The following appendix accompanies the article

RNA:DNA ratios of calanoid copepods from the epipelagic through abyssopelagic zones of the North Pacific Ocean

Tsutomu Ikeda*, Fumikazu Sano, Atsushi Yamaguchi, Takashi Matsuishi

Graduate School of Fisheries Sciences, Hokkaido University, Minato-machi, Hakodate, 041-0921 Japan

*Email: tom@pop.fish.hokudai.ac.jp

Aquatic Biology 1:99–108 (2007)

Appendix 1. Summary of protein (PRO), protein:wet weight (PRO:WW), RNA:protein (RNA:PRO), protein:DNA (PRO:DNA) and RNA:DNA of individual copepods from the epipelagic through abyssopelagic zones of the northern North Pacific and Bering Sea (note: RNA:PRO and PRO:DNA are additional data and are not discussed in the article). Associated features of each species including stage/sex (F: female, M: male), feeding type (C: carnivore, D: detritivore, S: suspension feeder), and presence or absence (P or A, respectively) of myelin sheath enveloping axon are noted. See 'Results' in main article for details

Copepod	Stage	Sampling date	Site	Feeding type	Myelin sheath	n	PRO (mg ind.$^{-1}$)		PRO:WW (%)		RNA:PRO (µg mg^{-1})		PRO:DNA (mg µg^{-1})		RNA:DNA (µg µg^{-1})	
							Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD
Epipelagic (0 to 500 m)																
Metridia pacifica	C6F	Jul 03	16,17,20	S	A	9	0.09	0.01	9.63	0.63	24.4	7.6	0.22	0.03	5.22	1.25
	C6F	Dec 03	2	S	A	13	0.05	0.01	8.40	1.09	47.3	6.5	0.16	0.03	7.48	1.30
Pleuromamma abdominalis	C6F	Jul 03	15,21,22	S	A	7	0.15	0.05	9.81	2.46	23.6	14.1	0.20	0.05	4.63	2.57
Pleuromamma scutullata	C6F	Jul 03	11,16,17	S	A	11	0.16	0.01	9.12	0.79	15.5	3.9	0.12	0.02	1.78	0.43
Pleuromamma xiphias	C6F	Jul 03	14,21,22	S	A	6	0.23	0.04	8.66	1.11	19.1	15.8	0.19	0.09	4.85	5.62
Candacia bipinnata	C6F	Jul 03	22	C	A	2	0.05	0.00	6.68	1.90	11.4	11.2	0.28	0.02	3.08	2.92
Candacia columbiae	C6F	Jul 03	11	C	A	2	0.41	0.13	11.01	2.29	21.5	15.5	0.16	0.19	4.97	6.57
Euchirella rostrata	C6F	Jul 03	13	C	A	3	0.38	0.02	10.47	1.23	31.2	3.5	0.13	0.01	3.97	0.31
Gaetanus simplex	C6F	Jul 03	11,17,20	S	P	8	0.20	0.02	10.09	0.61	14.8	4.8	0.12	0.02	1.75	0.50
Gaetanus sp.	C6F	Jul 03	9	S	P	1	0.17		10.84		11.5		0.12		1.34	
Euchaeta indica	C6F	Jul 03	14	C	P	2	0.21	0.02	9.51	0.36	18.5	3.3	0.13	0.01	2.33	0.24
Euchaeta marina	C6F	Jul 03	15,22	C	P	4	0.17	0.02	9.80	0.91	15.3	8.8	0.12	0.03	1.92	1.32
Paraeuchaeta elongata	C6F	Jul 03	11	C	P	2	0.70	0.07	7.41	1.14	12.4	1.8	0.07	0.02	0.92	0.37
Scolecithrix danae	C6F	Jul 03	23	D	P	2	0.07	0.01	13.56	4.59	18.7	5.4	0.14	0.03	2.57	0.28
Eucalanus bungii	C6F	Jul 03	10,12,14	S	P	5	0.26	0.08	3.28	0.60	43.1	18.4	0.11	0.04	4.54	1.80
Eucalanus hyalinus	C6F	Jul 03	24	S	P	3	0.09	0.00	7.08	0.48	32.5	4.4	0.10	0.01	3.43	0.95
Calanus marshallae	C5	Jul 03	18	S	P	3	0.11	0.05	10.17	0.72	18.3	9.4	0.10	0.03	1.78	0.92
Mesocalanus tenuicornis	C6F	Jul 03	22	S	P	2	0.15	0.01	10.75	0.01	10.85	0.43	0.12	0.00	1.28	0.04
Neocalanus cristatus	C5	Jul 03	10,12,16,17	S	P	6	0.88	0.36	5.27	1.98	24.1	32.6	0.17	0.08	2.31	1.13
Neocalanus plumchrus	C5	Jul 03	10,12,16,20	S	P	7	0.15	0.10	3.68	1.33	46.4	37.9	0.09	0.04	3.46	2.21
Neocalanus robstior	C6F	Jul 03	22	S	P	1	0.53		7.33		14.5		0.08		1.12	

Appendix 1 (continued)

Copepod	Stage	Sampling date	Site	Feeding type	Myelin sheath	n	PRO (mg ind.$^{-1}$)		PRO:WW (%)		RNA:PRO (µg mg^{-1})		PRO:DNA (mg µg^{-1})		RNA:DNA (µg µg^{-1})	
							Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD
Mesopelagic (500 to 1000 m)																
Heterorhabdus tanneri	C5	Dec 03	1	C	A	1	0.08		4.04		17.2		0.41		7.14	
	C6F	Dec 03	1	C	A	2	0.09	0.02	3.99	0.98	34.9	7.9	0.32	0.06	10.83	0.39
Metridia asymmetrica	C6F	Jul 03	10	S	A	1	0.07		4.75		10.3		0.06		0.57	
	C6F	Dec 03	1	S	A	2	0.08	0.01	5.81	0.94	18.3	4.8	0.10	0.00	1.83	0.46
Metridia curticauda	C6F	Dec 03	1	S	A	1	0.06		4.61		14.5		0.06		0.91	
Metridia okhotensis	C5M	Dec 03	1	S	A	1	0.16		6.68		14.0		0.26		3.60	
	C6F	Dec 03	1	S	A	7	0.13	0.02	5.41	0.48	17.7	5.0	0.15	0.03	2.56	0.67
Pleuromamma abdominalis	C6F	May 03	9	S	A	5	0.24	0.13	9.18	1.97	15.8	8.9	0.15	0.06	2.52	1.90
Pleuromamma scutullata	C6F	May 03	7	S	A	1	0.34		8.10		21.1		0.11		2.27	
	C6F	Dec 03	1	S	A	2	0.12	0.00	6.90	0.02	20.7	5.1	0.13	0.02	2.72	0.34
Aetideopsis rostrata	C5F	Dec 03	1	S	P	1	0.09		9.68		24.0		0.08		1.88	
Euchirella galeata	C6F	Dec 03	1	S	P	2	0.45	0.18	9.84	2.01	21.6	2.4	0.10	0.00	2.23	0.15
Euchirella messinensis	C4F	Dec 03	1	S	P	1	0.24		10.71		14.4		0.13		1.88	
	C5F	Dec 03	1	S	P	2	0.37	0.15	7.65	2.95	17.8	5.0	0.04	0.00	0.77	0.24
	C5M	Dec 03	1	S	P	1	0.69		11.06		19.1		0.07		1.29	
	C6F	Dec 03	1	S	P	1	0.76		6.44		26.8		0.07		1.85	
Gaetanus kruppii	C6F	Dec 03	3	S	P	1	0.58		10.02		29.1		0.10		2.84	
Gaetanus simplex	C5F	Dec 03	1	S	P	2	0.14	0.00	11.43	0.22	6.5	3.4	0.08	0.00	0.51	0.29
	C5M	Dec 03	1	S	P	1	0.16		12.54		7.6		0.08		0.64	
	C6F	Dec 03	1	S	P	2	0.22	0.00	10.00	0.52	15.4	4.4	0.11	0.00	1.75	0.56
Gaidius variabilis	C5F	Dec 03	1	S	P	1	0.23		9.32		19.1		0.05		0.93	
	C5M	Dec 03	1	S	P	1	0.15		11.98		5.5		0.11		0.62	
		May 03	7	S	P	1	0.16		10.19		8.6		0.08		0.65	
	C6F	May 03	7	S	P	3	0.28	0.03	11.48	0.73	8.7	1.0	0.07	0.02	0.65	0.19
	C6F	Dec 03	1	S	P	8	0.26	0.11	10.59	1.23	16.8	7.0	0.12	0.03	1.85	0.63
Gaetanus sp.	C6F	May 03	9	S	P	1	0.22		11.07		11.7		0.12		1.39	
Paraeuchaeta birostrata	C4F	May 03	8	C	P	1	0.23		6.18		10.7		0.04		0.46	
	C5F	May 03	8	C	P	2	0.16	0.03	5.91	4.36	12.3	2.5	0.03	0.00	0.42	0.13
	C5F	Dec 03	3	C	P	2	0.60	0.16	7.25	1.44	15.6	2.9	0.05	0.01	0.84	0.00
	C6F	May 03	3,8	C	P	2	1.12	0.12	6.92	0.59	4.2	2.0	0.08	0.02	0.37	0.24
	C6F	Jul 03	8	C	P	1	0.58		4.54		5.4		0.04		0.21	
	C6F	Dec 03	1	C	P	5	1.33	0.15	7.77	0.53	12.1	3.1	0.09	0.01	1.05	0.20
Paraeuchaeta elongata	C4F	Dec 03	1	C	P	1	0.27		8.33		15.1		0.03		0.52	
	C4M	Dec 03	1	C	P	1	0.29		10.03		14.9		0.04		0.55	
	C5F	May 03	8	C	P	2	0.66	0.18	9.06	0.93	5.1	2.8	0.05	0.01	0.23	0.08
	C5F	Dec 03	1	C	P	3	0.57	0.19	7.62	1.51	14.5	1.6	0.05	0.01	0.70	0.14
	C5M	May 03	8	C	P	3	0.74	0.05	9.56	1.15	10.9	2.3	0.04	0.00	0.44	0.10
	C5M	Dec 03	3	C	P	5	0.58	0.25	8.40	2.55	12.8	4.8	0.06	0.03	0.78	0.52
	C6F	May 03	8	C	P	1	0.98		10.08		8.4		0.09		0.78	
	C6F	Dec 03	3	C	P	5	0.78	0.48	7.50	1.70	14.7	4.7	0.09	0.01	1.24	0.33
	C6M	May 03	7	C	P	1	0.69		9.22		5.5		0.05		0.26	
	C6M	Dec 03	3	C	P	1	0.51		7.85		9.8		0.05		0.48	
Paraeuchaeta media	C5F	Dec 03	3	C	P	1	0.59		7.70		18.5		0.06		1.04	
	C6F	Dec 03	1,3	C	P	4	1.29	0.13	8.09	0.71	7.7	2.5	0.09	0.01	0.69	0.25
Paraeuchaeta rubra	C6F	Dec 03	3	C	P	1	0.62		5.48		24.4		0.05		1.22	
Scaphocalanus affinis	C5M	Dec 03	1	D	P	1	0.29		9.66		34.1		0.18		6.20	
Rhincalanus nastus	C4	Dec 03	1	D	P	1	0.16		5.44		15.7		0.07		1.04	
Spinocalanus spinipes	C6F	Dec 03	1	D	P	1	0.08		7.58		18.4		0.24		4.43	
Neocalanus cristatus	C5	Dec 03	1	S	P	7	0.75	0.25	4.11	1.41	1.4	1.4	0.15	0.04	2.06	1.77
	C6F	Jul 03	1,10	S	P	3	1.48	0.53	6.35	1.58	1.7	1.0	0.26	0.13	3.79	1.83
	C6M	Dec 03	1,10	S	P	2	1.04	0.33	6.52	1.2	0.3	0.1	0.15	0.04	0.50	0.23
Neocalanus plumchrus	C5	Dec 03	1	S	P	1	0.07		2.05		6.6		0.088		5.81	
	C6F	Dec 03	1	S	P	5	0.24	0.11	6.26	1.82	4.1	1.1	0.16	0.06	6.33	2.08
Neocalanus flemingeri	C6F	Dec 03	1	S	P	7	0.27	0.10	6.18	0.96	2.7	1.1	0.22	0.06	5.80	1.82

Appendix 1 (continued)

Copepod	Stage	Sampling date	Site	Feeding type	Myelin sheath	n	PRO (mg ind.$^{-1}$)		PRO:WW (%)		RNA:PRO (µg mg^{-1})		PRO:DNA (mg µg^{-1})		RNA:DNA (µg µg^{-1})	
							Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD
Upper bathypelagic (1000 to 2000 m)																
Euaugaptilus longimanus	C5	Dec 03	3	C	A	2	0.16	0.07	2.10	1.73	51.46	10.18	0.02			
Haloptilus logicornis	C6F	Dec 03	3	C	A	1	0.40		4.80		28.69		0.24			
Heterorhabdus robustoides	C6F	May 03	3	C	A	1	0.34		9.20		10.12		0.55	0.00	1.27	0.12
Heterorhabdus tanneri	C6F	May 03	3,5	C	A	4	0.20	0.07	7.41	3.42	22.46	13.69	0.22		6.75	
	C6M	May 03	3	C	A	1	0.16		6.43		9.43		0.09		5.54	
	C6M	Dec 03	3	C	A	1	0.25		6.43		6.23		0.10	0.07	4.41	1.29
Heterostylites major	C5	May 03	3	C	A	1	0.69		4.76		8.15		0.16		0.88	
	C6M	May 03	3	C	A	2	0.15	0.03	4.76	0.00	10.11	6.34	0.18		0.60	
Lucicutia longifurca	C6M	May 03	5,6	S	A	3	0.22	0.09	3.40	1.45	12.22	5.69	0.07		1.31	
Metridia asymmetrica	C6F	May 03	3,5,6	S	A	15	0.12	0.06	5.24	1.63	29.82	23.25	0.11	0.13	1.38	
	C6F	Dec 03	3	S	A	2	0.11	0.01	5.27	0.84	35.49	21.95	0.09	0.01	0.84	0.34
Aetideopsis rostrata	C4F	Dec 03	3	S	P	1	0.16		7.91		34.93		0.04	0.05	3.01	2.33
	C4M	Dec 03	3	S	P	4	0.20	0.03	9.42	1.20	31.21	14.25	0.05	0.00	3.32	2.18
	C5F	May 03	6	S	P	1	0.45		9.36		19.22		0.11		1.43	
	C5F	Dec 03	3	S	P	3	0.33	0.13	6.54	1.85	19.49	3.43	0.06	0.01	1.39	0.52
	C5M	Dec 03	3	S	P	4	0.26	0.13	5.70	2.34	32.70	23.11	0.05		2.10	
Euchirella amoena	C6F	Dec 03	3	S	P	1	0.56		5.72		18.86		0.06	0.03	1.17	0.26
Euchirella bella	C6F	Dec 03	3	S	P	2	1.09	0.09	9.00	0.80	11.24	2.09	0.14	0.01	1.56	0.81
Euchirella messinensis	C4M	Dec 03	3	S	P	1	0.05		3.33		7.04		0.03		1.11	
	C6F	May 03	3	S	P	4	0.63	0.12	5.42	1.05	12.04	1.44	0.08	0.02	1.57	0.09
	C6F	Dec 03	3	S	P	1	1.09		9.58		10.58		0.17		0.20	
Gaidius brevispinus	C6F	May 03	5	S	P	1	0.65		9.91		4.69		0.14	0.02	0.97	0.25
Gaidius tenuispinus	C5M	Dec 03	3	S	P	2	0.36	0.18	9.83	0.11	16.75	5.99	0.07		1.79	
	C6F	Dec 03	3	S	P	2	0.22	0.01	9.17	0.03	17.48	6.40	0.12		0.65	
	C6M	Dec 03	3	S	P	1	0.52		10.56		6.71		0.06	0.00	1.23	0.51
Gaidius variabilis	C4F	Dec 03	3	S	P	1	0.21		10.22		16.80		0.04	0.00	2.18	0.78
	C4M	Dec 03	3	S	P	1	0.18		9.18		50.35		0.04		0.40	
	C6F	May 03	3	S	P	1	0.18		9.51		7.97		0.15		0.71	
	C6F	Dec 03	3	S	P	4	0.46	0.08	9.95	0.79	12.94	2.64	0.10		2.03	
Pseudochirella pacifica	C6F	May 03	3	S	P	1	0.87		7.71		5.02		0.10		1.16	
	C6M	May 03	5	S	P	3	0.54	0.28	8.33	0.51	3.97	1.45	0.05	0.05	1.30	0.75
Pseudogaetanus robustus	C5M	May 03	5	S	P	1	0.36		7.17		8.84		0.10		0.48	
	C6F	May 03	3,5	S	P	2	1.56	1.28	6.11	1.50	5.62	0.85	0.11	0.01	0.19	0.06
Paraeuchaeta abyssalis	C6F	May 03	6	C	P	1	1.28		7.34		6.10		0.14		0.87	
Paraeuchaeta barbata	C6F	May 03	3	C	P	1	2.02		7.00		7.21		0.11	0.06	0.62	0.45
Paraeuchaeta birostrata	C5F	May 03	3	C	P	1	0.64		7.53		17.45		0.04		0.87	
	C5F	Dec 03	3	C	P	1	1.31		9.32		7.66		0.06		0.76	
	C6F	May 03	3	C	P	4	0.99	0.26	6.37	2.03	9.98	5.15	0.09		0.71	
	C6F	Dec 03	3	C	P	1	2.31		8.25		5.43		0.12		0.48	
	C6M	Dec 03	3	C	P	1	0.50		9.09		19.85		0.07	0.02	0.95	0.60
Paraeuchaeta media	C4F	Dec 03	3	C	P	1	0.26		10.42		14.58		0.05		0.68	
	C5F	Dec 03	3	C	P	3	0.50	0.09	7.97	1.12	20.87	18.92	0.06		1.41	
	C5M	Dec 03	3	C	P	3	0.79	0.38	12.46	4.85	9.15	2.44	0.07		0.68	
	C6F	Dec 03	9	C	P	3	1.35	0.05	8.64	0.13	5.44	0.94	0.10	0.01	1.26	0.98
Paraeuchaeta orientalis	C6F	May 03	5	C	P	1	1.26		7.33		2.08		0.15	0.01	0.66	0.16
Paraeuchaeta rubra	C3	Dec 03	3	C	P	1	0.08		6.30		37.44		0.02	0.01	0.55	0.04
	C4F	Dec 03	3	C	P	1	0.28		9.45		7.11		0.04		0.31	
	C5F	May 03	3	C	P	1	0.71		8.77		13.90		0.07		0.70	
	C5M	May 03	3	C	P	2	0.47	0.03	7.10	0.51	23.18	0.38	0.06		0.28	
	C6F	May 03	3,5	C	P	9	0.96	0.64	7.27	1.74	7.82	3.49	0.09		0.94	
Paraeuchaeta rubra	C6F	Dec 03	3	C	P	6	1.04	0.08	8.35	0.82	4.64	2.29	0.11	0.03	1.39	0.57
	C6M	May 03	5	C	P	2	0.71	0.11	11.25	0.66	6.29	2.97	0.05	0.04	0.79	0.56
	C6M	Dec 03	3	C	P	2	0.58	0.04	8.73	0.48	6.39	2.83	0.05	0.01	0.51	0.24

Appendix 1 (continued)

Copepod	Stage	Sampling date	Site	Feeding type	Myelin sheath	n	PRO (mg ind.$^{-1}$)		PRO:WW (%)		RNA:PRO (µg mg^{-1})		PRO:DNA (mg µg^{-1})		RNA:DNA (µg µg^{-1})	
							Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD
Cornucalanus indicus	C5F	May 03	6	D	P	1	1.36		8.78		9.17		0.19	0.00	0.33	0.15
	C5M	May 03	3	D	P	1	1.36		6.30		6.90		0.13	0.02	0.37	0.26
	C6F	May 03	5,6	D	P	3	1.98	0.74	5.42	0.81	9.19	4.06	0.16		1.73	
Onchocalanus magnus	C5F	May 03	3	D	P	1	1.37		8.01		12.21		0.13		0.88	
Amallothrix valida	C6M	May 03	5	D	P	1	0.45		12.71		2.52		0.23	0.10	1.69	1.68
Racovitzanus antarcticus	C6F	Dec 03	3	D	P	1	0.34		9.69		16.87		0.16		1.53	
Scaphocalanus magnus	C5F	May 03	5	D	P	1	1.20		48.68		9.34		0.19		0.57	
	C5F	Dec 03	3	D	P	1	0.54		10.49		12.75		0.13		2.72	
	C5M	Dec 03	3	D	P	1	0.24		9.62		18.11		0.16		1.78	
	C6F	May 03	3,5,6	D	P	10	0.43	0.18	9.95	1.40	10.54	4.30	0.23		1.64	
Scolecithricella valida	C6F	Dec 03	3	D	P	3	0.28	0.01	8.49	0.49	14.98	2.41	0.12		2.96	
Neocalanus cristatus	C5	Dec 03	3,5	S	P	6	1.56	0.52	6.40	1.70	0.9	0.2	0.33	0.11	2.66	0.81
	C6F	May 03	3	S	P	1	0.79		3.30		4.3		0.11		4.59	
	C6M	May 03	3,5	S	P	2	1.34	0.52	6.38	2.88	1.6	1.3	0.14	0.07	1.78	0.74
Neocalanus plumchrus	C5	Dec 03	3	S	P	19	0.22	0.07	6.72	1.6	1.7	0.95	0.203	0.049	3.42	2.03
	C6F	May 03	5	S	P	2	0.09	0.03	4.22	0.17	3.7	0.6	0.13	0.06	4.68	1.58
	C6F	Dec 03	3	S	P	10	0.15	0.07	5.77	1.28	3.5	1.2	0.16	0.07	5.60	2.90
	C6M	Dec 03	3	S	P	10	0.20	0.05	6.54	0.75	1.2	0.7	0.13	0.02	1.56	0.90
Neocalanus flemingeri	C6F	Dec 03	3	S	P	4	0.35	0.25	8.35	2.33	2.0	1.5	0.23	0.09	4.22	3.81
Lower bathypelagic (2000 to 3000 m)																
Euaugaptilus graciloides	C6F	Feb 04	3	C	A	1	0.33		3.03		44.66		0.06		2.85	
Euaugaptilus mixtus	C6F	Feb 04	3	C	A	1	0.41		4.00		28.33		0.10		2.94	
Euaugaptilus parabullifer	C6F	Feb 04	3	C	A	1	0.25		2.93		25.94		0.08		2.17	
Euaugaptilus similis	C6F	Feb 04	3	C	A	2	0.26	0.02	4.95	0.99	21.06	19.46	0.15	0.08	4.02	4.65
Neoaugaptilus distinctus	C6F	Feb 04	3	C	A	1	0.20		2.92		9.27		0.05		0.45	
Heterorhabdus robustoides	C6F	Feb 04	3	C	A	1	0.13		6.40		20.11		0.23		4.61	
Heterorhabdus tanneri	C6F	Feb 04	3	C	A	1	0.21		4.81		13.15		0.34		4.42	
Heterostylites major	C6F	Feb 04	3	C	A	1	0.35		7.97		14.28		0.50		7.12	
Lucicutia ellipsoidalis	C6M	Feb 04	3	S	A	1	0.02		6.13		14.22		0.05		0.78	
Lucicutia grandis	C6F	Feb 04	3	S	A	2	0.28	0.04	2.75	0.35	68.18	4.88	0.05	0.00	3.69	0.22
	C6M	Feb 04	3	S	A	2	0.56	0.23	5.31	0.47	17.05	7.02	0.08	0.04	1.14	0.21
Lucicutia longifurca	C5	Feb 04	3	S	A	2	0.33	0.02	4.29	0.23	31.27	4.54	0.06	0.02	1.94	0.90
	C6M	Feb 04	3	S	A	1	0.26		3.81		17.41		0.06		1.08	
Lucicutia orientalis	C6F	Feb 04	3	S	A	1	0.04		2.84		73.70		0.04		2.94	
Lucicutia pacifica	C6F	Feb 04	3	S	A	1	0.33		3.13		15.38		0.12		1.80	
Metridia asymmetrica	C5	Feb 04	3	S	A	1	0.04		4.30		16.93		0.05		0.82	
	C6F	Feb 04	3	S	A	3	0.12	0.01	5.84	0.49	11.93	6.74	0.11	0.02	1.27	0.72
Bradyidius pacificus	C6F	Feb 04	3	S	P	1	0.18		8.81		32.24		0.09		2.87	
Chiridius pacificus	C6F	Feb 04	3	S	P	1	0.04		4.53		54.85		0.05		2.66	
Gaetanus paracurvicornis	C5	Feb 04	3	S	P	1	0.04		2.75		34.82		0.02		0.86	
Pseudochirella polyspina	C6F	Feb 04	3	S	P	1	1.46		7.75		11.54		0.10		1.20	
Pseudogaetanus robustus	C5F	Feb 04	3	S	P	1	0.49		8.68		12.54		0.10		1.20	
	C6F	Feb 04	3	S	P	2	0.70	0.53	6.25	2.74	16.69	10.37	0.05	0.03	0.72	0.00
Undeuchaeta major	C6F	Feb 04	3	S	P	1	0.69		3.94		22.02		0.05		1.02	

Appendix 1 (continued)

Copepod	Stage	Sampling date	Site	Feeding type	Myelin sheath	n	PRO (mg ind.$^{-1}$)		PRO:WW (%)		RNA:PRO (µg mg^{-1})		PRO:DNA (mg µg^{-1})		RNA:DNA (µg µg^{-1})	
							Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD
Undeuchaeta plumosa	C6F	Feb 04	3	S	P	1	0.63		4.70		10.12		0.10		1.00	
Paraeuchaeta brevirostris	C4F	Feb 04	3	C	P	1	0.21		3.58		18.87		0.02		0.29	
Paraeuchaeta modesta	C6F	Feb 04	3	C	P	2	0.29	0.09	8.11	2.20	6.42	1.01	0.05	0.01	0.33	0.12
Paraeuchaeta pseudo-tumidula	C4	Feb 04	3	C	P	2	0.07	0.02	4.97	1.18	25.09	8.26	0.02	0.00	0.38	0.11
	C5F	Feb 04	3	C	P	1	0.33		5.33		3.52		0.04		0.13	
	C6F	Feb 04	3	C	P	1	0.28		7.97		5.43		0.05		0.28	
Paraeuchaeta rubra	C4F	Feb 04	3	C	P	1	0.03		4.69		21.23		0.01		0.30	
	C4M	Feb 04	3	C	P	3	0.13	0.12	7.99	2.75	16.25	5.68	0.03	0.02	0.40	0.08
	C5F	Feb 04	3	C	P	1	0.48		7.00		3.94		0.05		0.18	
	C5M	Feb 04	3	C	P	1	0.54		5.39		10.86		0.04		0.40	
	C6F	Feb 04	3	C	P	3	1.25	0.05	10.37	0.57	7.35	1.57	0.09	0.01	0.64	0.23
	C6M	Feb 04	3	C	P	1	0.21		8.42		9.93		0.05		0.46	
Onchocalanus magnus	C6F	Feb 04	3	D	P	1	0.74		6.96		12.85		0.06		0.79	
Amallothrix inornata	C5M	Feb 04	3	D	P	1	0.04		4.50		33.03		0.04		1.34	
	C6F	Feb 04	3	D	P	2	0.32	0.09	9.57	2.38	18.38	6.82	0.20	0.05	3.51	0.47
Amallothrix valida	C6F	Feb 04	3	D	P	1	0.10		8.73		14.41		0.10		1.43	
Scaphocalanus affinis	C6F	Feb 04	3	D	P	1	0.33		9.12		17.36		0.09		1.51	
Scaphocalanus magnus	C5	Feb 04	3	D	P	2	0.21	0.09	8.84	0.74	17.89	1.94	0.10	0.01	1.87	0.38
Scaphocalanus medius	C5	Feb 04	3	D	P	1	0.16		9.01		14.90		0.11		1.66	
	C6F	Feb 04	3	D	P	1	0.04		5.84		18.55		0.05		0.96	
Scaphocalanus subelongatus	C6F	Feb 04	3	D	P	2	0.05	0.00	11.49	3.35	11.76	3.24	0.12	0.01	1.43	0.27
Bathycalanus bradyi	C6F	Feb 04	3	S	P	1	4.47		5.73		4.49		0.14		0.61	
Spinocalanus spinipes	C6F	Feb 04	3	S	P	1	0.04		11.10		6.23		0.18		1.14	
Spinocalanus stellatus	C4	Feb 04	3	S	P	1	0.02		7.07		27.55		0.04		1.21	
	C6M	Feb 04	3	S	P	1	0.07		9.66		3.00		0.10		0.31	
Neocalanus cristatus	C5	Feb 03	3	S	P	3	2.06	0.91	7.19	2.27	1.3	0.1	0.18	0.06	2.23	0.59
	C6F	Feb 03	3	S	P	10	0.76	0.93	3.21	2.99	3.6	1.4	0.08	0.08	2.24	1.27
	C6M	Feb 03	3	S	P	3	2.19	1.54	10.55	7.14	1.3	0.8	0.22	0.14	2.04	0.54
Neocalanus plumchrus	C5	Feb 03	3	S	P	2	0.07	0.04	2.62	1.24	4.6	4.4	0.105	0.048	3.78	2.42
	C6F	Dec 03	3	S	P	13	0.12	0.09	5.08	2.38	4.0	1.5	0.13	0.07	4.46	1.93
	C6M	Feb 03	3	S	P	2	0.18	0.06	6.88	2.13	0.6	0.1	0.17	0.06	0.98	0.49
Abyssopelagic (3000 to 5000 m)																
Euaugaptilus graciloides	C6F	Aug 04	4	C	A	1	0.46		5.12		8.04		0.17		1.35	
Euaugaptilus parabullifer	C6F	Aug 04	4	C	A	1	0.26		2.34		8.75		0.06		0.52	
Euaugaptilus similis	C6F	Aug 04	4	C	A	1	0.37		3.38		14.83		0.08		1.14	
Heterorhabdus pacificus	C6F	Aug 04	4	C	A	2	0.31	0.05	5.38	0.59	14.32	4.64	0.07	0.00	0.97	0.28
	C6M	Aug 04	4	C	A	1	0.23		8.36		10.33		0.04		0.40	
Lucicutia ellipsoidalis	C6F	Aug 04	4	S	A	1	0.03		6.04		27.48		0.11		2.89	
Lucicutia grandis	C5F	Aug 04	4	S	A	1	1.93		7.59		10.06		0.10		0.98	
Lucicutia pacifica	C6F	Aug 04	4	S	A	1	0.11		2.98		39.19		0.11		4.35	
Metridia curticauda	C6M	Aug 04	4	S	A	2	0.05	0.01	4.14	0.26	29.63	10.05	0.03	0.00	0.84	0.22
Paraeuchaeta orientalis	C5M	Aug 04	4	C	P	1	0.11		3.56		24.76		0.01		0.34	
	C6F	Aug 04	4	C	P	1	0.77		6.66		16.44		0.08		1.33	
Paraeuchaeta pseudotumidula	C5M	Aug 04	4	C	P	3	0.31	0.15	6.51	1.03	16.72	2.63	0.03	0.01	0.53	0.14
	C6F	Aug 04	4	C	P	1	0.24		5.94		12.50		0.04		0.46	
Paraeuchaeta rubra	C6F	Aug 04	4	C	P	1	0.22		5.09		12.24		0.05		0.66	

Appendix 1 (continued)

Copepod	Stage	Sampling date	Site	Feeding type	Myelin sheath	n	PRO (mg ind.$^{-1}$)		PRO:WW (%)		RNA:PRO (µg mg^{-1})		PRO:DNA (mg µg^{-1})		RNA:DNA (µg µg^{-1})	
							Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD
Phyllopus helgae	C6F	Aug 04	4	D	P	1	0.08		2.23		15.92		0.15		2.32	
Pseudochirella polyspina	C6F	Aug 04	4	D	P	3	0.43	0.08	8.45	1.11	15.25	4.73	0.08	0.02	1.20	0.13
Pseudogaetanus robustus	C6F	Aug 04	4	D	P	1	0.14		2.21		40.93		0.05		2.12	
Amallothrix inornata	C6F	Aug 04	4	C	A	5	0.35	0.18	4.19	1.73	8.46	2.98	0.06	0.01	0.55	0.23
Scaphocalanus magnus	C6F	Aug 04	4	D	P	1	0.30		3.86		38.09		0.03		1.30	
	C6M	Aug 04	4	D	P	1	0.58		5.86		11.20		0.05		0.57	
Scaphocalanus medius	C4M	Aug 04	4	D	P	1	0.27		8.97		7.72		0.07		0.51	
	C5M	Aug 04	4	D	P	3	0.17	0.08	8.73	0.34	5.87	1.67	0.04	0.01	0.23	0.05
	C6M	Aug 04	4	D	P	1	0.18		5.19		14.00		0.05		0.69	
Scaphocalanus subbrevicornis	C6F	Aug 04	4	D	P	1	0.11		7.46		9.45		0.10		0.93	
Spinocalanus spinipes	C6F	Aug 04	4	S	P	1	0.06		8.40		26.55		0.07		1.93	
Spinocalanus stellatus	C5M	Aug 04	4	S	P	1	0.19		7.22		8.01		0.05		0.38	
	C6F	Aug 04	4	S	P	2	0.28	0.06	5.23	0.03	10.67	2.24	0.05	0.01	0.54	0.00
Neocalanus cristatus	C6F	Aug 03	4	S	P	1	0.75		3.26		2.5		0.09		2.31	
Neocalanus flemingeri	C5	Aug 03	4	S	P	1	0.22		6.06		0.9		0.14		1.27	
	C6F	Aug 03	4	S	P	1	0.25		7.63		0.8		0.13		1.00	
	C6M	Aug 03	4	S	P	1	0.26		8.20		1.1		0.115		1.3	