

Spatial patterns and short-term changes of coral assemblages along a cross-shelf gradient in the southwestern lagoon of New Caledonia

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Supplementary Materials

Table S1. Characteristics of the 10 sampling stations.

Station code	Name of the location	Habitat	GPS coordinates
SM1	Baie de Sainte Marie	Fringing reefs	22°17 686 S; 166°28 368 W
SM2	Baie de Sainte Marie	Fringing reefs	22°18 387 S; 166°28 548 W
RA1	Grande Rade	Fringing reefs	22°15 455 S; 166°24 024 W
RA2	Grande Rade	Fringing reefs	22°14 987 S; 166°23 677 W
MA1	Baie Maa	Fringing reefs	22°12 176 S; 166°20 774 W
MA2	Baie Maa	Fringing reefs	22°12 587 S; 166°20 633 W
MS1	Récif du Prony	Mid-shelf reefs	22°15 910 S; 166°19 646 W
MS2	Récif Larégnère	Mid-shelf reefs	22°19 760 S; 166°17 681 W
BA1	Uitoé	Barrier reefs	22°19 615 S; 166°13 566 W
BA2	Passe de Dumbéa	Barrier reefs	22°20 284 S; 166°14 135 W

Table S2. Summary of the ANOVA and Student-Neuman-Keuls (SNK) tests to analyse spatial and temporal variation for corals, turf, encrusting coralline algae, and macroalgae percent cover. For SNK tests, *: significant difference, ns: non-significant difference ($p > 0.001$). We used the Bonferroni correction for multiple tests to avoid Type 1 error.

Percent cover of corals – ANOVA

	Df	Sum Sq	Mean Sq	F	p
Years	2	0.018	0.009	1.117	0.3340
Stations	9	0.899	0.100	12.247	< 0.0001
Years × Stations	18	0.417	0.023	2.842	0.0013
Residuals	60	0.489	0.008		

Percent cover of corals (2006) – SNK

	MS1	MS2	MA2	MA1	BA2	BA1	SM1	SM2	RA1	RA2
MS1	-									
MS2	ns	-								
MA2	ns	ns	-							
MA1	ns	ns	ns	-						
BA2	*	ns	ns	ns	-					
BA1	*	ns	ns	ns	ns	-				
SM1	*	*	*	ns	ns	ns	-			
SM2	*	*	*	ns	ns	ns	ns	-		
RA1	*	*	*	ns	ns	ns	ns	ns	-	
RA2	*	*	*	ns	ns	ns	ns	ns	ns	-

Percent cover of corals (2007) – SNK

	MA2	MS1	MA1	BA1	BA2	SM2	SM1	RA2	MS2	RA1
MA2	-									
MS1	ns	-								
MA1	ns	ns	-							
BA1	*	ns	ns	-						
BA2	*	ns	ns	ns	-					
SM2	*	*	ns	ns	ns	-				
SM1	*	*	ns	ns	ns	ns	-			
RA2	*	*	ns	ns	ns	ns	ns	-		
MS2	*	ns	ns	ns	ns	ns	ns	ns	-	
RA1	*	ns	ns	ns	ns	ns	ns	ns	ns	-

Percent cover of corals (2008) – SNK

	MA2	BA1	MS1	MA1	BA2	RA1	SM1	SM2	RA2	MS2
MA2	-									
BA1	ns	-								
MS1	ns	ns	-							
MA1	ns	ns	ns	-						
BA2	*	ns	ns	ns	-					
RA1	*	ns	ns	ns	ns	-				
SM1	*	ns	ns	ns	ns	ns	-			
SM2	*	ns	ns	ns	ns	ns	ns	-		
RA2	*	ns	ns	ns	ns	ns	ns	ns	-	
MS2	*	*	ns	ns	ns	ns	ns	ns	ns	-

Percent cover of turf – ANOVA

	Df	Sum Sq	Mean Sq	F	p
Years	2	0.191	0.095	8.766	0.0005
Stations	9	6.378	0.709	65.176	< 0.0001
Years × Stations	18	0.877	0.049	4.483	< 0.0001
Residuals	60	0.652	0.011		

Percent cover of turf (2006) – SNK

	RA1	SM2	MA1	RA2	MA2	MS2	BA2	BA1	SM1	MS1
RA1	-									
SM2	ns	-								
MA1	ns	ns	-							
RA2	ns	ns	ns	-						
MA2	*	ns	ns	ns	-					
MS2	*	*	ns	ns	ns	-				
BA2	*	*	*	*	*	ns	-			
BA1	*	*	*	*	*	ns	ns	-		
SM1	*	*	*	*	*	ns	ns	ns	-	
MS1	*	*	*	*	*	*	ns	ns	ns	-

Percent cover of turf (2007) – SNK

	RA1	RA2	MS2	MA1	SM2	MA2	MS1	SM1	BA2	BA1
RA1	-									
RA2	ns	-								
MS2	ns	ns	-							
MA1	ns	ns	ns	-						
SM2	ns	ns	ns	ns	-					
MA2	*	ns	ns	ns	ns	-				
MS1	*	*	ns	ns	ns	ns	-			
SM1	*	*	*	*	*	ns	ns	-		
BA2	*	*	*	*	*	*	ns	ns	-	
BA1	*	*	*	*	*	*	*	ns	ns	-

Percent cover of turf (2008) – SNK

	RA1	RA2	MA1	MS1	SM2	MS2	MA2	SM1	BA2	BA1
RA1	-									
RA2	ns	-								
MA1	ns	ns	-							
MS1	ns	ns	ns	-						
SM2	ns	ns	ns	ns	-					
MS2	ns	ns	ns	ns	ns	-				
MA2	ns	ns	ns	ns	ns	ns	-			
SM1	*	*	*	*	*	*	ns	-		
BA2	*	*	*	*	*	*	*	ns	-	
BA1	*	*	*	*	*	*	*	*	ns	-

Percent cover of encrusting coralline algae – ANOVA

	Df	Sum Sq	Mean Sq	F	p
Years	2	0.025	0.013	2.950	0.0600
Stations	9	7.340	0.816	189.936	< 0.0001
Years × Stations	18	0.154	0.009	1.988	0.0247
Residuals	60	0.258	0.004		

Percent cover of encrusting coralline algae (2006) – SNK

	BA2	BA1	MS2	MA1	MS1	RA1	SM2	SM1	RA2	MA2
BA2	-									
BA1	ns	-								
MS2	*	*	-							
MA1	*	*	*	-						
MS1	*	*	*	ns	-					
RA1	*	*	*	ns	ns	-				
SM2	*	*	*	ns	ns	ns	-			
SM1	*	*	*	ns	ns	ns	ns	-		
RA2	*	*	*	ns	ns	ns	ns	ns	-	
MA2	*	*	*	*	ns	ns	ns	ns	ns	-

Percent cover of encrusting coralline algae (2007) – SNK

	BA2	BA1	MS2	RA2	RA1	SM1	SM2	MS1	MA1	MA2
BA2	-									
BA1	ns	-								
MS2	*	*	-							
RA2	*	*	*	-						
RA1	*	*	*	ns	-					
SM1	*	*	*	ns	ns	-				
SM2	*	*	*	ns	ns	ns	-			
MS1	*	*	*	ns	ns	ns	ns	-		
MA1	*	*	*	ns	ns	ns	ns	ns	-	
MA2	*	*	*	*	ns	ns	ns	ns	ns	-

Percent cover of encrusting coralline algae (2008) – SNK

	BA2	BA1	MS2	SM2	RA1	RA2	SM1	MS1	MA1	MA2
BA2	-									
BA1	ns	-								
MS2	*	ns	-							
SM2	*	*	*	-						
RA1	*	*	*	ns	-					
RA2	*	*	*	ns	ns	-				
SM1	*	*	*	ns	ns	ns	-			
MS1	*	*	*	ns	ns	ns	ns	-		
MA1	*	*	*	ns	ns	ns	ns	ns	-	
MA2	*	*	*	ns	ns	ns	ns	ns	ns	-

Percent cover of macroalgae – ANOVA

	Df	Sum Sq	Mean Sq	F	p
Years	2	1.062	0.531	153.598	< 0.0001
Stations	9	0.670	0.074	21.519	< 0.0001
Years × Stations	18	1.987	0.110	31.917	< 0.0001
Residuals	60	0.207	0.003		

Percent cover of macroalgae (2006) – SNK

	RA1	MA1	MS1	BA2	MS2	SM1	BA1	SM2	RA2	MA2
RA1										
MA1										
MS1										
BA2										
MS2										
SM1										
BA1										
SM2										
RA2										
MA2										

Not calculated as no spatial difference was found this year

Percent cover of macroalgae (2007) – SNK

	MS1	RA1	MS2	SM2	MA2	MA1	SM1	RA2	BA1	BA2
MS1	-									
RA1	*	-								
MS2	*	ns	-							
SM2	*	ns	ns	-						
MA2	*	ns	ns	ns	-					
MA1	*	ns	ns	ns	ns	-				
SM1	*	ns	ns	ns	ns	ns	-			
RA2	*	ns	ns	ns	ns	ns	ns	-		
BA1	*	ns	ns	ns	ns	ns	ns	ns	-	
BA2	*	ns	ns	ns	ns	ns	ns	ns	ns	-

Percent cover of macroalgae (2008) – SNK

	BA2	BA1	MS2	SM2	RA1	RA2	SM1	MS1	MA1	MA2
BA2	-									
BA1	ns	-								
MS2	*	ns	-							
SM2	*	*	ns	-						
RA1	*	ns	ns	ns	-					
RA2	ns	*	*	ns	ns	-				
SM1	*	ns	ns	ns	ns	ns	-			
MS1	*	*	*	ns	ns	ns	ns	-		
MA1	*	*	ns	ns	ns	ns	ns	ns	-	
MA2	*	*	ns	ns	ns	ns	ns	ns	ns	-

Table S3. Summary of the ANOVA and Student-Neuman-Keuls (SNK) tests to analyse spatial and temporal variation in the mean generic richness of adult and juvenile corals. For SNK tests, *: significant difference, ns: non-significant difference ($p > 0.001$). We used the Bonferroni correction for multiple tests to avoid Type 1 error.

Generic richness of adult corals – ANOVA

	Df	Sum Sq	Mean Sq	F	p
Years	2	0.019	0.009	2.056	0.1369
Stations	9	1.075	0.119	26.295	< 0.0001
Years × Stations	18	0.029	0.002	0.354	0.9914
Residuals	60	0.273	0.005		

Generic richness of adult corals (2006) – SNK

	MS2	RA1	RA2	BA1	BA2	SM2	MA1	MS1	SM1	MA2
MS2	-									
RA1	ns	-								
RA2	ns	ns	-							
BA1	ns	ns	ns	-						
BA2	ns	ns	ns	ns	-					
SM2	*	ns	ns	ns	ns	-				
MA1	*	ns	ns	ns	ns	ns	-			
MS1	*	*	*	*	*	ns	ns	-		
SM1	*	*	*	*	*	*	ns	ns	-	
MA2	*	*	*	*	*	*	*	ns	ns	-

Generic richness of adult corals (2007) – SNK

	MS2	RA1	BA1	RA2	SM2	BA2	MA1	MS1	SM1	MA2
MS2	-									
RA1	ns	-								
BA1	ns	ns	-							
RA2	ns	ns	ns	-						
SM2	ns	ns	ns	ns	-					
BA2	ns	ns	ns	ns	ns	-				
MA1	*	*	ns	ns	ns	ns	-			
MS1	*	*	ns	ns	ns	ns	ns	-		
SM1	*	*	*	ns	ns	ns	ns	ns	-	
MA2	*	*	*	*	*	*	ns	ns	ns	-

Generic richness of adult corals (2008) – SNK

	MS2	RA1	BA1	BA2	RA2	MA1	SM2	SM1	MS1	MA2
MS2	-									
RA1	ns	-								
BA1	ns	ns	-							
BA2	ns	ns	ns	-						
RA2	ns	ns	ns	ns	-					
MA1	ns	ns	ns	ns	ns	-				
SM2	ns	ns	ns	ns	ns	ns	-			
SM1	*	*	ns	ns	ns	ns	ns	-		
MS1	*	*	ns	ns	ns	ns	ns	ns	-	
MA2	*	*	*	*	*	ns	ns	ns	ns	-

Generic richness of juvenile corals – ANOVA

	Df	Sum Sq	Mean Sq	F	p
Years	2	0.046	0.023	2.477	0.0925
Stations	9	1.205	0.134	14.310	< 0.0001
Years × Stations	18	0.094	0.005	0.556	0.9163
Residuals	60	0.562	0.009		

Generic richness of juvenile corals (2006) – SNK

	RA1	MS2	BA2	BA1	SM2	SM1	RA2	MA2	MA1	MS1
RA1	-									
MS2	ns	-								
BA2	ns	ns	-							
BA1	ns	ns	ns	-						
SM2	ns	ns	ns	ns	-					
SM1	ns	ns	ns	ns	ns	-				
RA2	ns	ns	ns	ns	ns	ns	-			
MA2	ns	ns	ns	ns	ns	ns	ns	-		
MA1	*	*	*	ns	ns	ns	ns	ns	-	
MS1	*	*	*	*	ns	ns	ns	ns	ns	-

Generic richness of juvenile corals (2007) – SNK

	MS2	BA1	RA1	BA2	SM2	SM1	MS1	MA1	RA2	MA2
MS2	-									
BA1	ns	-								
RA1	ns	ns	-							
BA2	ns	ns	ns	-						
SM2	ns	ns	ns	ns	-					
SM1	ns	ns	ns	ns	ns	-				
MS1	ns	ns	ns	ns	ns	ns	-			
MA1	*	ns	ns	ns	ns	ns	ns	-		
RA2	*	ns	ns	ns	ns	ns	ns	ns	-	
MA2	*	*	*	ns	ns	ns	ns	ns	ns	-

Generic richness of juvenile corals (2008) – SNK

	MS2	RA1	BA1	BA2	SM2	SM1	RA2	MA2	MA1	MS1
MS2	-									
RA1	ns	-								
BA1	ns	ns	-							
BA2	ns	ns	ns	-						
SM2	ns	ns	ns	ns	-					
SM1	ns	ns	ns	ns	ns	-				
RA2	ns	ns	ns	ns	ns	ns	-			
MA2	ns	ns	ns	ns	ns	ns	ns	-		
MA1	*	ns	ns	ns	ns	ns	ns	ns	-	
MS1	*	ns	ns	ns	ns	ns	ns	ns	ns	-

Table S4. Summary of the ANOVA and Student-Neuman-Keuls (SNK) tests to analyze spatial and temporal variation in the abundance of adult and juvenile corals. For SNK tests, *: significant difference, ns: non-significant difference ($p > 0.001$). We used the Bonferroni correction for multiple tests to avoid Type 1 error.

Abundance of adult corals – ANOVA

	Df	Sum Sq	Mean Sq	F	p
Years	2	0.038	0.019	3.177	0.0488
Stations	9	1.849	0.205	34.055	< 0.0001
Years × Stations	18	0.204	0.011	1.878	0.0358
Residuals	60	0.362	0.006		

Abundance of adult corals (2006) – SNK

	MS2	BA1	BA2	MS1	RA1	SM2	MA1	SM1	RA2	MA2
MS2	-									
BA1	ns	-								
BA2	ns	ns	-							
MS1	*	ns	ns	-						
RA1	*	ns	ns	ns	-					
SM2	*	ns	ns	ns	ns	-				
MA1	*	ns	ns	ns	ns	ns	-			
SM1	*	*	ns	ns	ns	ns	ns	-		
RA2	*	*	*	ns	ns	ns	ns	ns	-	
MA2	*	*	*	*	*	*	ns	ns	ns	-

Abundance of adult corals (2007) – SNK

	BA1	MS2	RA1	BA2	MS1	SM2	MA1	SM1	RA2	MA2
BA1	-									
MS2	ns	-								
RA1	ns	ns	-							
BA2	ns	ns	ns	-						
MS1	ns	ns	ns	ns	-					
SM2	*	ns	ns	ns	ns	-				
MA1	*	ns	ns	ns	ns	ns	-			
SM1	*	ns	ns	ns	ns	ns	ns	-		
RA2	*	*	*	*	*	ns	ns	ns	-	
MA2	*	*	*	*	*	*	*	*	ns	-

Abundance of adult corals (2008) – SNK

	BA1	BA2	RA1	MS2	SM1	SM2	MS1	MA1	RA2	MA2
BA1	-									
BA2	ns	-								
RA1	ns	ns	-							
MS2	ns	ns	ns	-						
SM1	*	ns	ns	ns	-					
SM2	*	ns	ns	ns	ns	-				
MS1	*	ns	ns	ns	ns	ns	-			
MA1	*	ns	ns	ns	ns	ns	ns	-		
RA2	*	*	*	*	ns	ns	ns	ns	-	
MA2	*	*	*	*	*	*	*	*	ns	-

Abundance of juvenile corals – ANOVA

	Df	Sum Sq	Mean Sq	F	p
Years	2	0.388	0.194	14.556	< 0.0001
Stations	9	5.098	0.566	42.537	< 0.0001
Years × Stations	18	0.550	0.031	2.296	0.0085
Residuals	60	0.799	0.013		

Abundance of juvenile corals (2006) – SNK

	BA1	BA2	RA1	MS2	MS1	SM2	SM1	MA1	RA2	MA2
BA1	-									
BA2	ns	-								
RA1	ns	ns	-							
MS2	ns	ns	ns	-						
MS1	*	*	ns	ns	-					
SM2	*	*	ns	ns	ns	-				
SM1	*	*	ns	ns	ns	ns	-			
MA1	*	*	ns	ns	ns	ns	ns	-		
RA2	*	*	*	ns	ns	ns	ns	ns	-	
MA2	*	*	*	*	ns	ns	ns	ns	ns	-

Abundance of juvenile corals (2007) – SNK

	BA1	BA2	RA1	MS2	SM1	SM2	MA1	RA2	MS1	MA2
BA1	-									
BA2	ns	-								
RA1	ns	ns	-							
MS2	ns	ns	ns	-						
SM1	ns	ns	ns	ns	-					
SM2	*	ns	ns	ns	ns	-				
MA1	*	*	ns	ns	ns	ns	-			
RA2	*	*	ns	ns	ns	ns	ns	-		
MS1	*	*	ns	ns	ns	ns	ns	ns	-	
MA2	*	*	*	*	*	ns	ns	ns	ns	-

Abundance of juvenile corals (2008) – SNK

	BA2	BA1	MS2	RA1	SM1	MA1	MS1	SM2	RA2	MA2
BA2	-									
BA1	ns	-								
MS2	ns	ns	-							
RA1	*	*	ns	-						
SM1	*	*	*	ns	-					
MA1	*	*	*	ns	ns	-				
MS1	*	*	*	ns	ns	ns	-			
SM2	*	*	*	*	ns	ns	ns	-		
RA2	*	*	*	*	ns	ns	ns	ns	-	
MA2	*	*	*	*	ns	ns	ns	ns	ns	-

Table S5. Abundance (mean no. of colonies per 10 m²) of adult coral colonies recorded at each station during the three years of the study.

	SM1			SM2			RA1			RA2			MA1			MA2			MS1			MS2			BA1			BA2			
	2006	2007	2008	2006	2007	2008	2006	2007	2008	2006	2007	2008	2006	2007	2008	2006	2007	2008	2006	2007	2008	2006	2007	2008	2006	2007	2008	2006	2007	2008	
<i>Stylocoeniella</i>	0.0	0.0	0.0	0.7	0.7	0.3	2.0	1.7	0.7	3.0	1.0	0.7	0.3	0.3	0.3	0.3	0.3	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
<i>Pocillopora</i>	2.3	3.0	2.7	4.3	5.0	3.3	4.7	8.0	6.3	3.0	3.7	4.3	3.7	4.0	3.7	1.3	0.7	0.3	2.3	1.7	0.7	14.3	8.7	1.7	14.3	13.7	15.0	18.0	14.3	25.7	
<i>Seriatopora</i>	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.3	0.3	21.3	16.0	6.7	0.0	0.0	0.0	0.0	0.0	0.7	
<i>Stylophora</i>	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	11.7	5.0	2.0	18.3	16.3	16.7	16.3	13.0	28.0	
<i>Montipora</i>	41.3	42.7	46.7	7.0	4.0	3.3	14.3	17.3	22.3	2.3	1.7	1.7	11.3	12.0	17.3	4.7	3.0	4.7	58.0	64.3	65.3	54.7	33.3	22.0	44.0	50.3	37.7	16.3	13.7	6.0	
<i>Acropora</i>	24.7	35.0	46.7	27.3	28.0	35.3	8.3	11.7	10.0	1.3	1.7	0.7	21.0	23.7	16.3	3.0	4.7	4.3	47.0	40.0	28.0	114.3	37.7	7.3	91.3	103.0	89.7	94.3	85.0	91.0	
<i>Astreopora</i>	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
<i>Porites</i>	6.7	7.0	6.0	63.7	50.7	53.0	65.3	79.0	59.7	59.3	55.0	55.3	53.3	46.7	44.0	54.3	48.7	50.7	28.7	10.7	5.3	19.3	21.7	41.3	0.0	0.0	0.0	0.7	0.3	6.3	
<i>Goniopora</i>	0.0	0.0	0.0	0.7	0.3	0.0	0.0	0.3	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.3	0.3	0.0	0.0	0.0	0.0	0.0	0.0	1.7	1.3	1.3	
<i>Psammocora</i>	3.3	4.7	2.3	1.0	1.0	1.0	13.7	16.3	11.7	1.7	1.0	0.7	25.0	20.7	22.0	1.0	0.0	1.0	0.3	0.7	0.7	4.0	2.0	2.3	0.3	1.0	0.7	3.0	2.3	1.7	
<i>Coscinaraea</i>	0.0	0.0	0.0	0.3	0.0	0.3	2.3	0.3	1.3	0.0	0.0	0.0	0.3	0.7	1.7	0.0	0.0	0.0	0.0	0.0	0.0	1.3	1.3	1.3	1.3	1.0	1.7	0.3	0.3	0.0	
<i>Pavona</i>	6.0	4.3	5.0	0.3	0.3	0.3	1.7	0.7	1.0	0.0	0.0	0.0	6.7	5.7	4.3	11.3	8.3	11.3	2.7	4.0	3.0	2.7	0.3	1.0	0.3	0.7	0.3	6.3	4.7	3.0	
<i>Coeloseris</i>	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.3	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
<i>Pachyseris</i>	0.3	0.3	0.3	0.7	0.7	0.3	0.7	0.7	0.7	0.3	0.7	0.3	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
<i>Fungia</i>	5.0	4.0	3.3	2.0	1.7	2.0	4.7	4.0	3.7	1.0	1.3	2.0	4.0	4.0	5.7	0.3	0.3	0.3	7.3	9.0	11.3	1.3	1.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	
<i>Sandalolitha</i>	0.7	0.3	0.3	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
<i>Galaxea</i>	0.3	0.3	0.7	1.0	1.0	1.0	2.7	2.0	5.0	0.7	0.3	0.7	2.3	2.0	1.7	0.0	0.0	0.0	8.3	9.3	9.0	33.0	31.3	35.0	16.7	18.7	21.7	0.0	0.0	0.3	
<i>Acrohelina</i>	0.0	0.0	0.0	0.3	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
<i>Echinophyllia</i>	0.3	0.0	0.0	1.0	1.7	1.3	1.0	1.0	1.0	0.7	1.0	0.7	0.3	0.0	0.0	0.7	0.7	0.3	0.3	0.0	0.0	0.0	0.0	0.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0
<i>Oxypora</i>	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
<i>Mycedium</i>	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.7	0.3	0.0	0.3	0.3	0.3	0.0	0.0	0.3	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
<i>Pectinia</i>	0.7	1.3	1.0	1.3	2.0	2.3	0.3	0.7	1.3	1.3	1.0	0.3	0.3	0.3	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
<i>Cynarina</i>	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
<i>Scolymia</i>	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
<i>Acanthastrea</i>	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.3	0.0	0.3	0.0	0.0	0.3	0.0	0.0	0.0	0.0
<i>Lobophyllia</i>	0.0	0.0	0.0	0.0	0.0	0.0	1.3	1.7	2.7	1.7	2.0	1.3	0.7	0.3	0.0	0.0	0.0	0.0	0.3	0.0	1.0	0.7	0.3	0.7	0.7	0.7	0.7	0.3	0.3	0.0	0.0
<i>Symphyllia</i>	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.7	0.0	0.0	0.3	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.7	0.0	0.0	0.3	0.3	0.0	0.0
<i>Hydnophora</i>	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.3	0.3	0.0	0.0	0.3	0.3	0.3	1.0	0.3	3.0	1.3	1.0	0.7	1.0	0.7	1.3	0.0
<i>Merulina</i>	0.0	0.0	0.0	0.3	0.0	0.3	0.7	0.7	0.3	0.0	0.0	0.0	0.0	0.0	0.7	0.0	0.0	0.7	0.3	1.3	0.7	5.7	3.3	0.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0
<i>Dipsastraea</i>	0.0	0.0	0.0	9.0	6.3	6.3	12.0	11.3	15.0	6.0	2.7	3.3	1.7	1.7	2.0	0.0	0.0	0.0	1.7	2.0	1.3	3.3	3.0	3.7	4.0	3.3	4.0	4.7	4.7	1.3	0.0
<i>Favites</i>	0.0	0.0	0.0	3.7	2.0	0.7	4.0	3.0	3.0	2.3	1.7	4.0	1.7	1.0	3.0	1.3	1.0	0.3	0.0	0.0	0.0	2.3	2.0	3.0	1.0	1.0	0.7	0.3	0.0	0.7	0.0
<i>Goniastrea</i>	0.0	0.0	0.0	0.3	0.3	0.3	2.7	2.0	6.3	1.3	1.0	2.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.3	1.3	1.0	3.0	3.3	3.0	2.7	2.0	0.3	0.0
<i>Platygyra</i>	0.0	0.0	0.0	0.3	0.7	0.3	3.0	2.3	2.0	0.7	0.3	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.3	1.3	1.7	0.7	0.7	1.3	0.0	0.0	1.0	0.0
<i>Leptoria</i>	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.3	2.7	2.3	1.3	1.7	1.7	0.3	0.3	0.0	0.0
<i>Astrea</i>	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.7	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.3	3.7	3.3	12.0	8.0	10.7	1.7	1.3	0.7	0.0
<i>Diploastrea</i>	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.7	0.0	0.3	0.3	0.0	0.0	0.0	0.0	0.0	0.0
<i>Leptastrea</i>	0.0	0.0	0.0	0.3	0.3	0.3	2.7	6.7	3.0	1.3	1.0	2.0	0.7	0.7	0.7	0.3	0.3	0.3	0.7	0.7	0.7	1.7	0.7	0.7	1.0	1.0	2.3	1.3	1.3	1.0	0.0
<i>Cyphastrea</i>	0.7	0.7	0.3	1.3	1.7	1.0	2.0	1.7	1.7	2.0	1.0	0.7	0.3	0.7	0.7	0.0	0.0	0.0	1.7	1.3	1.0	5.3	2.7	2.3	6.0	4.7	6.7	8.7	9.0	2.3	0.0
<i>Echinopora</i>	13.3	18.3	18.0	1.3	1.7	0.7	8.3	10.0	10.0	1.0	1.0	1.3	2.0	4.0	3.0	1.7	1.7	0.7	0.0	0.3	0.0	5.0	4.3	3.7	0.0	0.0	0.0	0.3	0.3	0.7	0.0
<i>Turbinaria</i>	0.0	0.0	0.0	0.7	1.0	0.7	1.0	0.7	0.3	2.7	1.7	1.7	1.3	0.3	0.3	0.3	0.3	0.3	0.0	0.0	0.0	0.7	0.0	0.3	4.0	2.0	2.3	0.0	0.0	0.0	0.0
<i>Millepora</i>	3.7	3.3	1.0	24.3	20.0	14.0	0.7	1.0	1.0	0.7	1.3	2.7	1.0	0.3	0.7	1.3	1.3	1.0	0.0	0.0	0.0	3.0	3.0	1.3	5.7	3.0	6.7	4.7	4.3	13.7	0.0

Table S6. Abundance (mean no. of colonies per 10 m²) of juvenile coral colonies recorded at each station during the three years of the study.

	SM1			SM2			RA1			RA2			MA1			MA2			MS1			MS2			BA1			BA2		
	2006	2007	2008	2006	2007	2008	2006	2007	2008	2006	2007	2008	2006	2007	2008	2006	2007	2008	2006	2007	2008	2006	2007	2008	2006	2007	2008	2006	2007	2008
<i>Stylocoeniella</i>	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
<i>Pocillopora</i>	4.0	5.7	4.0	2.3	5.3	1.3	6.0	2.7	4.0	0.3	0.7	1.0	2.0	2.0	0.3	0.7	0.7	0.7	0.7	1.7	0.7	5.3	5.7	6.7	14.7	14.3	19.7	17.7	16.0	18.7
<i>Seriatopora</i>	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	4.7	12.0	26.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0
<i>Stylophora</i>	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.7	0.7	7.7	12.7	19.7	19.0	12.3	11.7	38.0	
<i>Montipora</i>	11.0	15.7	13.3	1.7	1.7	1.0	1.7	8.0	5.3	1.3	1.3	5.0	2.3	3.7	7.3	1.0	0.0	2.7	9.7	10.0	15.7	12.7	14.3	27.0	6.3	6.0	16.7	9.0	10.0	10.0
<i>Acropora</i>	16.0	18.7	32.7	4.7	16.3	11.0	8.3	8.3	7.7	1.7	3.3	0.7	18.0	22.0	22.7	3.3	4.3	9.0	22.3	13.3	22.3	16.7	13.3	37.3	73.7	60.0	105.3	37.0	35.0	99.0
<i>Porites</i>	1.7	1.7	0.3	16.7	11.7	12.7	33.0	34.0	36.3	23.3	21.7	17.0	9.7	7.0	11.0	15.0	10.3	11.3	10.0	3.3	3.0	10.3	12.0	35.7	0.7	0.0	3.0	7.7	7.3	14.0
<i>Psammocora</i>	1.0	0.3	0.3	0.3	0.3	0.0	4.0	4.0	1.3	0.0	0.0	0.0	1.3	0.7	9.3	0.7	0.0	0.0	0.0	0.0	1.3	0.3	0.7	0.0	0.0	0.3	0.3	0.7	0.3	0.3
<i>Pavona</i>	0.3	0.3	0.7	0.0	0.0	0.0	0.7	0.0	0.7	0.0	0.0	0.0	2.0	0.3	0.0	4.0	3.7	2.7	0.3	0.0	0.3	0.7	0.0	0.7	0.3	0.3	0.0	2.0	1.0	1.0
<i>Fungia</i>	1.3	3.7	6.0	0.7	0.3	0.0	0.7	1.0	1.0	0.3	0.3	0.3	0.7	0.3	1.0	0.3	0.0	0.0	0.3	0.3	0.3	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
<i>Galaxea</i>	0.3	0.3	0.3	0.0	0.0	0.3	1.7	0.3	2.0	0.0	0.0	0.0	0.0	0.0	0.7	0.3	0.3	0.3	1.7	1.0	1.0	2.7	2.3	9.7	6.0	5.7	11.3	0.0	0.0	4.3
<i>Echinophyllia</i>	0.0	0.0	0.0	0.3	0.7	0.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
<i>Pectinia</i>	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
<i>Lobophyllia</i>	0.0	0.0	0.0	0.0	0.0	0.0	0.7	0.0	0.7	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0
<i>Hydnophora</i>	0.0	0.0	2.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0	2.0	0.0	0.0	0.0	0.0	0.0	0.0	0.7
<i>Merulina</i>	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0	0.0	0.7	0.0	0.3	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
<i>Favia</i>	0.0	0.0	0.3	2.7	2.3	2.0	7.7	7.0	19.0	2.0	2.3	2.3	0.3	1.3	0.7	0.3	0.0	0.0	0.0	0.0	1.7	1.7	2.0	2.0	1.0	4.3	1.7	1.0	0.3	
<i>Favites</i>	0.0	0.0	0.0	0.3	0.7	0.3	0.3	0.7	1.3	0.3	0.3	0.7	0.0	0.0	0.7	0.0	0.0	0.7	0.0	0.0	0.3	0.0	1.7	0.3	0.3	0.3	0.3	0.3	0.0	0.0
<i>Goniastrea</i>	0.0	0.0	0.0	0.0	0.0	0.3	4.3	3.0	4.3	0.7	0.3	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.3	0.3	0.0	0.0	0.7	0.0	0.0	0.0	0.0
<i>Platygyra</i>	0.0	0.0	0.0	0.0	0.0	0.0	1.3	1.7	0.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0
<i>Leptoria</i>	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	1.3	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
<i>Montastrea</i>	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.7	0.7	2.0	4.0	4.0	3.0	1.7	1.3	1.7	
<i>Leptastrea</i>	0.0	0.0	0.0	0.3	0.7	0.3	3.0	6.3	8.7	1.7	0.7	0.3	0.0	0.0	0.0	0.7	0.3	0.7	0.0	0.3	0.7	0.0	1.0	0.3	1.0	3.0	0.3	0.0	0.0	
<i>Cyphastrea</i>	0.3	0.0	0.0	0.7	0.7	0.3	0.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.3	0.3	0.0	0.3	0.0	1.0	0.7	2.3	0.7	1.7	4.7	2.0	1.3	3.7	
<i>Echinopora</i>	3.0	1.7	0.0	0.0	0.3	0.0	1.3	0.0	0.7	0.0	0.0	0.0	0.0	0.0	0.3	0.3	0.0	0.0	0.0	0.0	0.3	0.3	2.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
<i>Turbinaria</i>	0.0	0.0	0.0	0.7	0.3	0.3	0.0	0.0	0.3	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	1.3	1.0	0.0	0.0	0.0	
<i>Millepora</i>	1.7	2.3	1.7	7.0	5.7	3.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	1.7	0.3	0.0	3.7	2.7	2.7	8.0		