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Intergenerational epigenetic inheritance in reef-building corals

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Supplementary Information

Supplementary Table S1. Age estimates of *Platygyra daedalea* colonies from Abu Dhabi.

Colony radius-age relationships established for *P. sinensis* from the Great Barrier Reef⁵⁶ were applied to local data as this closely related species has identical growth morphology to *P. daedalea*. Radial size gains were adjusted to reflect a 33% slower growth rate in Abu Dhabi *P. daedalea*⁵⁷ and applied to the sizes of colonies measured in the population ($n = 140$).

	<i>P. sinensis</i> growth rates (years per cm)	<i>P. daedalea</i> growth rates (years per cm, adjusted)	<i>P. daedalea</i> colony radius (cm)	<i>P. daedalea</i> colony age estimates (mean, min–max)
Mean	1.9	2.5	12.8	32 (24–41)
Minimum	1.4	1.9	1.25	3 (2–4)
Maximum	2.4	3.2	47.8	120 (91–153)

Supplementary Table S2. Temperature and salinity profiles of *P. daedalea* populations

in Abu Dhabi and Fujairah. Temperatures summaries were calculated from daily means from *in situ* temperature loggers (*HOB*O pendant) attached to the reef substrate (Abu Dhabi: 2010–2014; Fujairah; 2012–2014)¹⁴. Salinity summaries were calculated from ad hoc measurements (YSI multi-probe) taken *in situ* within 0.5 m of the substrate (Abu Dhabi: 2013–2017, $n = 23$; Fujairah; 2013–2015, $n = 9$)⁵⁷.

Temperature (°C)	Abu Dhabi	Fujairah
Annual mean	28.1	27.4
Maximum	35.7	33.3
Minimum	18.4	22.0
Annual range	17.3	11.3
Salinity (psu)	Abu Dhabi	Fujairah
Mean	42.1	37.7
Maximum	45.9	39.4
Minimum	38.6	35.5

References

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