

Table S1. Collection data for *Caldora penicillata* specimens used in this study.

Sample ID	Location	GPS coordinates		Depth (m)	Date <sup>a</sup>
BCBC11-25	Raph's wall, Belize	16°46'775"N	88°04'513"W	12-15	09/17/2011
BCBC11-38	South Water, Belize	16°48'164"N	88°04'916"W	5	09/19/2011
BCBC12-2	Carrie Bow Cay, Belize	16°80'360"N	88°08'188"W	1-2	08/24/2012
NAB11-8	Lac Bay, Bonaire	12°09'463"N	68°23'325"W	1-2	10/19/2011
NAB11-21	Playa Franz, Bonaire	12°09'127"N	68°23'282"W	5-8	10/20/2011
NAB11-28	Lac Bay, Bonaire	12°08'968"N	68°23'119"W	1-5	10/22/2011
NAB11-29	Lac Bay, Bonaire	12°08'968"N	68°23'119"W	1-5	10/22/2011
NAB11-32	Cali reef, Bonaire	12°10'210"N	68°22'132"W	16	10/22/2011
NAC11-67	Porto Marie, Curaçao	12°21'814"N	69°08'640"W	1-2	10/27/2011
NAC11-68	Porto Marie, Curaçao	12°21'814"N	69°08'640"W	1-2	10/27/2011
FK12-2	Wonderland, Florida Keys	24°33'628"N	08°30'084"W	5-8	05/18/2012
FK12-18	Big Pine Ledge, Florida Keys	24°33'479"N	81°22'744"W	5-8	05/21/2012
FK12-20	Wonderland, Florida Keys	24°33'628"N	81°30'084"W	10-12	05/21/2012
FK12-26	Looe Key, Florida Keys	24°35'400"N	81°31'100"W	8-10	08/13/2012
FK13-1	Looe Key, Florida Keys	24°35'400"N	81°31'100"W	8-10	06/10/2013
HMC13-6	Beceros, Honduras	15°91'113"N	83°25'733"W	6-7	05/07/2013
HMC13-9	Caratasca, Honduras	16°02'433"N	83°31'633"W	3-5	05/07/2013

<sup>a</sup>Dates indicated by month/day/year

Table S2. Morphological characterization of *Caldora penicillata* specimens used in this study.

Sample ID	Thallus	Color	Filament width ( $\mu\text{m}$ ) <sup>a</sup>	Cell width ( $\mu\text{m}$ ) <sup>a</sup>	Cell length ( $\mu\text{m}$ ) <sup>a</sup>	Cross-wall constriction	End cells
BCBC11-25	Puffballs	Orange-red	$6.0 \pm 0.1$	$5.4 \pm 0.1$	$6.3 \pm 0.7$	Slight	Rounded
BCBC11-38	Feathery	Red	$5.4 \pm 0.3$	$5.3 \pm 0.3$	$6.4 \pm 0.7$	Slight	Rounded
BCBC12-2	Feathery	Red	$4.9 \pm 0.3$	$4.9 \pm 0.3$	$5.7 \pm 0.6$	Slight	Rounded
NAB11-8	Feathery	Green	$5.1 \pm 0.2$	$5.0 \pm 0.3$	$4.8 \pm 0.6$	Slight	Rounded
NAB11-21	Feathery	Red	$4.9 \pm 0.5$	$4.9 \pm 0.5$	$6.0 \pm 0.6$	Slight	Rounded
NAB11-28	Puffballs	Green	$4.7 \pm 0.4$	$4.6 \pm 0.4$	$5.8 \pm 0.4$	Slight	Rounded
NAB11-29	Feathery	Green	$4.7 \pm 0.4$	$4.7 \pm 0.3$	$5.3 \pm 0.4$	Slight	Rounded
NAB11-32	Puffballs	Red	$4.9 \pm 0.4$	$4.9 \pm 0.4$	$6.1 \pm 0.6$	Slight	Rounded
NAC11-67	Puffballs	Green	$5.4 \pm 0.4$	$5.3 \pm 0.4$	$5.7 \pm 0.5$	Slight	Rounded
NAC11-68	Puffballs	Orange-red	$4.5 \pm 0.2$	$4.4 \pm 0.1$	$5.3 \pm 0.5$	Slight	Rounded
FK12-2	Feathery	Red	$5.7 \pm 0.3$	$5.5 \pm 0.3$	$7.1 \pm 1.2$	Slight	Rounded
FK12-18	Feathery	Red	$5.1 \pm 0.2$	$5.0 \pm 0.3$	$5.7 \pm 0.3$	Slight	Rounded
FK12-20	Feathery	Red	$5.3 \pm 0.7$	$5.3 \pm 0.7$	$5.9 \pm 0.3$	Slight	Rounded
FK12-26	Feathery	Red	$5.1 \pm 0.5$	$4.9 \pm 0.6$	$6.3 \pm 0.6$	Slight	Rounded
FK13-1	Feathery	Red	$5.3 \pm 0.6$	$5.2 \pm 0.7$	$6.6 \pm 0.5$	Slight	Rounded
HMC13-6	Feathery	Red	$4.4 \pm 0.1$	$4.3 \pm 0.1$	$5.5 \pm 0.1$	Slight	Rounded
HMC13-9	Feathery	Orange-red	$5.4 \pm 0.5$	$5.2 \pm 0.7$	$6.6 \pm 0.6$	Slight	Rounded

<sup>a</sup>The size measurements presented in this table are mean  $\pm$  SD in  $\mu\text{m}$  (n = 10).