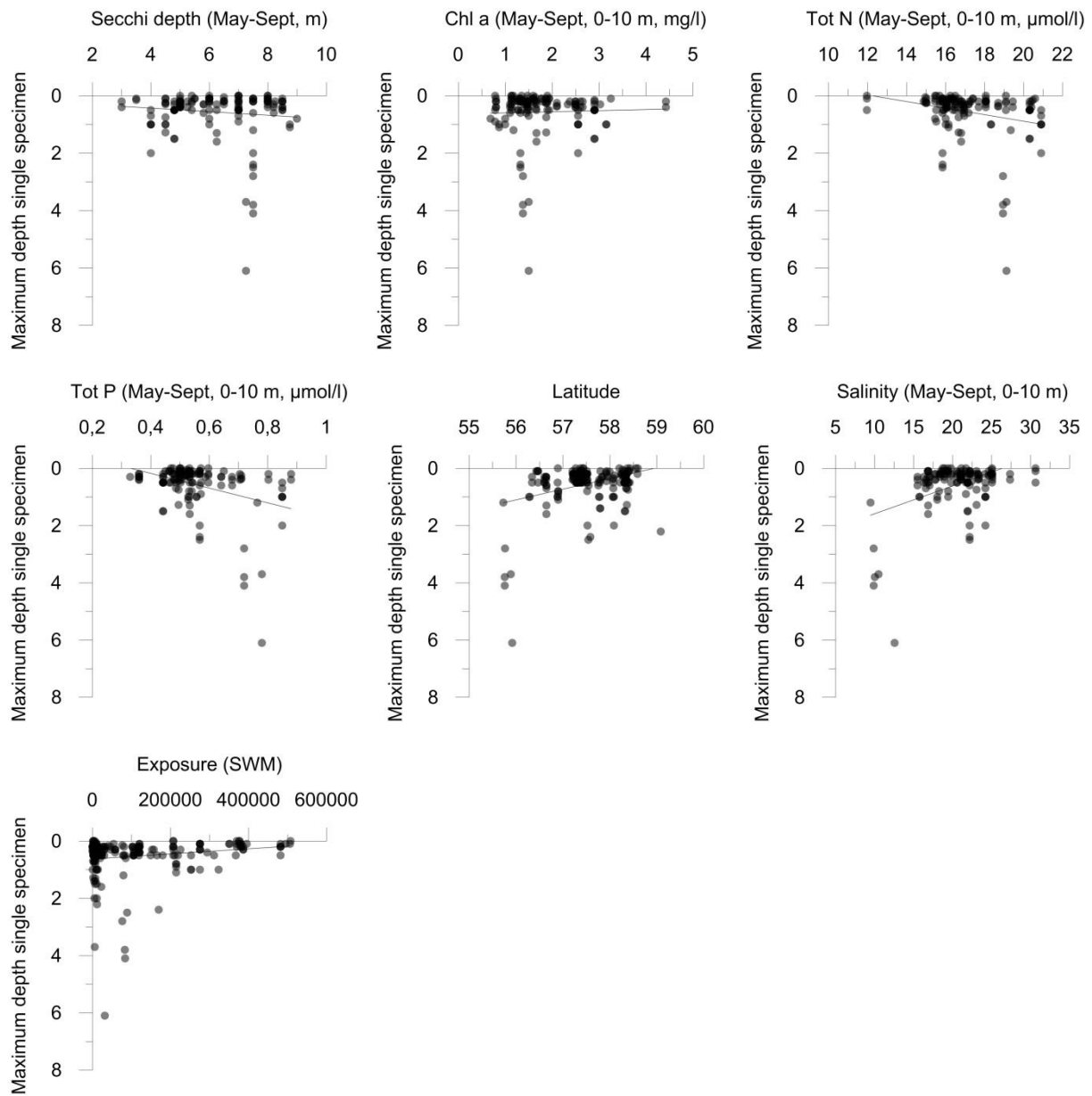
Fucus vesiculosus



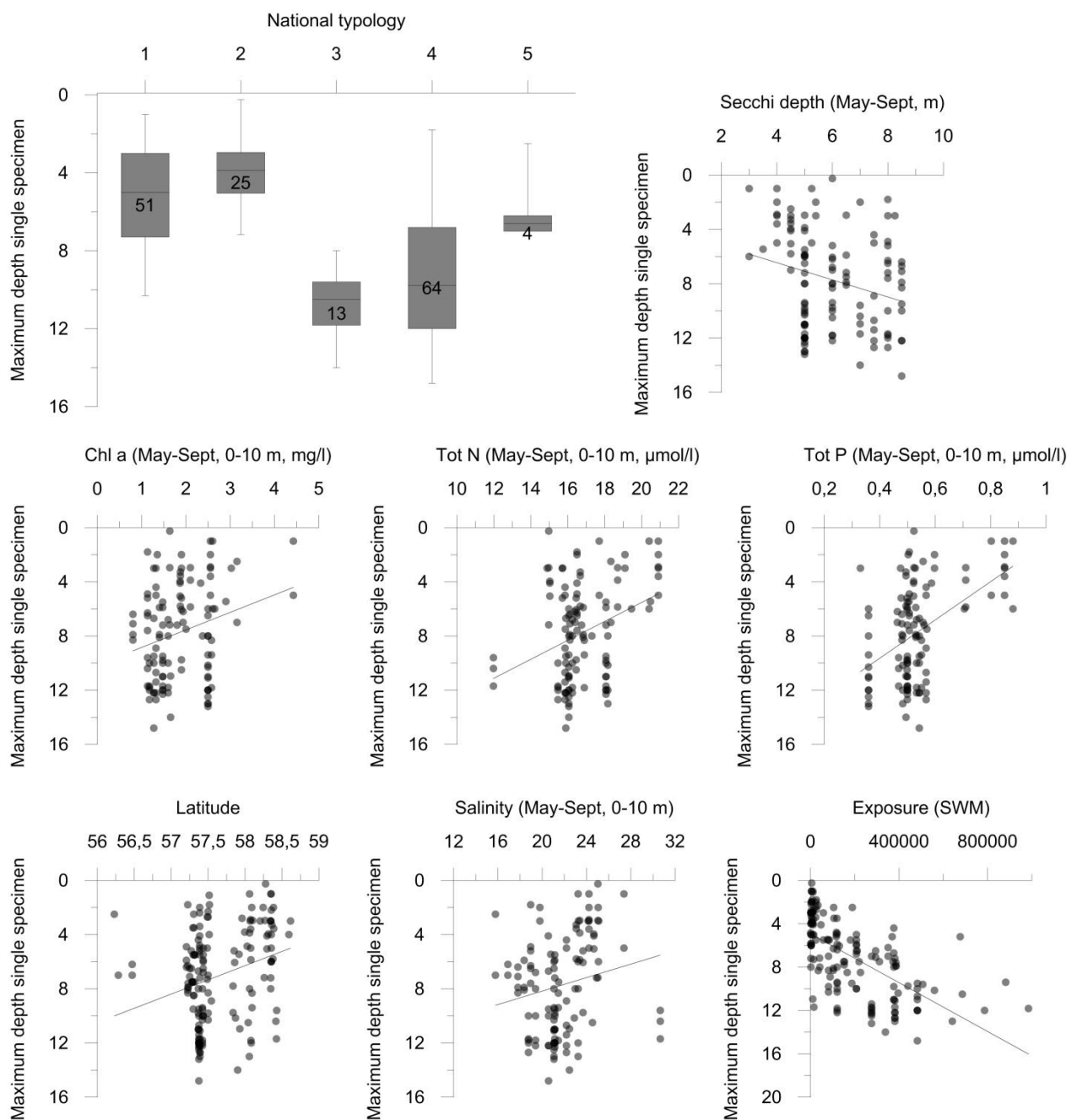
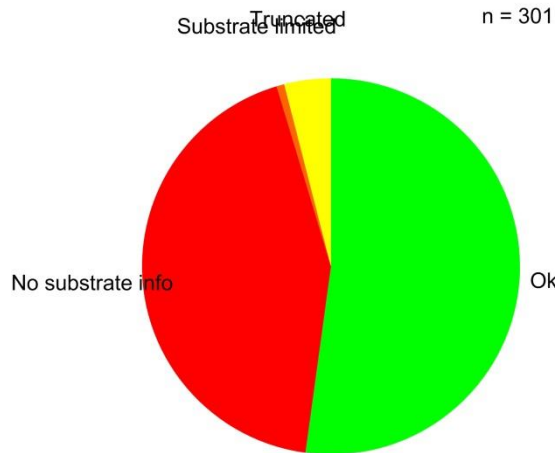
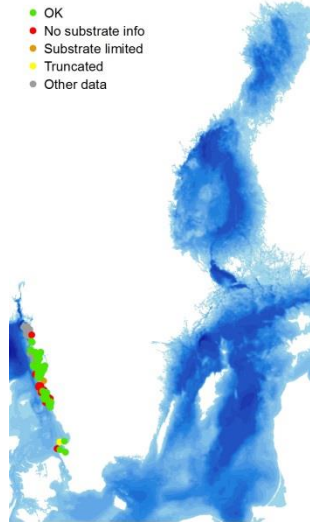
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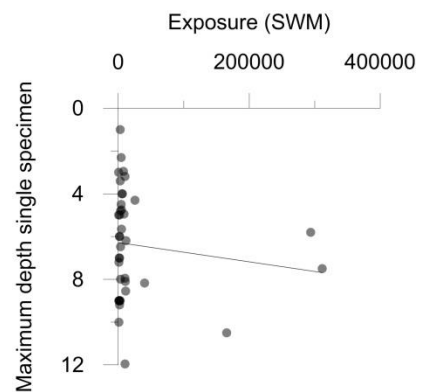
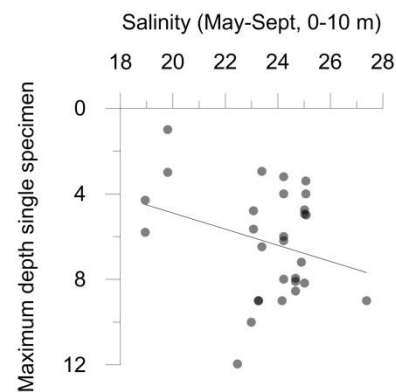
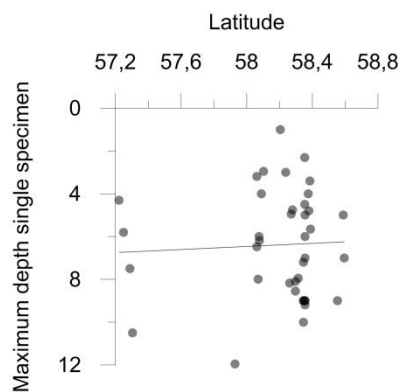
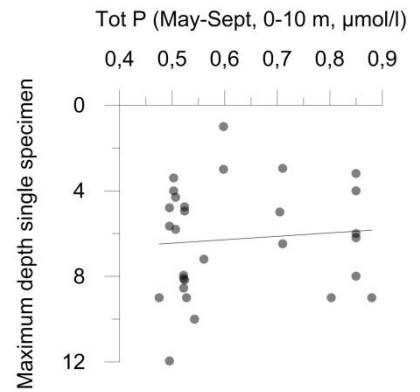
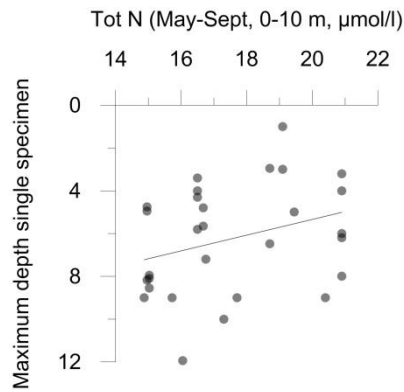
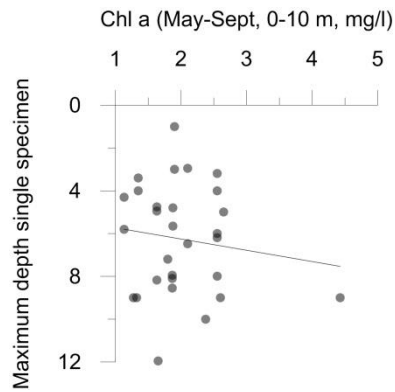
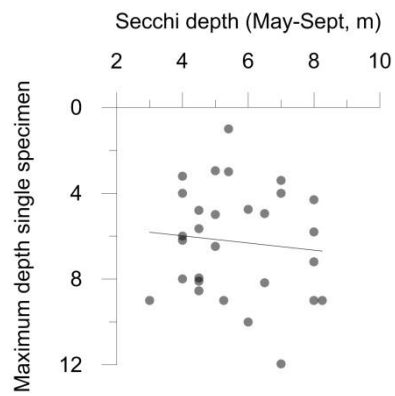
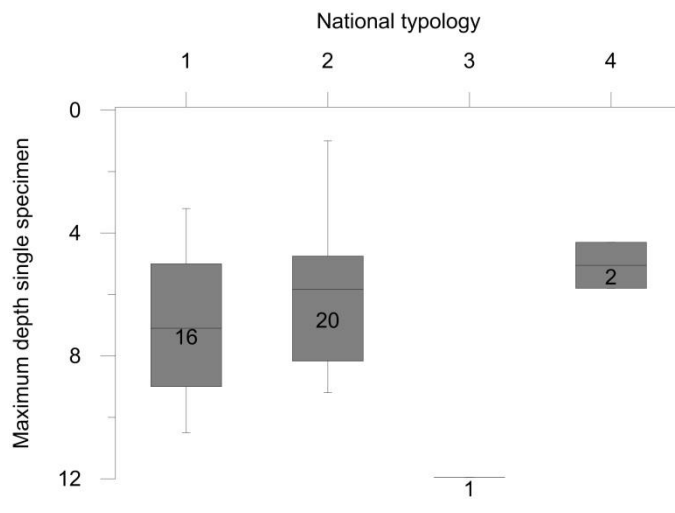
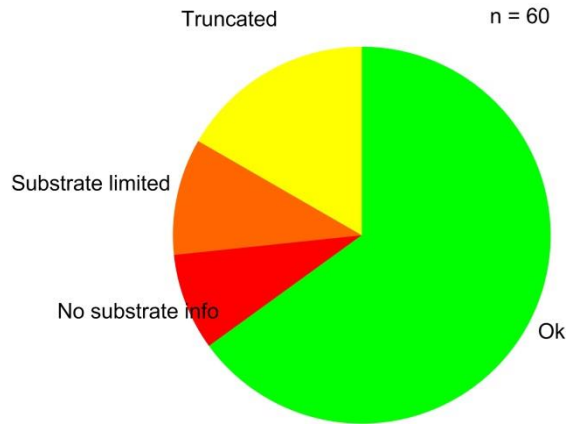
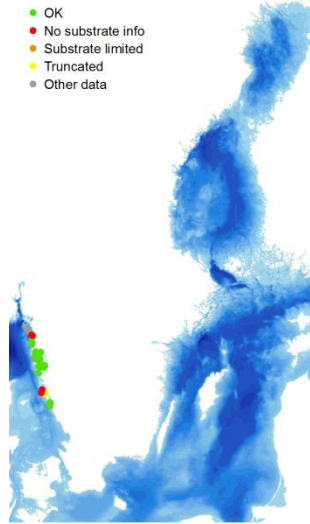
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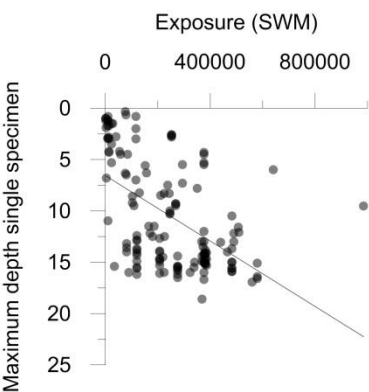
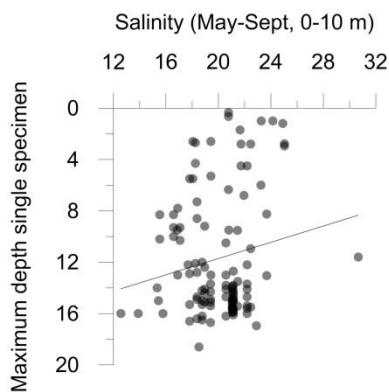
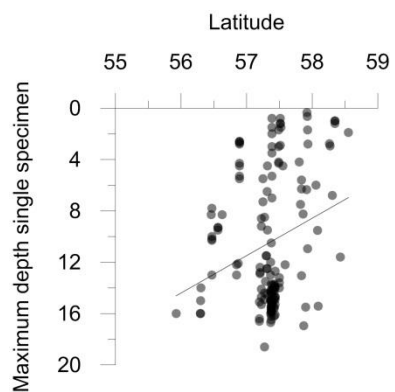
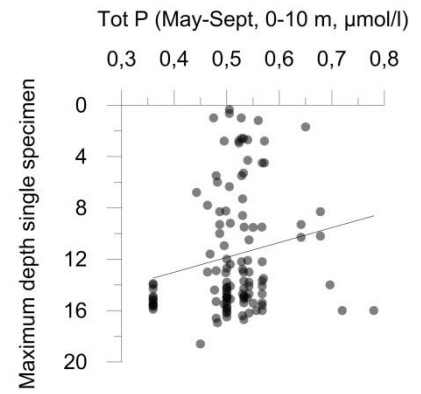
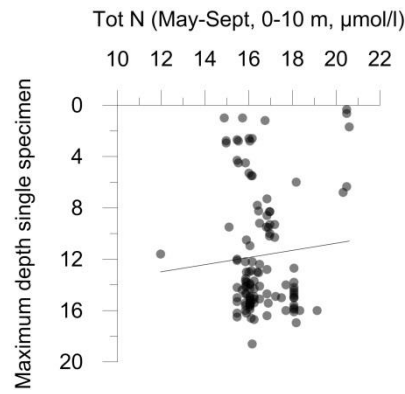
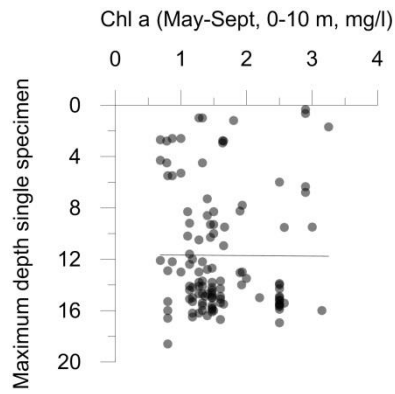
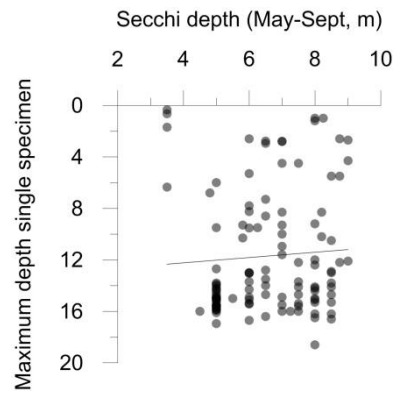
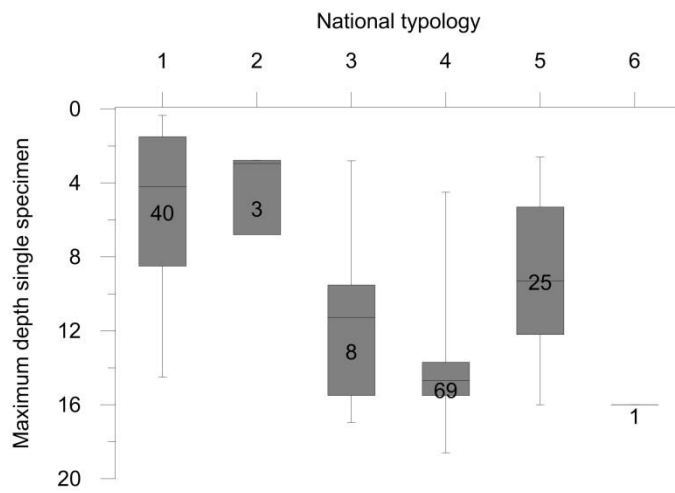
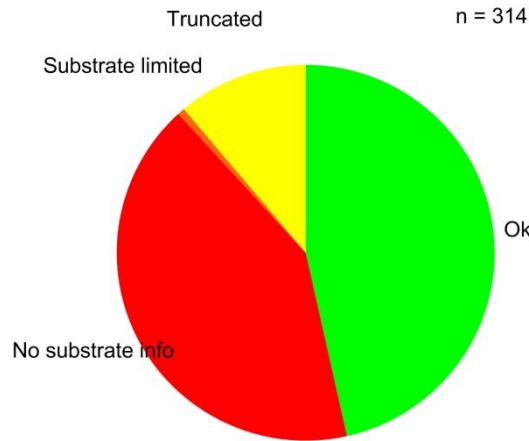
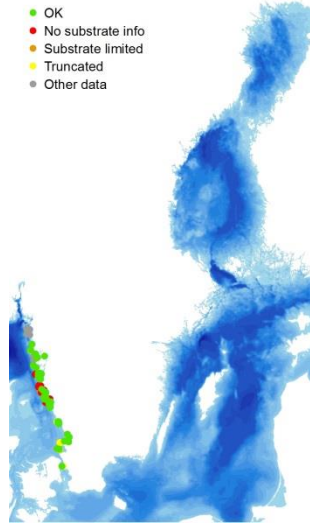
Halidrys siliquosa



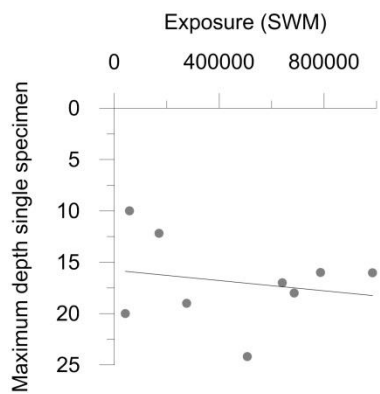
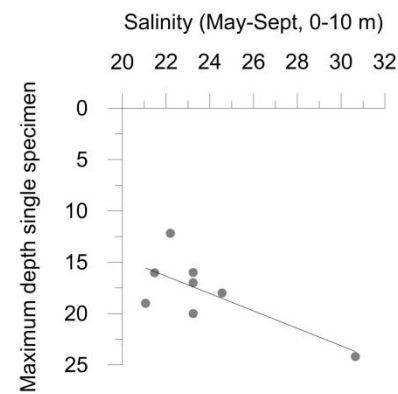
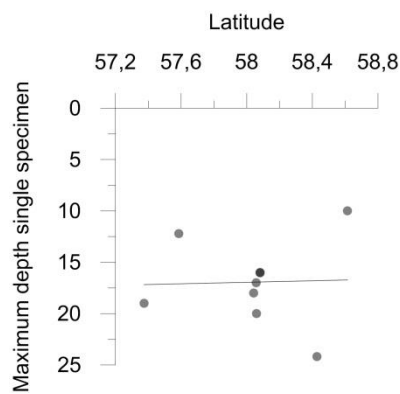
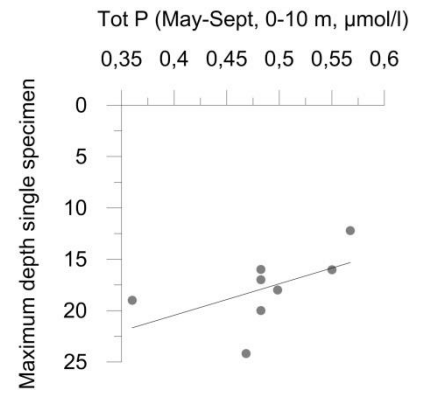
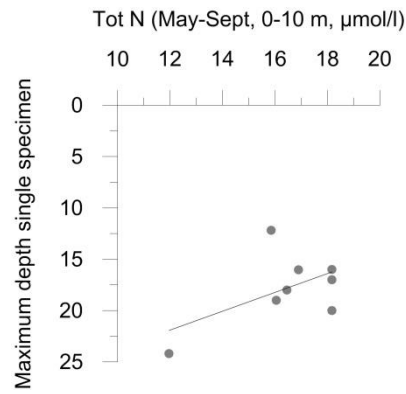
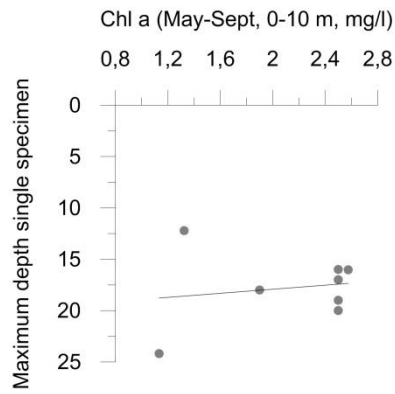
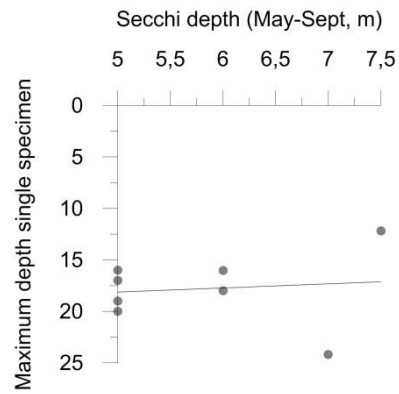
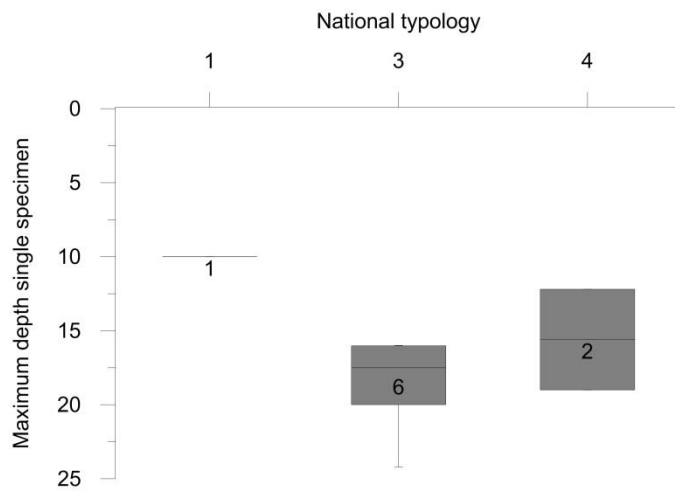
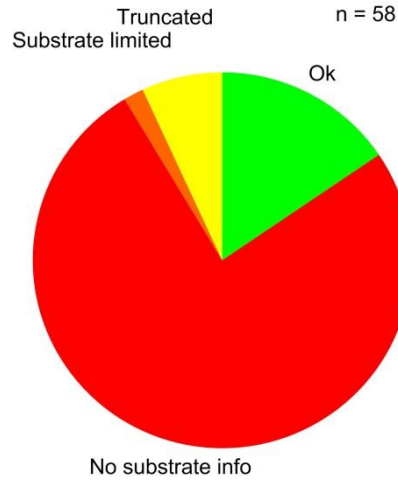
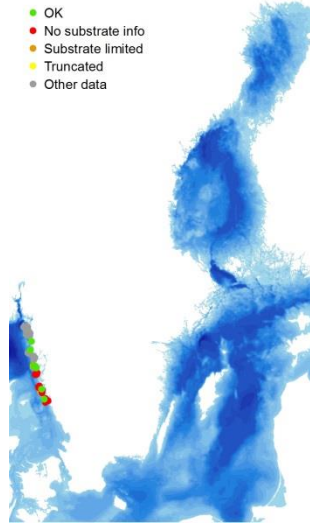
Sargassum muticum



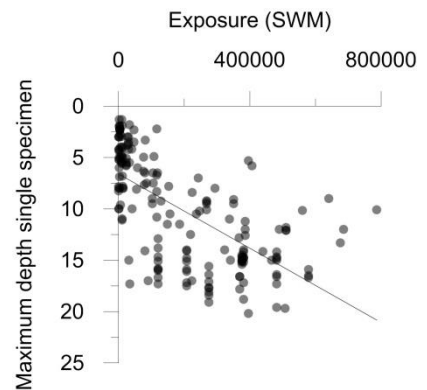
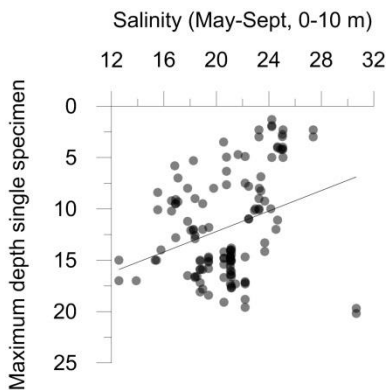
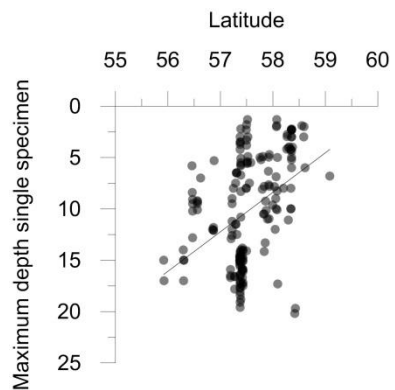
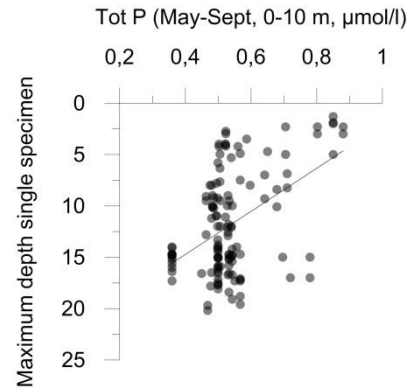
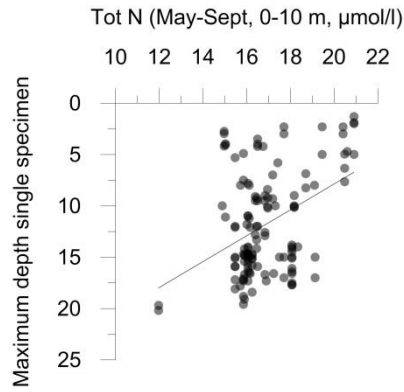
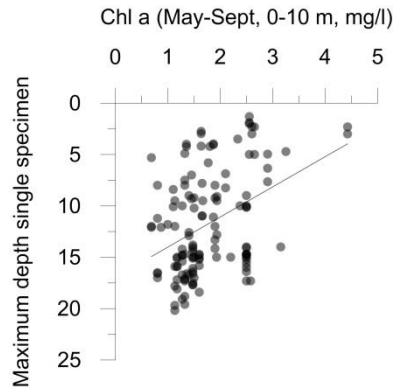
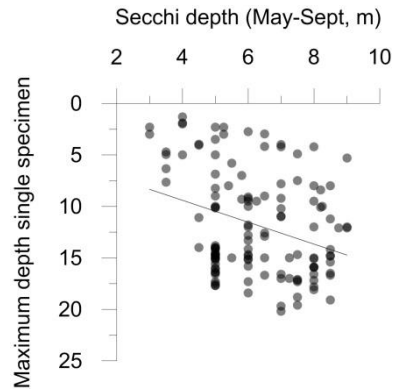
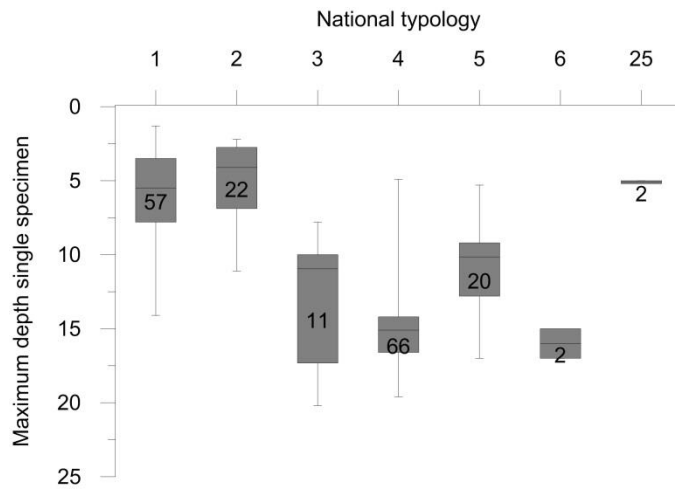
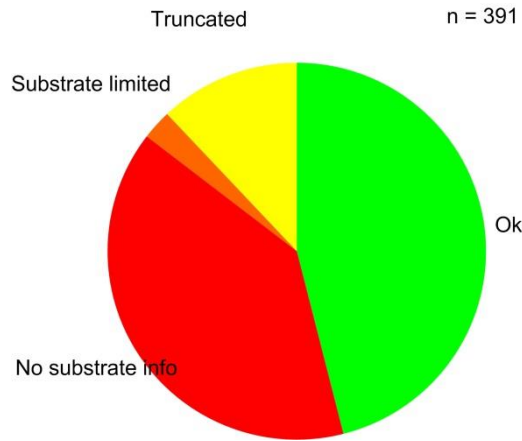
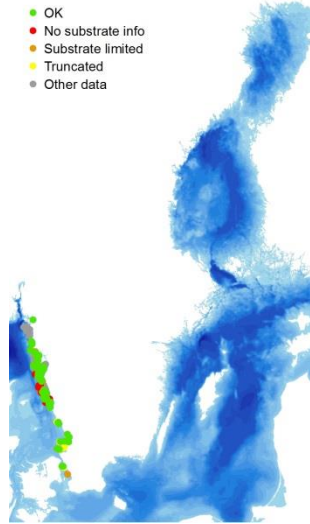
Laminaria digitata



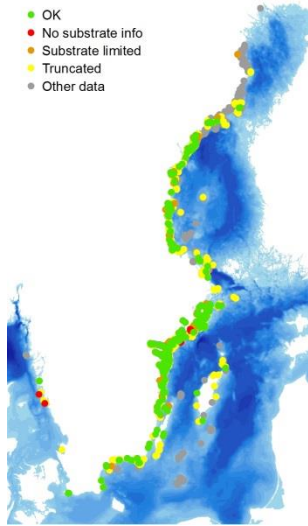
Laminaria hyperborea



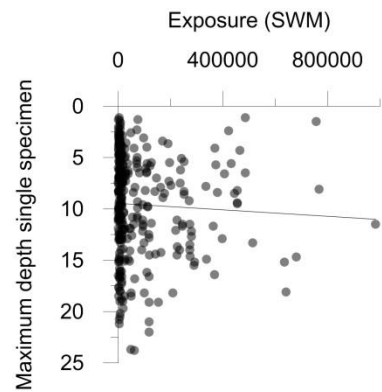
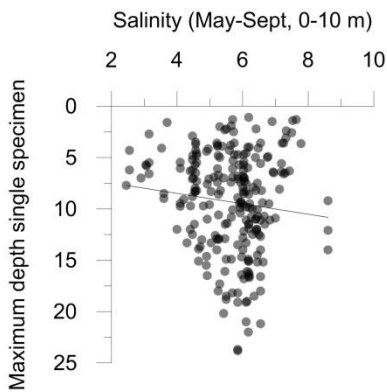
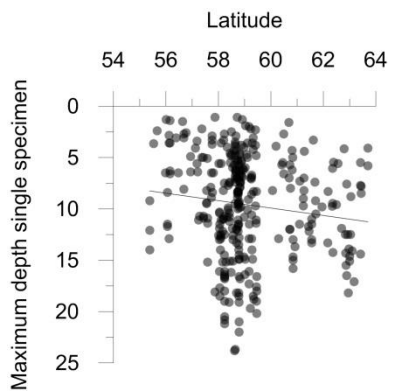
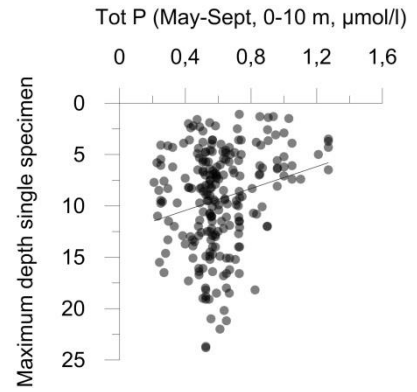
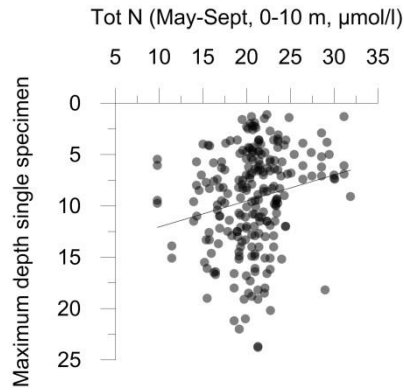
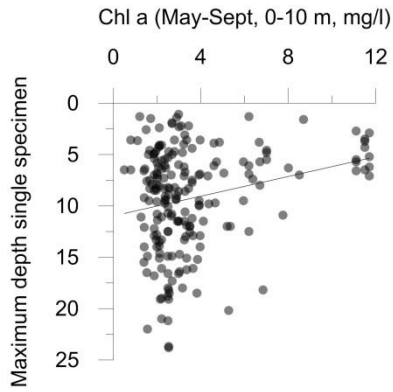
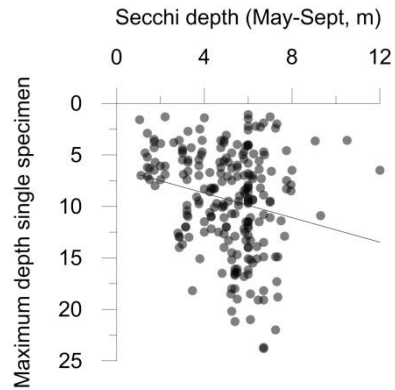
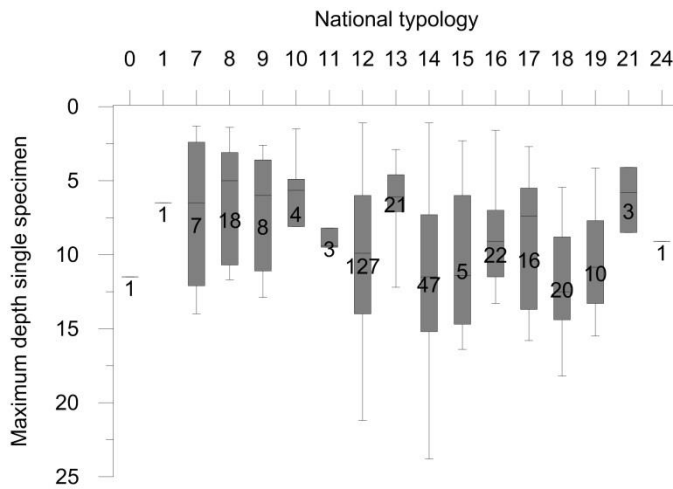
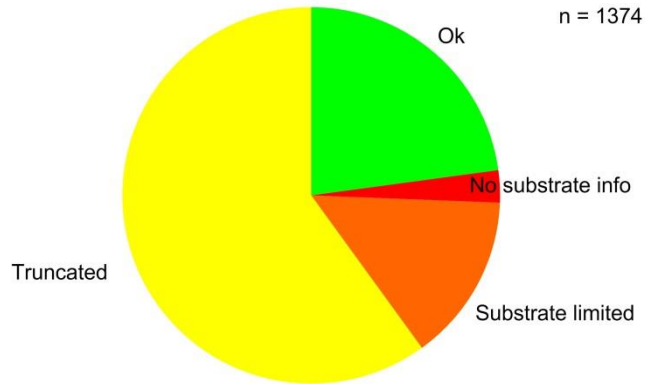
Saccharina latissima



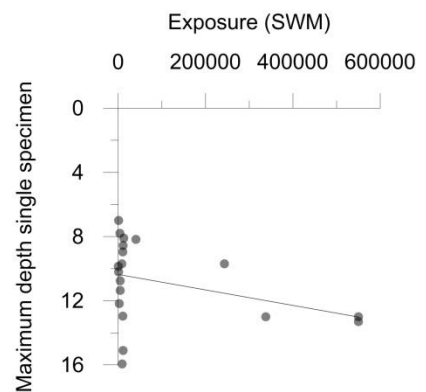
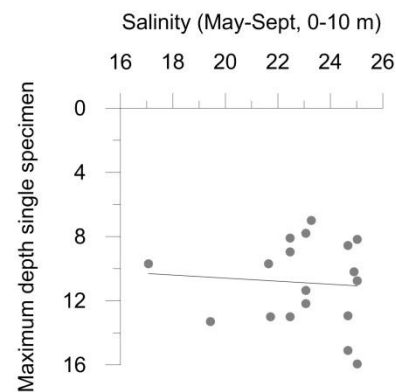
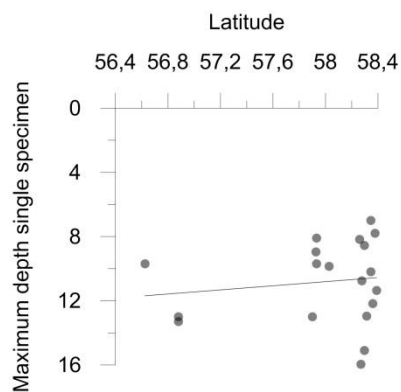
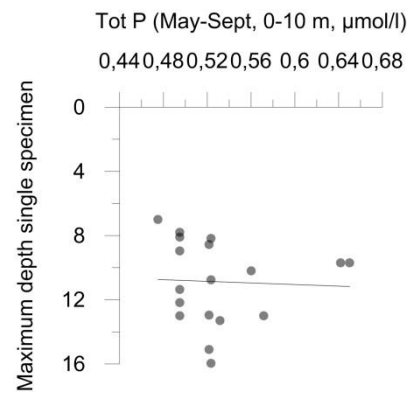
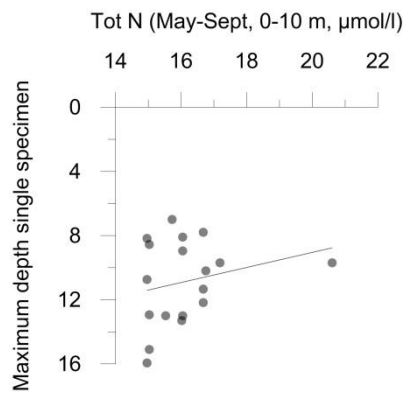
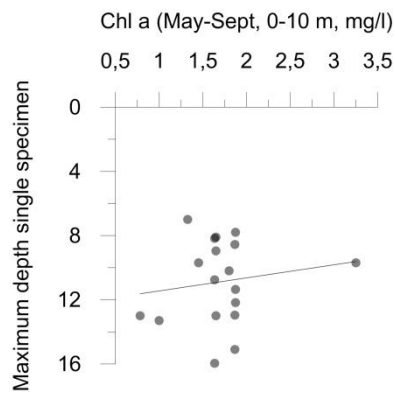
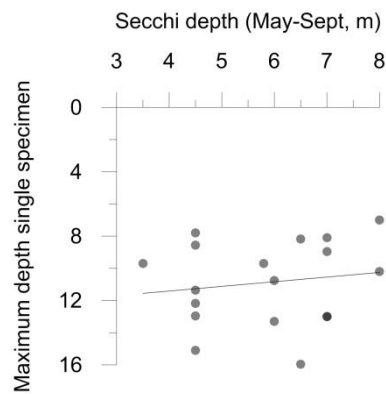
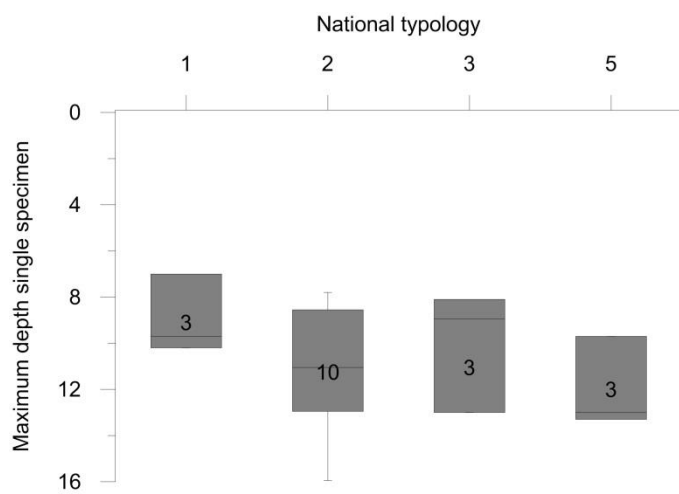
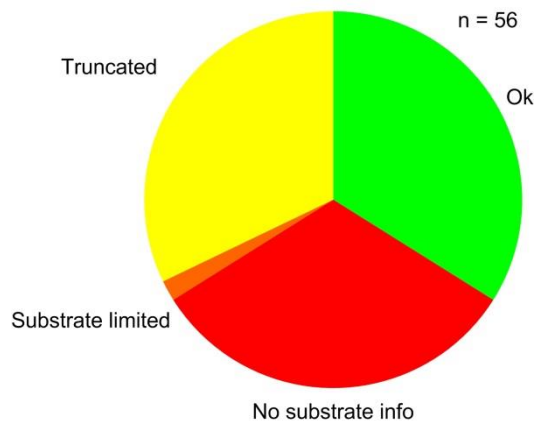
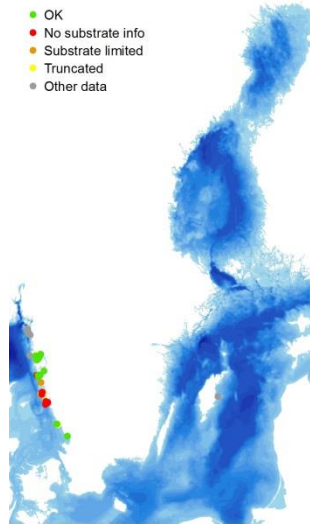
Battersia arctica



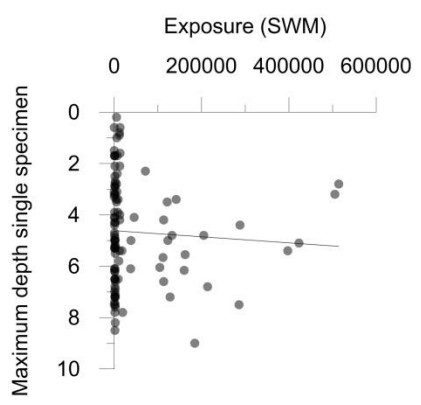
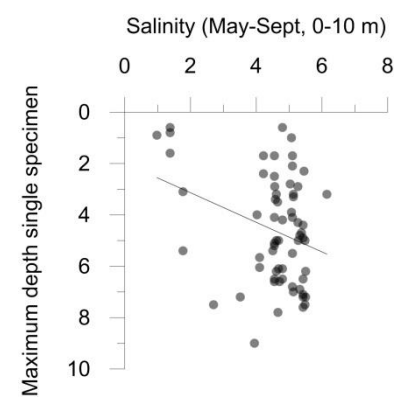
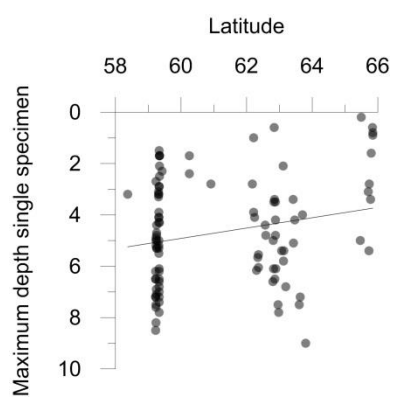
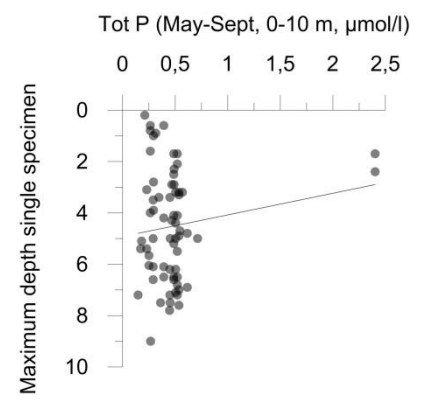
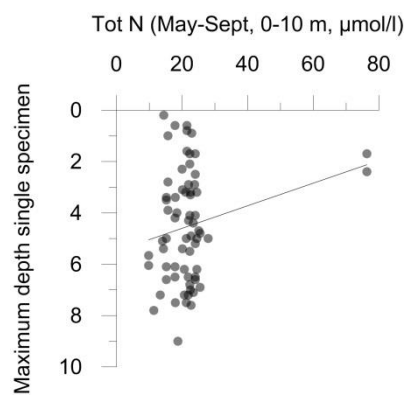
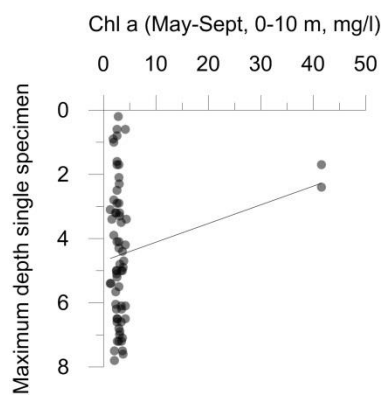
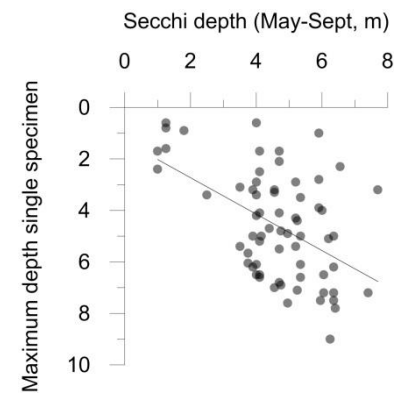
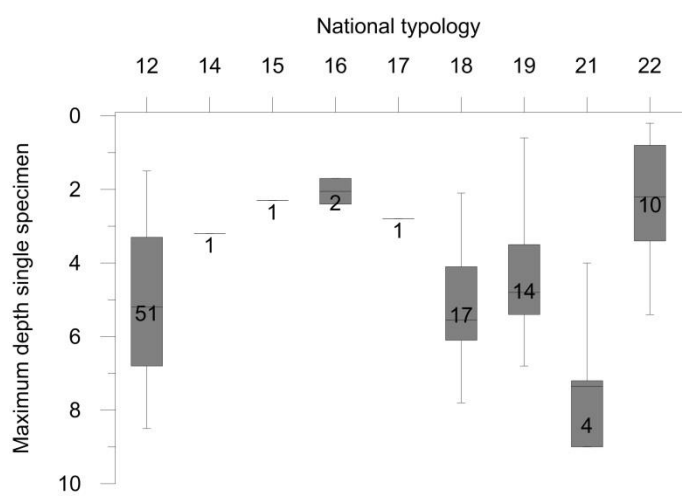
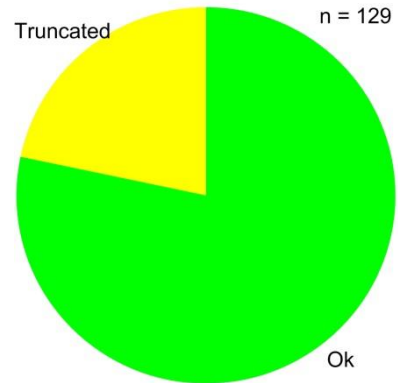
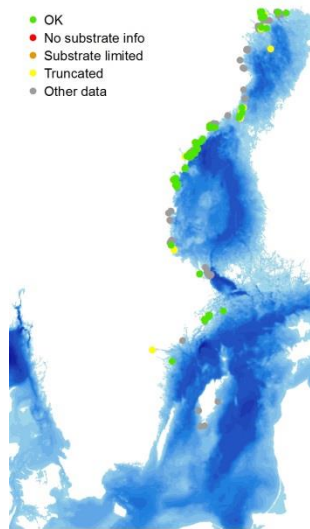
- OK
- No substrate info
- Substrate limited
- Truncated
- Other data



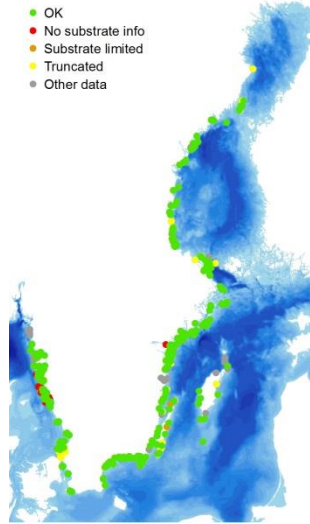
Chaetopteris plumosa



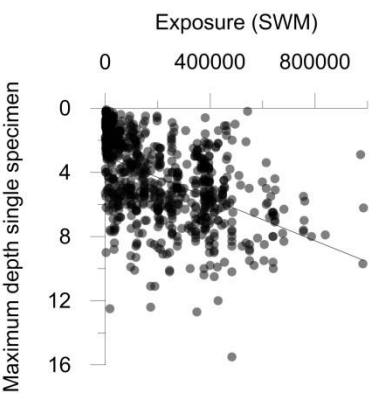
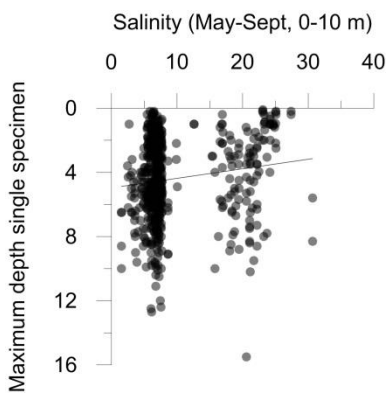
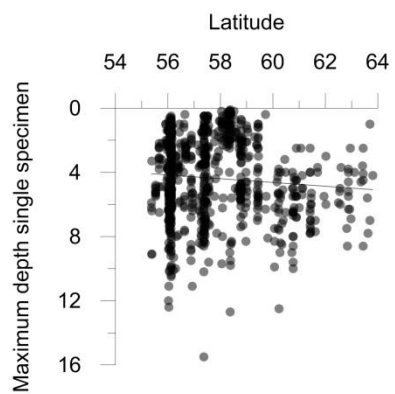
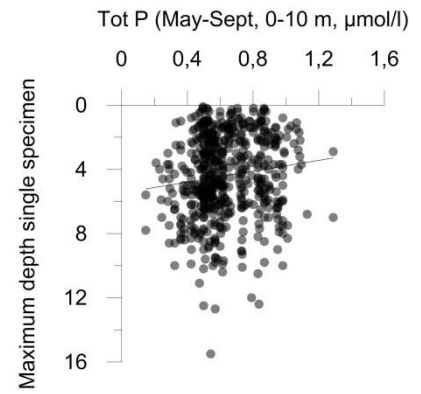
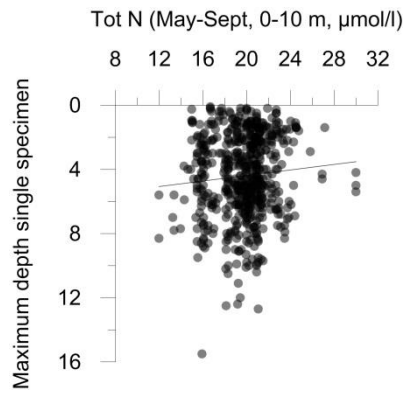
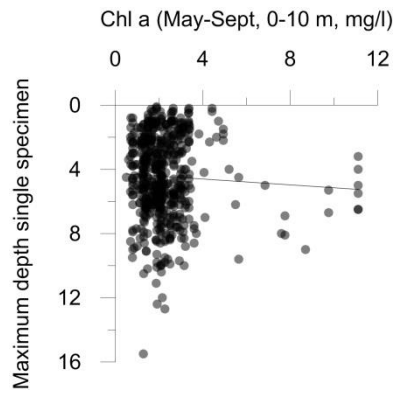
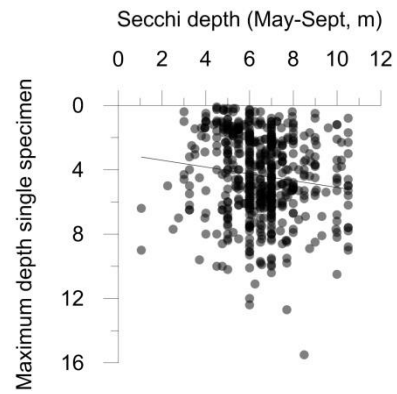
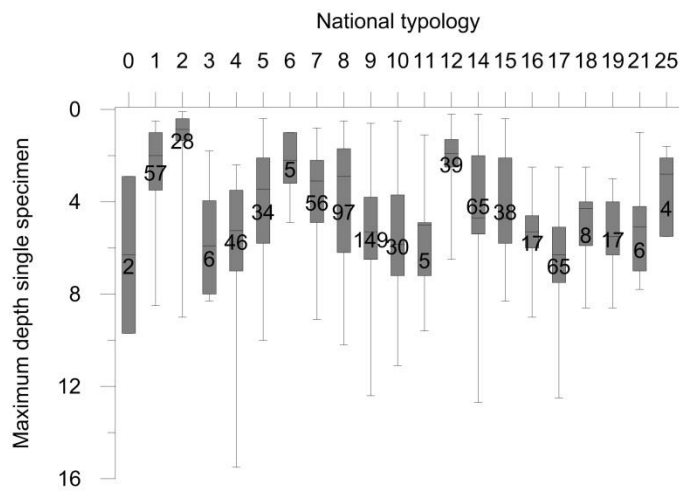
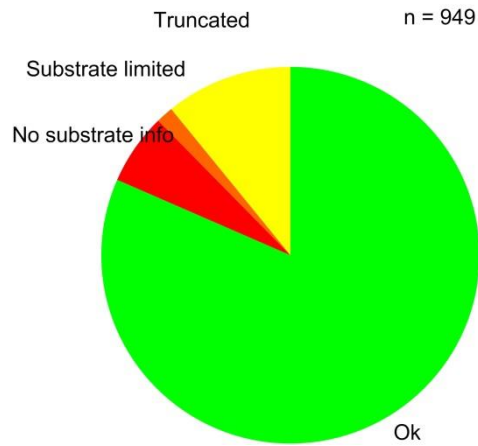
Aegagropila linnaei



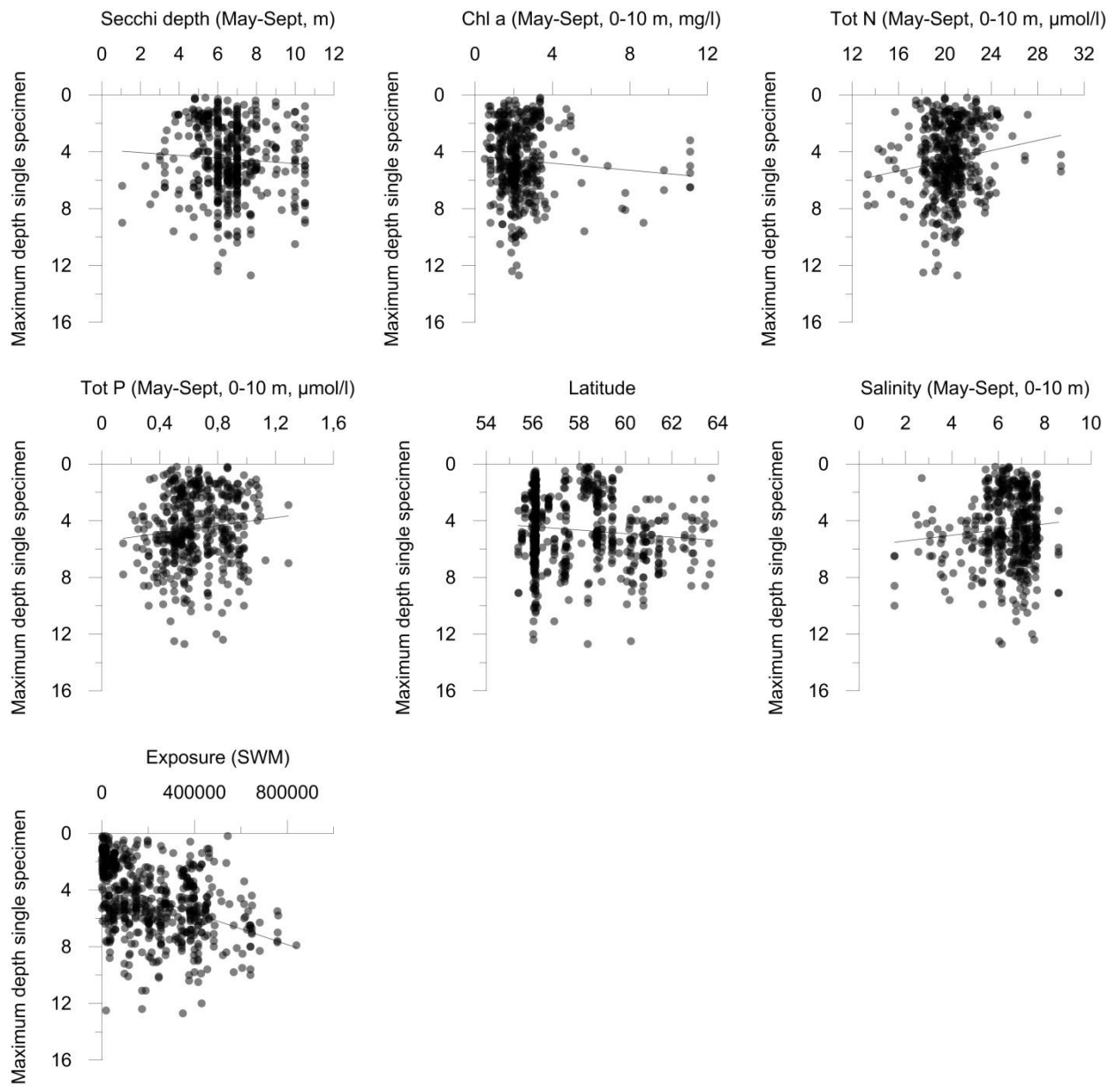
Cladophora rupestris



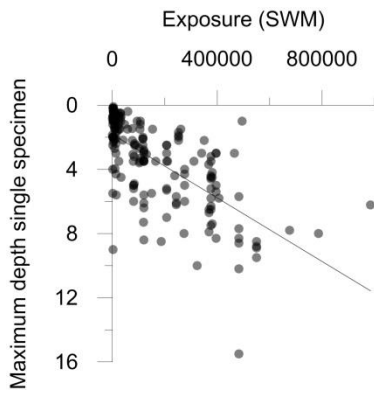
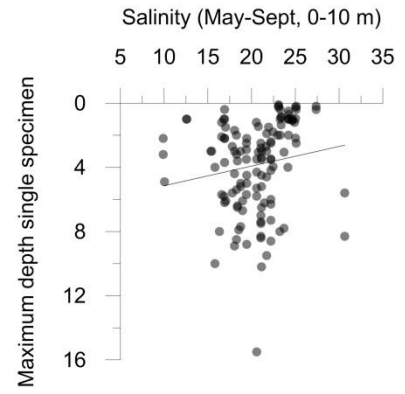
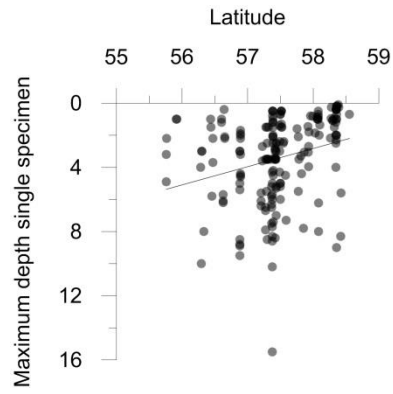
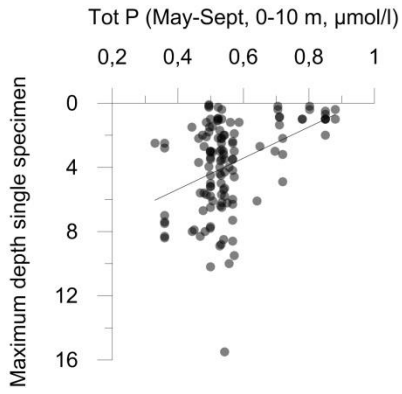
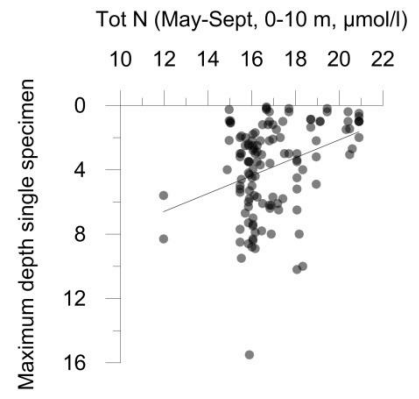
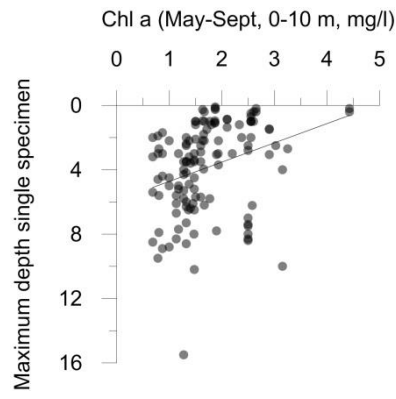
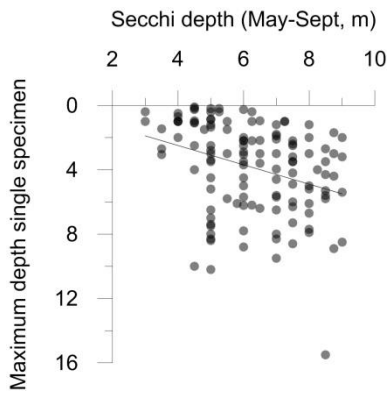
- OK
- No substrate info
- Substrate limited
- Truncated
- Other data



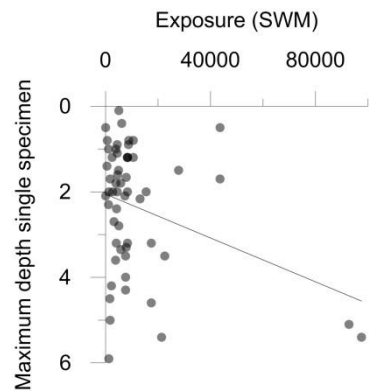
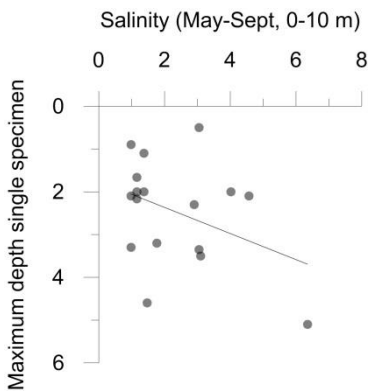
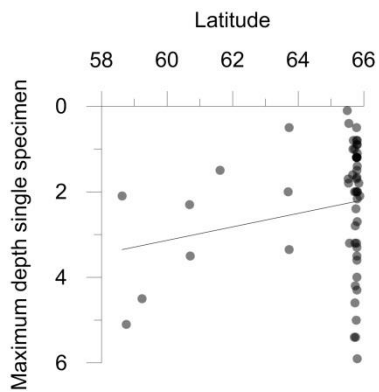
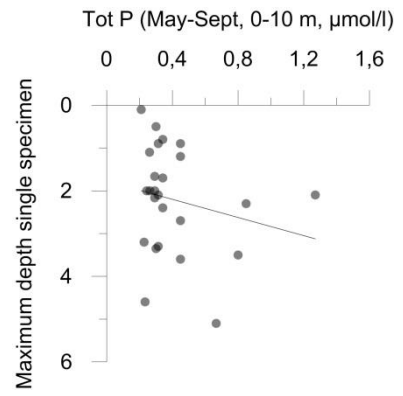
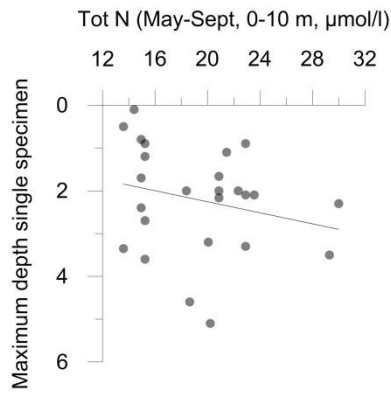
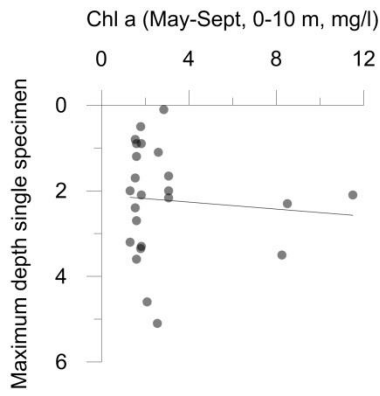
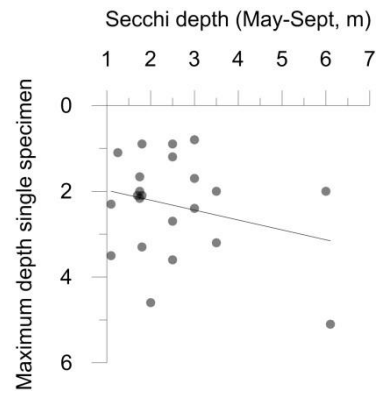
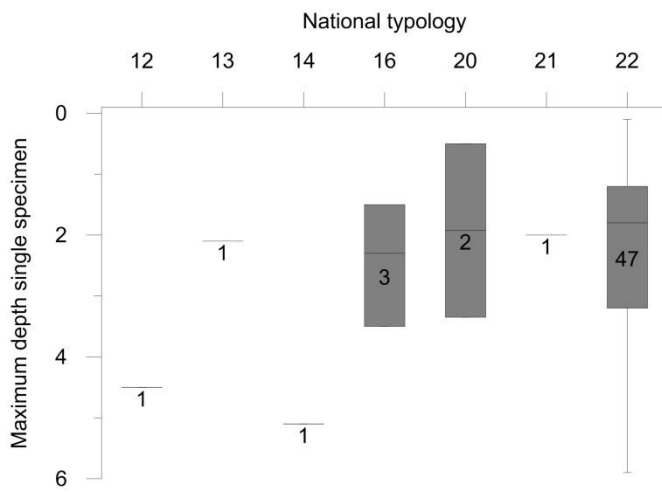
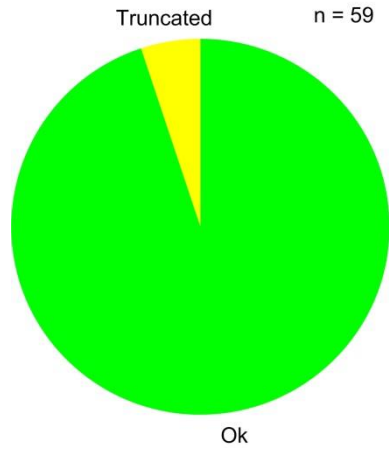
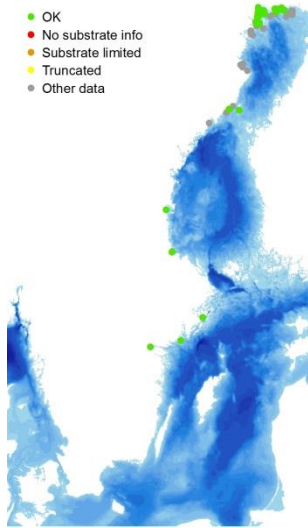
Cladophora rupestris east coast (type 7-24)



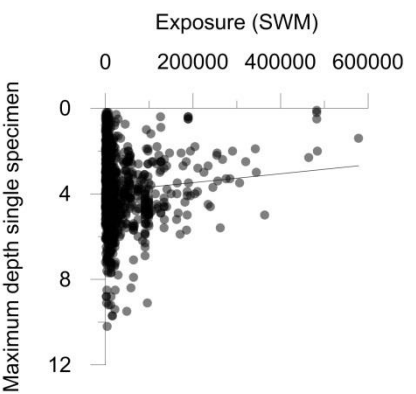
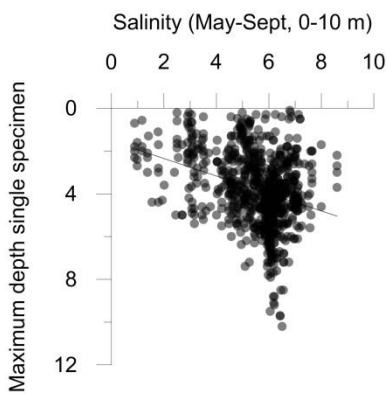
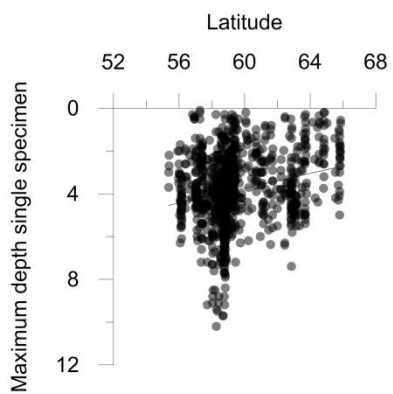
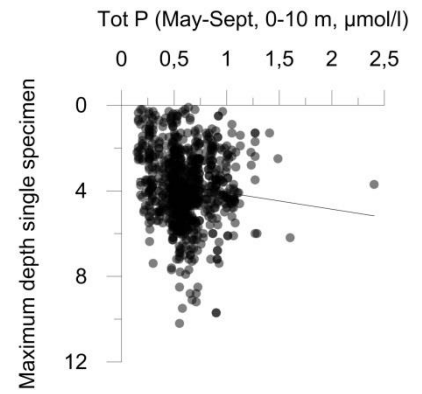
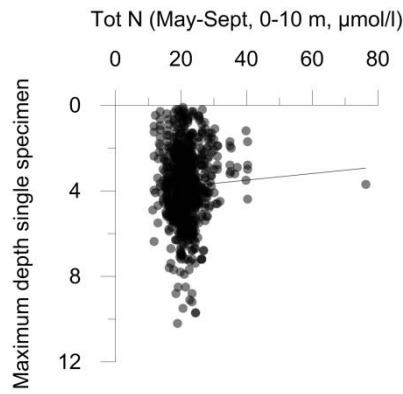
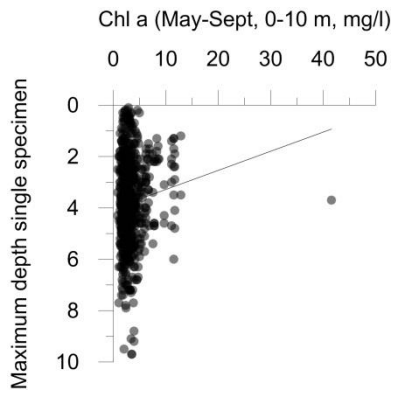
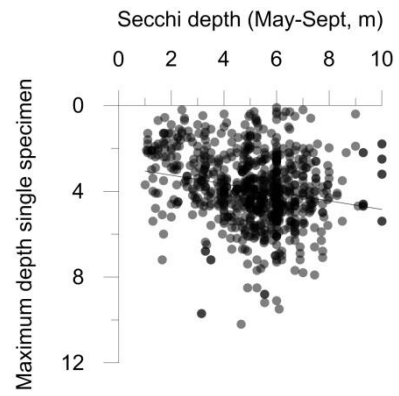
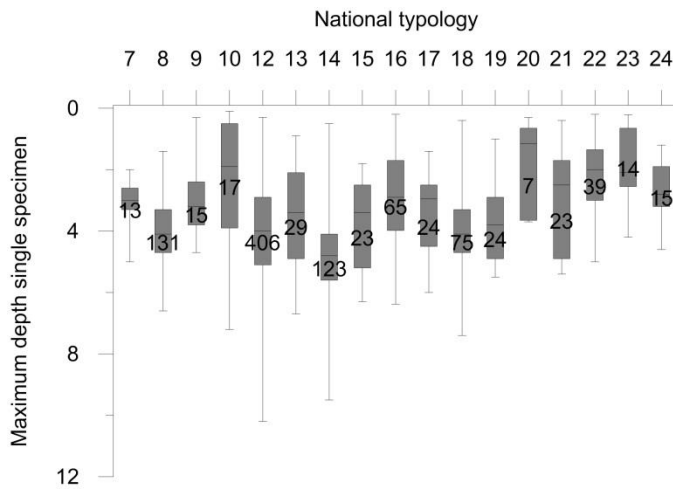
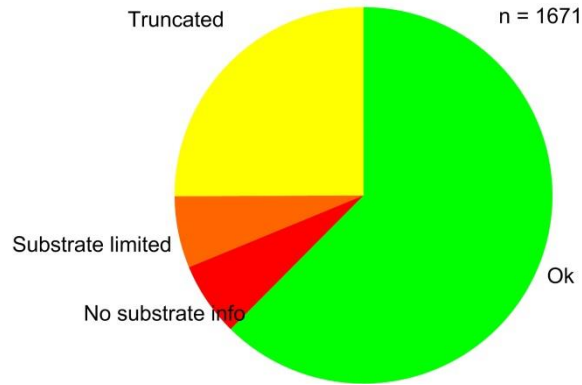
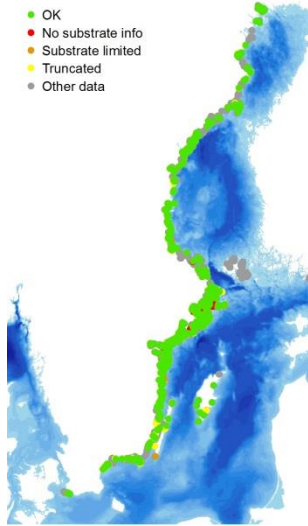
Cladophora rupestris west coast (type 1-6 and 25)



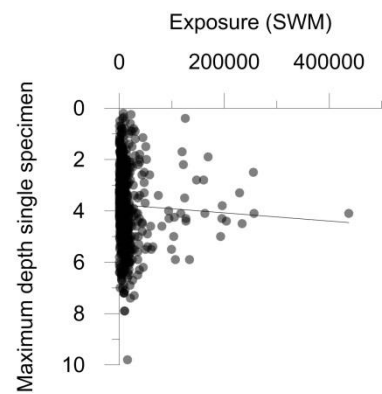
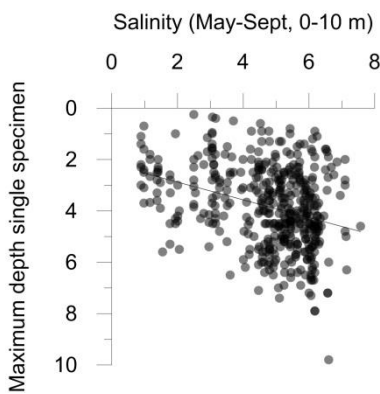
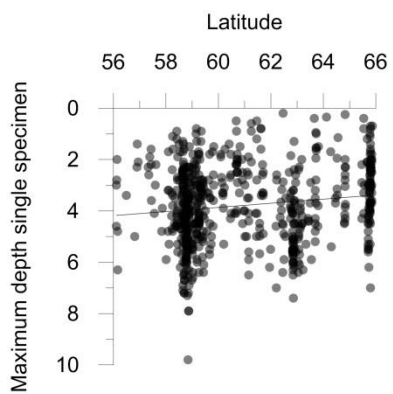
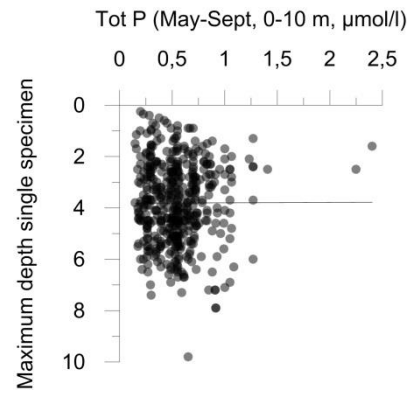
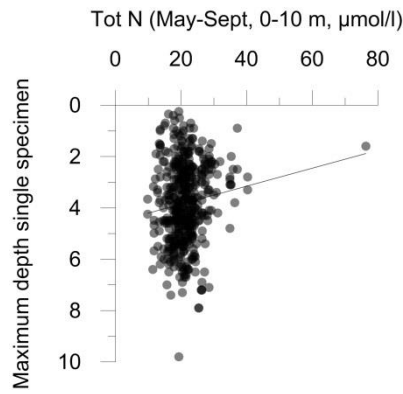
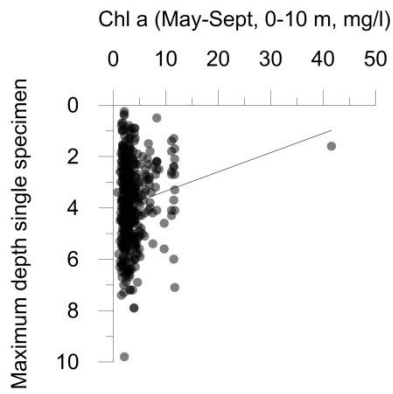
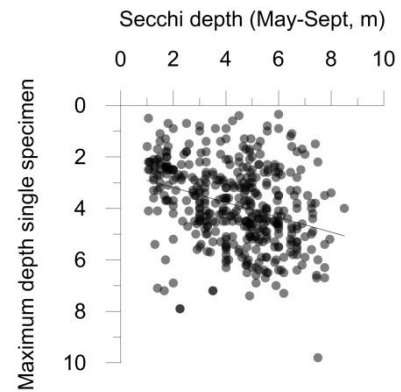
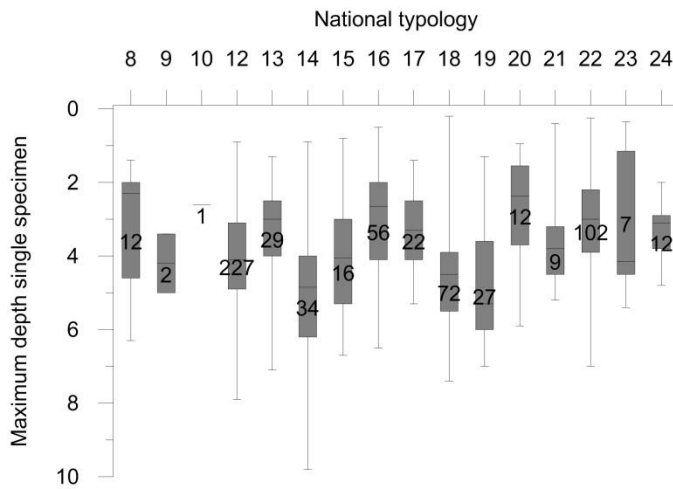
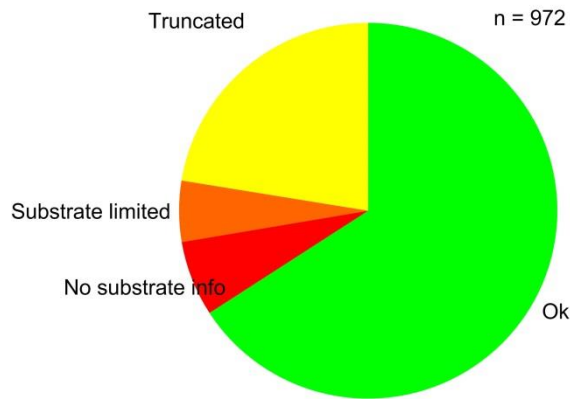
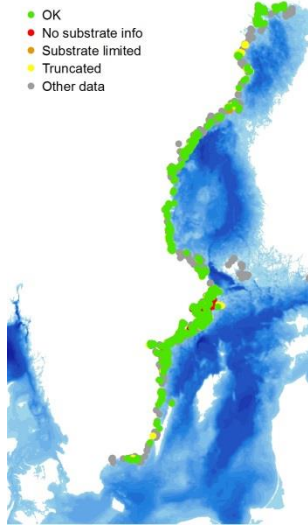
Potamogeton gramineus



Potamogeton pectinatus

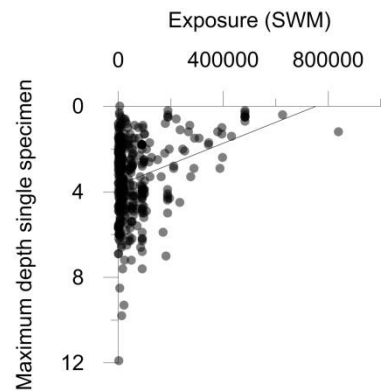
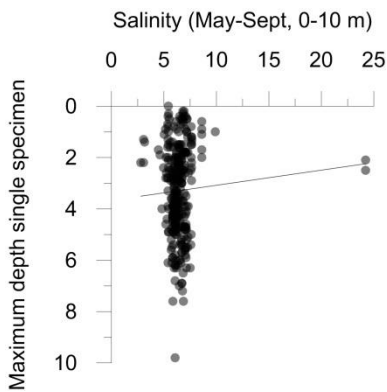
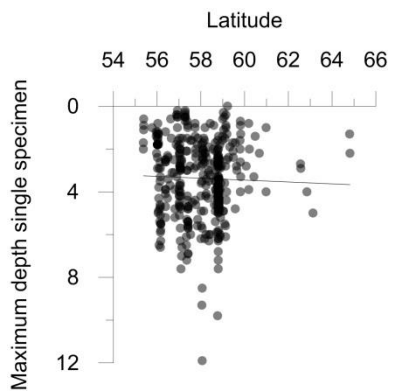
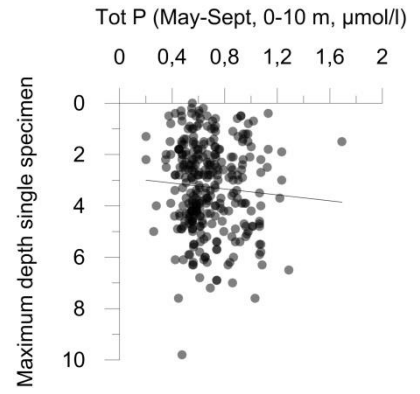
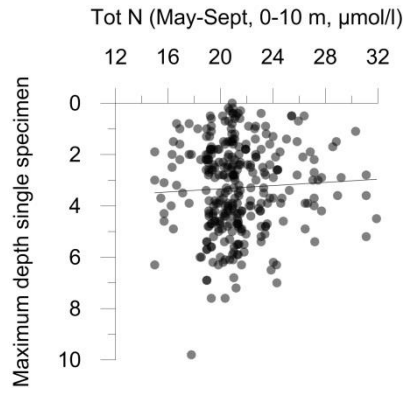
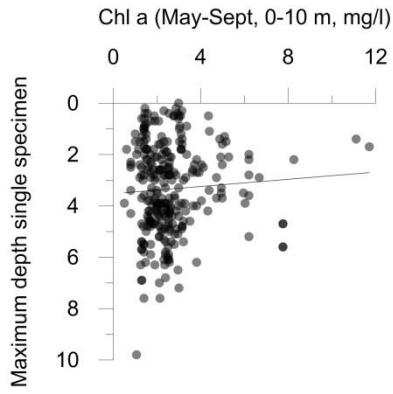
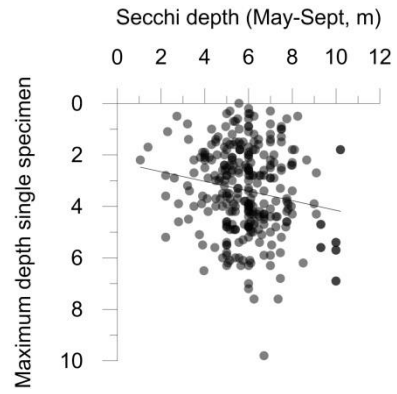
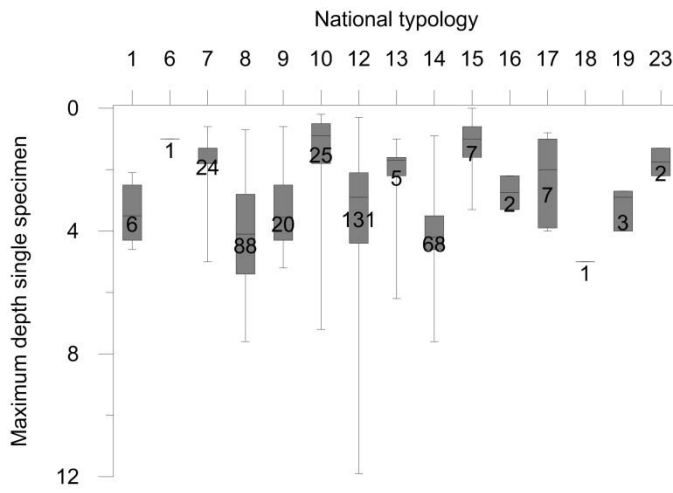
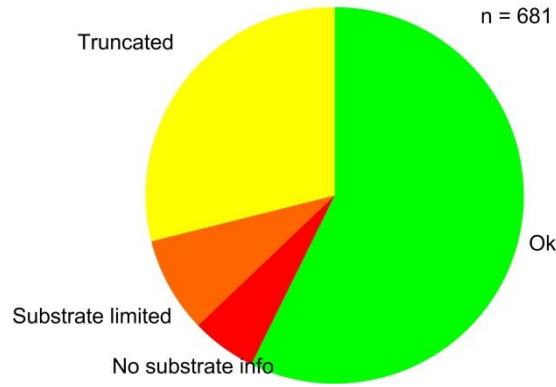
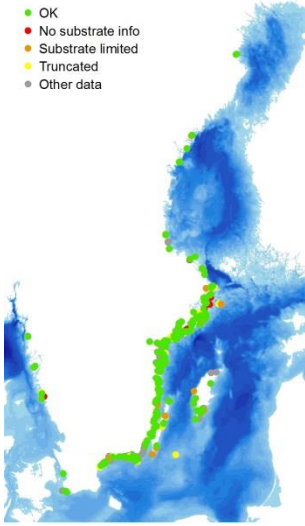


Potamogeton perfoliatus

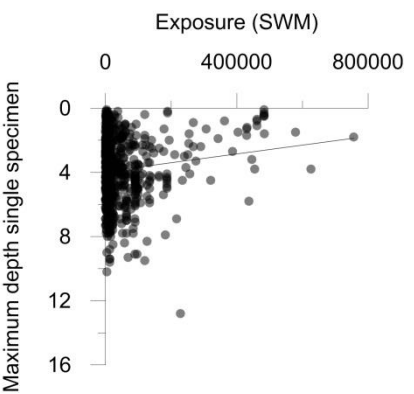
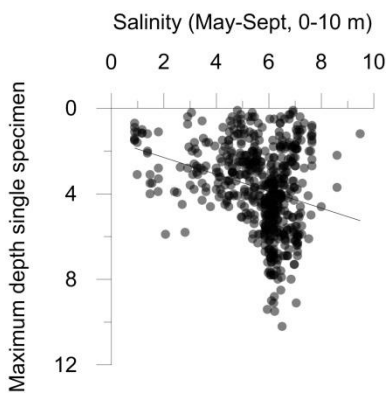
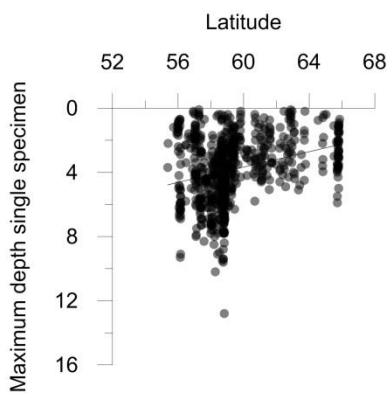
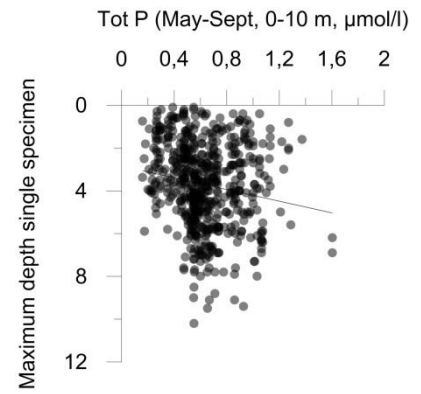
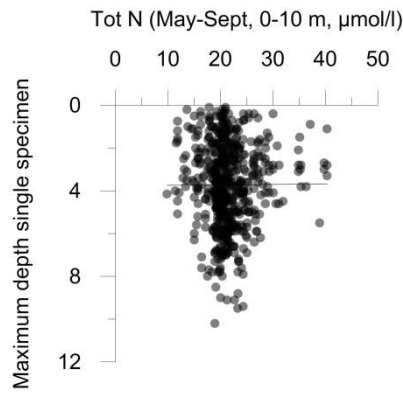
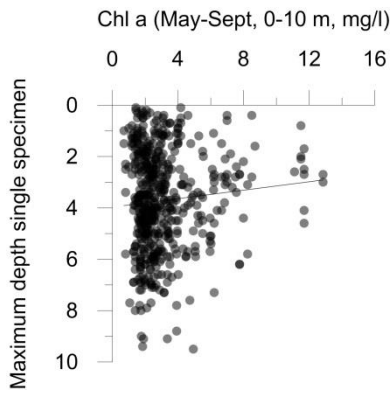
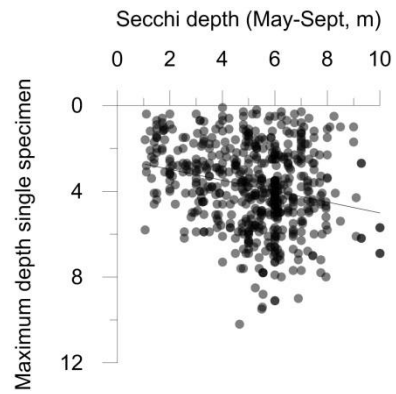
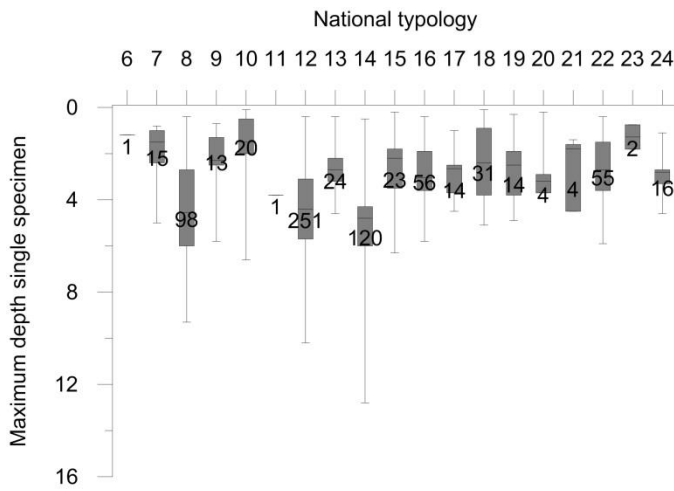
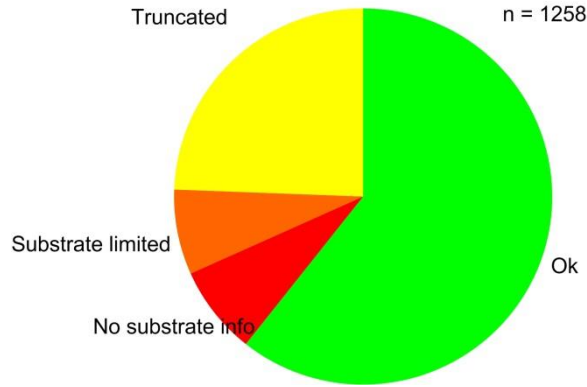
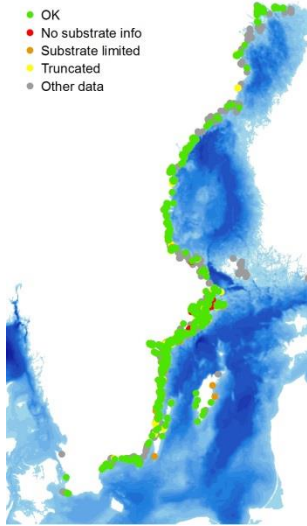


Ruppia

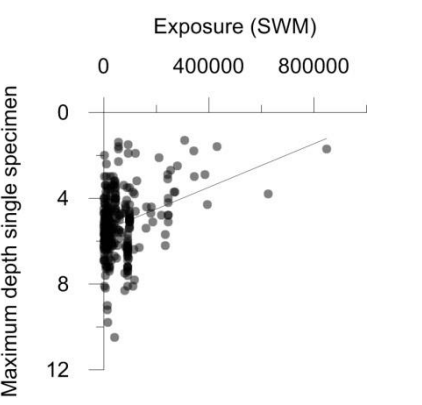
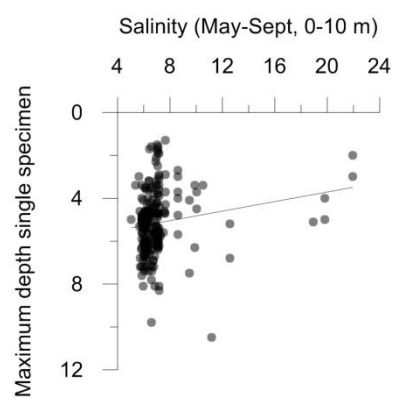
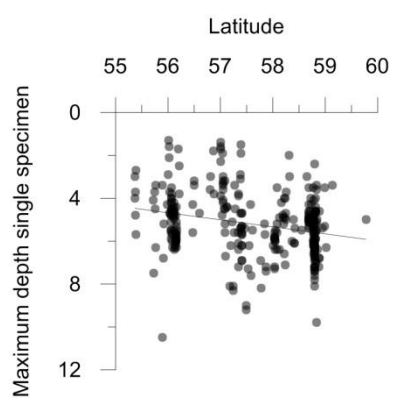
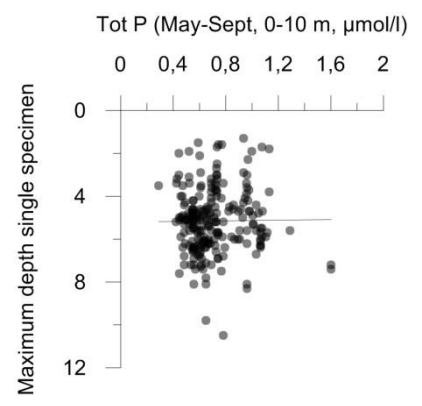
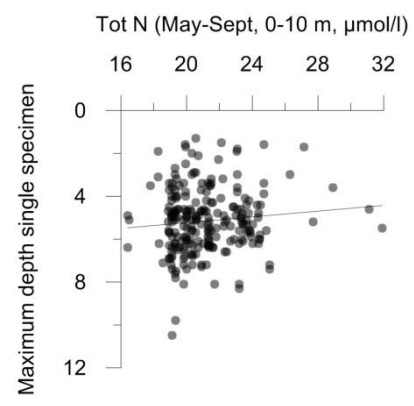
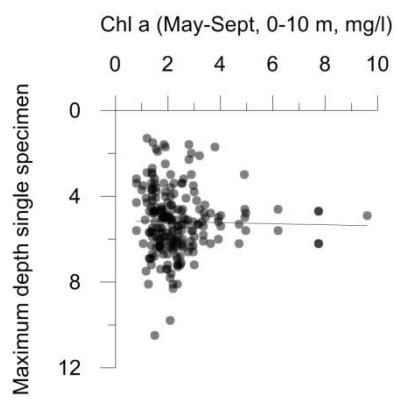
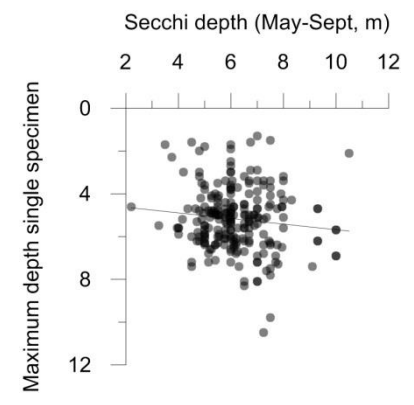
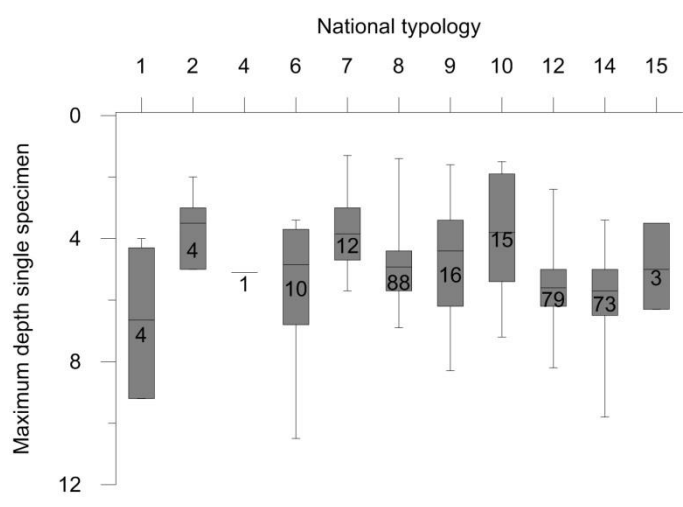
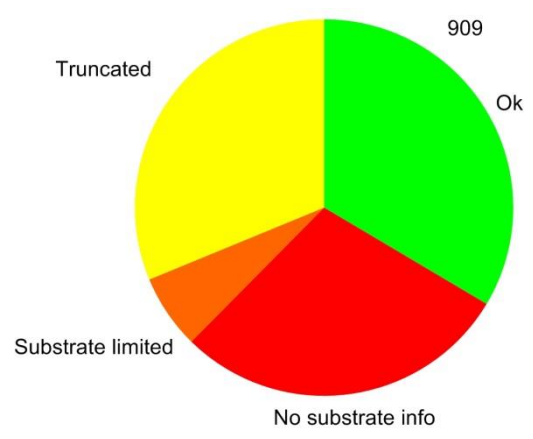
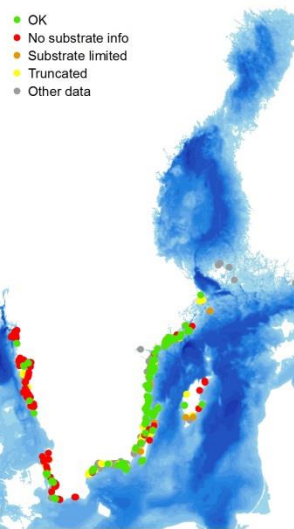
- OK
- No substrate info
- Substrate limited
- Truncated
- Other data



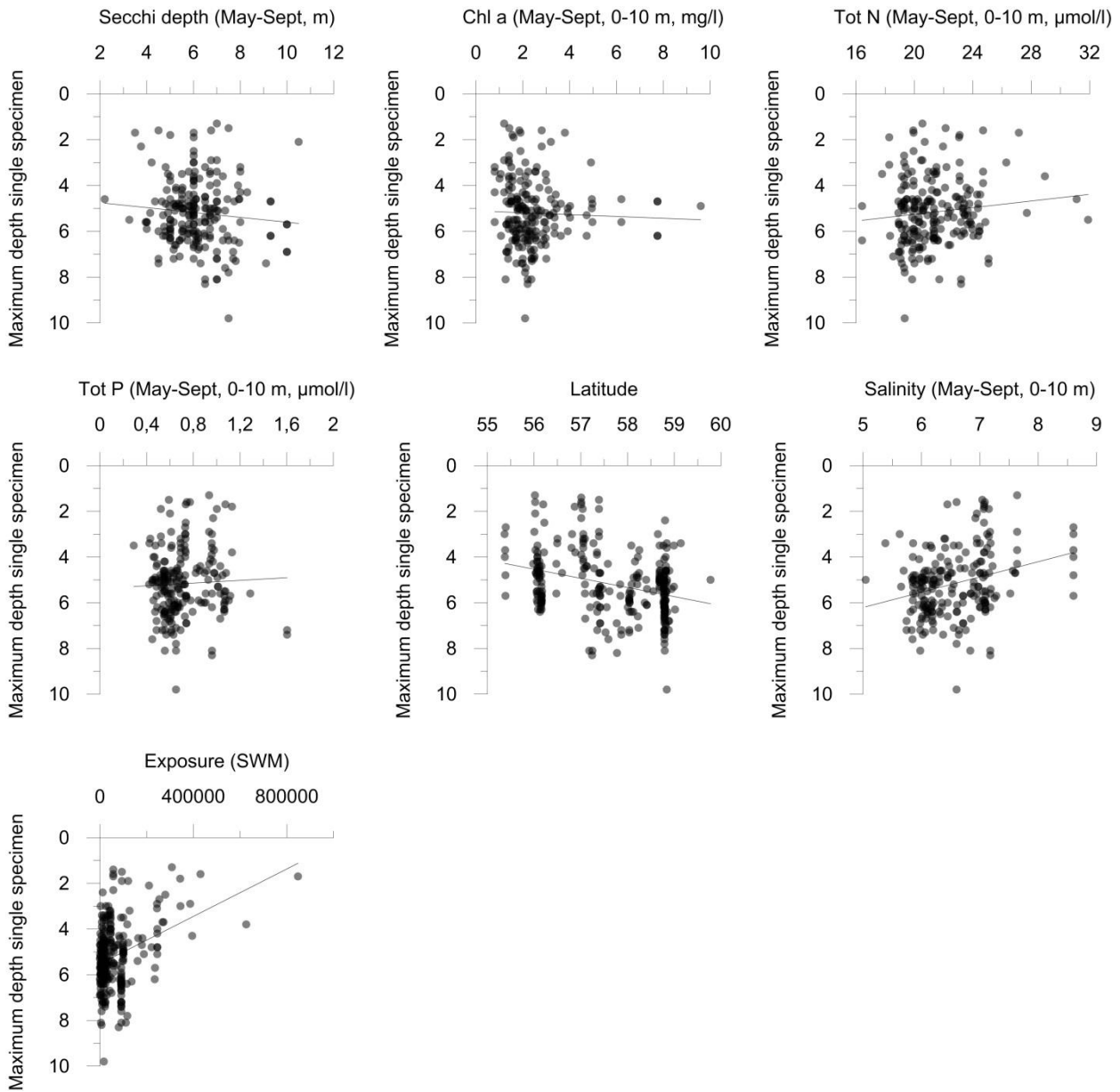
Zannichellia palustris



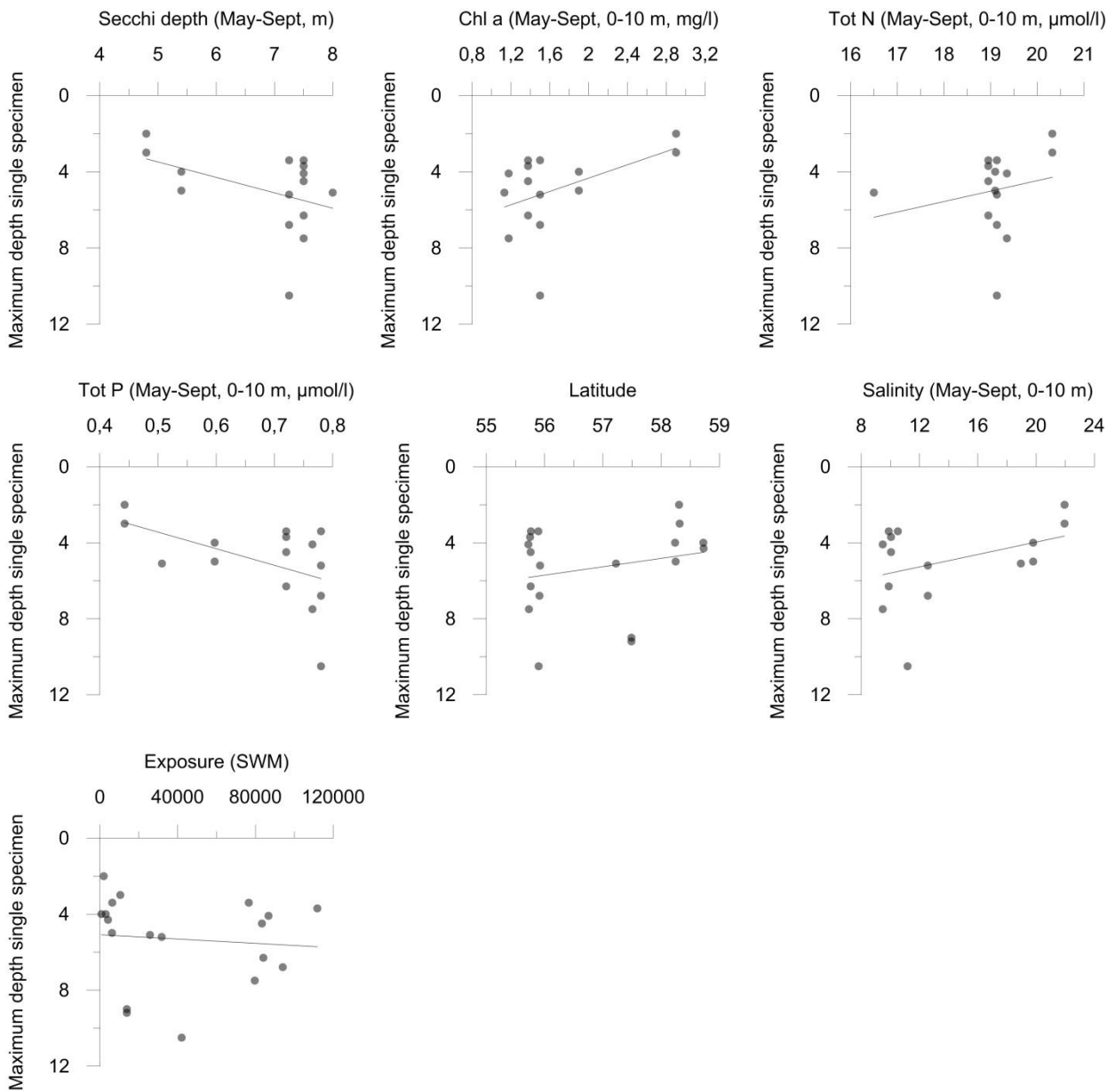
Zostera marina



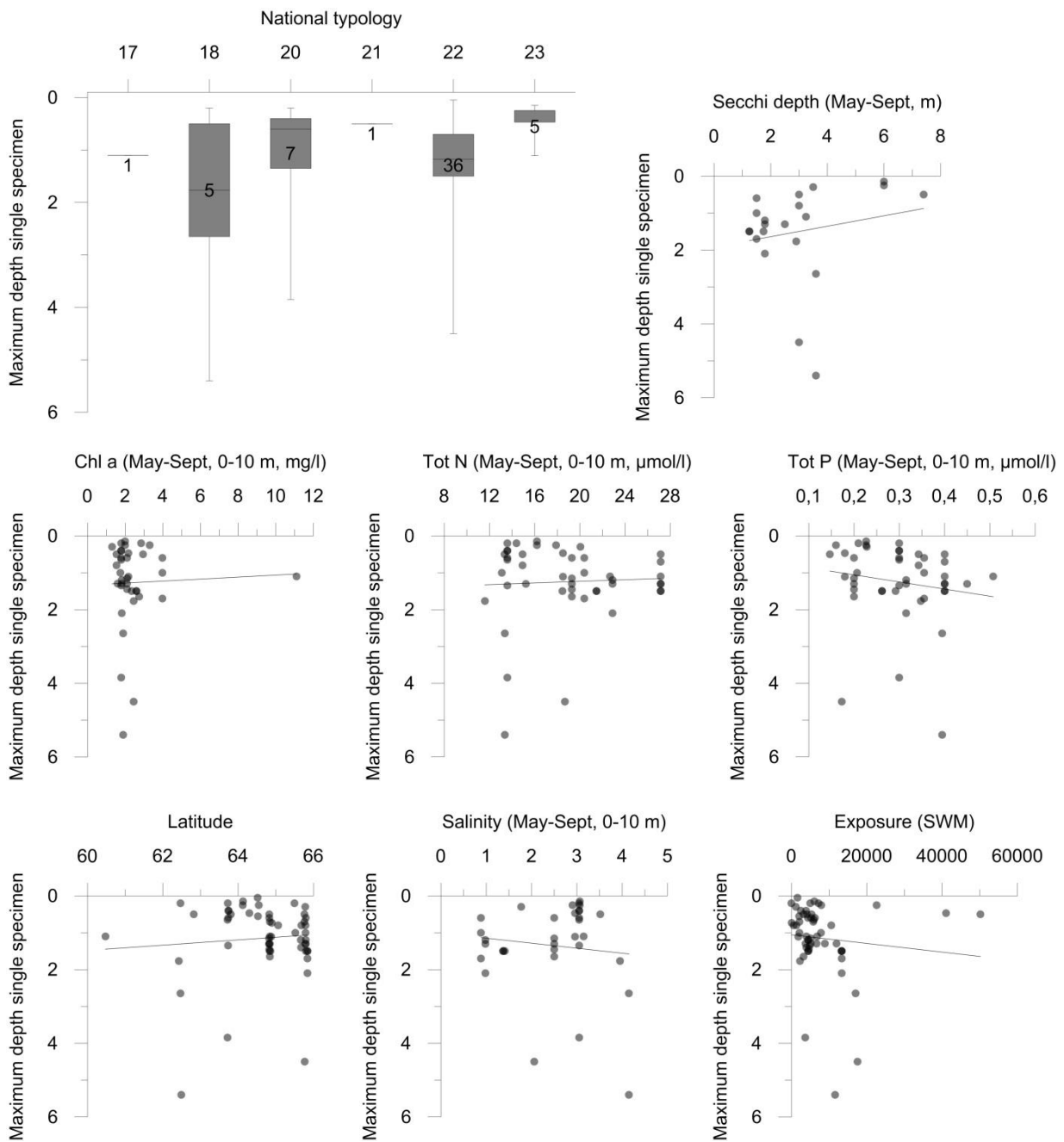
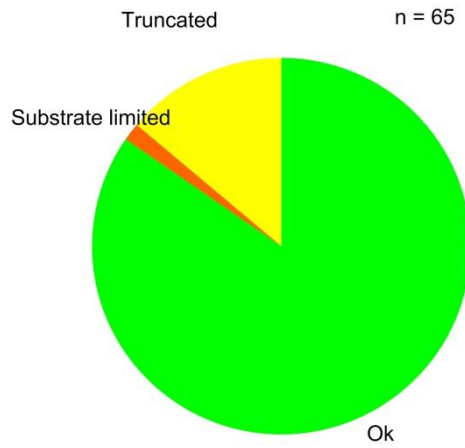
Zostera marina east coast (type 7-24)



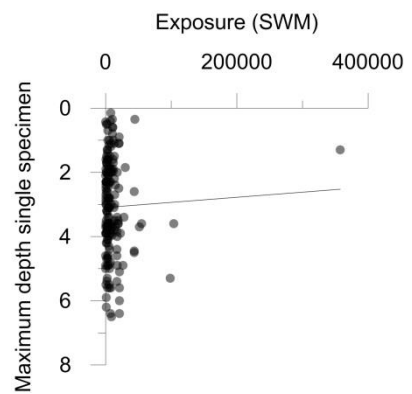
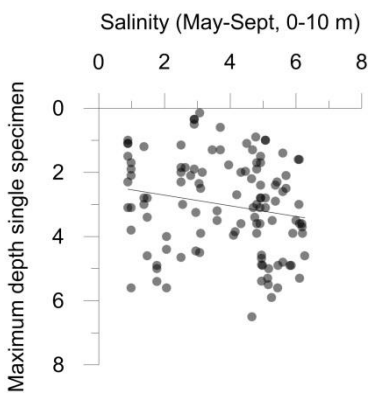
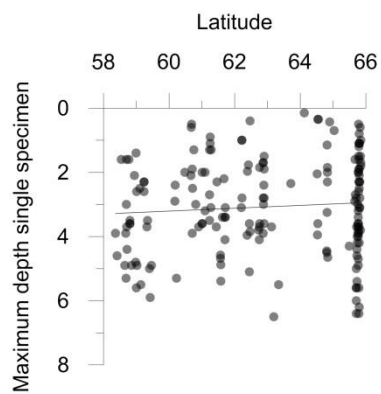
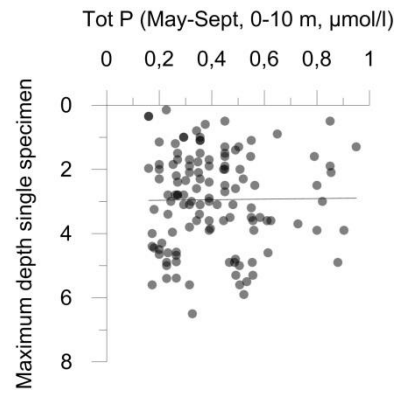
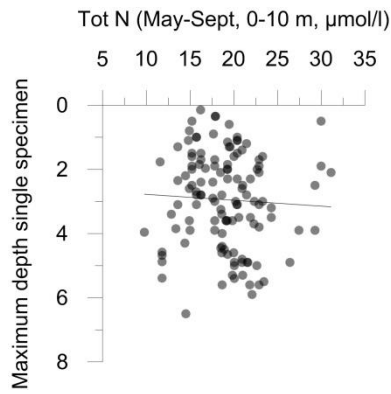
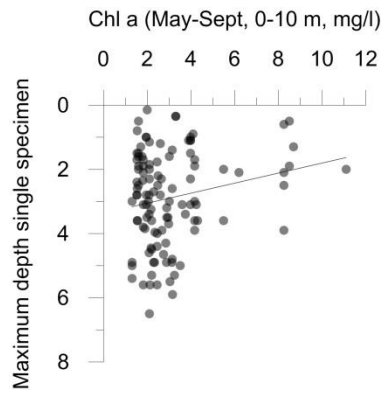
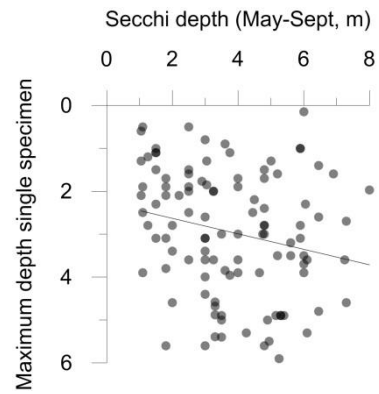
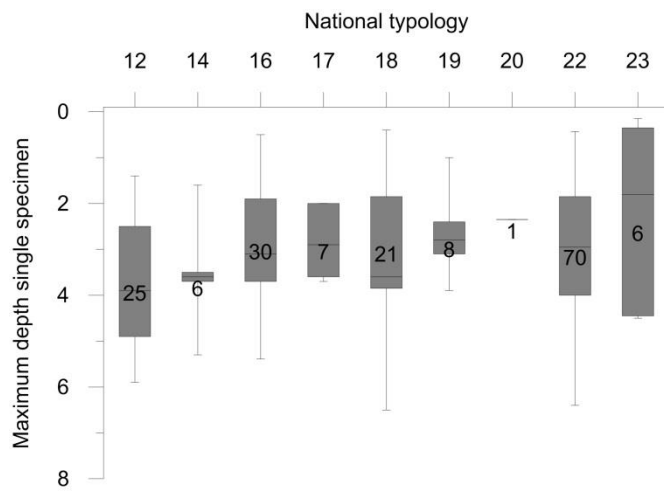
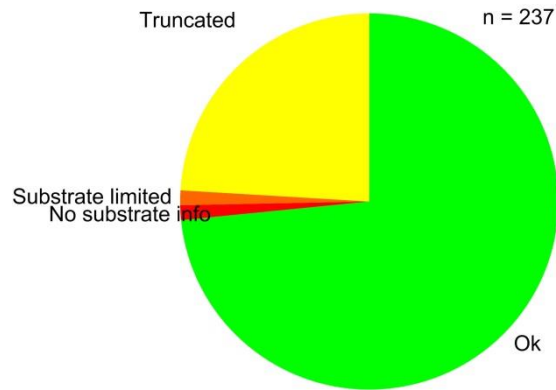
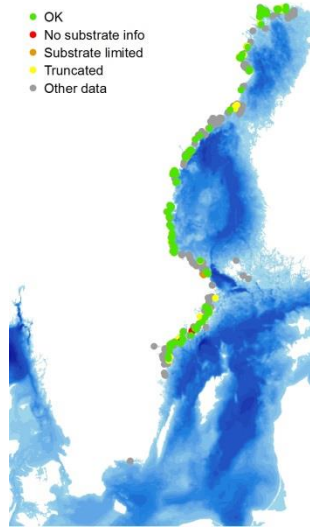
Zostera marina west coast (type 1-6 and 25)



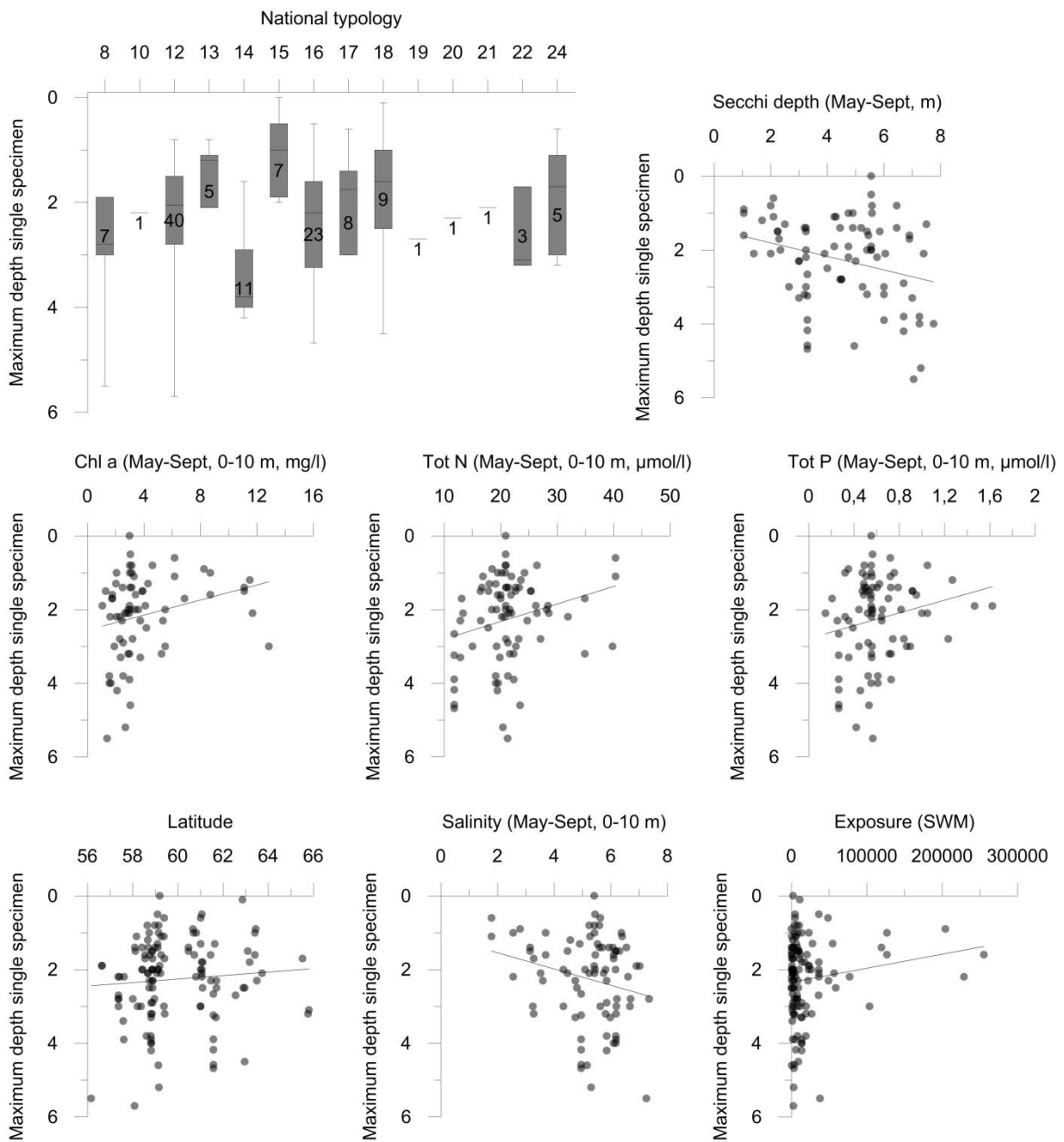
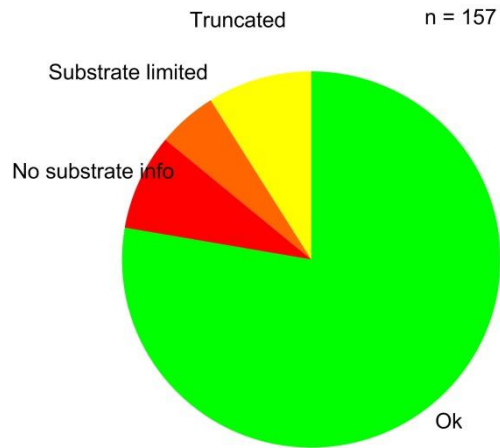
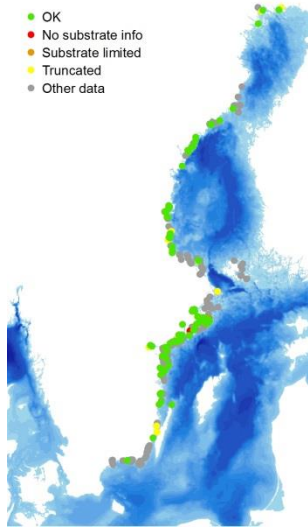
Eleocharis acicularis



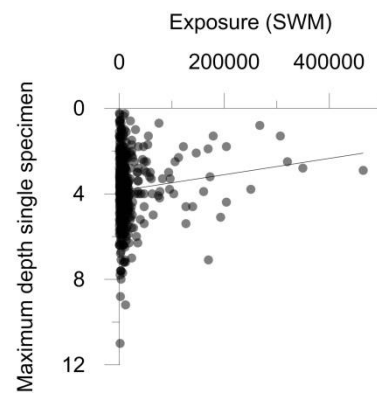
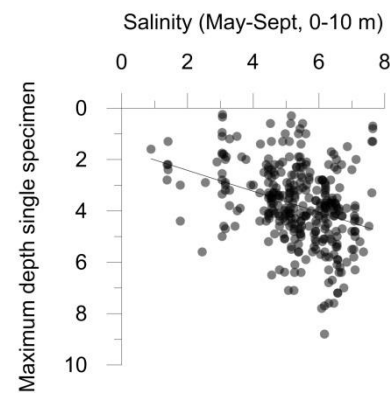
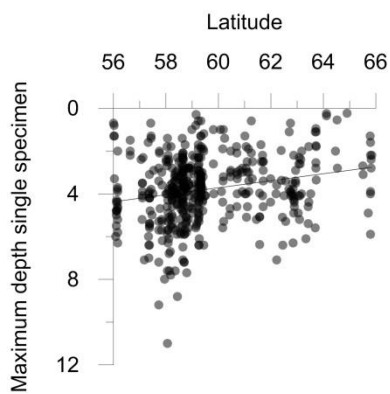
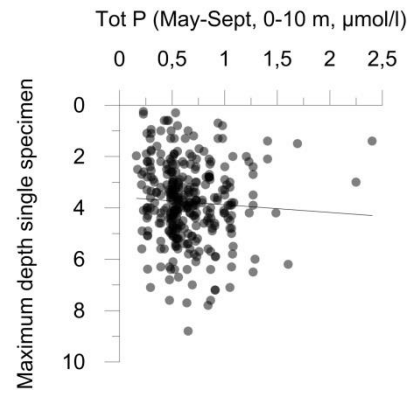
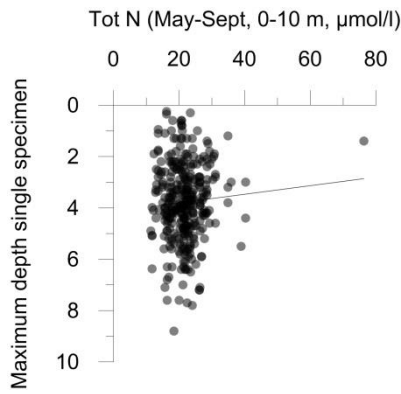
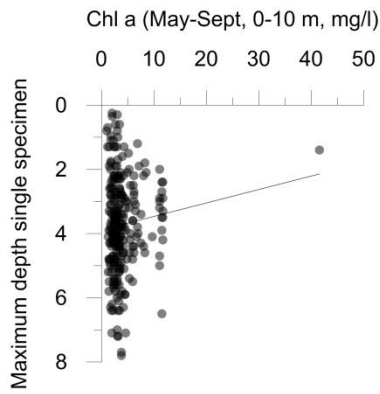
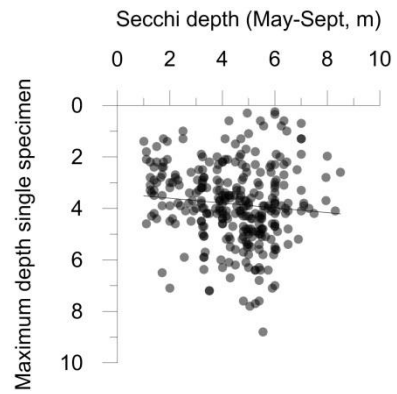
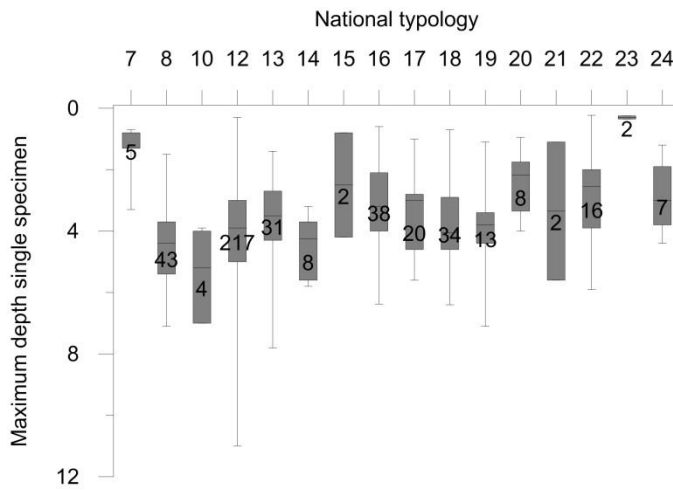
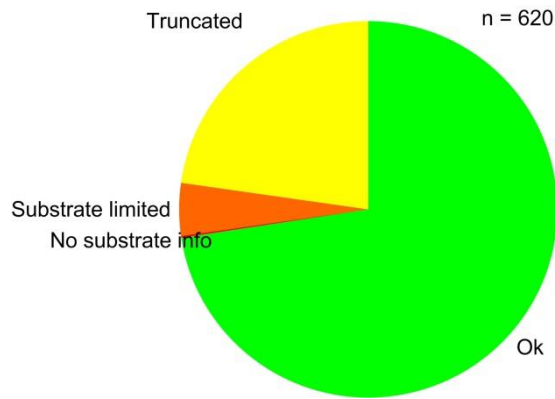
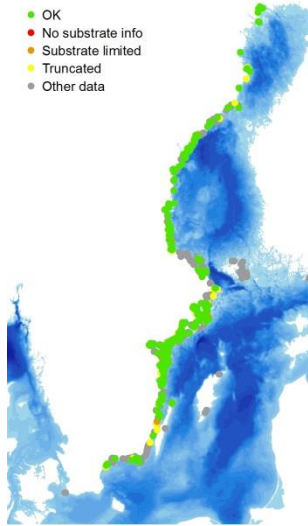
Callitriche hermaphroditica



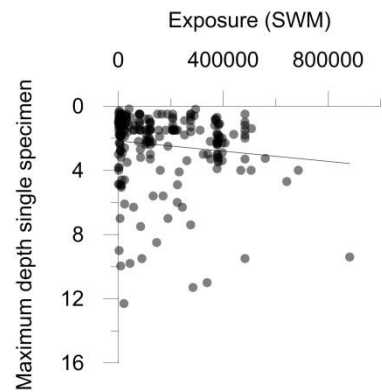
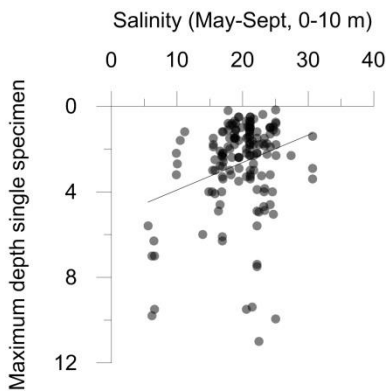
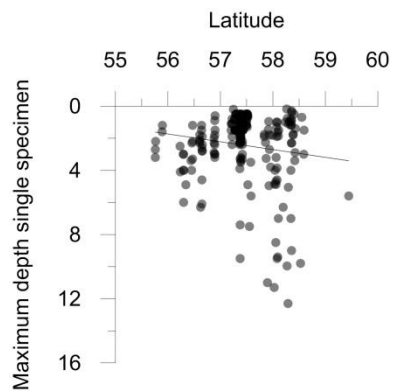
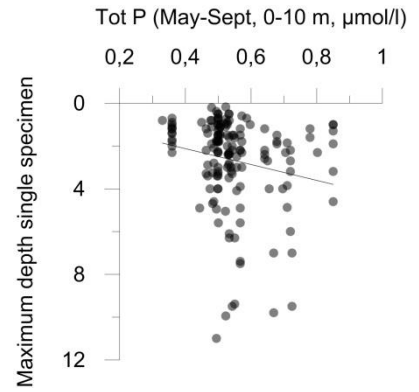
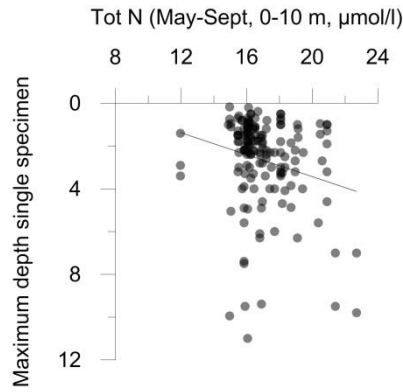
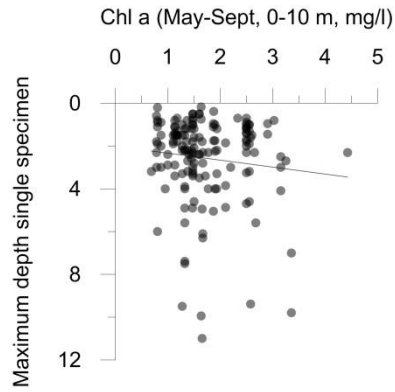
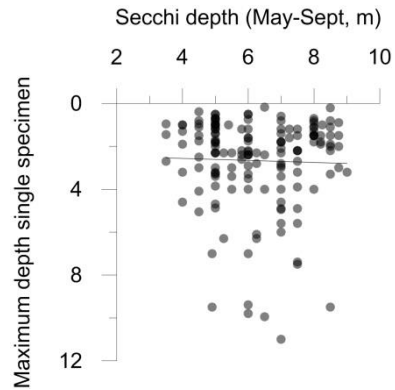
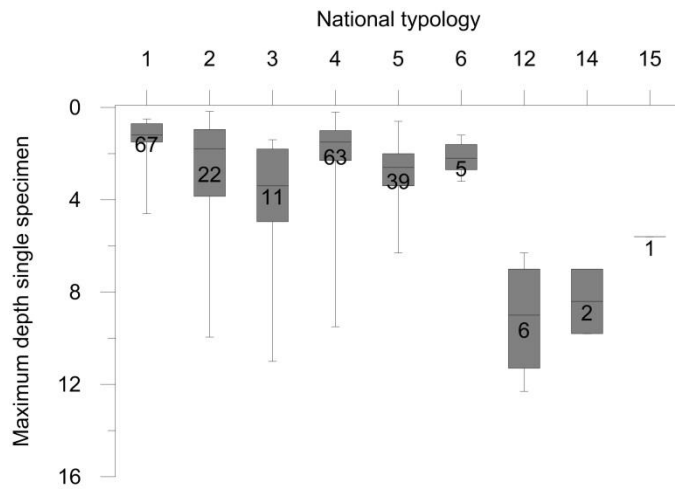
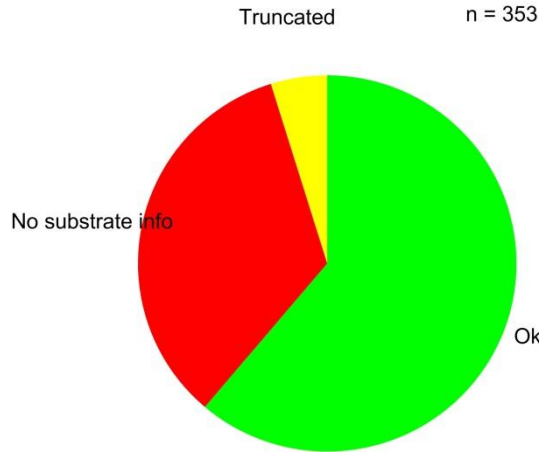
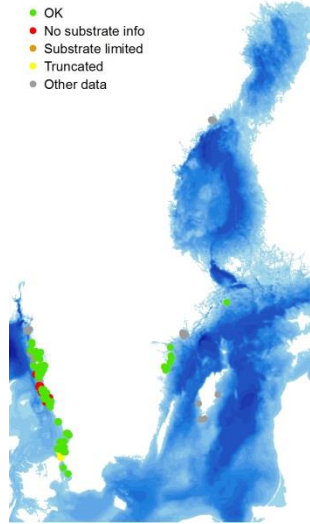
Ranunculus peltatus ssp. baudotii



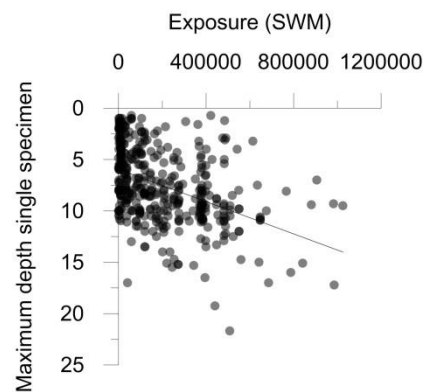
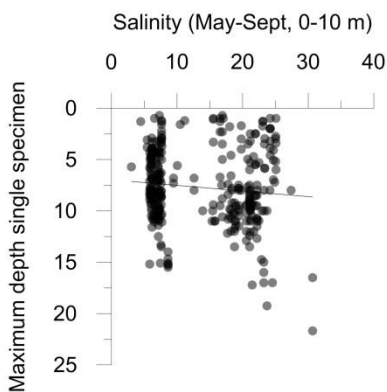
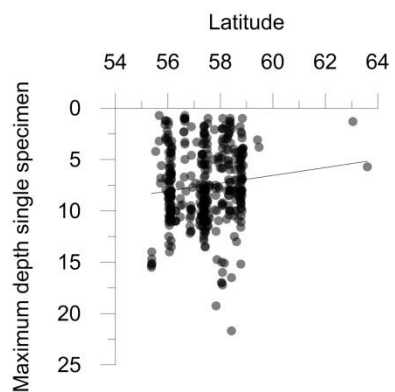
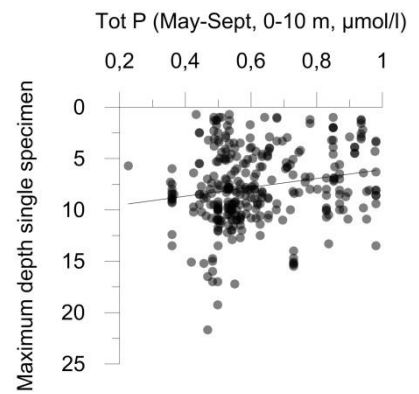
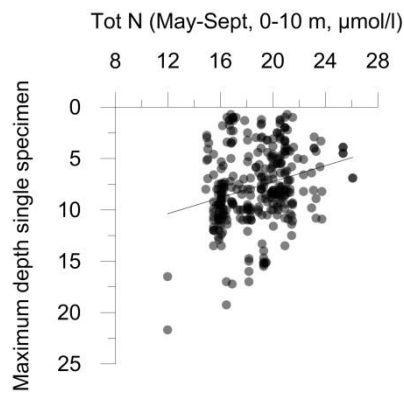
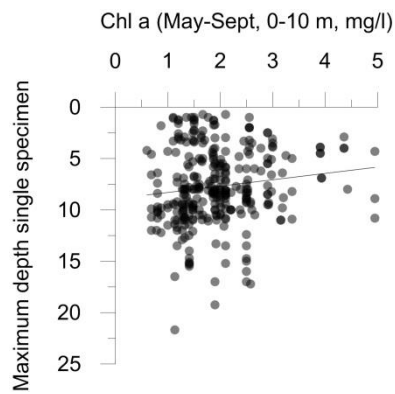
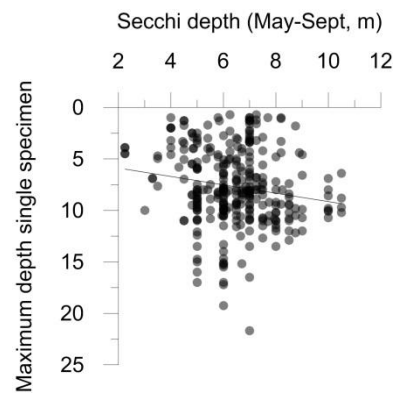
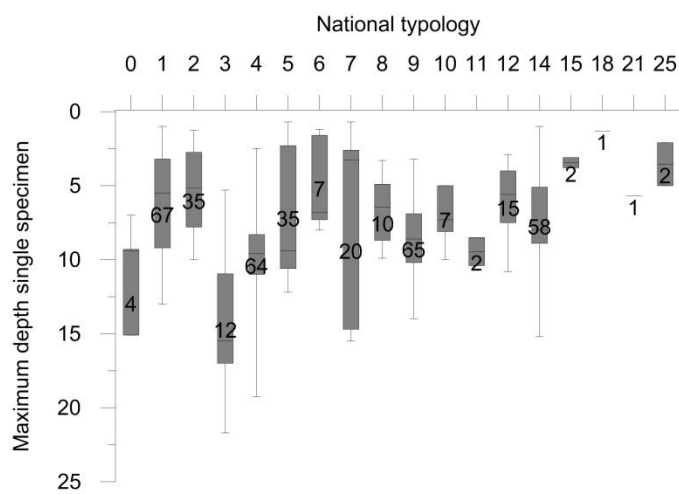
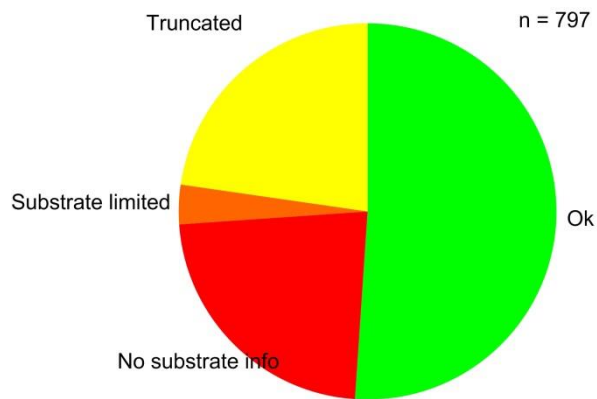
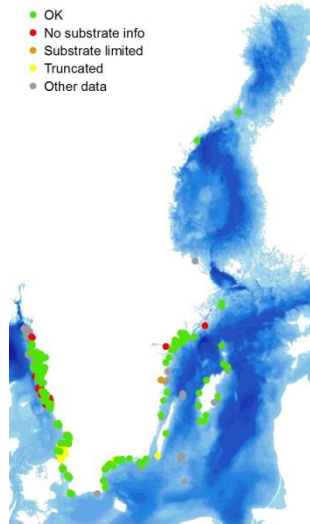
Myriophyllum spicatum



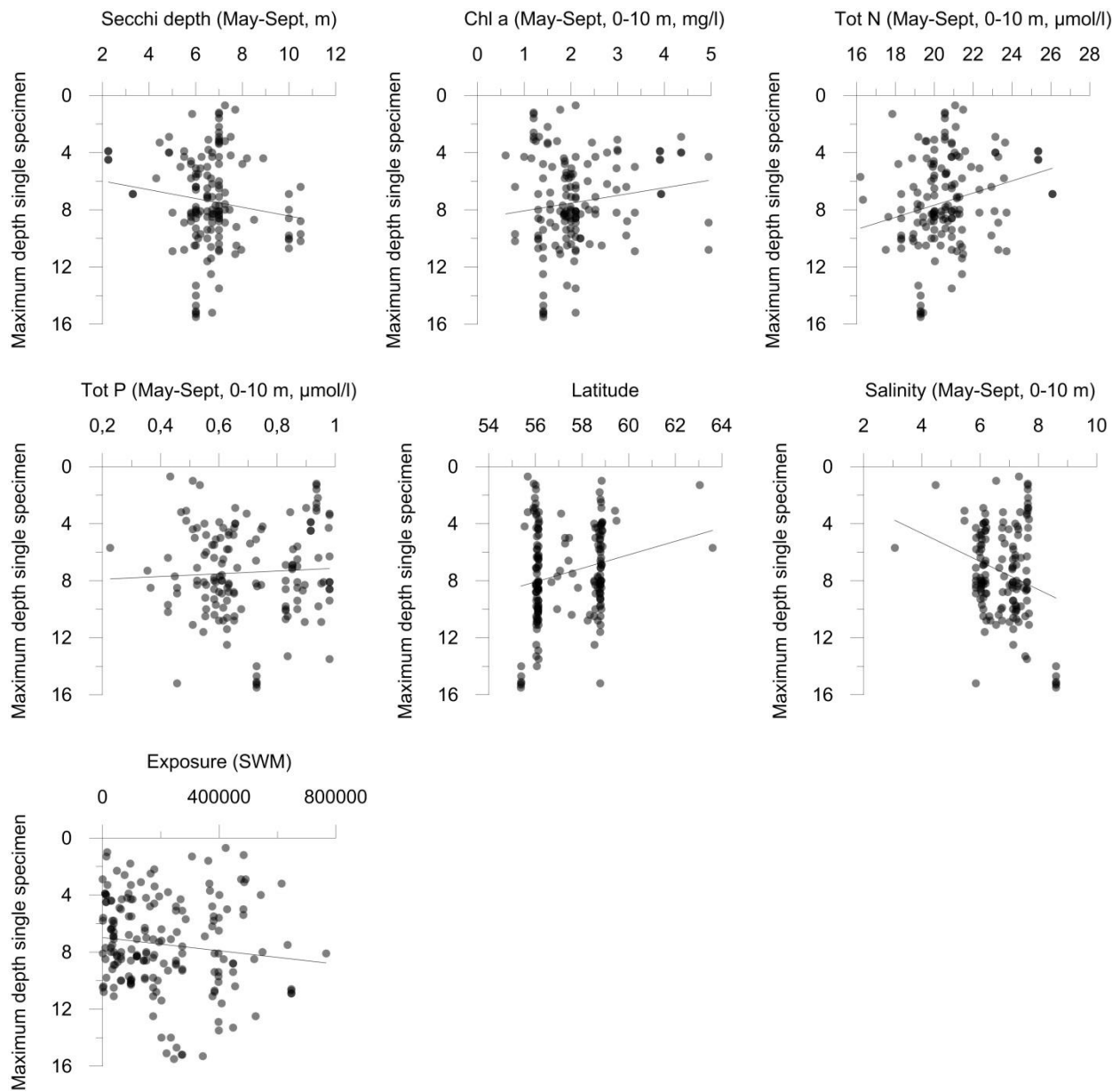
Ahnfeltia plicata



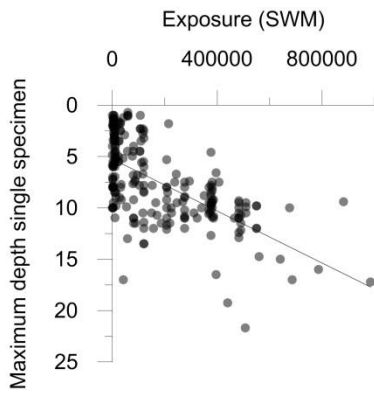
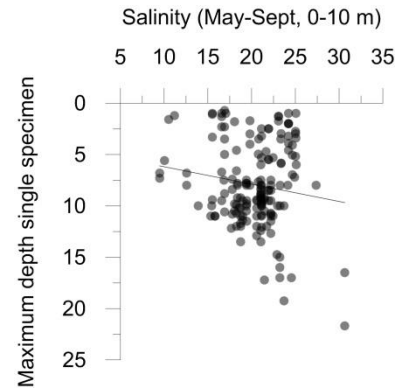
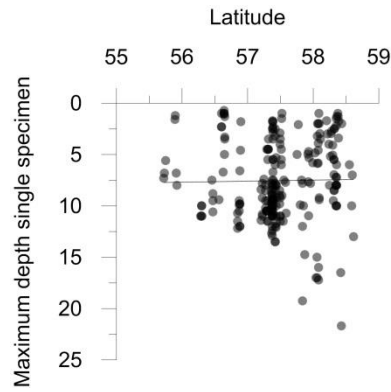
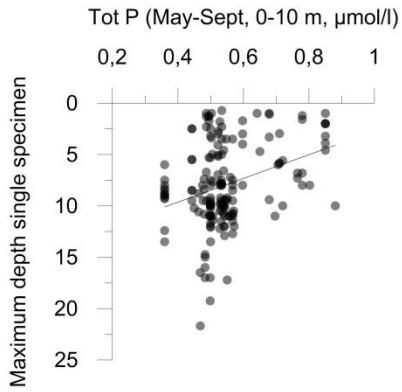
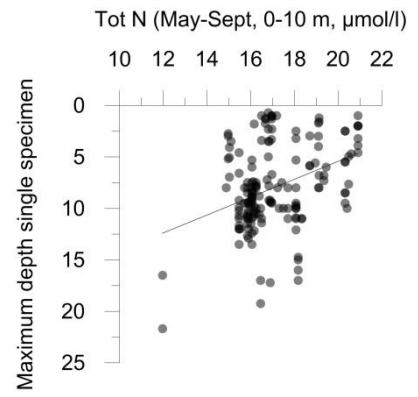
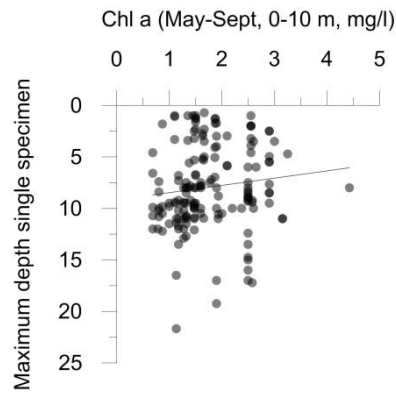
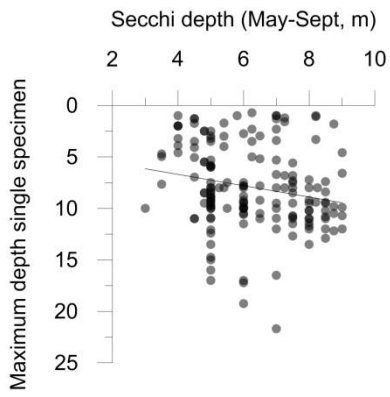
Ceramium virgatum



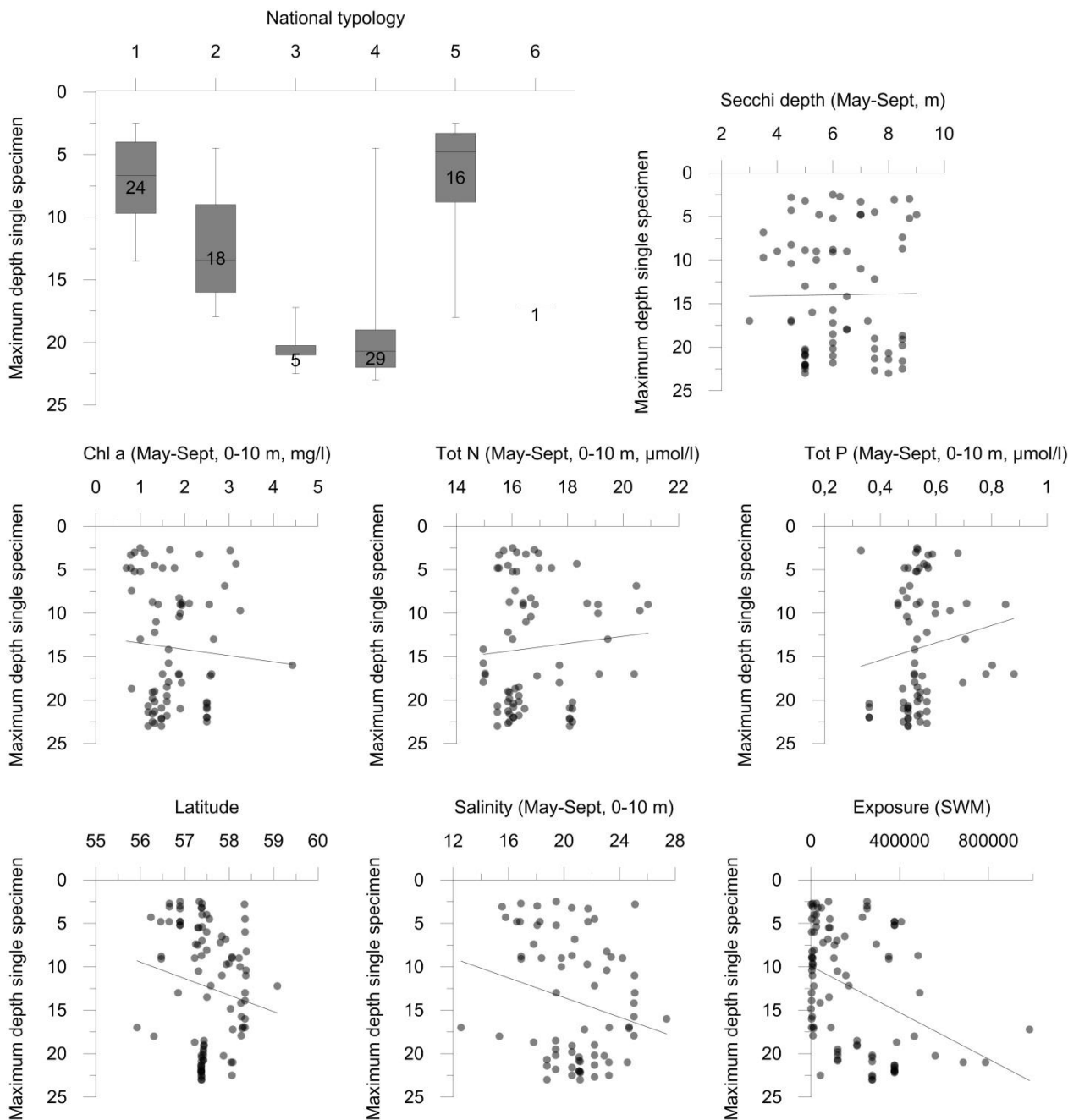
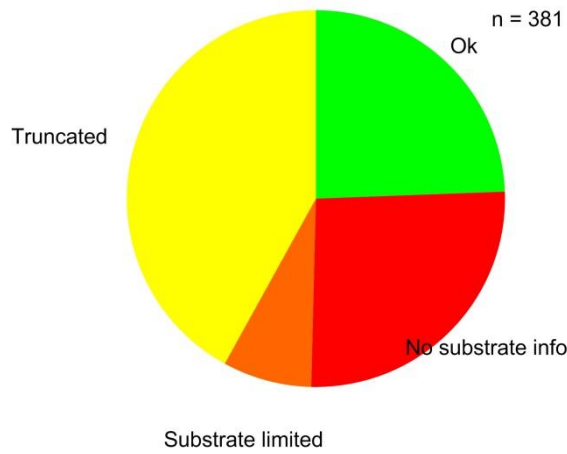
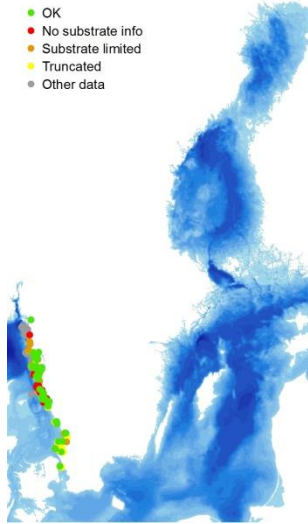
Ceramium virgatum east coast (type 7-24)



Ceramium virgatum west coast (type 1-6 and 25)

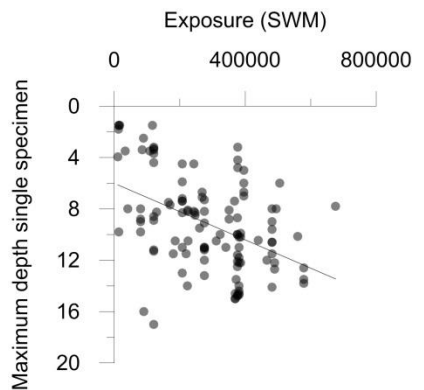
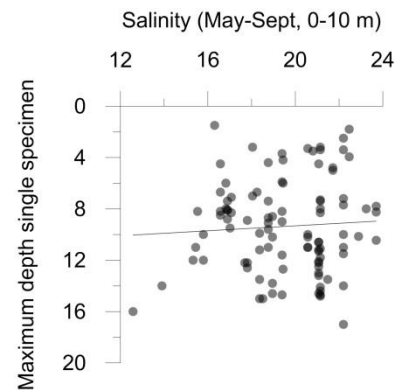
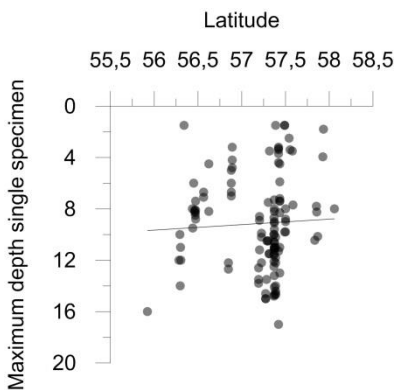
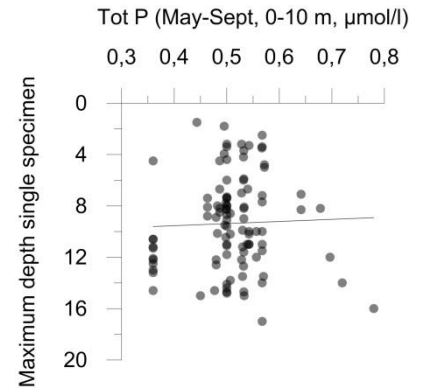
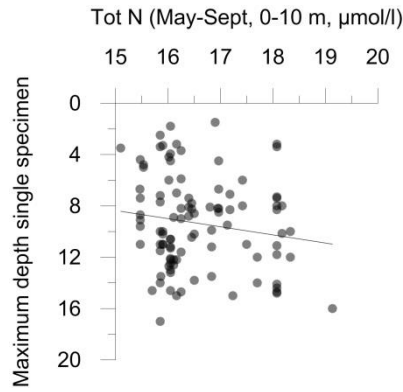
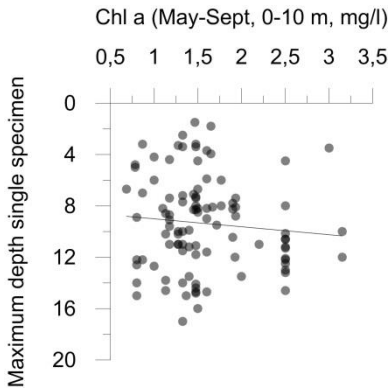
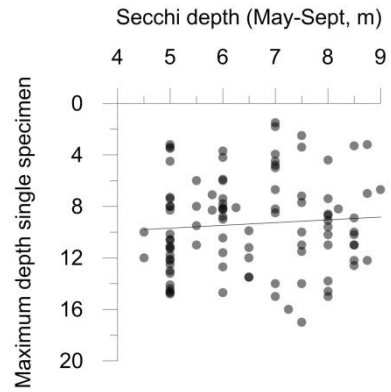
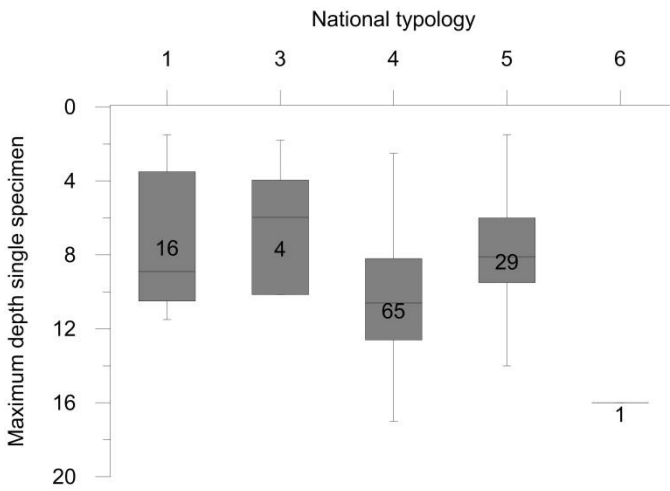
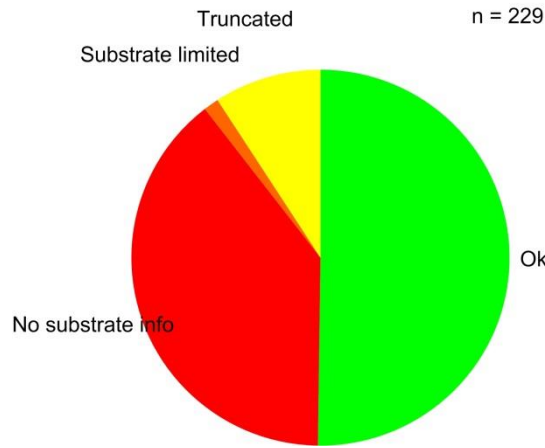
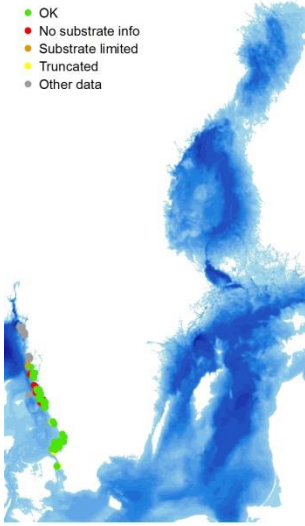


Delesseria sanguinea

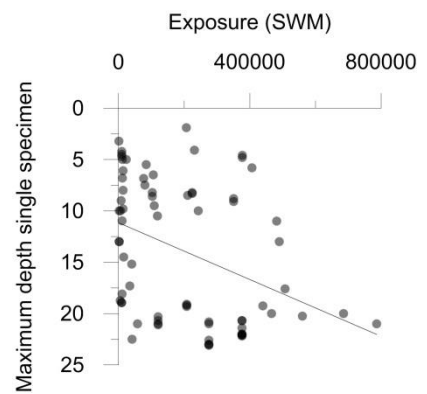
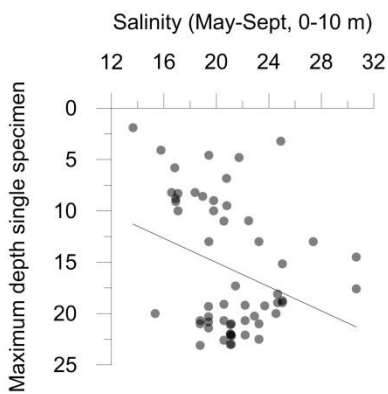
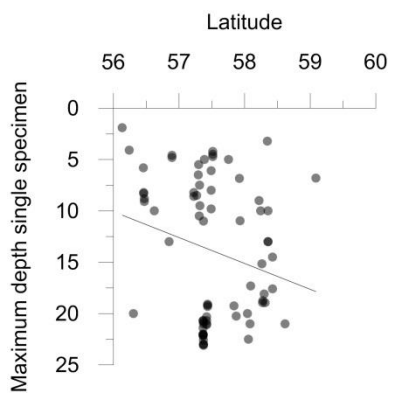
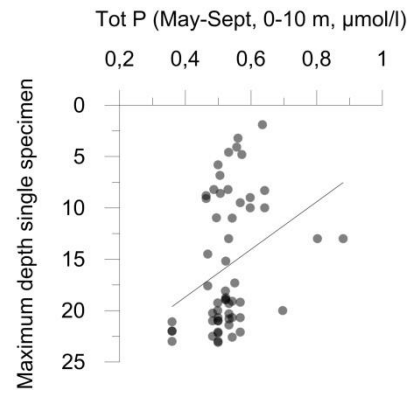
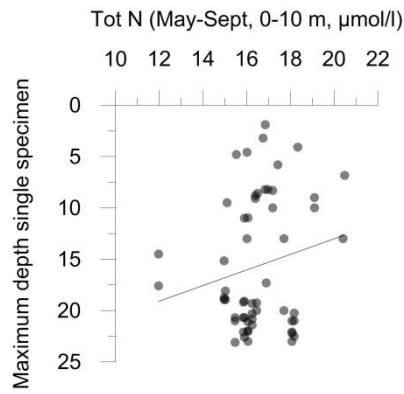
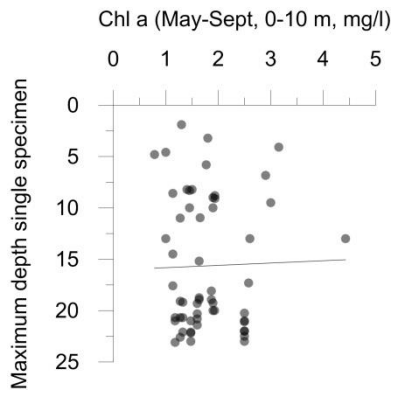
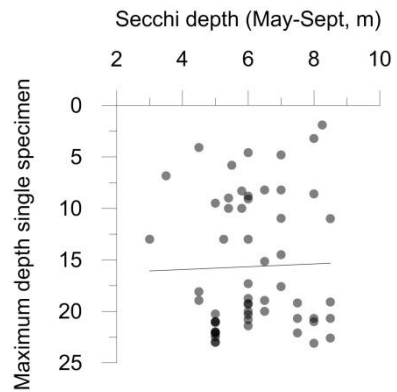
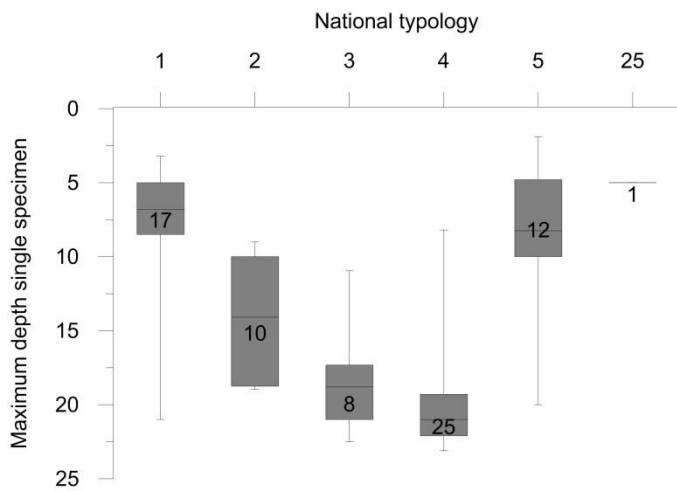
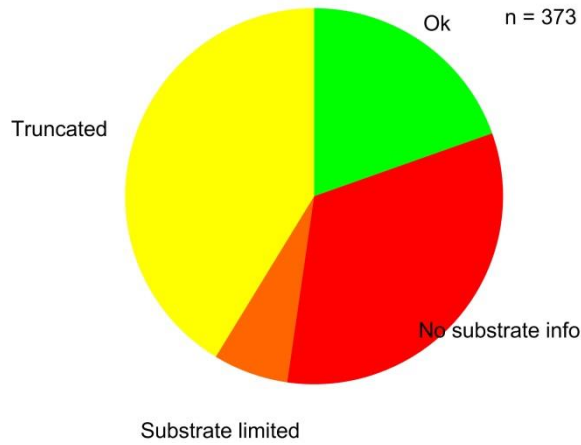
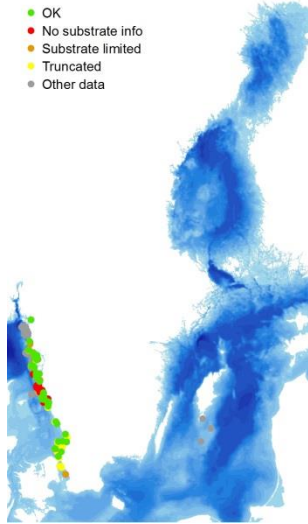


Membranoptera alata

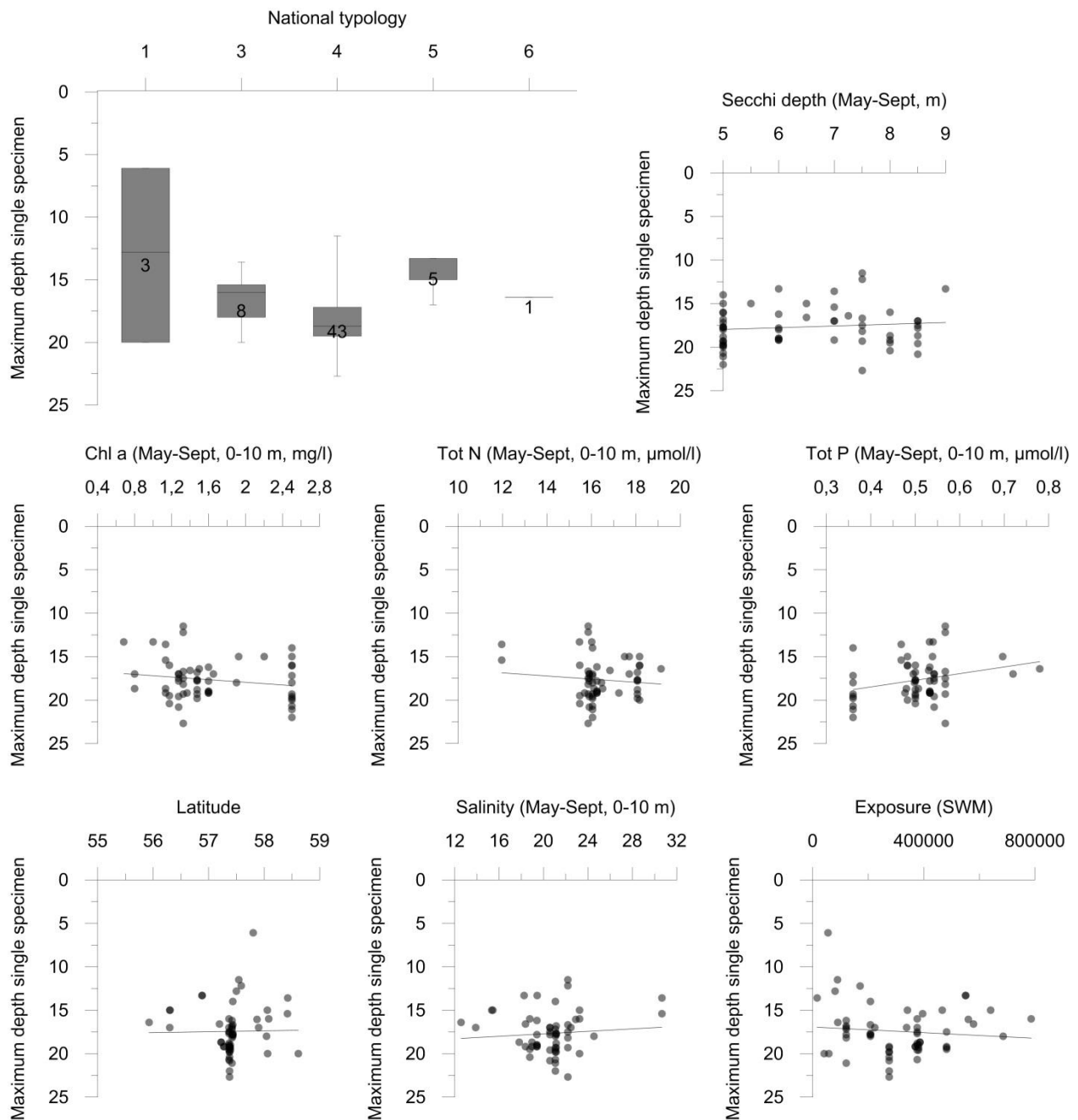
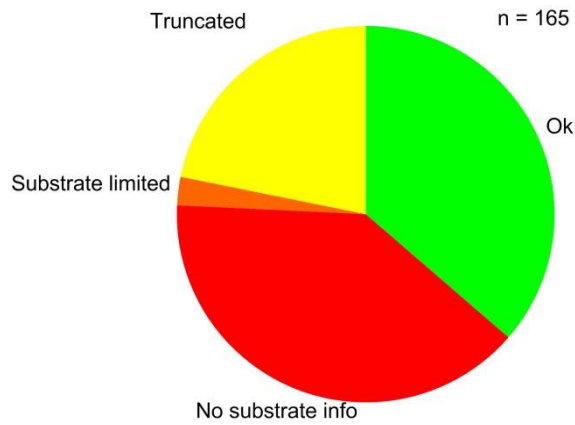
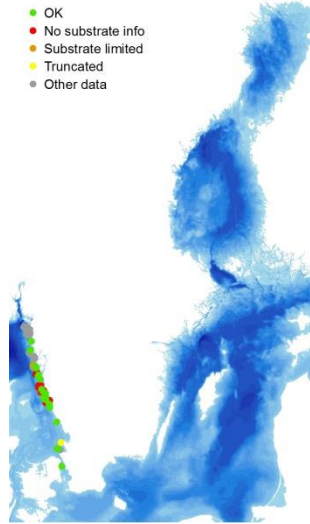
- OK
- No substrate info
- Substrate limited
- Truncated
- Other data



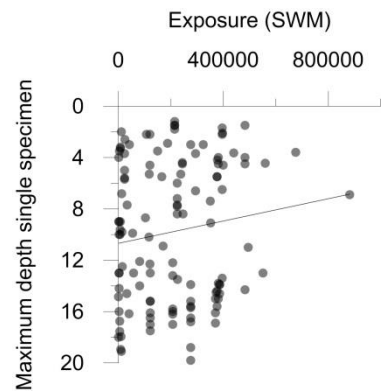
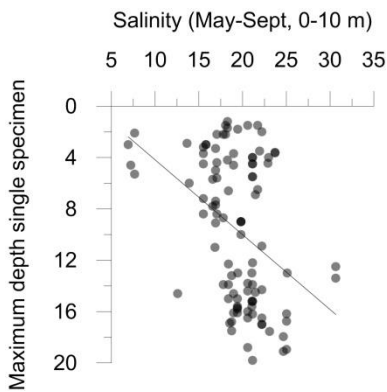
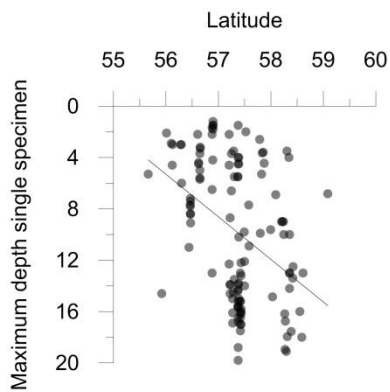
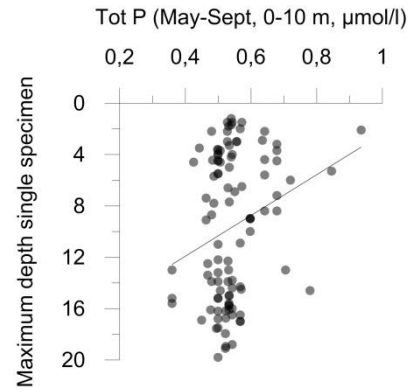
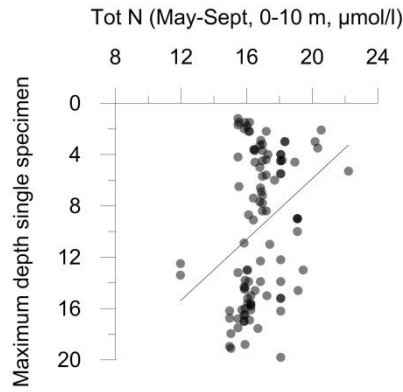
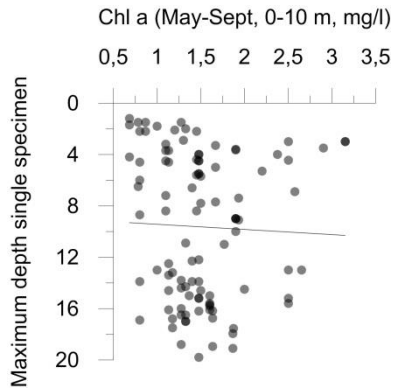
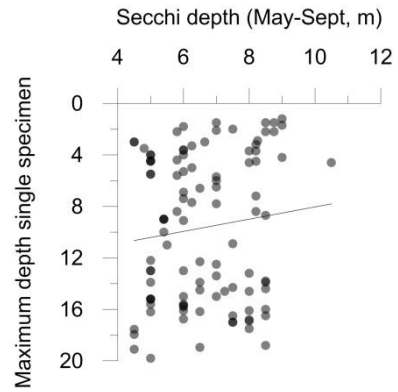
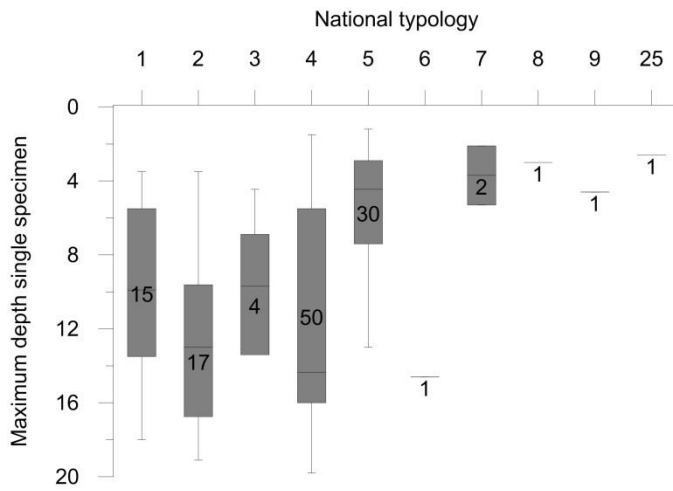
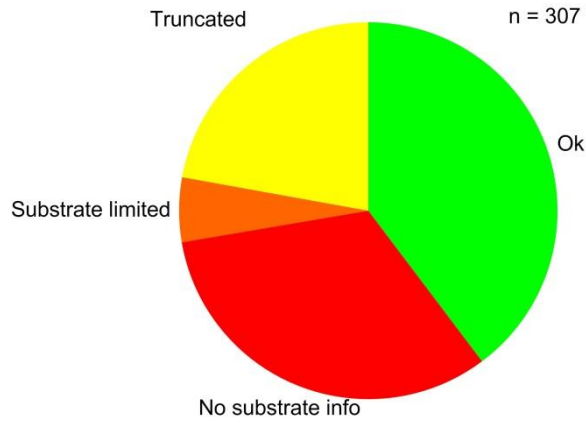
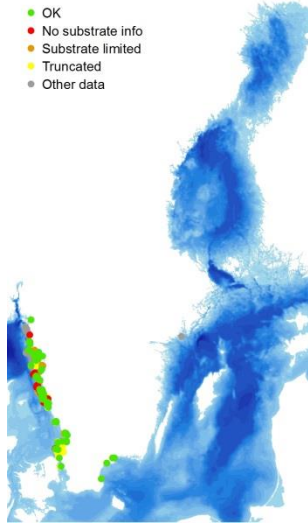
Phycodrys rubens



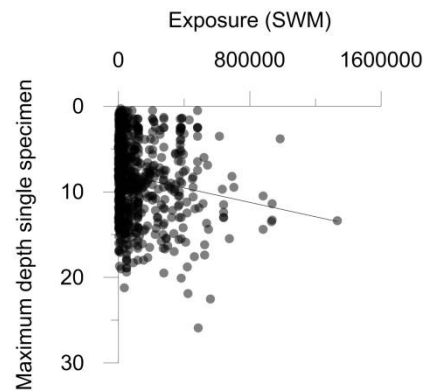
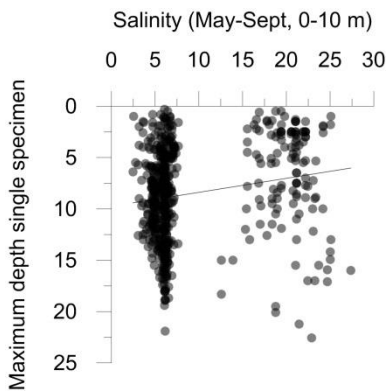
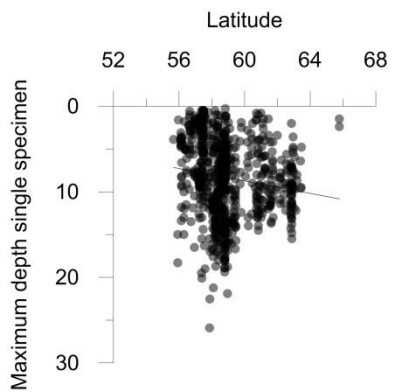
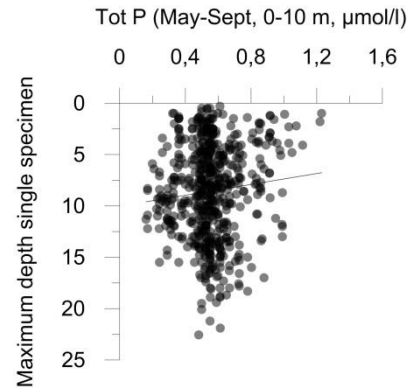
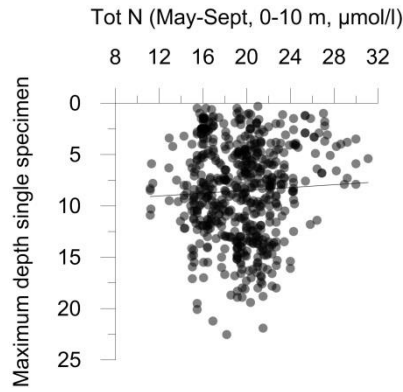
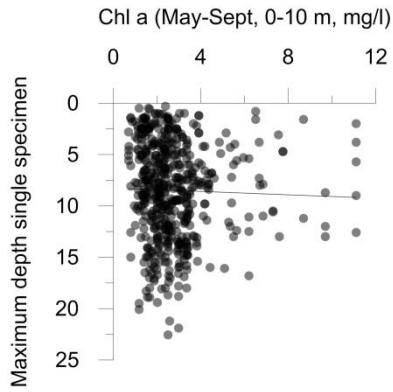
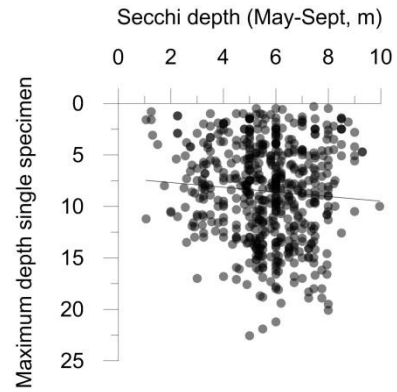
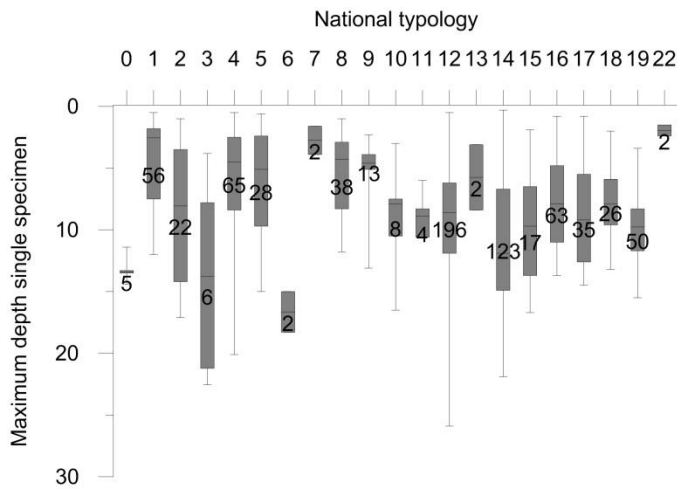
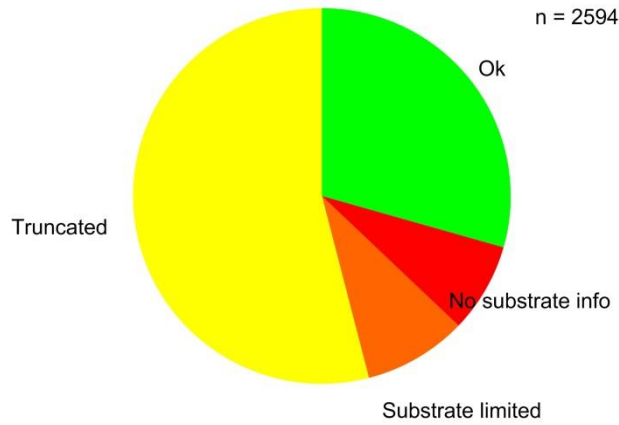
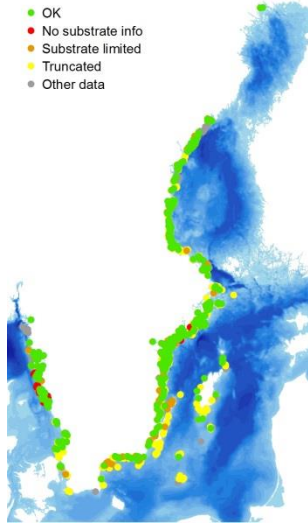
Odonthalia dentata



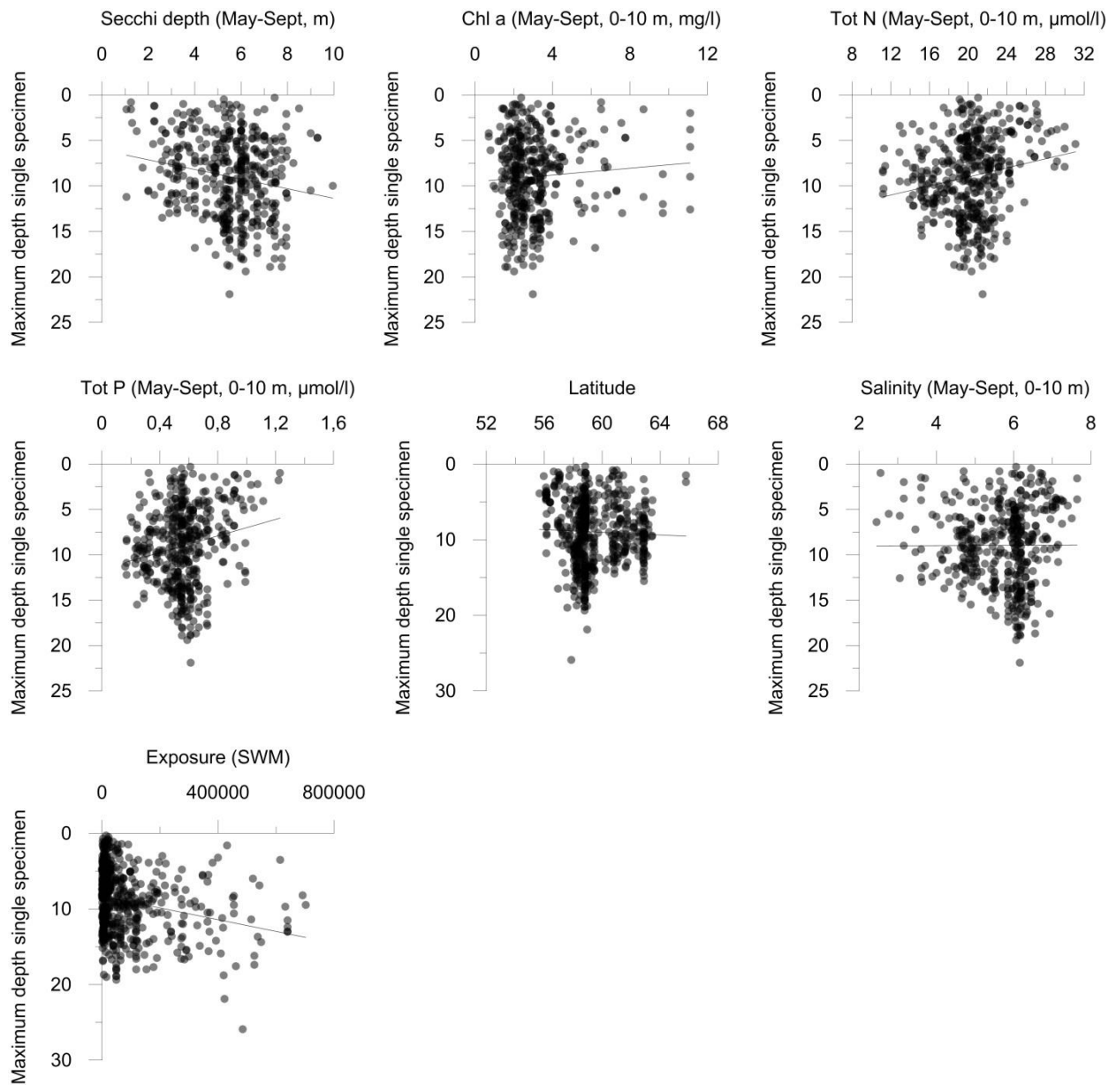
Polysiphonia elongata



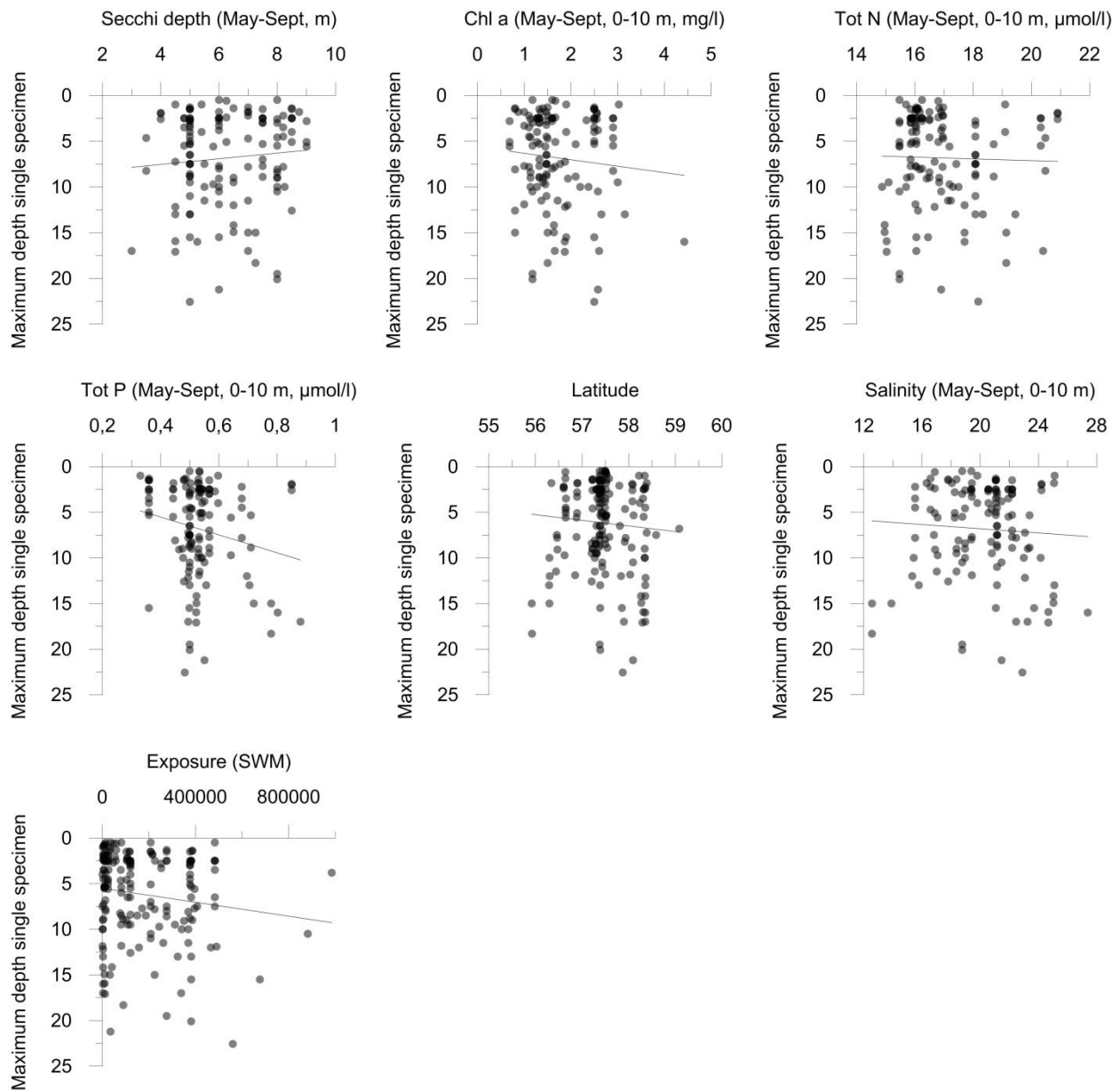
Polysiphonia fucoides



Polysiphonia fucoides east coast (type 7-24)

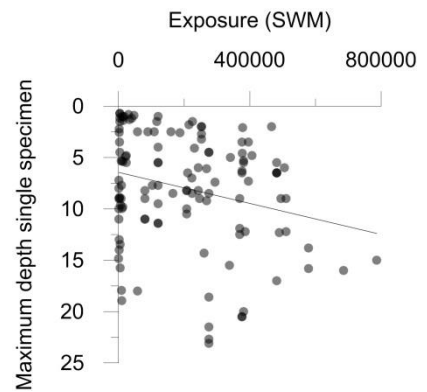
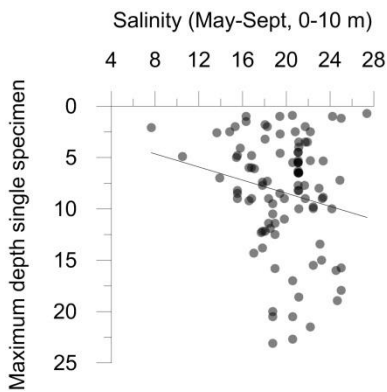
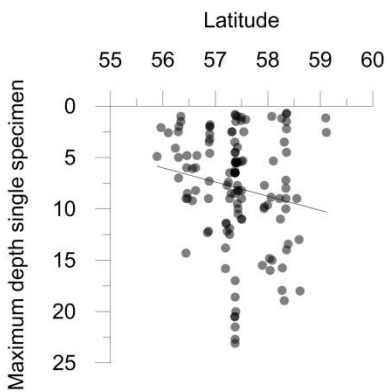
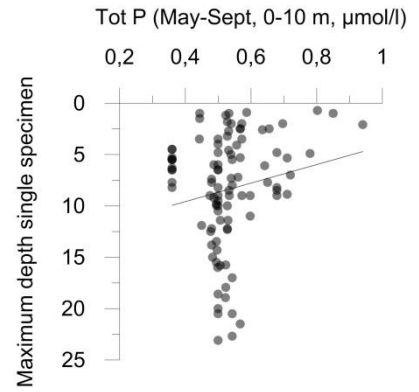
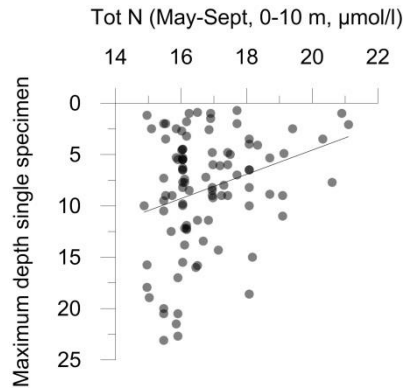
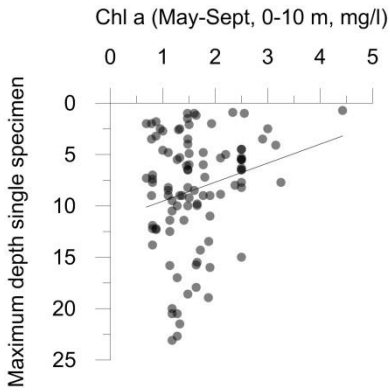
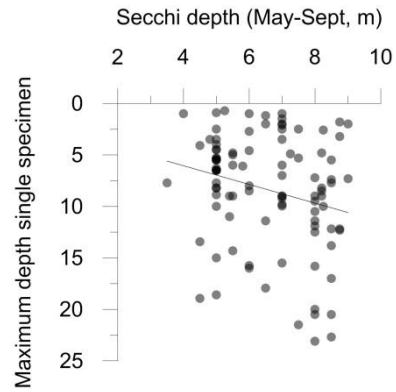
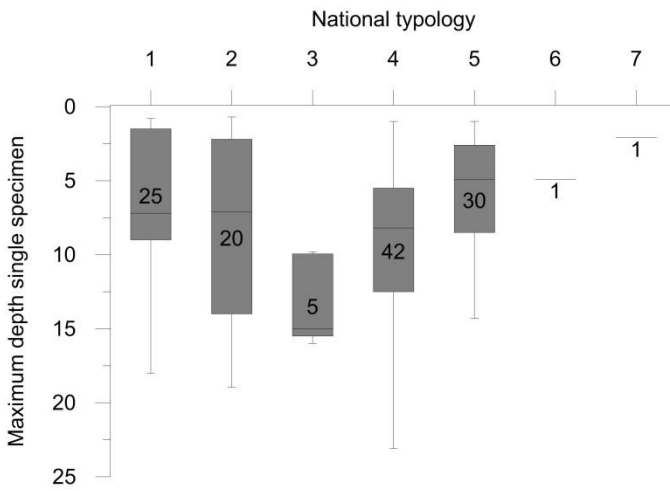
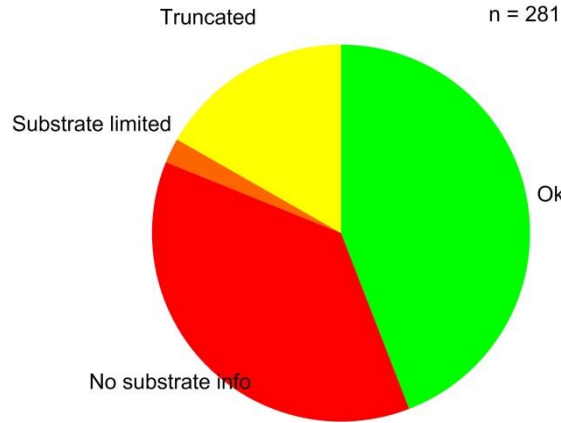
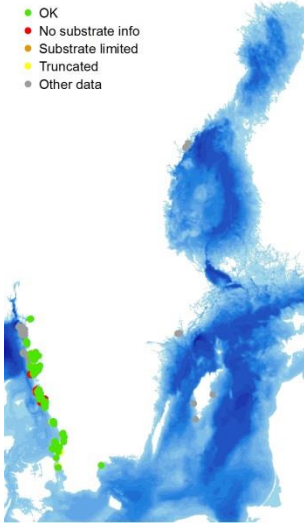


Polysiphonia fucoides west coast (type 1-6 and 25)

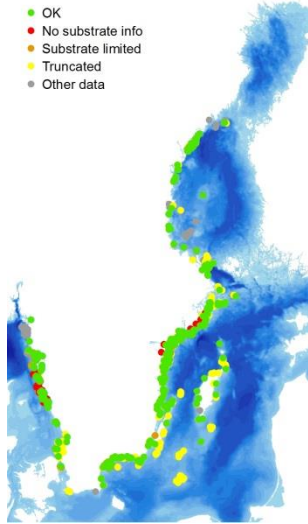


Polysiphonia stricta

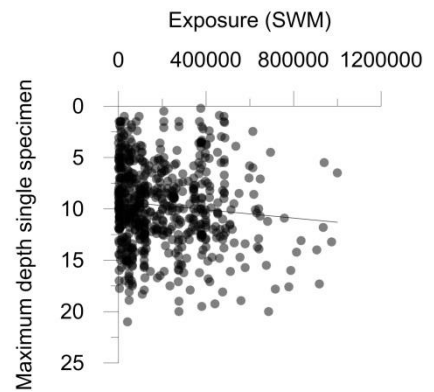
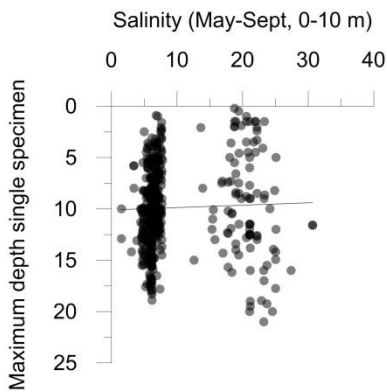
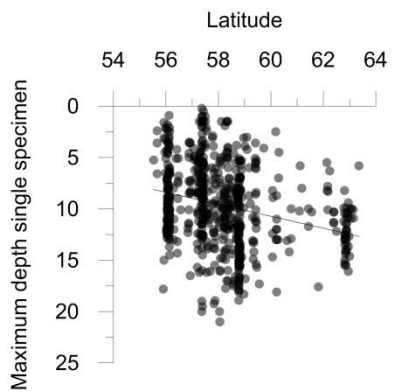
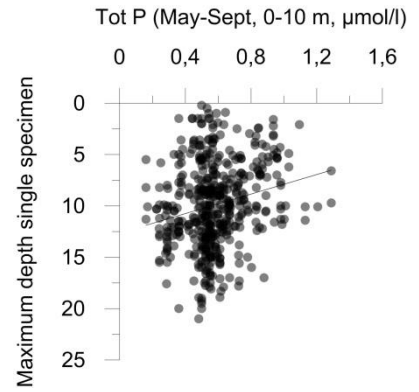
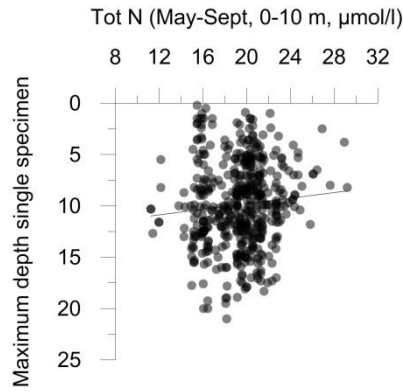
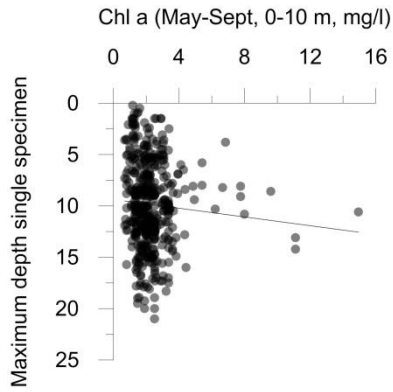
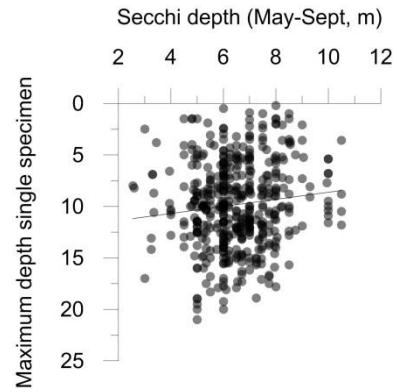
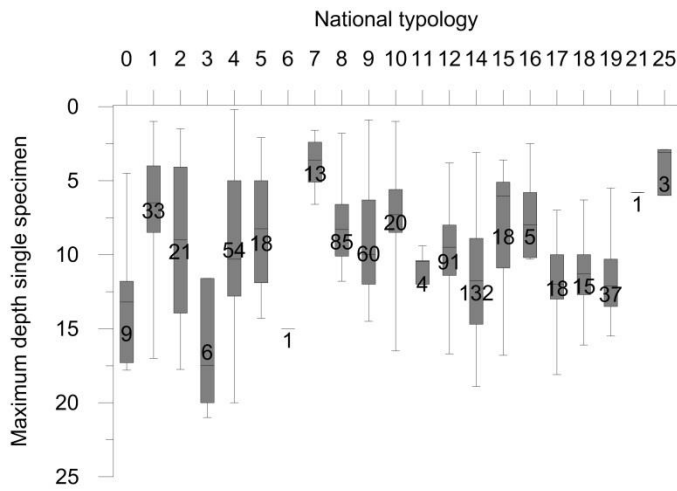
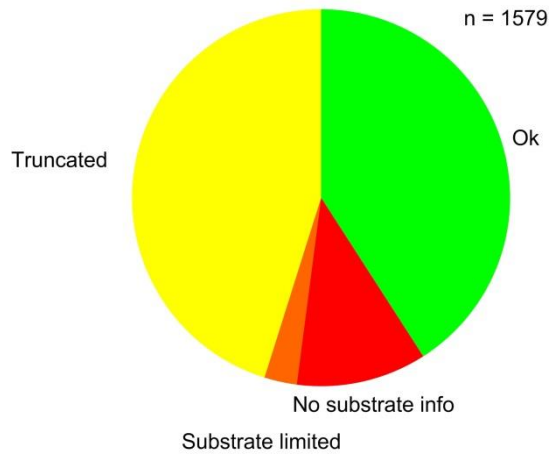
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- No substrate info
- Substrate limited
- Truncated
- Other data



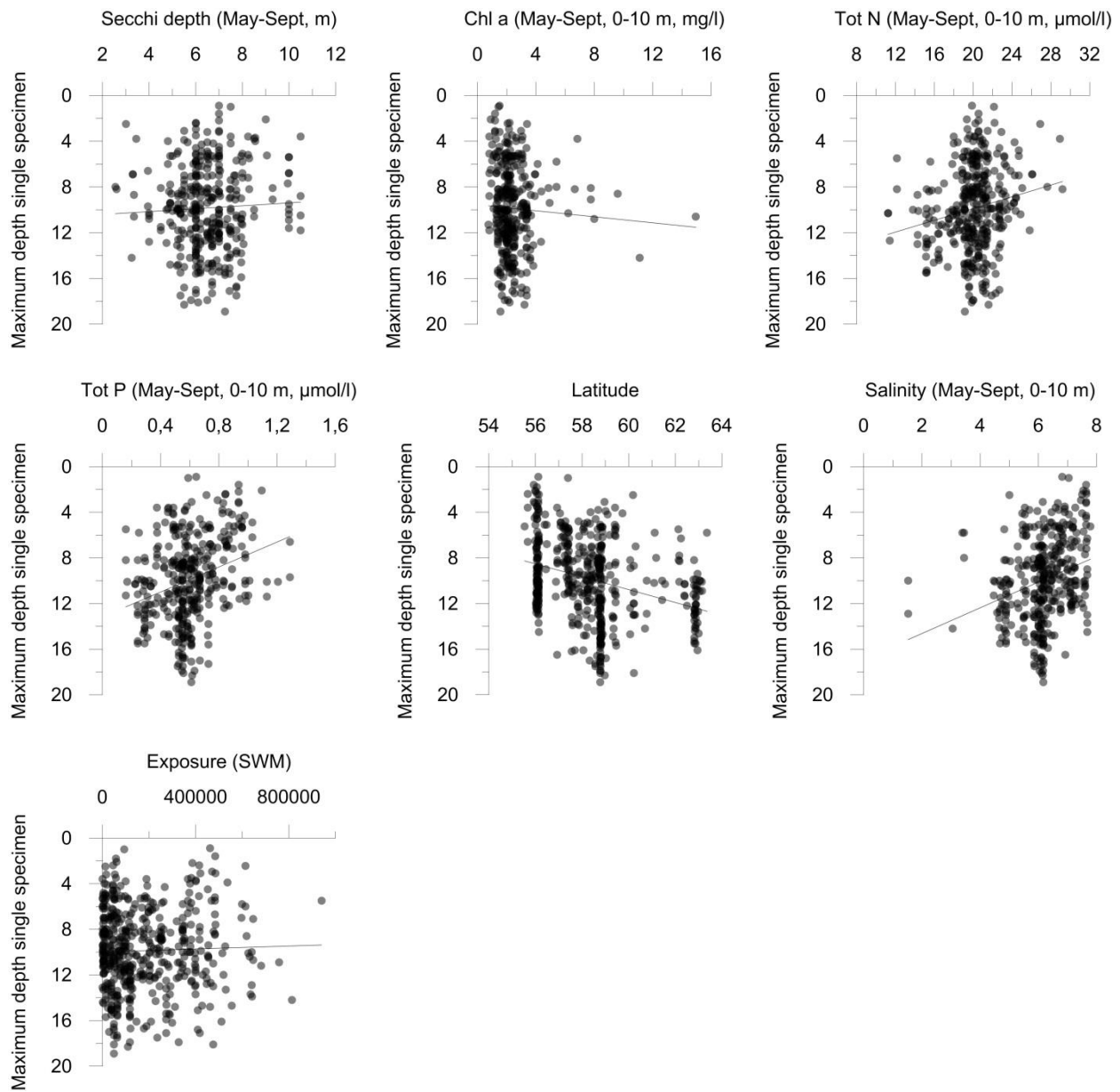
Rhodomela confervoides



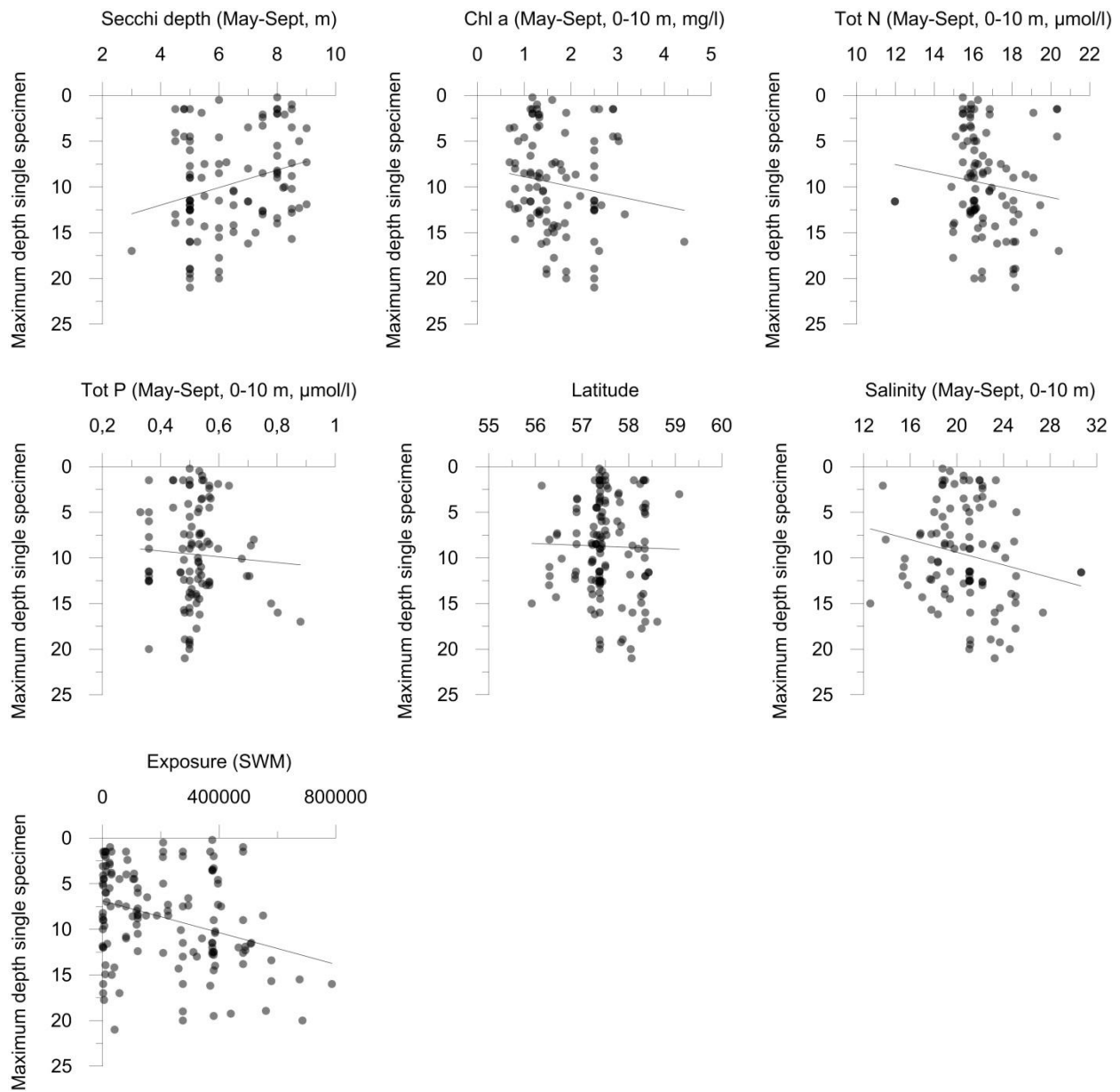
- OK
- No substrate info
- Substrate limited
- Truncated
- Other data



Rhodomela confervoides east coast (type 7-24)

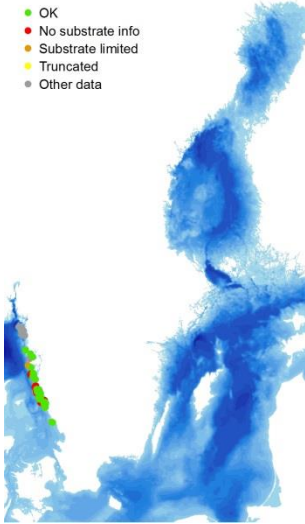


Rhodomela confervoides west coast (type 1-6 and 25)

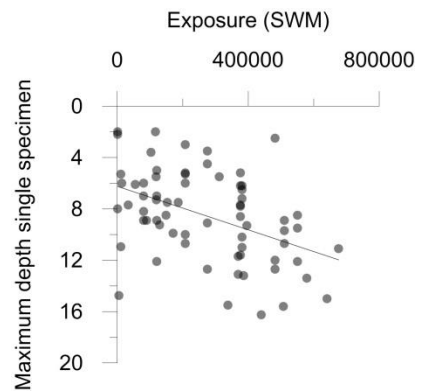
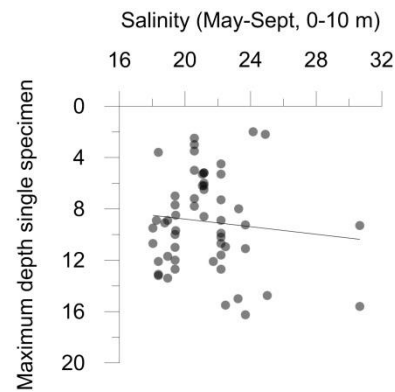
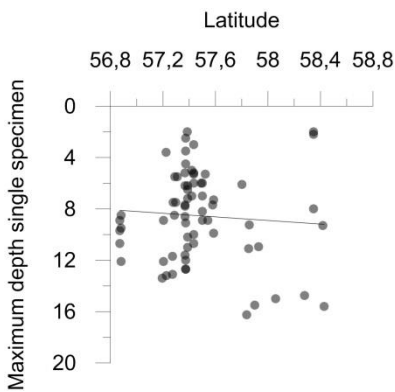
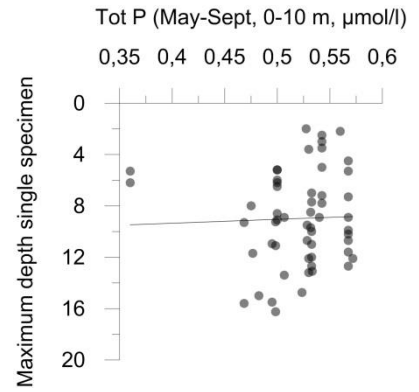
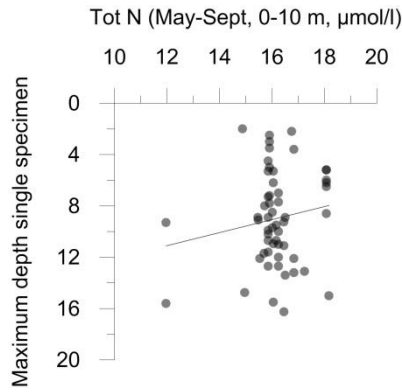
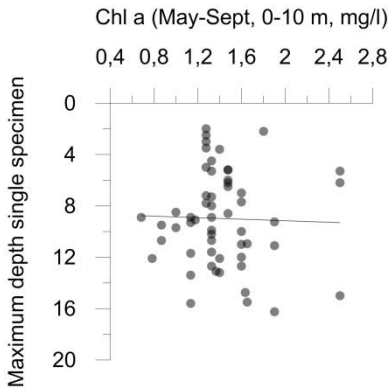
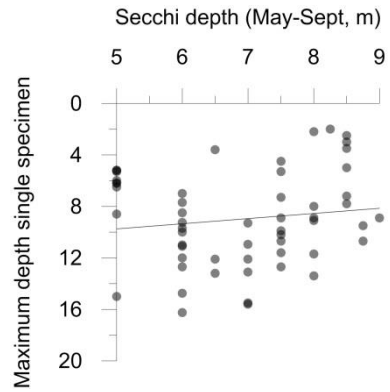
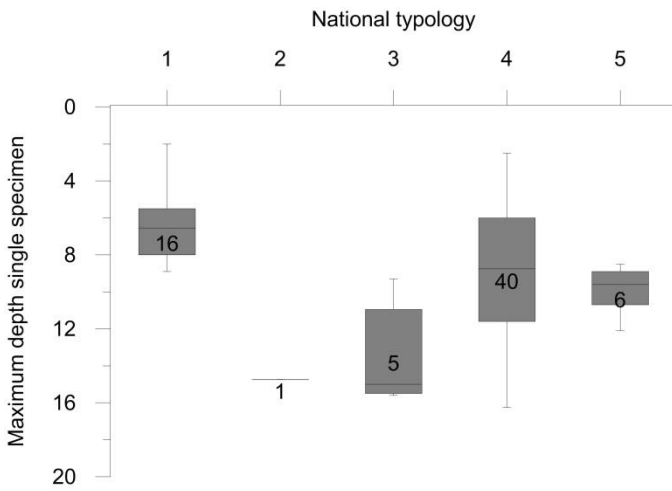
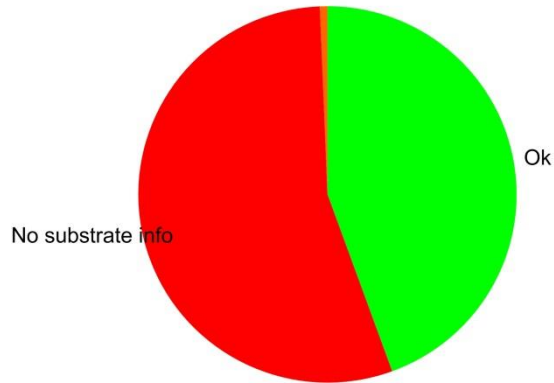


Plumaria plumosa

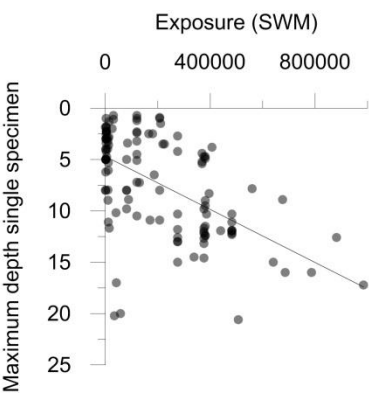
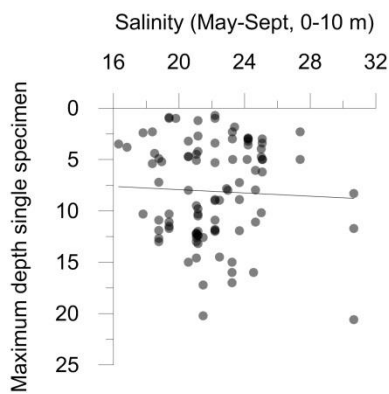
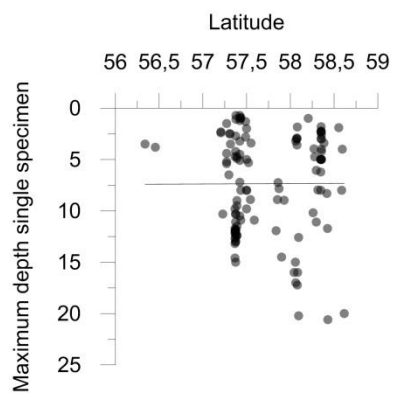
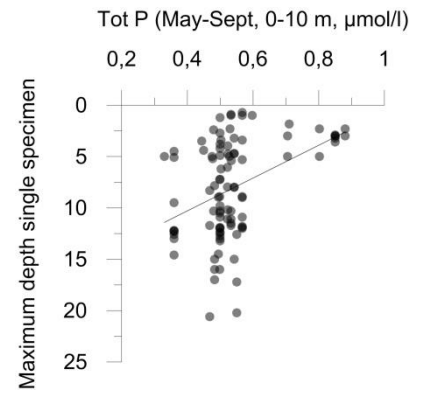
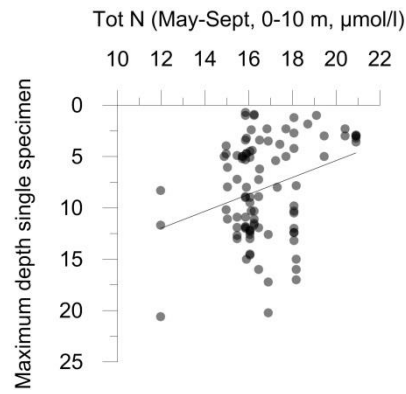
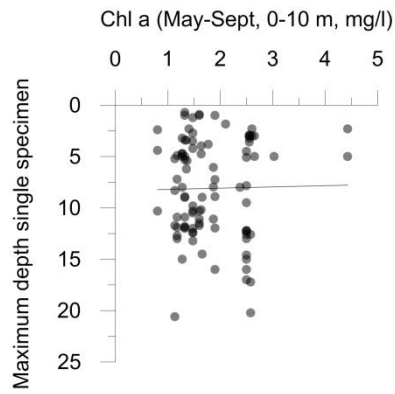
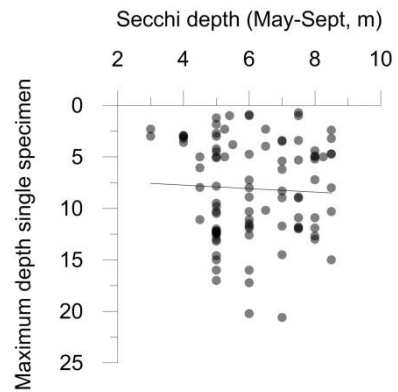
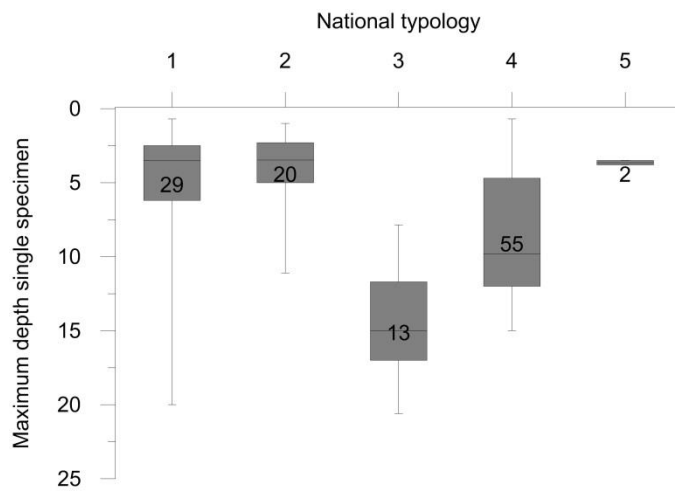
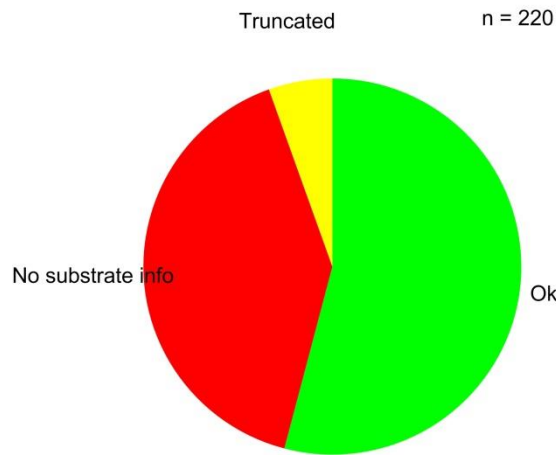
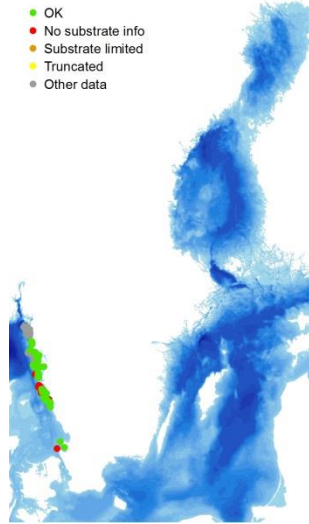
- OK
- No substrate info
- Substrate limited
- Truncated
- Other data



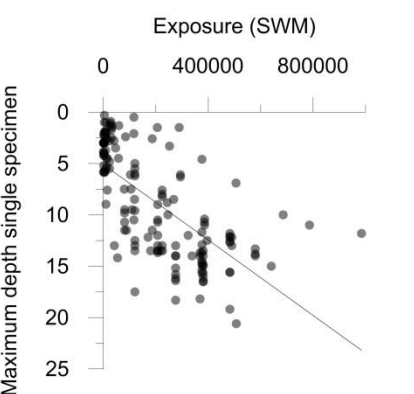
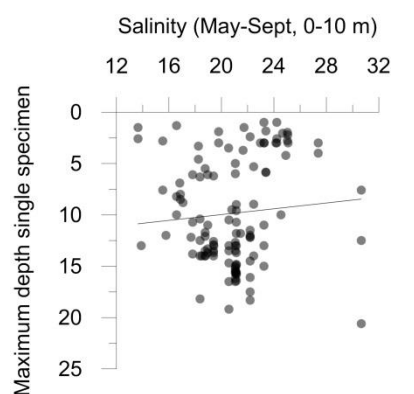
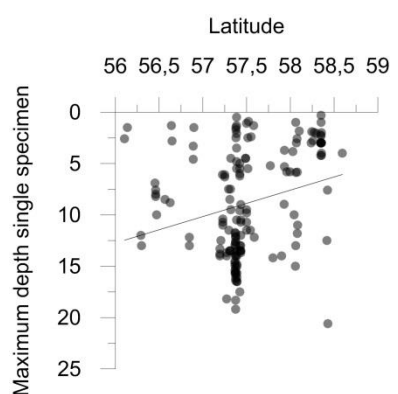
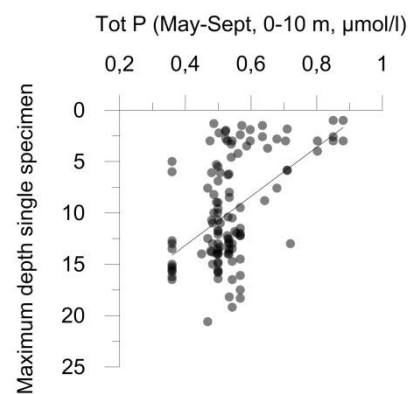
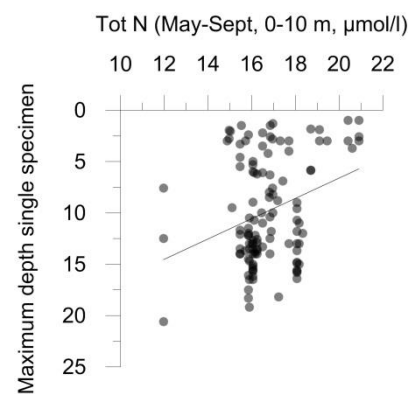
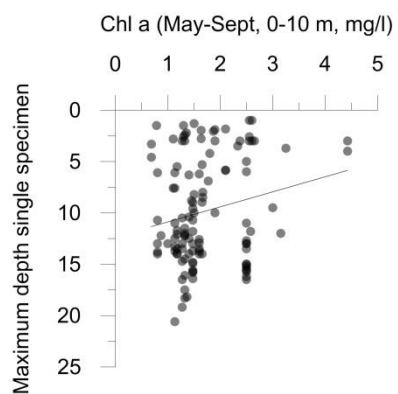
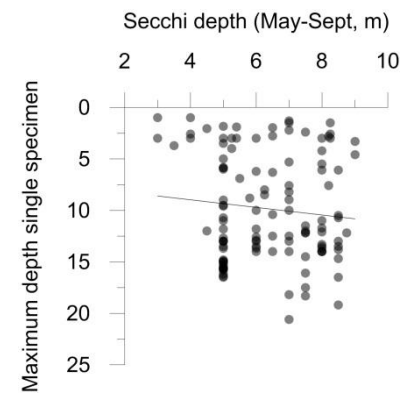
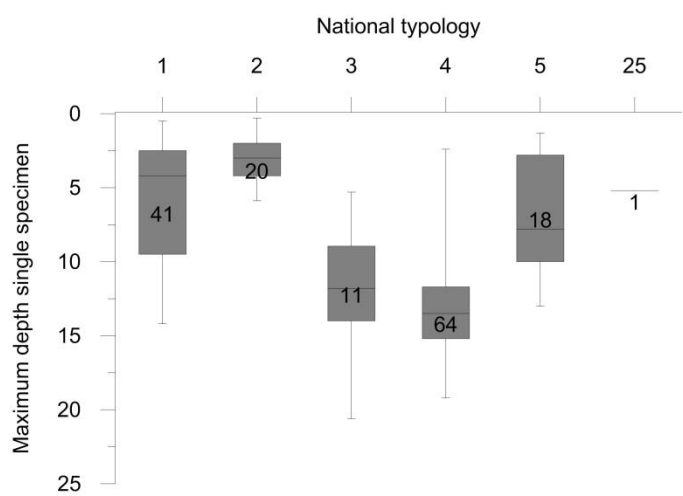
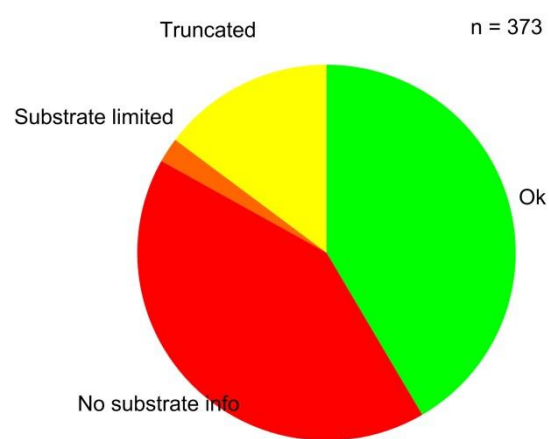
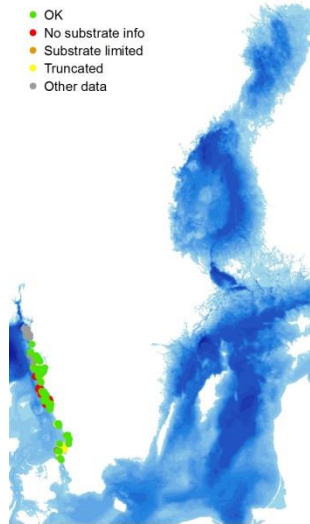
Substrate limited n = 153



Corallina officinalis

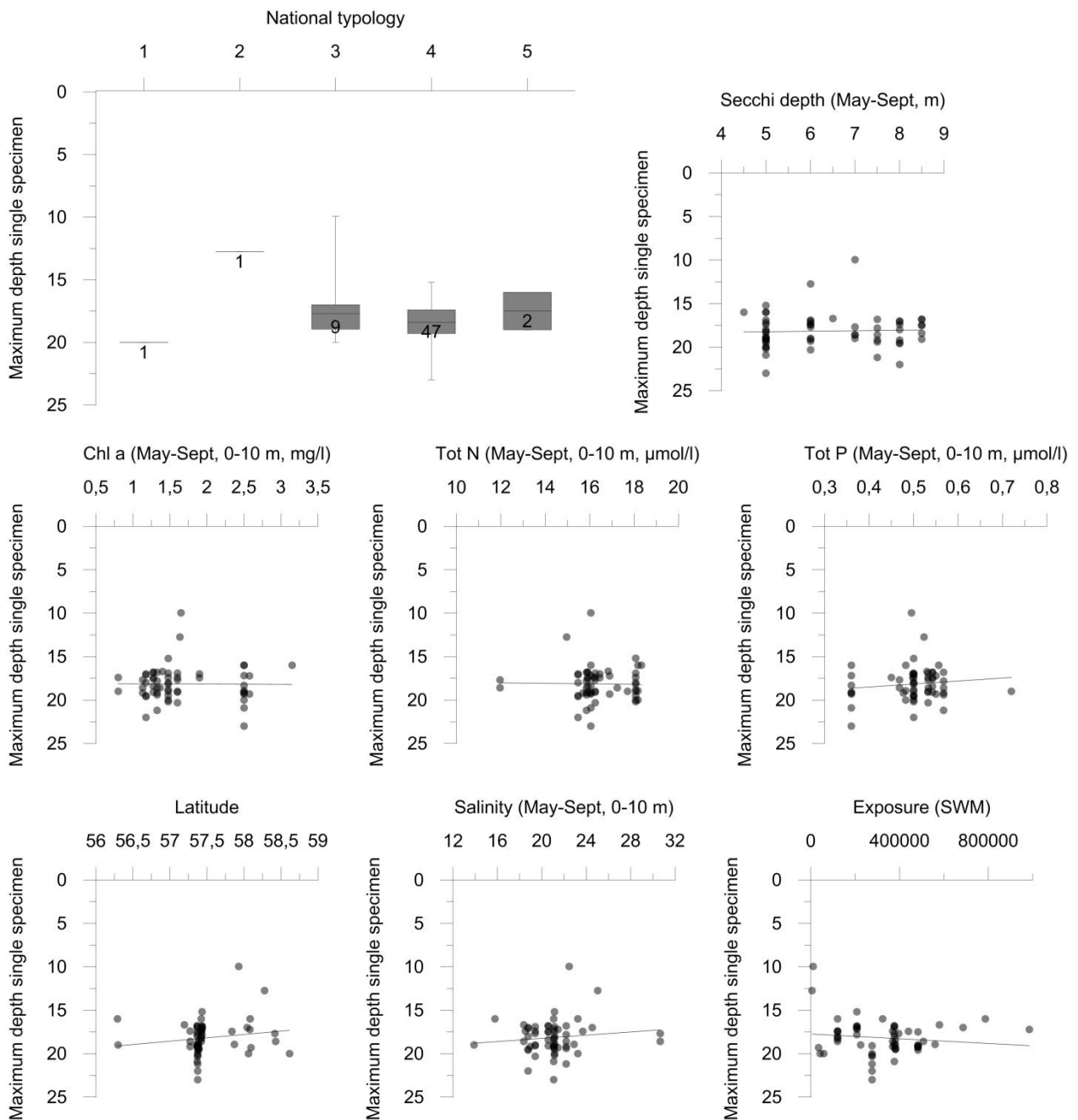
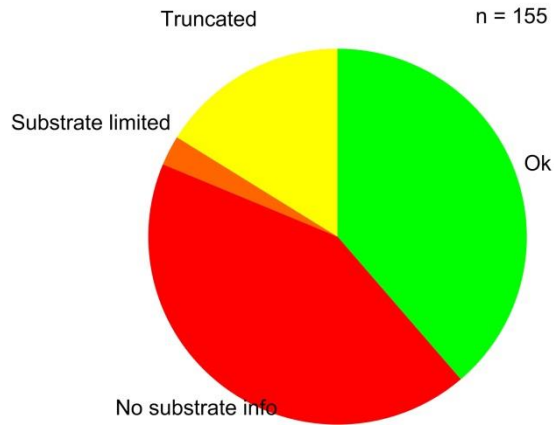
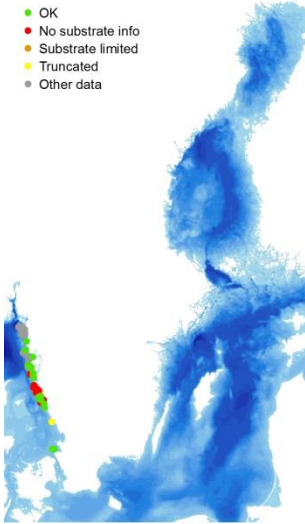


Cystoclonium purpureum

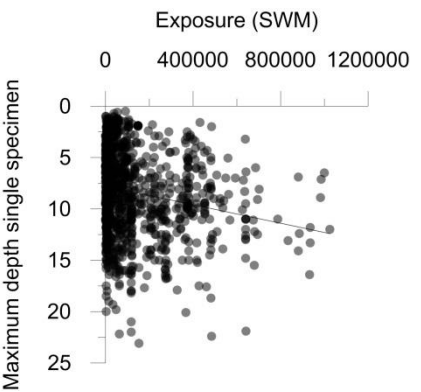
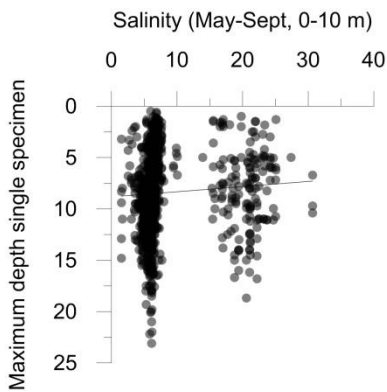
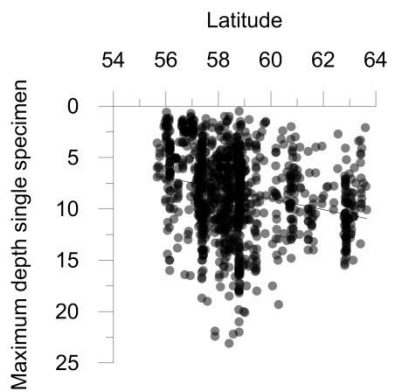
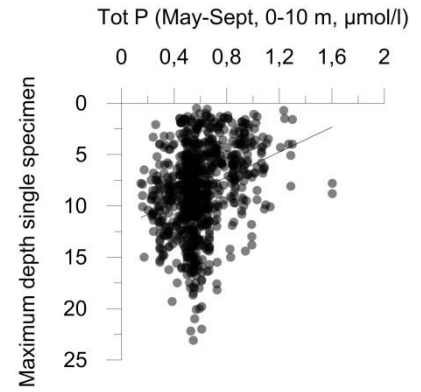
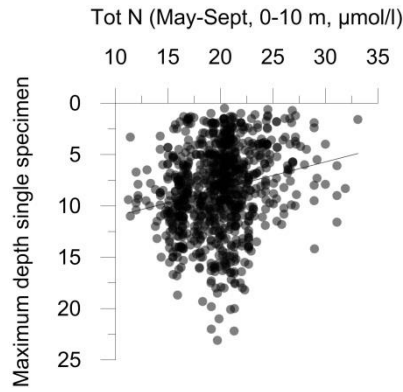
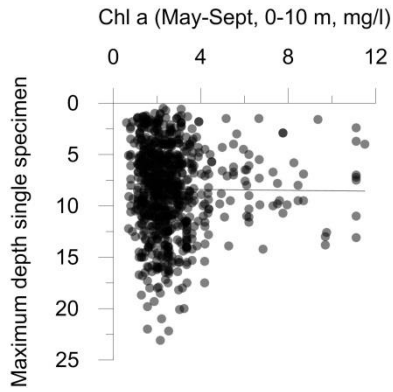
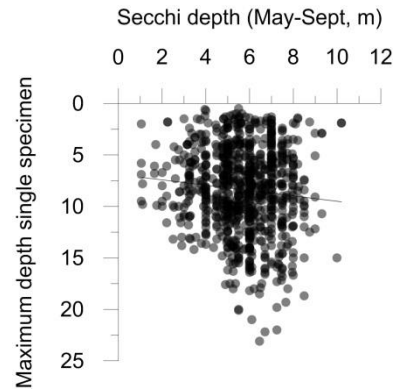
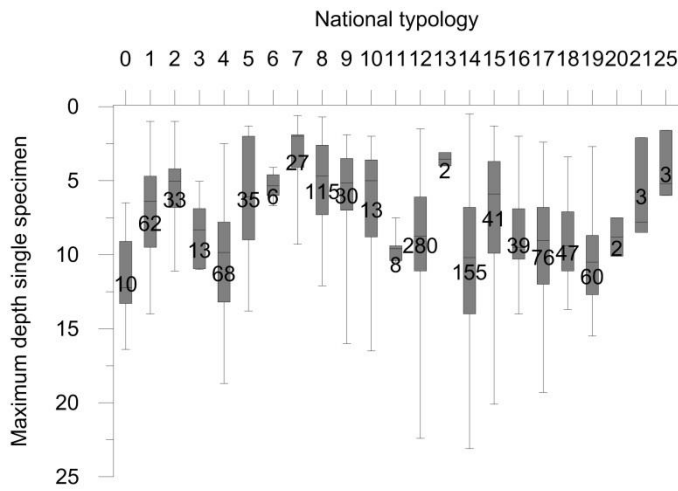
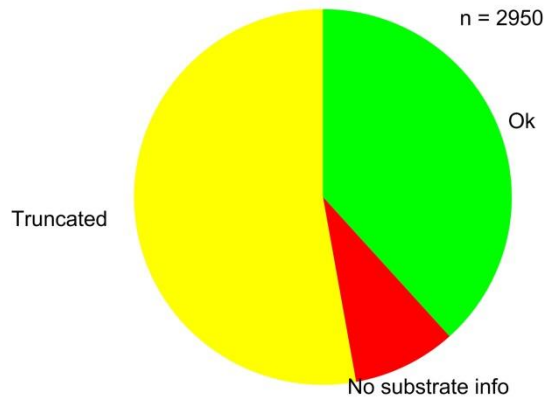
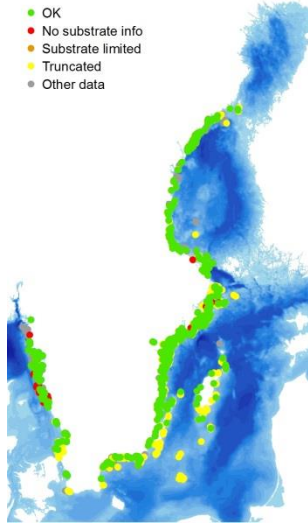


Dilsea carnosa

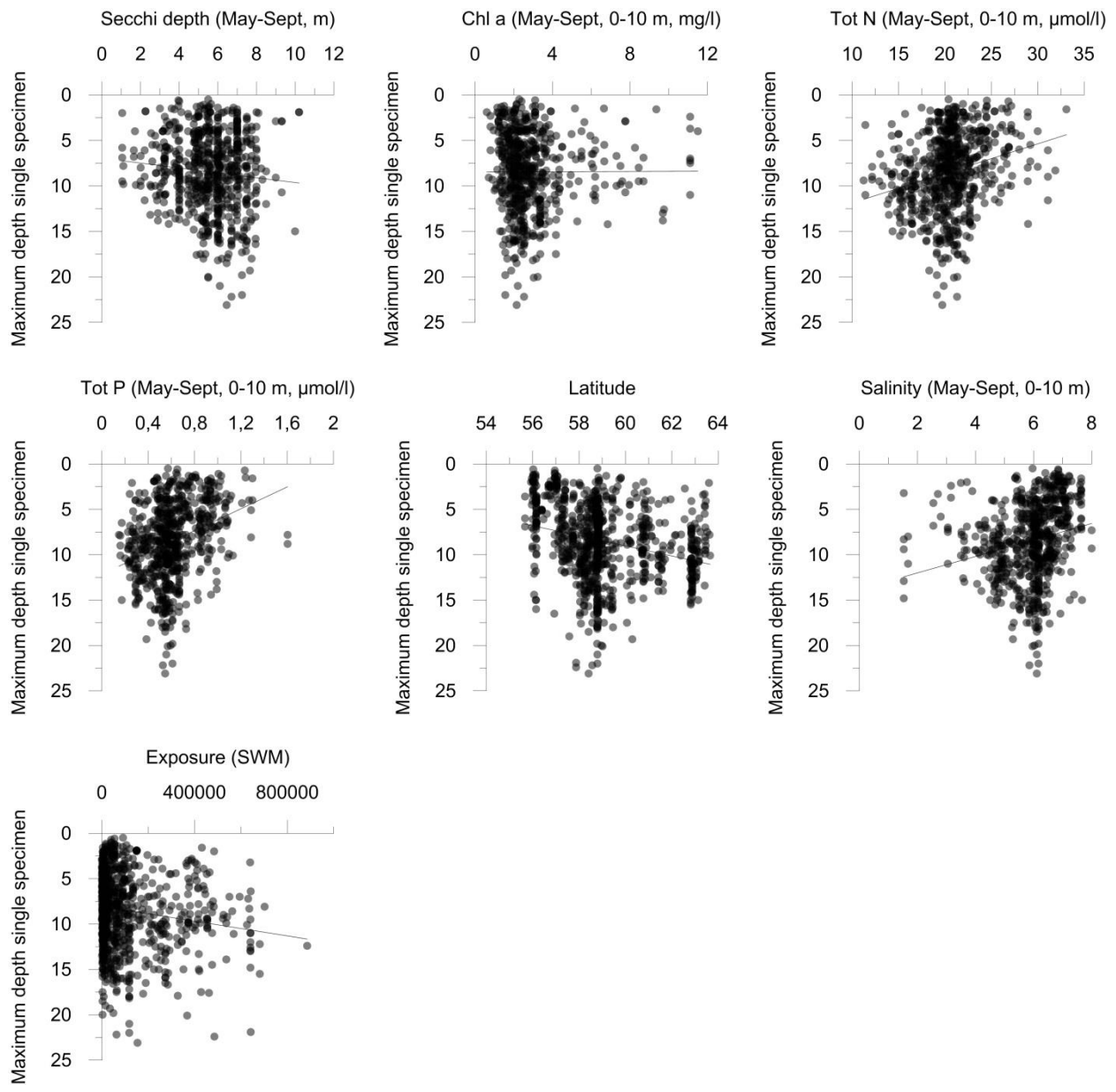
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- No substrate info
- Substrate limited
- Truncated
- Other data



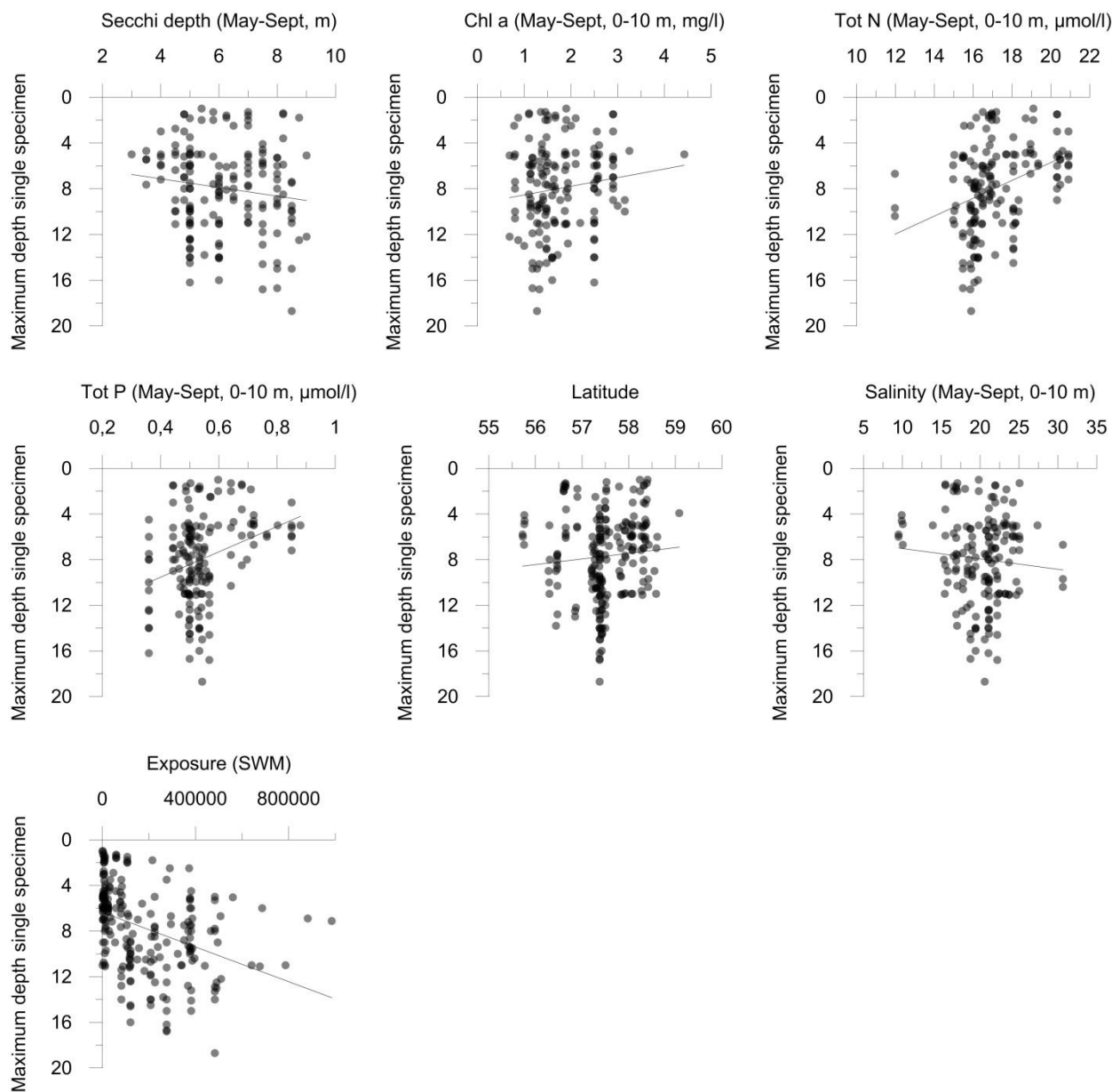
Furcellaria lumbricalis



Furcellaria lumbricalis east coast (type 7-24)

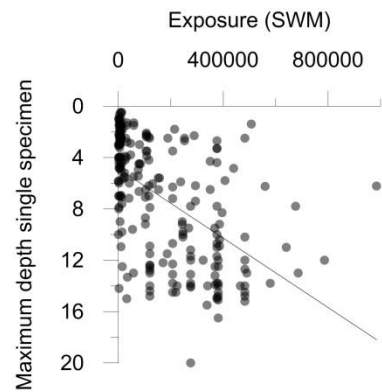
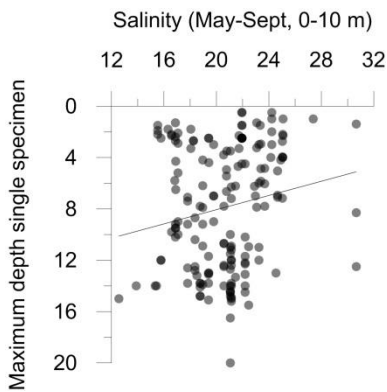
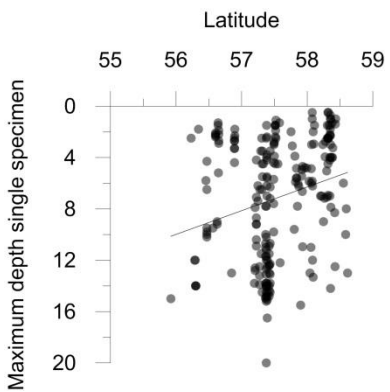
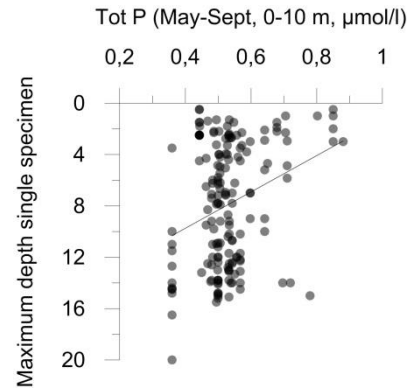
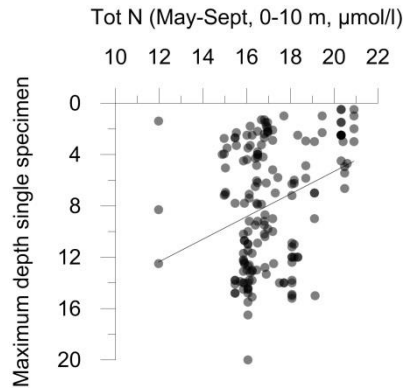
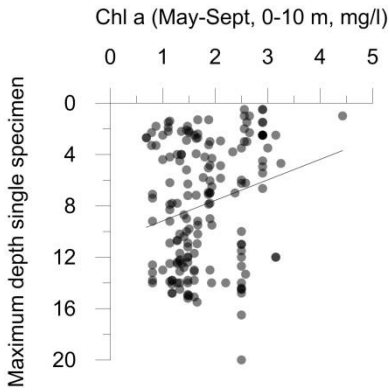
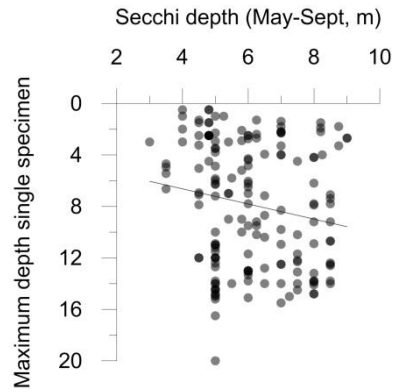
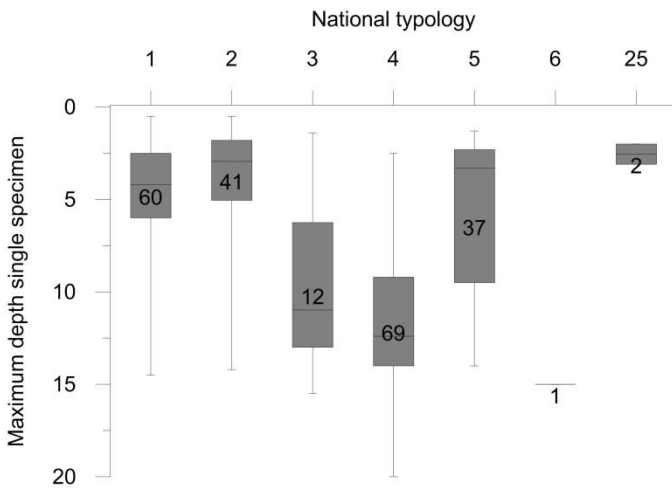
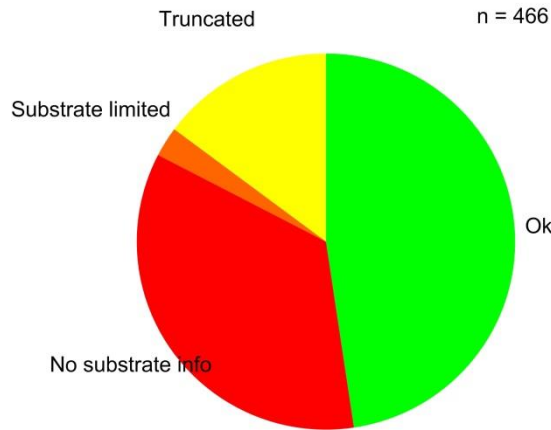
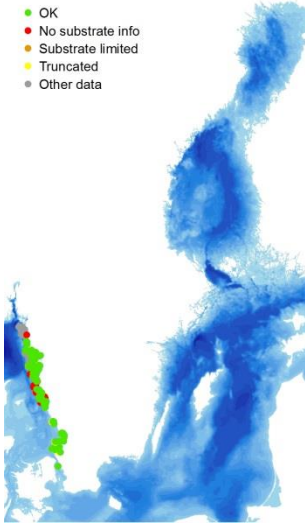


Furcellaria lumbricalis west coast (type 1-6 and 25)

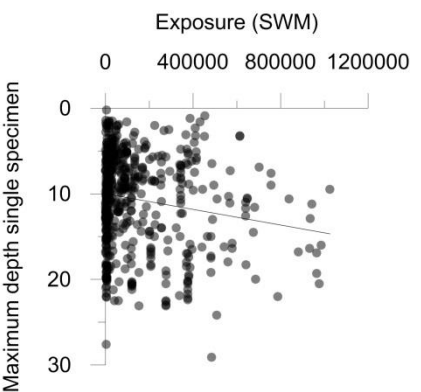
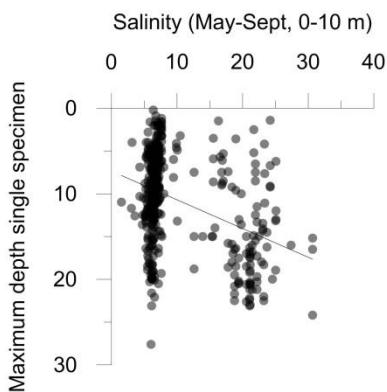
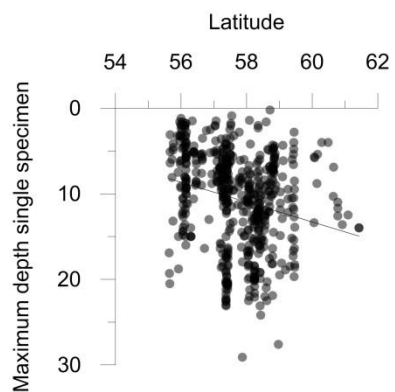
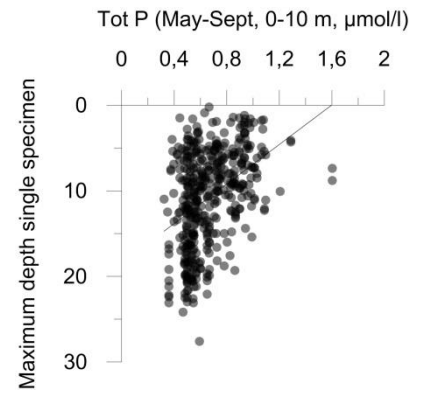
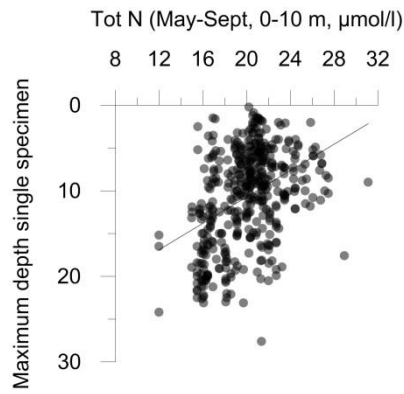
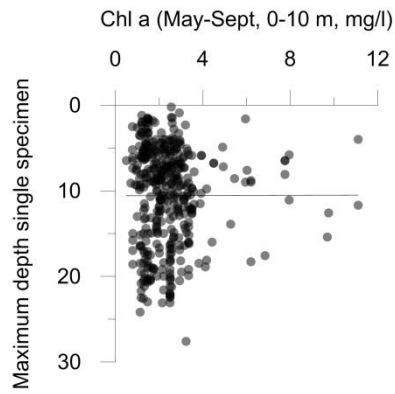
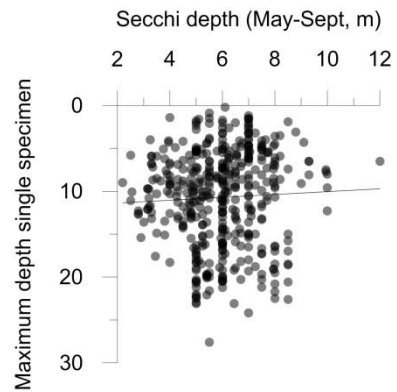
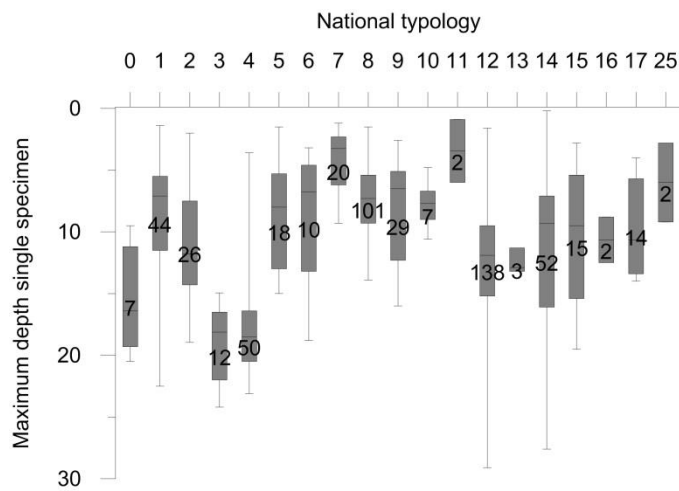
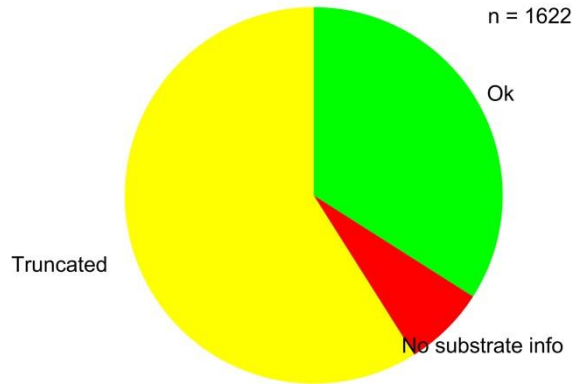
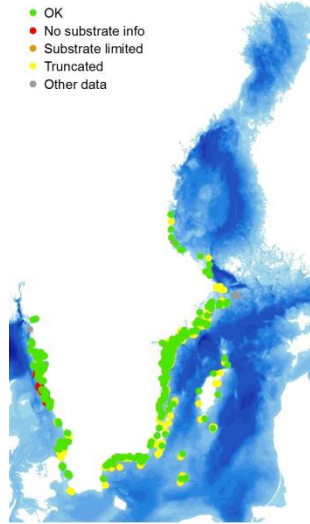


Chondrus crispus

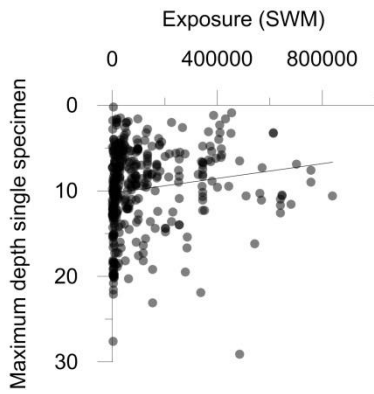
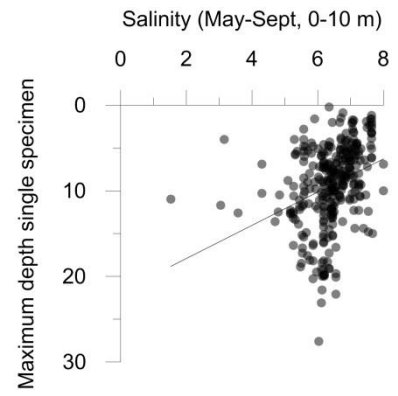
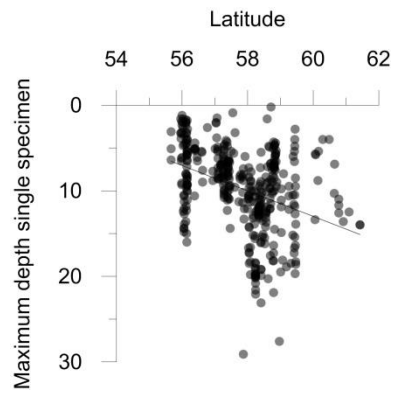
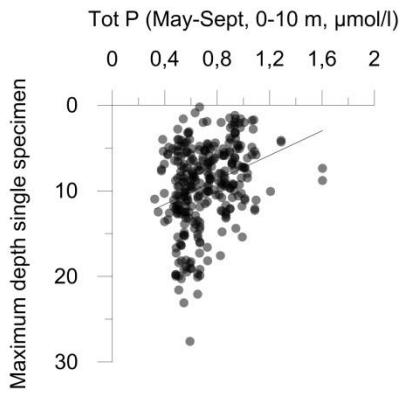
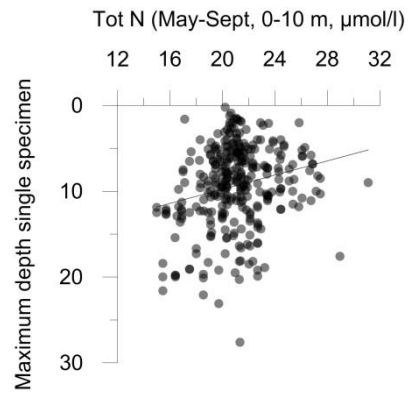
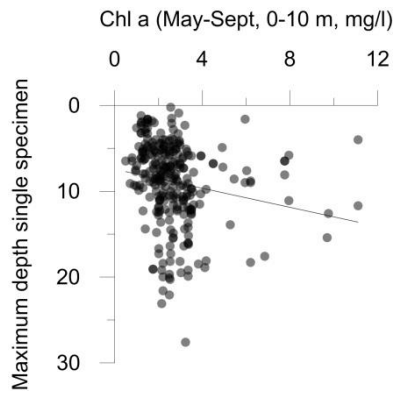
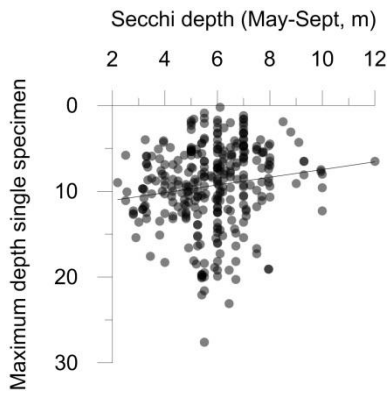
- OK
- No substrate info
- Substrate limited
- Truncated
- Other data



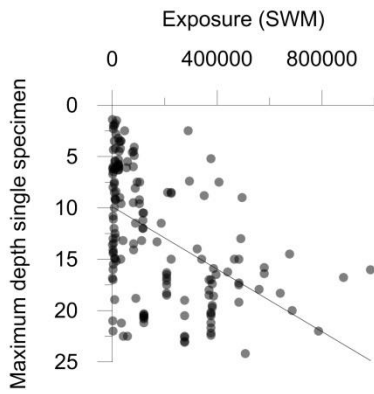
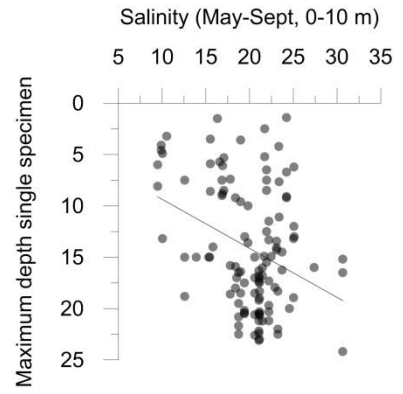
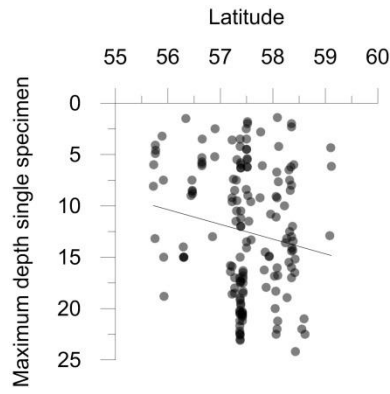
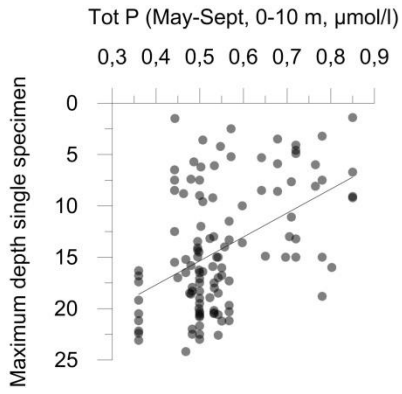
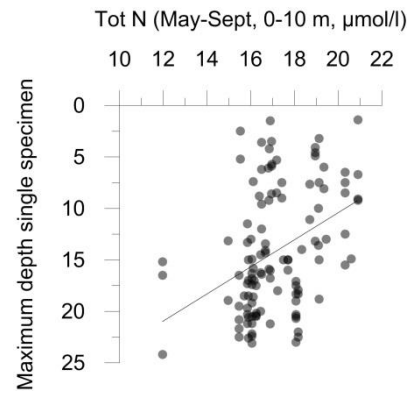
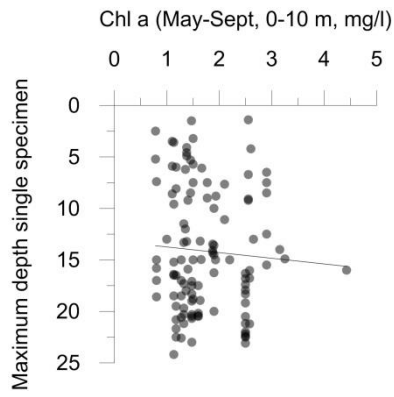
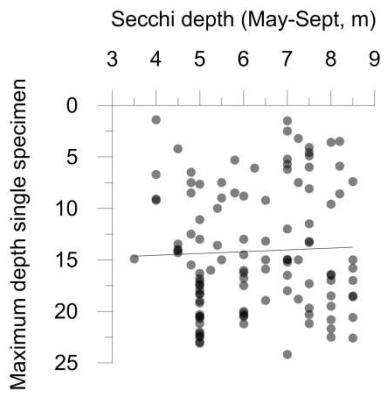
Coccotylus/Phyllophora



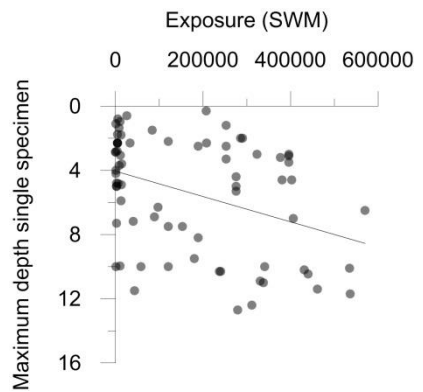
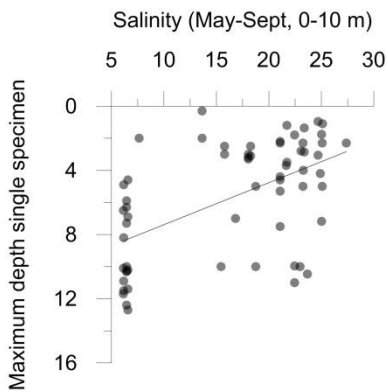
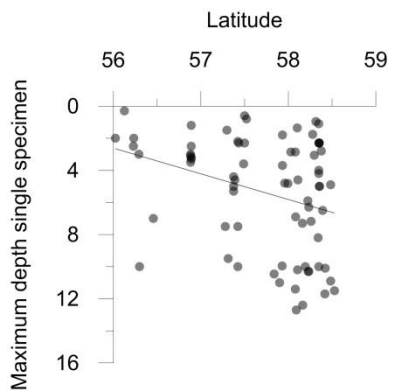
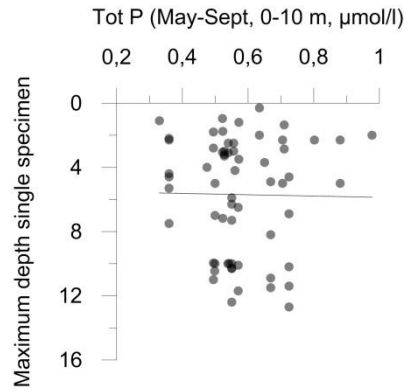
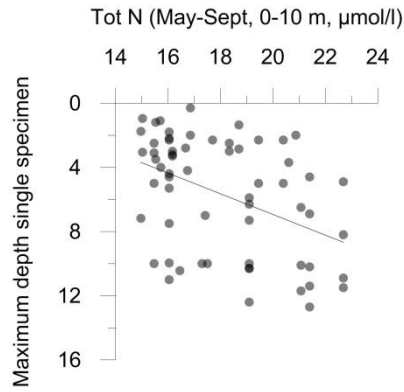
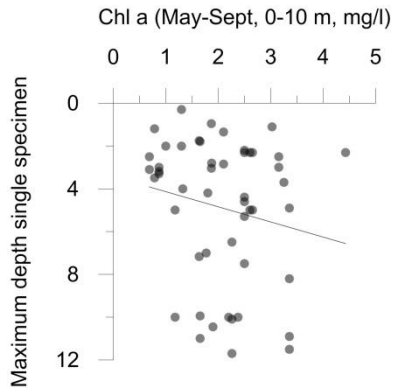
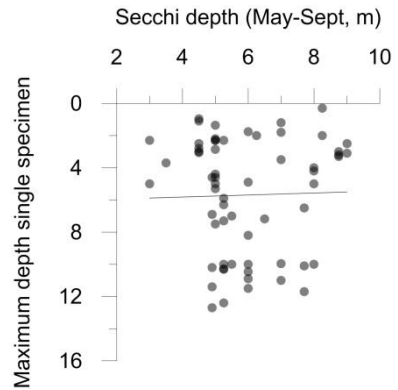
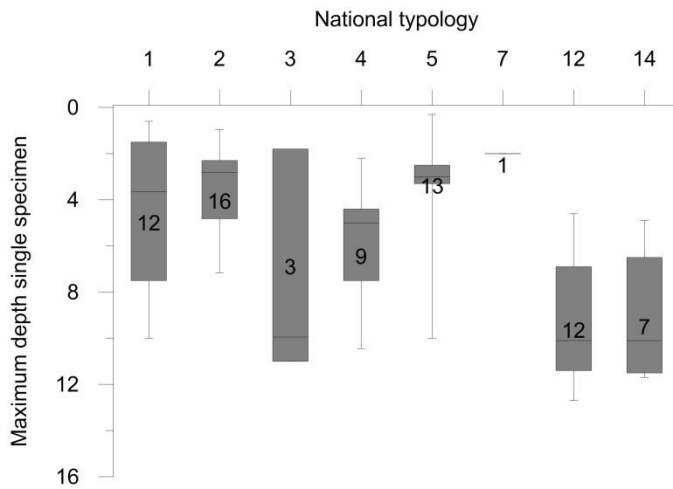
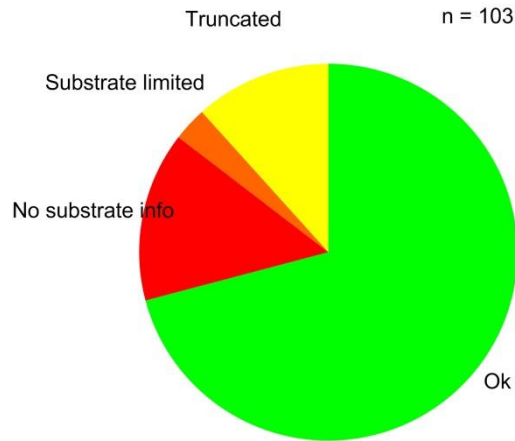
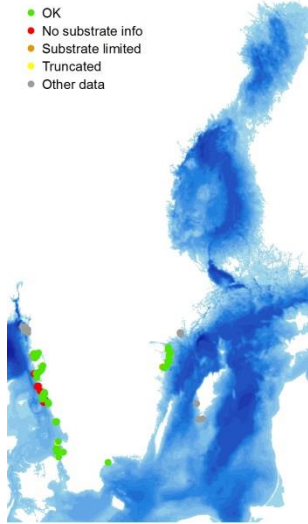
Coccotylus/Phyllophora east coast (type 7-24)



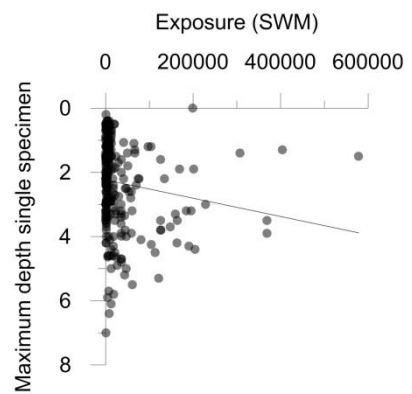
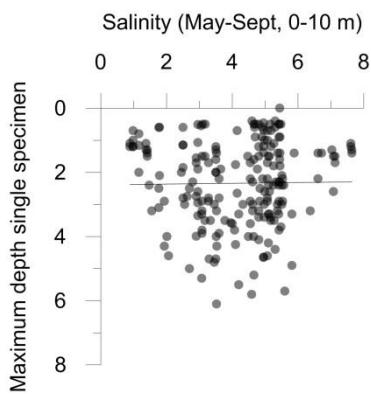
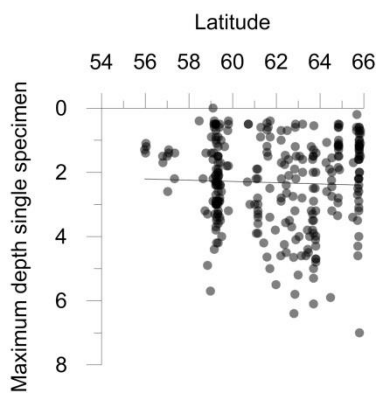
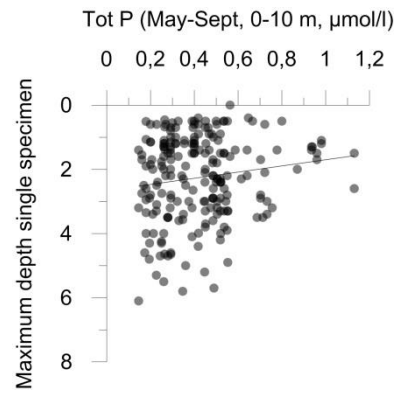
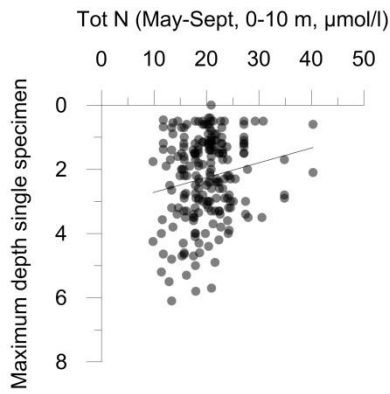
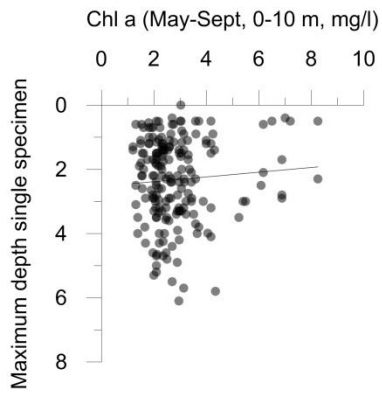
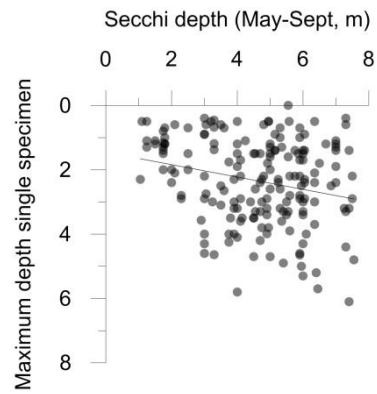
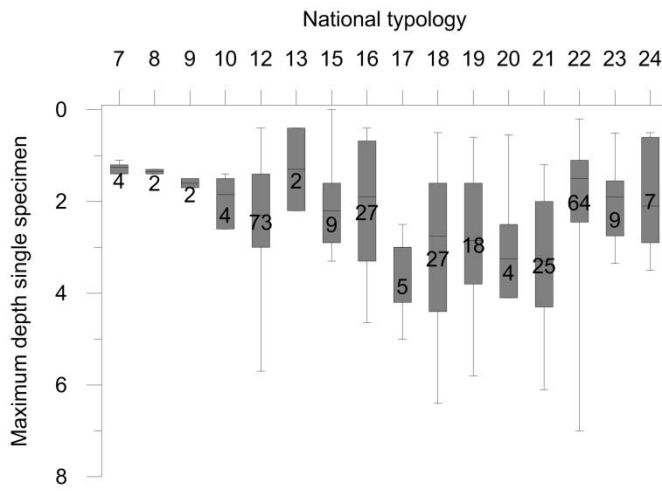
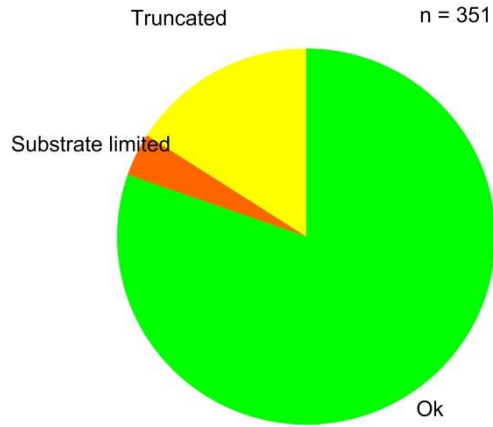
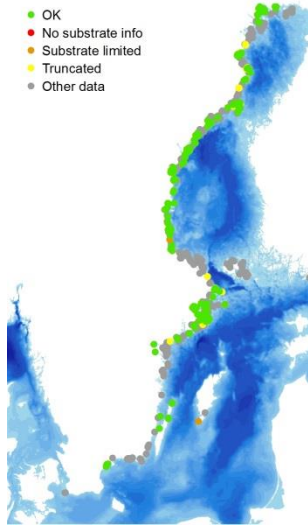
Coccotylus/Phyllophora west coast (type 1-6 and 25)



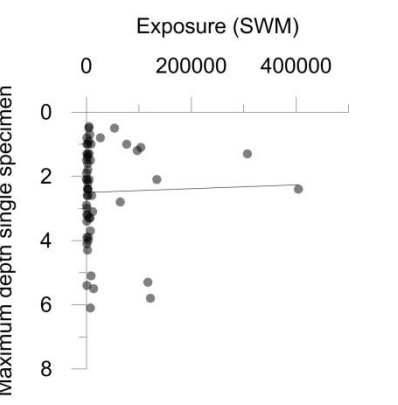
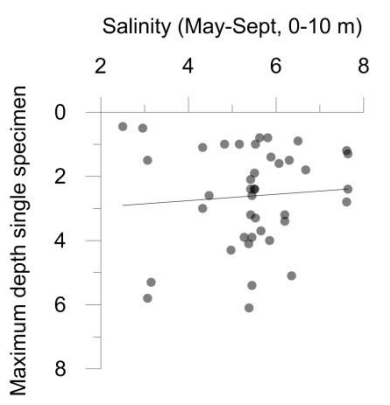
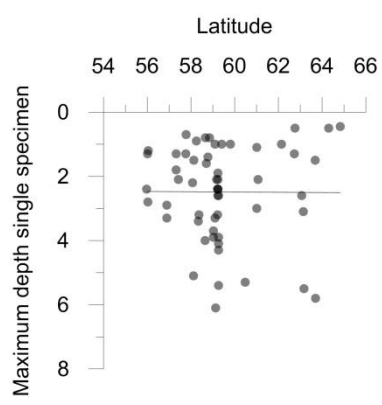
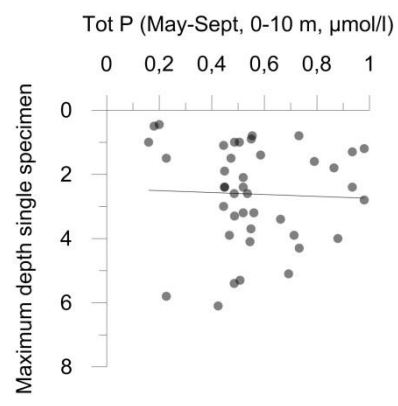
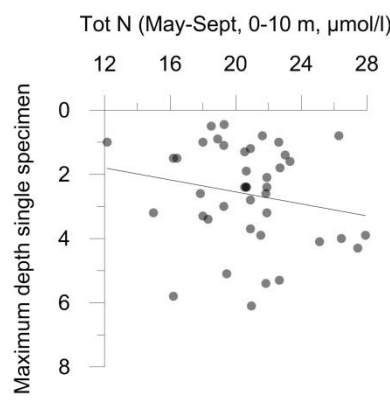
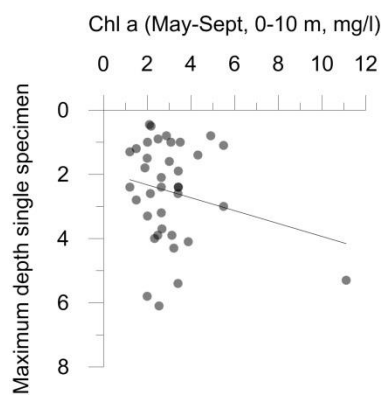
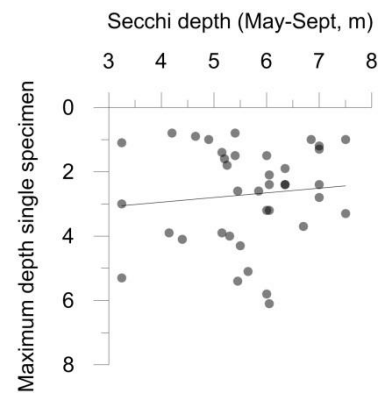
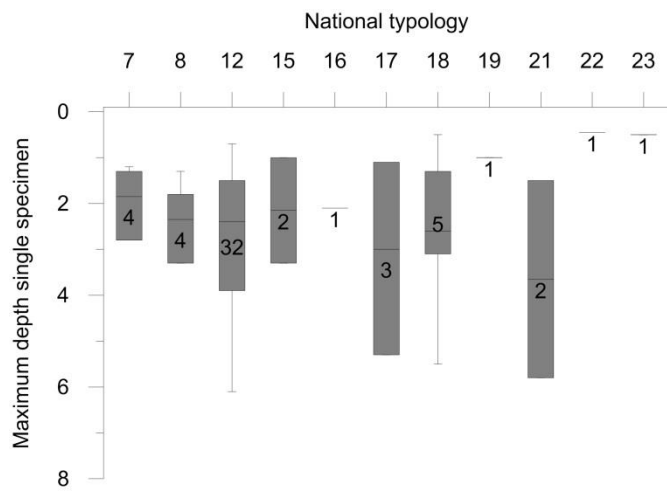
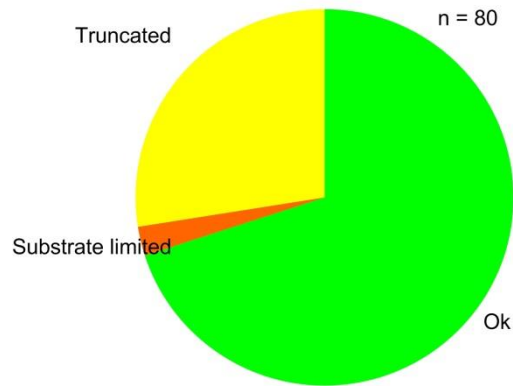
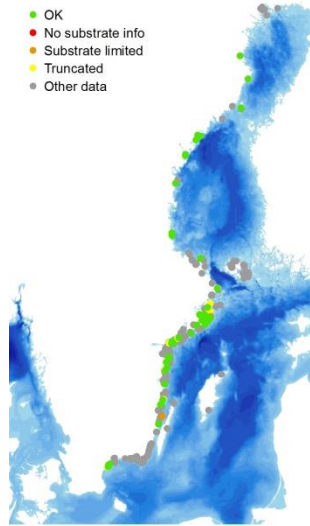
Polyides rotundus



Chara aspera



Chara baltica



Chara globularis

