

Supplementary Material

Table S1. List of specimens used in the phylogenetic analyses, including specimen identification number, locality, collector names, collection date and GenBank accession number.

Species	Specimen Identification Number	Locality	Collection date	Collectors	GenBank Accession Number	
					psbA	rbcL
<i>Heydrichia cerasina</i>	NCU 617165	South Africa: Western Cape Province, Cape Agulhas, L'Agulhas	16.vi.2010	G. W. Maneveldt, E. van der Merwe, C. van Gass & O. van Gass	MF03455 1	KY9941 28
<i>Heydrichia woelkerlingii</i>	NCU 597127	South Africa: Cape Province, Oudekraal	2.ix.2011	M. Rothman & C. Boothroyd	JQ91741 5	KP14278 8
<i>Heydrichia homalopasta</i>	NZC 0757	New Zealand: Chatam islands, Port Hutt	23.ii.2004	D. Hart, J. Broom, T. Farr, W. Nelson & K. Neill	DQ1679 37	-
<i>Heydrichia homalopasta</i>	NZC 2052	New Zealand: North Island, Auckland, Taiwharanui peninsula, Jones Bay	-	J. Broom, T. Farr, K. Neill & W. Nelson	FJ361548	-
<i>Sporolithon mesophoticum</i>	NCU 658543	Bermuda: Plantagenet (Argus) Bank	26.ix.2016	C. W. Schneider	MK1591 80	MK1591 81
<i>Sporolithon yoneshigueae</i>	RB 600359	Brazil: Abrolhos Continental Shelf, Bahia	27.x.2013	R.G. Bahia, G.M. Amado-Filho, G. Maneveldt & W.H. Adey	MF03454 5	KY9941 22
<i>Sporolithon yoneshigueae</i>	RB 600360	Brazil: Abrolhos Continental Shelf, Bahia	27.x.2013	R.G. Bahia, G.M. Amado-Filho, G. Maneveldt & W.H. Adey	MF03454 6	KY9941 23
<i>Sporolithon sinusmexicanum</i>	LAF 6956A	North West of Gulf of Mexico (NWGMx): Sackett bank	07.ix.2014	J. Richards & S. fredericq	MF03454 9	KY9941 26
<i>Sporolithon</i> sp.	GWS 024261	Australia: Western, Mutton Bird I	06.xi.2010	G.W. Saunders & K. Dixon	KY68292 6	KY6829 02
<i>Sporolithon durum</i>	LTB 21140	Australia: New South Wales, Jervis Bay, 'The Docks'	16.iii.2000	D. Hart, J. Broom, T. Farr, W. Nelson & K. Neill	DQ1680 23	KM3691 21
<i>Sporolithon</i> sp.	NZC 2375	New Zealand: North Island, Northland, Karikari Bay	06.iv.2006	D. Freeman	FJ361583	KM3691 22
<i>Sporolithon durum</i>	RHO 2203	New Zealand: Bay of Islands, North I	21.ix.2010	W. Nelson, R. D'Archino, K. Neill & T. Farr	KC96342 1	-
<i>Sporolithon</i> sp.	NZC 2268	New Zealand: North Island, Bay of Islands, Western side of Okahu Island	-	J. Broom, T. Farr, K. Neill & W. Nelson	FJ361515	-
<i>Sporolithon</i> sp.	NZC 0137	New Zealand: Catherine Cove, D'Urville I	06.ii.2003	S. Brown	DQ1678 75	-
<i>Sporolithon tenue</i>	Bahia Brazil 12512-4	Brazil: Bahia, Salvador, Itapuã	13.iii.2007	R.G. Bahia & G.M. Amado-Filho	KC87092 3	-
<i>Sporolithon tenue</i>	BahiaBrazil 33	Brazil: Bahia, Salvador, Itapuã	13.iii.2007	R.G. Bahia & G.M. Amado-Filho	KC87092 4	-

<i>Sporolithon tenue</i>	US 170943	Brazil: Bahia, Salvador, Itapuã	08.ii.2012	R.G. Bahia & G.M. Amado-Filho	KP14275 1	KP14278 5
<i>Sporolithon</i> sp.	WELT A029451	New Zealand: North Island, Taranaki, Whale Bay	01.ii.2006	K. Neill & T. Farr	FJ361509	KM3691 23
<i>Sporolithon amadoi</i>	RB 621750	Brazil: Bahia, Abrolhos Archipelago, Santa Bárbara Island, "Porto Norte"	23.x.2012	G.M. Amado-Filho	KY48531 3	-
<i>Sporolithon amadoi</i> (as <i>Sporolithon</i> cf. <i>ptychooides</i>)	GM AF6	Brazil: Pernambuco, Fernando de Noronha Archipelago, Cabeço Dois Irmãos	26.xi.2012	G.M. Amado-Filho	KP14275 3	KP14278 7
<i>Sporolithon amadoi</i>	RB779736	Brazil: Espírito Santo, São Mateus, Recifes Esquecidos	-	R.G. Bahia	MN4340 69	-
<i>Sporolithon amadoi</i> (as <i>Sporolithon ptychooides</i>)	US Amado-Filho Brazil 7	Brazil: Pernambuco, Fernando de Noronha Archipelago	-	G.M. Amado-Filho	KC87092 7	-
<i>Sporolithon molle</i>	NCU 606657	Egypt: Gulf of Suez, El Tor	08.v.2012	T. Sauvage, W.E. Schmidt & K. Gabriel	MG0512 72	KY9941 20
<i>Sporolithon ptychooides</i>	NCU 606663	Egypt: Gulf of Suez, El Tor	08.v.2012	T. Sauvage, W.E. Schmidt & D. Gabriel	MF03454 2	KY9941 18
<i>Sporolithon ptychooides</i>	NCU 606660	Egypt: Gulf of Suez, El Tor	08.v.2012	T. Sauvage, W.E. Schmidt & D. Gabriel	MF03454 1	KY9941 17
<i>Sporolithon franciscanum</i>	RB 797665	Brazil: Sergipe, Aracajú	02.ii.2011	L.C.S. Fontes, J.R. Santos, L.A. Santos, J.B.S. Mendonça, & M.S. Santos	MT2144 82	-
<i>Sporolithon</i> sp. (= <i>Sporolithon franciscanum</i>)	GM AF5	Brazil: Bahia, Abrolhos Continental Shelf	11.iii.2012	G.M. Amado-Filho	KP14275 2	KP14278 6
<i>Sporolithon</i> sp.	GWS 024693	Australia: Western Australia, Windy Harbour	08.xi.2010	G.W. Saunders & K. Dixon	KY68293 8	KY6829 07
<i>Sporolithon eltorensis</i>	LAF 5767	Egypt: Dahab, Gulf of Aqaba	05.v.2012	T. Sauvage, W.E. Schmidt & D. Gabriel	MF03454 4	-
<i>Sporolithon eltorensis</i>	NCU 606659	Egypt: Gulf of Suez, El Tor	08.v.2012	T. Sauvage, W.E. Schmidt & D. Gabriel	MF03454 3	MG0512 69
<i>Sporolithon</i> sp.	PHYKOS 4623	Panama: Gulf of Chiriqui, near Mono Feliz	10.x.2011	T. Sauvage, W.E. Schmidt & D. Gabriel	MF03454 8	-
<i>Sporolithon episporum</i>	NCU 598843	Panama: Bocas del Toro	13.vii.2008	K. Miklasz	MF03454 7	KY9941 24
<i>Sporolithon episporum</i>	Steneck USAJ-A-73233	Costa Rica: Punta Cocies, Prov. Limon	-	-	KC87092 5	-
<i>Sporolithon indopacificum</i>	UWC 94/1265	Fiji: Nakalau	06.xi.1994	D. W. Keats	MG0512 71	-
<i>Sporolithon indopacificum</i>	L:3964509	Tanzania: Zanzibar Island, Chwaka Bay	06.vi.2016	J. Kangwe, J. Nene & K. Mohammed	MG0512 70	MG0512 67

<i>Sporolithon indopacificum</i>	L:3964511	Tanzania: Zanzibar Island, Chwaka Bay	06.vi.2016	J. Kangwe, J. Nene & K. Mohammed	-	MG0512 68
<i>Sporolithon</i> sp.	NTOU 001517	Taiwan: Xinwu, Taoyuan County	25.i.2015	S.-M. Lin	MH3770 23	-
<i>Sporolithon</i> sp.	NTOU 001470	Taiwan: Xinwu, Taoyuan County	25.i.2015	S.-M. Lin	MH3770 24	-
<i>Lithothamnion glaciale</i>	GALW 15742	Ireland: Kingstown Bay	10.xi.2009	M. Moriarty	JQ89623 3	-
<i>Lithothamnion glaciale</i>	US170935	Canada: off Havre Cumberland, Quebec	04.viii.201 1	W.H. Adey	-	KP14276 6
<i>Melyvonnea erubescens</i> (as ' <i>Mesophyllum erubescens</i> ')	GALW 15774	Spain: Tenerife, Canary Islands	-	-	JQ89624 6	-
<i>Mesophyllum lichenoides</i>	NCU590286	England: South Devon	22.vii.2009	J. Brodie	-	KY9941 29
<i>Sporolithon dimotum</i>	NY 900043	Puerto Rico: Lemon Bay near Guanica	27.vi.1903	M.A. Howe	-	KY9941 31
<i>Sporolithon</i> sp.	GENT SV0069	Locality Unknown	ND.ND.20 14	S. Vranken	-	LT96967 9