

# Early post-settlement mortality and the structure of coral assemblages

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**Supplement 1.** Year-by year analyses of spatial patterns in recruit abundance and correlations among recruit, juvenile and adult abundances at the 9 study stations.

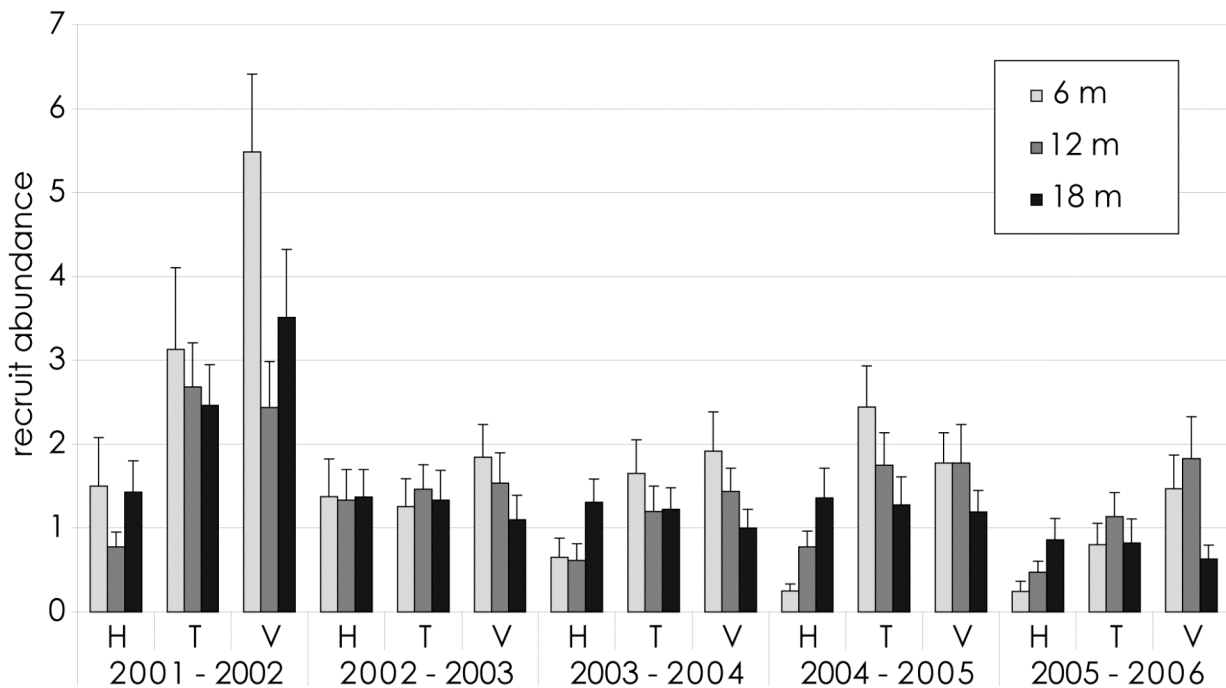


Fig. S1. Mean recruit abundance per tile ( $\pm$ SE) for each of the 3 sites (H: Haapiti; T: Tiahura; V: Vaipahu) and 3 depths (6, 12 and 18 m) over the 5 yr studied. All taxa pooled

Table S1. Year-by-year non-parametric correlations among abundance of recruits, juveniles and adults at the 9 sampling stations for all taxa pooled, Pocilloporidae, Acroporidae and Poritidae.  $\rho$ : Spearman non-parametric correlation coefficient; ns: not significant

All taxa pooled

		Recruits											
		2001–2002		2002–2003		2003–2004		2004–2005		2005–2006		5 yr	
Year		$\rho$	p	$\rho$	p	$\rho$	p	$\rho$	p	$\rho$	p	$\rho$	p
Juveniles	2003	-0.067	ns	0.117	ns							0.117	ns
	2004	-0.083	ns	-0.183	ns	0.117	ns					-0.050	ns
	2005	0.167	ns	-0.367	ns	-0.167	ns	-0.167	ns			-0.183	ns
	2006	0.283	ns	-0.333	ns	0.017	ns	-0.192	ns	-0.259	ns	-0.150	ns
	2007	0.517	ns	0.060	ns	0.367	ns	0.343	ns	0.343	ns	0.400	ns
	5 yr	0.183	ns	0.083	ns	0.383	ns	0.259	ns	0.117	ns	0.233	ns
Adults	2003											0.017	ns
	2004	0.250	ns									0.100	ns
	2005	0.250	ns	-0.250	ns							0.150	ns
	2006	0.450	ns	-0.017	ns	0.333	ns					0.300	ns
	2007	0.100	ns	-0.133	ns	0.233	ns	0.167	ns			0.217	ns
	5 yr	0.240	ns	-0.183	ns	0.283	ns	0.308	ns	0.326	ns	0.167	ns
		Juveniles											
		2003		2004		2005		2006		2007		5 yr	
		$\rho$	p	$\rho$	p	$\rho$	p	$\rho$	p	$\rho$	p	$\rho$	p
Adults	2003	<b>0.662</b>	<b>0.0007</b>										
	2004	<b>0.574</b>	<b>0.0034</b>	<b>0.627</b>	<b>0.0014</b>								
	2005	<b>0.529</b>	<b>0.0069</b>	<b>0.652</b>	<b>0.0009</b>	<b>0.715</b>	<b>0.0003</b>						
	2006	0.237	ns	0.241	ns	<b>0.503</b>	<b>0.0103</b>	0.274	ns				
	2007	-0.151	ns	0.083	ns	0.050	ns	-0.138	ns	0.377	ns		
	5 yr	<b>0.507</b>	<b>0.0097</b>	<b>0.522</b>	<b>0.0049</b>	<b>0.707</b>	<b>0.0004</b>	0.331	ns	<b>0.490</b>	<b>0.0125</b>	<b>0.690</b>	<b>0.0004</b>

Pocilloporidae

		Recruits											
		2001–2002		2002–2003		2003–2004		2004–2005		2005–2006		5 yr	
Year		$\rho$	p	$\rho$	p	$\rho$	p	$\rho$	p	$\rho$	p	$\rho$	p
Juveniles	2003	0.017	ns	0.550	ns							0.050	ns
	2004	-0.283	ns	0.300	ns	-0.159	ns					-0.150	ns
	2005	-0.067	ns	0.000	ns	-0.319	ns	-0.485	ns			-0.402	ns
	2006	0.050	ns	-0.233	ns	-0.611	ns	-0.583	ns	-0.400	ns	-0.517	ns
	2007	0.285	ns	-0.268	ns	-0.374	ns	-0.477	ns	-0.126	ns	-0.335	ns
	5 yr	-0.067	ns	0.033	ns	-0.427	ns	-0.517	ns	-0.350	ns	-0.433	ns
Adults	2003											0.117	ns
	2004	-0.050	ns									0.217	ns
	2005	0.317	ns	-0.133	ns							0.233	ns
	2006	0.500	ns	0.000	ns	0.343	ns					0.250	ns
	2007	0.600	ns	0.000	ns	0.310	ns	0.150	ns			0.317	ns
	5 yr	0.450	ns	-0.033	ns	0.301	ns	0.067	ns	0.217	ns	0.233	ns
		Juveniles											
		2003		2004		2005		2006		2007		5 yr	
		$\rho$	p	$\rho$	p	$\rho$	p	$\rho$	p	$\rho$	p	$\rho$	p
Adults	2003	0.336	ns										
	2004	0.034	ns	-0.092	ns								
	2005	0.052	ns	-0.064	ns	-0.028	ns						
	2006	-0.080	ns	-0.294	ns	0.098	ns	0.158	ns				
	2007	0.002	ns	-0.228	ns	-0.087	ns	-0.039	ns	0.232	ns		
	5 yr	0.085	ns	-0.135	ns	0.037	ns	0.066	ns	0.159	ns	-0.016	ns

Acroporidae

		Recruits											
		2001–2002		2002–2003		2003–2004		2004–2005		2005–2006		5 yr	
Year		ρ	p	ρ	p	ρ	p	ρ	p	ρ	p	ρ	p
Juveniles	2003	<b>0.767</b>	<b>0.0301</b>	0.647	ns							<b>0.767</b>	<b>0.0301</b>
	2004	0.583	ns	0.294	ns	0.176	ns					0.583	ns
	2005	<b>0.817</b>	<b>0.0209</b>	0.672	ns	0.462	ns	0.536	ns			<b>0.817</b>	<b>0.0209</b>
	2006	<b>0.783</b>	<b>0.0267</b>	0.294	ns	0.664	ns	<b>0.715</b>	<b>0.0431</b>	0.610	ns	<b>0.783</b>	<b>0.0267</b>
	2007	<b>0.817</b>	<b>0.0209</b>	0.672	ns	0.462	ns	0.536	ns	0.509	ns	<b>0.817</b>	<b>0.0210</b>
	5 yr	<b>0.833</b>	<b>0.0184</b>	0.597	ns	0.462	ns	0.536	ns	0.509	ns	<b>0.833</b>	<b>0.0184</b>
Adults	2003											0.467	ns
	2004	0.544	ns									0.544	ns
	2005	0.650	ns	0.664	ns							0.650	ns
	2006	0.533	ns	0.303	ns	<b>0.714</b>	<b>0.0433</b>					0.533	ns
	2007	0.650	ns	0.664	ns	0.445	ns	0.502	ns			0.650	ns
	5 yr	0.567	ns	0.630	ns	0.403	ns	0.409	ns	0.542	ns	0.567	ns
		Juveniles											
		2003		2004		2005		2006		2007		5 yr	
		ρ	p	ρ	p	ρ	p	ρ	p	ρ	p	ρ	p
Adults	2003	<b>0.597</b>	<b>0.0023</b>										
	2004	<b>0.658</b>	<b>0.0008</b>	<b>0.654</b>	<b>0.0009</b>								
	2005	<b>0.496</b>	<b>0.0114</b>	<b>0.601</b>	<b>0.0022</b>	<b>0.544</b>	<b>0.0055</b>						
	2006	0.141	ns	0.258	ns	0.341	ns	<b>0.451</b>	<b>0.0214</b>				
	2007	0.040	ns	0.042	ns	0.037	ns	0.079	ns	<b>0.665</b>	<b>0.001</b>		
	5 yr	<b>0.559</b>	<b>0.0044</b>	<b>0.648</b>	<b>0.0001</b>	<b>0.616</b>	<b>0.0002</b>	0.354	ns	<b>0.385</b>	<b>0.0439</b>	<b>0.620</b>	<b>0.0002</b>

Poritidae

		Recruits											
		2001–2002		2002–2003		2003–2004		2004–2005		2005–2006		5 yr	
Year		ρ	p	ρ	p	ρ	p	ρ	p	ρ	p	ρ	p
Juveniles	2003	0.650	ns	0.661	ns							<b>0.817</b>	<b>0.0209</b>
	2004	0.420	ns	0.519	ns	<b>0.865</b>	<b>0.0144</b>					<b>0.773</b>	<b>0.0288</b>
	2005	0.460	ns	0.235	ns	0.655	ns	0.603	ns			0.586	ns
	2006	0.577	ns	0.294	ns	<b>0.773</b>	<b>0.0288</b>	<b>0.720</b>	<b>0.0418</b>	<b>0.703</b>	<b>0.0301</b>	<b>0.770</b>	<b>0.0294</b>
	2007	0.639	ns	0.498	ns	0.646	ns	0.605	ns	0.454	ns	0.672	0.0572
	5 yr	0.592	ns	0.574	ns	<b>0.781</b>	<b>0.0273</b>	<b>0.790</b>	<b>0.0255</b>	0.630	ns	<b>0.748</b>	<b>0.0034</b>
Adults	2003											<b>0.767</b>	<b>0.0301</b>
	2004	<b>0.750</b>	<b>0.0381</b>									<b>0.900</b>	<b>0.0109</b>
	2005	0.661	ns	0.424	ns							<b>0.753</b>	<b>0.0332</b>
	2006	<b>0.883</b>	<b>0.0125</b>	0.594	ns	<b>0.751</b>	<b>0.0332</b>					<b>0.883</b>	<b>0.0125</b>
	2007	<b>0.695</b>	<b>0.0495</b>	0.370	ns	0.445	ns	0.615	ns			0.611	ns
	5 yr	<b>0.711</b>	<b>0.0442</b>	0.441	ns	0.643	ns	0.627	ns	<b>0.803</b>	<b>0.0231</b>	<b>0.770</b>	<b>0.0294</b>
		Juveniles											
		2003		2004		2005		2006		2007		5 yr	
		ρ	p	ρ	p	ρ	p	ρ	p	ρ	p	ρ	p
Adults	2003	<b>0.548</b>	<b>0.0052</b>										
	2004	<b>0.533</b>	<b>0.0065</b>	<b>0.450</b>	<b>0.0216</b>								
	2005	<b>0.578</b>	<b>0.0032</b>	<b>0.391</b>	<b>0.0464</b>	0.321	ns						
	2006	<b>0.584</b>	<b>0.0029</b>	0.315	ns	0.142	ns	0.242	ns				
	2007	0.3003	ns	0.229	ns	0.125	ns	0.291	ns	0.259	ns		
	5 yr	<b>0.539</b>	<b>0.0006</b>	0.378	ns	0.254	ns	0.320	ns	0.362	ns	<b>0.458</b>	<b>0.0197</b>