

**Supplementary Materials**
**Table S1.** Symbiodiniaceae nucleotide databases.

Species	Type	Reference
<i>Symbiodinium minutum</i>	Gene models	[1]
<i>Symbiodinium kawagutii</i>	Gene models	[2]
<i>Symbiodinium microadriaticum</i>	Gene models	[3]
<i>Symbiodinium microadriaticum</i>	Genome	[3]
<i>Symbiodinium aenigmaticum</i>	Transcriptome	[4]
<i>Symbiodinium minutum</i>	Transcriptome	[4]
<i>Symbiodinium pseudominutum</i>	Transcriptome	[4]
<i>Symbiodinium psymphilum</i>	Transcriptome	[4]

1. Shoguchi, E.; Tanaka, M.; Shinzato, C.; Kawashima, T.; Satoh, N. A genome-wide survey of photoreceptor and circadian genes in the coral, *Acropora digitifera*. *Gene* **2013**, *515*, 426-431.
2. Lin, S.; Cheng, S.; Song, B.; Zhong, X.; Lin, X.; Li, W.; et al. The *Symbiodinium kawagutii* genome illuminates dinoflagellate gene expression and coral symbiosis. *Science*, **2015**, *350*, 691-694.
3. Aranda, M.; Li, Y.; Liew, Y.J.; Baumgarten, S.; Simakov, O.; Wilson, M.C.; et al. Genomes of coral dinoflagellate symbionts highlight evolutionary adaptations conducive to a symbiotic lifestyle. *Sci. Rep.* **2016**, *6*, 1-15.
4. Parkinson, J.E.; Baumgarten, S.; Michell, C.T.; Baums, I.B.; LaJeunesse, T.C.; Voolstra, C.R. Gene expression variation resolves species and individual strains among coral-associated dinoflagellates within the genus *Symbiodinium*. *Genome Biol. Evol.* **2016**, *8*, 665-680.

**Table S2.** RT-qPCR Mastermix used for determining gene expression and efficiency.

Reagent	Volume per reaction (µl)	
	Gene expression	Gene efficiency
SsoAdvanced™ Inhibitor-Tolerant SYBR Green		
Supermix	10	5.2
Forward primer 10 µM	0.4	0.2

Reverse primer 10 $\mu$ M	0.4	0.2
cDNA template	1	1
Nuclease-free H <sub>2</sub> O	3.2	3.4
Total reaction mix volume	14	10

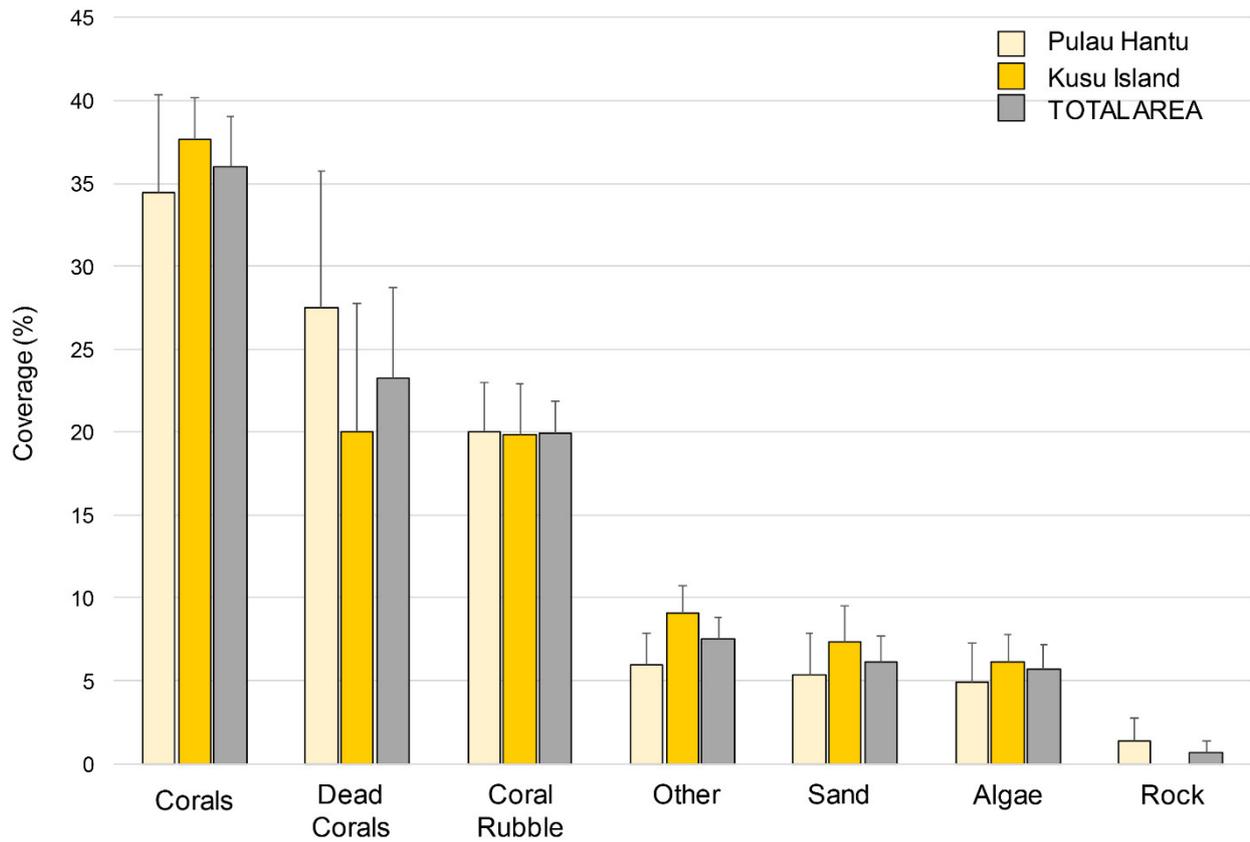
**Table S3.** Coverage percentage of each coral genus in the two sites and in the whole study area.

Coral genus	Coverage (%)		
	Total area	Pulau Hantu	Kusu Island
<i>Pectinia</i>	10.93	13.34	8.20
<i>Dipsastraea</i>	9.18	7.97	10.55
<i>Merulina</i>	7.90	10.40	5.08
<i>Pachyseris</i>	5.14	4.33	6.05
<i>Goniopora</i>	5.05	8.32	1.37
<i>Platygyra</i>	4.96	4.16	5.86
<i>Favites</i>	4.78	2.77	7.03
<i>Galaxea</i>	4.59	4.51	4.69
<i>Heliopora</i>	4.22	0.35	8.59
<i>Goniastrea</i>	3.67	4.68	2.54
<i>Porites</i>	3.58	2.77	4.49
<i>Lobophyllia</i>	3.40	2.60	4.30
<i>Montipora</i>	3.40	1.04	6.05
<i>Turbinaria</i>	3.21	1.91	4.69
<i>Pavona</i>	2.66	4.33	0.78
<i>Cyphastrea</i>	2.48	4.51	0.20
<i>Echinopora</i>	2.48	3.64	1.17
<i>Fungia</i>	2.02	2.77	1.17
<i>Podabacia</i>	1.93	2.77	0.98
<i>Oxypora</i>	1.56	1.39	1.76
<i>Diploastrea</i>	1.29	0.87	1.76
<i>Lithophyllon</i>	1.19	1.56	0.78
<i>Hydnophora</i>	1.10	0.69	1.56
<i>Astreopora</i>	0.92	1.56	0.20
<i>Fimbriaphyllia</i>	0.92	1.39	0.39
<i>Herpolitha</i>	0.92	1.73	0.00
<i>Leptoria</i>	0.92	0.52	1.37
<i>Acropora</i>	0.83	0.17	1.56

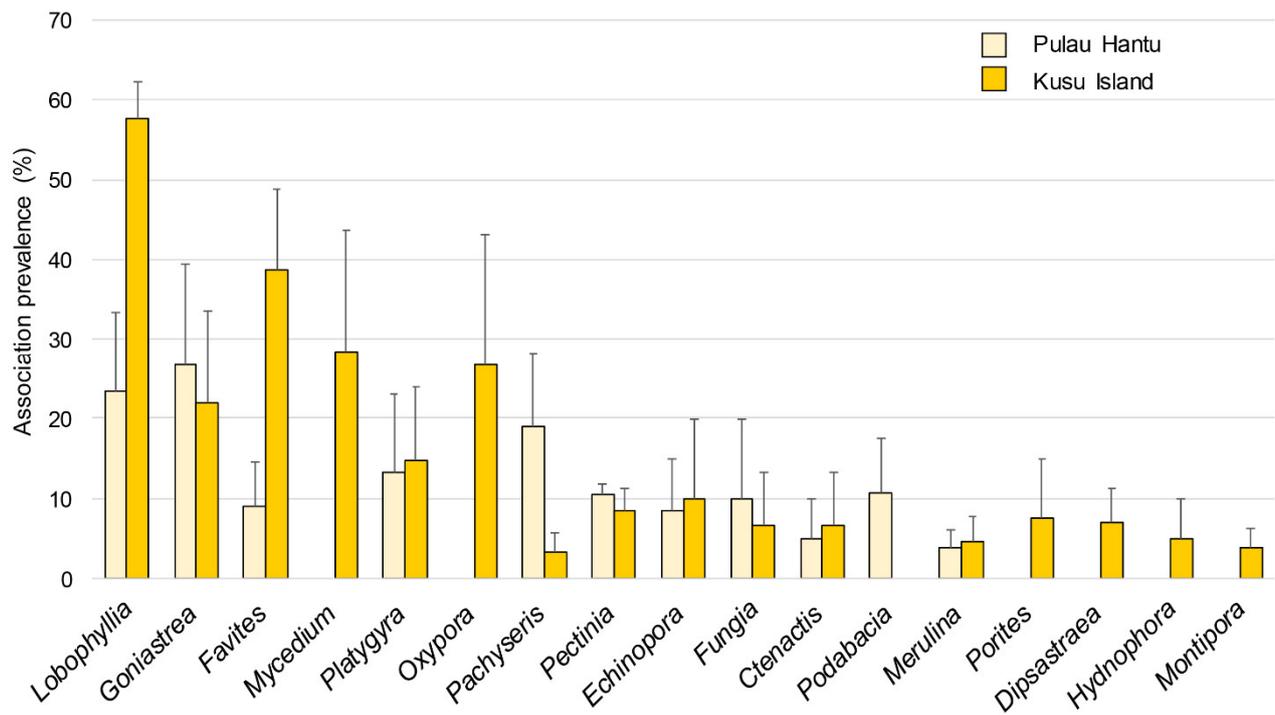
<i>Ctenactis</i>	0.83	0.87	0.78
<i>Plerogyra</i>	0.83	1.21	0.39
<i>Coscinaraea</i>	0.73	0.35	1.17
<i>Mycedium</i>	0.73	0.00	1.56
<i>Pocillopora</i>	0.55	0.00	1.17
<i>Bernardpora</i>	0.28	0.35	0.20
<i>Psammocora</i>	0.28	0.00	0.59
<i>Acanthastrea</i>	0.18	0.00	0.39
<i>Echinophyllia</i>	0.18	0.17	0.20
<i>Danafungia</i>	0.09	0.00	0.20
<i>Leptastrea</i>	0.09	0.00	0.20

**Table S4.** Gene efficiency (E) for each analyzed gene (SD: standard deviation).

Gene	E	E minus SD	E plus SD	Intercept
<i>C-type lectin</i>	2.02	1.94	2.11	27.6
<i>C3</i>	2.12	2.07	2.22	30.0
<i>Hsp70</i>	2.04	2.16	2.16	30.4
<i>Actin</i>	2.20	2.1	2.36	29.1



**Figure S1.** Coverage percentage of the different benthic categories in the two sites analyzed and in the whole study area. Data are expressed as the mean  $\pm$  SEM.



**Figure S2.** Prevalence (%) of *Waminoa* sp.-corals association by coral genus in the two sites. Data are expressed as the mean  $\pm$  SEM.