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### The effect of allometric scaling in coral thermal microenvironments

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**DOI**

[10.1371/journal.pone.0184214](https://doi.org/10.1371/journal.pone.0184214)

**Publication date**

2017

**Document Version**

Other version

**Published in**

PLoS ONE

[Link to publication](#)

**Citation for published version (APA):**

Ong, R. H., King, A. J. C., Kaandorp, J. A., Mullins, B. J., & Caley, M. J. (2017). The effect of allometric scaling in coral thermal microenvironments. *PLoS ONE*, *12*(10), [e0184214]. <https://doi.org/10.1371/journal.pone.0184214>

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**S7 Table**

**Summary of local heat coefficients (*a*) and exponents (*b*) based on the colony shape and the allometric thermal scaling constants for both the laminar (L) and turbulent (T) regimes.**

Shape	Local <i>a</i> and <i>b</i>		Local allometric constants	
	<i>a</i>	<i>b</i>	<i>C</i>	<i>m</i>
Flat plate or mushroom (L)	0.68	0.82	$6.45 \times 10^{-3}$	0.12
Flat plate or mushroom (T)	1.16	0.95	$1.17 \times 10^{-4}$	0.40
Cylinder (L)	0.96	0.68	$1.14 \times 10^{-3}$	0.48
Cylinder (T)	0.68	0.87	$7.94 \times 10^{-6}$	0.74
masive - hemispherical (L)	0.83	0.56	$5.75 \times 10^{-3}$	0.28
massive - hemispherical (T)	1.52	0.75	$1.35 \times 10^{-4}$	0.36
massive - <i>G. aspera</i> (L)	0.75	0.47	$1.18 \times 10^{-1}$	-0.16
massive - <i>G. aspera</i> (T)	0.96	0.83	$1.99 \times 10^{-4}$	-0.09
massive - <i>Porites</i> (L)	0.89	0.53	$1.82 \times 10^{-1}$	-0.16
massive - <i>Porites</i> (T)	1.63	0.69	$2.51 \times 10^{-4}$	0.22
encrusting - <i>D. labyrinthiformis</i> (L)	0.83	0.55	$1.54 \times 10^{-2}$	0.14
encrusting - <i>D. labyrinthiformis</i> (T)	1.10	0.86	$2.51 \times 10^{-5}$	0.57
columnar - <i>S. hystrix</i> (L)	0.79	0.58	$4.57 \times 10^{-3}$	0.36
columnar - <i>S. hystrix</i> (T)	0.15	1.16	$7.94 \times 10^{-11}$	1.12
columnar - <i>S. caliendrum</i> (L)	0.80	0.50	$1.99 \times 10^{-2}$	0.23
columnar - <i>S. caliendrum</i> (T)	0.89	0.94	$1.00 \times 10^{-5}$	0.80
tabular - <i>A. millepora</i> (L)	0.58	0.57	$3.98 \times 10^{-3}$	0.38
tabular - <i>A. millepora</i> (T)	0.98	0.81	$1.29 \times 10^{-5}$	0.73
digitate - <i>M. mirabilis</i> (L)	0.69	0.58	$3.71 \times 10^{-3}$	0.40
digitate - <i>M. mirabilis</i> (T)	0.22	1.03	$9.12 \times 10^{-7}$	0.95
digitate - <i>M. annularis</i> (L)	0.44	0.65	$1.66 \times 10^{-3}$	0.47
digitate - <i>M. annularis</i> (T)	0.49	0.89	$6.02 \times 10^{-6}$	0.70
digitate - <i>A. digitifera</i> (L)	0.61	0.58	$3.63 \times 10^{-3}$	0.40
digitate - <i>A. digitifera</i> (T)	1.14	0.79	$1.86 \times 10^{-5}$	0.70