

## Nematode beta diversity on the continental slope of New Zealand: spatial patterns and environmental drivers

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**Supplement.** Results of SIMPER analyses showing the nematode species/genera contributing most to within-community similarity and between-community dissimilarity

**Table S1.** Nematode species contributing most to similarity within communities/sub-communities based on SIMPER analysis. CR: Chatham Rise; CP: Challenger Plateau; E: east; W: west

Species	% Contribution (cumul.)	Species	% Contribution (cumul.)
CR1 community		CR2 community	
<i>Actinonema</i> sp. 3	8	<i>Diplopeltula</i> sp. 2	7
<i>Calomicrolaimus</i> sp. 4	15	<i>Greeffiella</i> sp. 3	14
<i>Microlaimus</i> sp. 17	22	<i>Halalaimus</i> sp. 7	20
<i>Calomicrolaimus</i> sp. 2	29	Diplopeltidae sp. 1	23
<i>Desmoscolex</i> sp. 1	35	<i>Microlaimus</i> sp. 14	27
CR3W sub-community		CR3E sub-community	
<i>Paramonohystera</i> sp. 1	6	<i>Paramonohystera</i> sp. 1	5
<i>Sabatieria</i> sp. 2	11	<i>Gammanema</i> sp. 1	10
<i>Leptolaimus</i> sp. 1	15	<i>Vasostoma</i> sp. 1	14
<i>Campylaimus</i> sp. 1	18	<i>Hapalomus</i> sp. 1	18
<i>Desmoscolex</i> sp. 1	21	<i>Setosabatieria</i> sp. 2	22
CP1W sub-community		CP1E sub-community	
<i>Theristus</i> sp. 9	9	<i>Sabatieria bitumen</i>	12
<i>Monhystrella</i> sp. 16	15	<i>Paramonohystera</i> sp. 1	22
<i>Aponema</i> sp. 10	20	<i>Desmoscolex</i> sp. 1	26
<i>Camacolaimus</i> sp. 1	25	<i>Monhystrella</i> sp. 10	30
<i>Monhystrella</i> sp. 10	30	<i>Leptolaimus</i> sp. 12	33

**Table S2.** Nematode species contributing most to dissimilarity between communities/sub-communities based on SIMPER analysis. CR: Chatham Rise; CP: Challenger Plateau; E: east; W: west

Species	Mean % abundance		Cumulative % dissimilarity
	CR1	All others	
CR1 vs. all others	CR1	All others	
<i>Theristus</i> sp. 6	5.7	0.0	3.1
<i>Paramonohystera</i> sp. 1	0.0	3.1	4.8
<i>Calomicrolaimus</i> sp. 4	3.1	0.0	6.4
<i>Sabatieria bitumen</i>	0.0	2.9	8.0
<i>Microlaimus</i> sp. 17	2.6	0.1	9.4
CR2 vs. CP and CR3	CR2	CP and CR3	
<i>Greeffiella</i> sp. 3	3.9	0.0	2.2
<i>Sabatieria bitumen</i>	1.3	3.1	4.2
Diplopeltidae sp. 1	3.0	0.2	5.9
<i>Monhystrella</i> sp. 16	2.5	1.0	7.5
<i>Paramonohystera</i> sp. 1	1.2	3.4	9.0
CP vs. CR3	CP	CR3	
<i>Sabatieria bitumen</i>	6.0	1.3	3.2
<i>Theristus</i> sp. 9	2.5	0.0	4.7
<i>Sabatieria</i> sp. 16	2.5	0.0	6.2
<i>Paramonohystera</i> sp. 1	4.0	3.1	7.6
<i>Sabatieria</i> sp. 2	0.6	2.3	8.9
CPW vs. CPE	CPW	CPE	
<i>Sabatieria bitumen</i>	0.4	8.7	5.0
<i>Theristus</i> sp. 9	7.0	0.2	9.1
<i>Sabatieria</i> sp. 16	4.0	1.7	11.7
<i>Hopperia</i> sp. 1	0.0	3.1	13.5
<i>Paramonohystera</i> sp. 1	2.7	4.7	15.2
CR3W vs. CR3E	CR3W	CR3E	
<i>Molgolaimus</i> sp. 6	0.9	2.8	1.8
<i>Sabatieria</i> sp. 2	2.9	1.5	3.5
<i>Gammanema</i> sp. 1	0.5	2.4	4.9
<i>Sabatieria bitumen</i>	1.0	2.1	6.3
<i>Vasostoma</i> sp. 1	1.0	2.5	7.7

**Table S3.** Nematode genera contributing most to similarity within communities based on SIMPER analysis. The Monhysteridae taxon comprises species of the genus *Monhystrella* and *Thalassomonhystera*. CR: Chatham Rise; CP: Challenger Plateau

Species	% Contribution (cumul.)	Species	% Contribution (cumul.)
CR1		CR2	
<i>Calomicrolaimus</i>	12.0	Monhysteridae	21.3
<i>Theristus</i>	23.7	<i>Acantholaimus</i>	30.8
Monhysteridae	34.0	<i>Desmoscolex</i>	39.9
<i>Desmoscolex</i>	42.8	<i>Greeffiella</i>	46.0
<i>Microlaimus</i>	50.8	<i>Diplopeltula</i>	51.4

**Table S4.** Nematode genera contributing most to dissimilarity between communities based on SIMPER analysis. The Monhysteridae taxon comprises species of the genus *Monhystrella* and *Thalassomonhystera*. CR: Chatham Rise; CP: Challenger Plateau

Species	Mean % abundance		Cumulative % dissimilarity
CR1 vs. all others	CR1	All others	
<i>Sabatieria</i>	0.3	10.6	6.7
Monhysteridae	5.0	10.8	11.3
<i>Theristus</i>	7.7	1.8	15.7
<i>Calomicrolaimus</i>	6.7	0.7	19.8
<i>Rhynchonema</i>	4.3	0.0	22.6
CR2 vs. all others	CR2	All others	
<i>Sabatieria</i>	3.0	11.3	6.4
Monhysteridae	15.0	10.4	11.9
<i>Acantholaimus</i>	10.3	5.4	16.7
<i>Greeffiella</i>	5.3	0.9	20.0
<i>Molgolaimus</i>	2.7	4.3	22.7