ミズクラゲ餌料としての微小動物プランクトン：現場海水中でのポリプ期の増殖と捕食応答

Table 1. Abundance and biomass of microzooplankton at the start and end of incubation in field feeding experiments of *A. coerulea* polyps and the feeding parameters. Values are written as mean (SE). Significance levels of difference from 0 are denoted by * for $p < 0.05$, and the levels of difference from the control treatment are denoted by $^{+}$ for $p < 0.05$. "-" means that the calculation was excluded because of low abundance data.

	Start		End		Feeding parameters		
	Abundance (n=3) (No L^{-1})	Biomass (n=3) (μg C L^{-1})	Abundance (Control, n=3) (No L^{-1})	Abundance (Experiment, n=4) (No L^{-1})	Clearance rates L $polyp^{-1}$ d^{-1}	Ingestion rates μg C $polyp^{-1}$ d^{-1}	Electivity
Exp. 1 (27–29 Aug.)							
Ciliates	2,388 (217)	8.49 (1.44)	7,192 (522)	3,643 (188)$^{+}$	0.07 (0.01)*	0.57 (0.05)*	-0.01 (0.05)
Dinoflagellates	13,862 (487)	38.31 (3.1)	15,882 (1,482)	7,860 (761)$^{+}$	0.07 (0.01)*	2.14 (0.2)*	0.00 (0.01)
Molluscs	138 (33)	37.47 (9.93)	142 (20)	118 (23)	0.03 (0.01)*	0.93 (0.37)*	-0.49 (0.2)
Rotifers	43 (12)	0.06 (0.02)	227 (17)	15 (2)$^{+}$	0.28 (0.03)*	0.01 (0)*	0.59 (0.04)*
Copepods	37 (2)	5.13 (0.19)	80 (12)	33 (6)$^{+}$	0.02 (0.01)	0.1 (0.04)*	-0.56 (0.16)*
Copepod nauplii	165 (18)	6.79 (0.74)	262 (28)	90 (10)$^{+}$	0.06 (0.01)*	0.31 (0.05)*	-0.08 (0.1)
Oikopleura spp.	72 (14)	3.14 (0.6)	112 (9)	13 (5)$^{+}$	0.28 (0.13)	0.25 (0.03)*	0.45 (0.16)
Others	27 (9)	7.45 (3.15)	20 (8)	15 (8)	0.16 (0.12)	0.21 (0.12)	-0.22 (0.45)
Total	16,732 (520)	106.84 (4.87)	23,915 (1,278)	11,785 (881)$^{+}$	0.07 (0.01)*	4.05 (0.57)*	
Exp. 2 (6–8 Sep.)							
Ciliates	2,338 (136)	17.58 (2.24)	8,443 (388)	2,646 (85)$^{+}$	0.09 (0.01)*	1.47 (0.24)*	0.05 (0.02)
Dinoflagellates	2,098 (120)	4.96 (0.9)	3,487 (456)	1,261 (154)$^{+}$	0.08 (0.01)*	0.29 (0.04)*	-0.02 (0.04)
Molluscs	183 (30)	49.01 (6.9)	248 (38)	120 (18)$^{+}$	0.03 (0.01)*	1.2 (0.32)*	-0.45 (0.12)*
Rotifers	3 (3)	0 (0)	20 (3)	4 (2)$^{+}$	-	-	-
Copepods	43 (12)	5.76 (1.52)	52 (7)	50 (9)	0.01 (0.01)	0.05 (0.03)	-0.85 (0.11)*
Copepod nauplii	140 (23)	6.96 (1.15)	147 (23)	75 (17)	0.06 (0.04)	0.26 (0.11)*	-0.26 (0.18)
Oikopleura spp.	13 (6)	0.33 (0.15)	20 (3)	10 (4)	0.09 (0.08)	0.01 (0.00)	-0.49 (0.38)
Others	13 (4)	1.67 (0.83)	30 (13)	6 (2)	0.11 (0.08)	0.07 (0.01)*	-0.13 (0.28)
Total	4,807 (33)	86.27 (6.6)	12,397 (651)	4,156 (197)$^{+}$	0.08 (0.01)*	3.27 (0.5)*	

Table 2. Abundance and biomass of ciliates and dinoflagellates at the start and end of incubation in field feeding experiments of *A. coerulea* polyps and the feeding parameters. Values are written as mean (SE). Significance levels of difference from 0 are denoted by * for $p < 0.05$, and the levels of difference from the control treatment are denoted by $^{+}$ for $p < 0.05$.

	Start		End		Feeding parameters		
	Abundance (n=3)	Biomass (n=3)	Abundance (Control, n=3)	Abundance (Experiment, n=4)	Clearance rates	Ingestion rates	Electivity
	(No L^{-1})	(µg C L^{-1})	(No L^{-1})	(No L^{-1})	L $polyp^{-1}$ d^{-1}	µg C $polyp^{-1}$ d^{-1}	
Exp. 1 (27–29 Aug.)							
Aloricate ciliates (< 30 µm)	1,357 (228)	1.73 (0.3)	4,477 (385)	2,779 (223)$^{+}$	0.05 (0.01)*	0.12 (0.02)*	-0.18 (0.06)
Aloricate ciliates (30-50 µm)	147 (25)	0.5 (0.08)	1147 (211)	249 (53)	0.16 (0.03)*	0.10 (0.01)*	0.38 (0.09)*
Aloricate ciliates (> 50 µm)	233 (60)	4.42 (1.13)	437 (26)	123 (10)$^{+}$	0.13 (0.01)*	0.41 (0.03)*	0.30 (0.08)*
Tintinnid ciliates	652 (39)	1.84 (0.39)	1132 (50)	493 (50)$^{+}$	0.09 (0.01)*	0.14 (0.01)*	0.10 (0.10)
Thecate dinoflagellates (< 50 µm)	6,227 (568)	11.11 (1.01)	7,598 (1,448)	1,670 (277)	0.16 (0.02)*	0.94 (0.07)*	0.39 (0.03)*
Thecate dinoflagellates (≥ 50 µm)	112 (11)	0.6 (0.15)	583 (86)	143 (11)$^{+}$	0.14 (0.01)*	0.09 (0.00)*	0.35 (0.08)*
Athecate dinoflagellates (< 50 µm)	6,498 (952)	7.12 (1.04)	6,623 (665)	5,293 (587)	0.02 (0.01)	0.14 (0.06)	-0.56 (0.16)*
Athecate dinoflagellates (≥ 50 µm)	1,025 (183)	19.48 (3.53)	1,077 (49)	755 (62)$^{+}$	0.04 (0.01)*	0.60 (0.13)*	-0.33 (0.09)*
Exp. 2 (6–8 Sep.)							
Aloricate ciliates (<30 µm)	252 (13)	0.23 (0.03)	2,458 (430)	1,085 (142)$^{+}$	0.07 (0.02)*	0.02 (0.00)*	-0.15 (0.08)
Aloricate ciliates (30-50 µm)	282 (52)	1.03 (0.19)	1,487 (207)	370 (54)$^{+}$	0.10 (0.02)*	0.10 (0.02)*	0.12 (0.06)
Aloricate ciliates (>50 µm)	498 (61)	14.33 (1.97)	2,270 (287)	424 (71)$^{+}$	0.13 (0.02)*	1.30 (0.24)*	0.21 (0.07)
Tintinnid ciliates	1,307 (33)	1.98 (0.1)	2,228 (191)	768 (93)$^{+}$	0.08 (0.01)*	0.12 (0.02)*	-0.02 (0.05)
Thecate dinoflagellates (< 50 µm)	1,200 (208)	1.77 (0.31)	1,955 (288)	865 (120)$^{+}$	0.06 (0.01)*	0.08 (0.03)*	-0.15 (0.07)
Thecate dinoflagellates (≥ 50 µm)	73 (23)	0.68 (0.33)	110 (35)	18 (8)$^{+}$	0.15 (0.03)*	0.03 (0.01)*	0.27 (0.13)
Athecate dinoflagellates (< 50 µm)	720 (124)	1.01 (0.17)	1,317 (268)	294 (62)$^{+}$	0.12 (0.02)*	0.06 (0.01)*	0.16 (0.05)*
Athecate dinoflagellates (≥ 50 µm)	105 (48)	1.49 (0.67)	105 (34)	85 (23)	0.03 (0.02)	0.02 (0.01)	-0.58 (0.22)