

Table S7: Pearson correlation of morphological CWMs (excl. food size and trophy type) with site variables. For traits with two mutually exclusive commodities (organisation, loricata, spined, mucus, tubes, toed) only one is included. p 0.05–>0.001 plain text, p 0.001–>0.0001 underlined, $p \leq 0.0001$ bold (unadjusted).

Feature	Variable	Organisation Defense				Adhesion Size			
		Solitary	Loricata	Spined	Mucus	Tubes	Toed	Length	Toe length
pH	pH	-	-	-	-	-	-	-	-0.18
total ions	EC	-	-	-	-	-	-0.18	-	-0.19
cations	Na	-	-	-	-	-	-	-	-0.20
	Ca	-	-	-	-	-	-0.21	-	-0.20
	Mg	-	-	-	-	-	-0.16	-	-0.16
	Al	-	-	0.18	-	-	-	-	-
anions	Cl	-	-	-	-	-	-	-	-0.20
	SO ₄	0.15	-	-	-	-	-	-	-
phosphorus	ortho-P	-	-	0.16	-	-	-	-	-0.19
	ortho-Pmax.	-	-	-	-	-	-	-	-0.16
	TP	-	-	0.18	-	-	-0.18	-	<u>-0.24</u>
	TPmax.	-	-	0.18	-	-	-0.17	-	-0.23
nitrogen	KjN	-	-	0.19	-	-	-0.17	-	-0.26
	KjNmax.	-	-	0.18	0.16	-	-0.18	-	-0.19
	TON	-	-	0.22	-	-	-0.18	-	-0.32
	TONmax.	-	-	0.21	0.19	-	-0.19	-	-0.23
	TN	-	-	0.22	-	-	-0.209	-	-0.27
silica	SiO ₂	-	-	0.19	-	-	-0.19	-	-0.17
organics	COD	-	-	0.19	-	-	-	-	-0.31
	CODf	-	-	-	-	-	-	-	-0.22
	CODp	-	<u>-0.24</u>	<u>0.27</u>	-	-	-0.20	-	-0.36
	A440	-	-	0.24	-	-	-0.16	-	-0.33
	A254	-	-	-	-	-	-	-	-0.17
phytoplankton	chl <i>a</i>	-	-0.29	0.34	-	-	-0.31	0.24	-0.31
	chl <i>a</i> max.	-	-0.24	<u>0.27</u>	-	-	-0.23	-	-0.29
metabolism	O ₂ sat.	-	-	-	-	0.15	-	-	-
	pGOP	-	-0.28	<u>0.24</u>	-	0.17	-0.34	<u>0.27</u>	-0.35
	BOD	-	-0.21	0.21	-	-	-0.22	0.16	-0.32
soil	sand	-	-	-0.17	-	-	-	-	-
	clay	-	-	0.17	-	-	-	0.15	-
morphometry	depth	-	-	-0.20	-	-	-	-	0.20
	surface	-	-	-0.17	-	-	-	-	-
	D _{sl}	-	-0.17	<u>0.25</u>	-	-	-	0.15	-0.16
	shoreline slope	-	-	-	-	-	-0.17	-	-
vegetation	submerged	-	-	-	-	-	-	-	0.20
	macrophytes	-0.20	-	-	0.15	-	-	-	-