

Relative influence of resident species and environmental variation on community assembly

Arthur Riedel^{1,*}, Keyne Monro², Mark W. Blows¹, Dustin J. Marshall²

¹School of Biological Sciences, University of Queensland, St Lucia, Queensland 4072, Australia

²School of Biological Sciences, Monash University, Clayton, Victoria 3800, Australia

*Corresponding author: a.riedel@uq.edu.au

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Supplement. Supporting data

Table S1. Model reduction results: effect of removing the random 3-way interaction term (Orientation × Panel × Resident effect) for each of the 3 data sets estimating effect of presence or absence of *Hippopodina* on community composition

	<i>Log-likelihood of each model</i>		X^2	df	p
	Full	Reduced			
Encrusting	5746.6331	5775.2197	28.5866	15	0.0182
Intermediate	4033.4227	4075.4196	41.997	10	<0.0001
Arborescent	2455.9889	2477.516	21.5271	6	0.0015

Table S2. Estimates of fixed effects, over conditional mean in a mixed-model analysis, for community metrics (abundances and diversity) of 13 species in association with the presence or absence of *Hippopodina*. Significant ($p < 0.05$) values are shown in **bold**

Source	df	F	p
Abundance			
Resident effect	1, 56.9	0.33	0.5673
Orientation	1, 57	330.02	< 0.0001
Orientation × Resident effect	1, 56.6	0.8	0.3745
Diversity			
Resident effect	1, 113	2.52	0.1151
Orientation	1, 56.9	97.65	< 0.0001
Orientation × Resident effect	1, 113	0.88	0.3508

Table S3. Estimates of fixed effects, over conditional mean in a mixed-model analysis, for abundances of 5 species in the encrusting functional group in association with the presence or absence of *Hippopodina*. Significant ($p < 0.05$) values are shown in **bold**

Source	df	F	p
<i>Celleporaria</i>			
Resident effect	1, 56.8	2.46	0.122
Orientation	1, 57	12.17	0.0009
Orientation \times Resident effect	1, 287	1	0.3188
<i>Hippopodina</i>			
Resident effect	1, 56.9	0.66	0.4195
Orientation	1, 344	35.93	<0.0001
Orientation \times Resident effect	1, 344	0.01	0.9329
<i>Schizoporella</i>			
Resident effect	1, 113	2.71	0.1024
Orientation	1, 56.9	30.22	<0.0001
Orientation \times Resident effect	1, 113	2.09	0.1512
<i>Watersipora</i>			
Resident effect	1, 344	1.88	0.1711
Orientation	1, 56.9	57.75	<0.0001
Orientation \times Resident effect	1, 344	2.24	0.1353
<i>Hippopodina</i>			
Resident effect	1, 56.9	2.77	0.1017
Orientation	1, 57	109.21	<0.0001
Orientation \times Resident effect	1, 56.8	1.25	0.2683

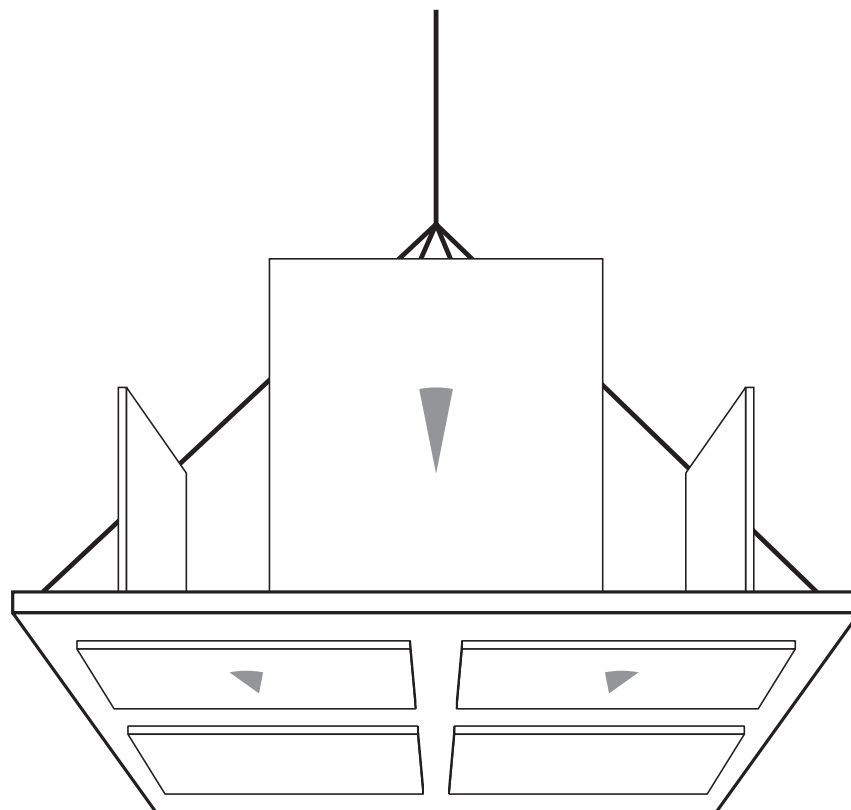


Fig. S1. Arrangement of settlement plates (110 \times 110 \times 5 mm) on backing panels (250 \times 450 \times 5 mm). The presence of the resident species, *Hippopodina*, is indicated by grey segments in the centre of the settlement plates