

## Supplementary table

**Table S1** List of zooplanktonic taxa collected and identified during the 2015 OUTPACE cruise with average percentage of abundance within the 0-200 upper meters of the water column in the four Clusters defined in the PCA analysis on environmental variables. W-MA = Western Melanesian archipelago, CE-MA= Central and Eastern Melanesian archipelago, BL = station B, blooming conditions, and GY = subtropical gyre.

	W-MA	CE-MA	BL	GY		W-MA	CE-MA	BL	GY
<b>COPEPODS</b>					<b>COPEPODS (follow)</b>				
Copepod nauplii	10.02	8.96	9.63	9.22	<i>Phaenna spinifera</i>	0.01			
Undetermined copepodites	0.01				<i>Pleuromamma</i>	0.09	0.72	0.81	1.64
<i>Acartia</i>	0.76	0.95	0.12	0.65	<i>Sapphirina</i>	0.05	0.06	0.05	0.10
<i>Aetideus</i>		0.04			<i>Scaphocalanus</i>	0.01	0.03		
<i>Calanidae</i>	1.44	1.70	1.73	1.25	<i>Scolecithrix</i>	0.09	0.26		0.00
<i>Calanopia</i>	0.05	0.38	0.55	0.21	<i>Scottocalanus</i>		0.00		
<i>Calanus</i>	0.17	0.08	0.13	0.01	<i>Subeucalanus / Eucalanu</i>	0.09	0.01		
<i>Calocalanus</i>	2.68	1.81	1.34	1.53	<i>Temora</i>	0.60	0.34	0.33	0.07
<i>Candacia</i>	0.27	0.33	0.36	0.42	<b>OTHER CRUSTACEANS</b>				
<i>Centropages</i>	0.05	0.03		0.04	Amphipoda	0.02	0.01	0.15	0.04
<i>Clausocalanus/Paracalanus</i>	18.83	17.28	16.04	24.70	Euphausiacea	0.18	0.37	0.39	0.22
<i>Clytemnestra</i>	0.01	0.03	0.03		Lucifer	0.01	0.06		
<i>Copilia</i>	0.17	0.12	0.17	0.14	Ostracoda	2.01	2.38	4.26	2.22
<i>Corycaeus</i>	5.29	4.20	3.04	8.90	Pseudoevadne	0.04			0.34
<i>Cosmocalanus darwini</i>			0.05		<b>GELATINOUS</b>				
<i>Ctenocalanus</i>		0.12			Appendicularia	15.00	13.34	11.90	11.44
<i>Cyclopoida</i>		0.01		0.03	Doliole	0.18	0.09	0.39	0.21
<i>Eucalanus</i>	0.08	0.17	1.23	0.33	Salpidae	0.14	0.10	0.08	0.30
<i>Euchaeta/Paraeuchaeta</i>	0.06	0.10	0.03	0.07	Siphonophora	0.24	0.26	0.14	0.24
<i>Euterpina acutifrons</i>	0.02	0.06			Hydrozoa	0.06	0.06	0.19	0.04
<i>Haloptilus</i>	0.25	0.30	0.56	0.33	<b>CHAETOGNATHA</b>	2.13	2.56	1.98	0.60
<i>Harpacticoida</i>	0.01				<b>MOLLUSCS</b>				
<i>Heterorhabdus</i>	0.05	0.08	0.05	0.14	Thecosomata	5.29	3.81	2.24	1.95
<i>Lubbockia</i>	0.10	0.07	0.24	0.10	<b>MEROPLANKTON</b>				
<i>Lucicutia</i>	1.11	1.27	1.54	1.41	Decapod larvae	0.01	0.12		
<i>Macrosetella gracilis</i>	0.11	0.05	0.73	0.03	Cephalopod larvae	0.02			
<i>Mecynocera clausi</i>	1.20	1.64	1.17	2.03	Cirripedia larvae		0.01		
<i>Mesocalanus/Neocalanus</i>	0.08	0.05	0.18	0.07	Echinoderm larvae		0.02	0.03	
<i>Microsetella</i>	3.08	4.13	4.38	2.83	Lamellibranch larvae	0.17	0.41	0.12	0.32
<i>Miracia efferata</i>	0.01	0.05	0.08		Gasteropod larvae			0.08	
<i>Mormonilla/Neomormonilla</i>	0.08	0.23	0.13	0.12	Polychaets larvae	0.28	0.21	0.51	0.43
<i>Nannocalanus minor</i>	0.32	0.36	0.05	0.04	Teleostei eggs		0.06		
<i>Oithona</i>	12.90	15.89	13.16	13.54	Teleostei larvae		0.03	0.03	0.00
<i>Oncaea</i>	13.88	14.10	19.53	11.65	Branchiostoma	0.01			
<i>Paracalanus</i>	0.13	0.03	0.05	0.03	Larvae unknown	0.05	0.05	0.05	0.07