

Additional mycobiont sequences used in this study, downloaded from GenBank (NCBI)

Acc.-No. ITS	Acc.-No. mtSSU	Species name	Country
JN873866	MK205038	<i>Carbonea vorticosa</i> (Flörke) Hertel	Antarctica, Ross Dependency
EU263920	GU074511	<i>Farnoldia jurana</i> (Schaer.) Hertel ssp. <i>jurana</i>	Austria
MK620133	MK684637	<i>Immersaria fuliginosa</i> Fryday	Argentina, Ushuaia
MK620076	MK684569	<i>Lecidea atrobrunnea</i> (Ramond ex Lam. DC.) Schaer.	Antarctic Pensinusla
GU074427	GU074500	<i>L. auriculata</i> Th. Fr.	Sweden
MK620087	MK684576	<i>L. cancriformis</i> (C.W. Dodge & G.E. Baker)	Antarctica, MacRobertson Land
EU263921	GU074492	<i>L. confluens</i> (Weber) Ach.	Austria
EU263922	GU074490	<i>L. fuscoatra</i> (L.) Ach.	Austria
MK590965	MK591821	<i>L. glacierensis</i> A. Abbas & R. Mamut	China
EU259902	MK684890	<i>L. laboriosa</i> Müll. Arg.	USA, California
GU074425	GU074493	<i>L. lapicida</i> (Ach.) Ach. var. <i>lapicida</i> Ach.	Austria
MK620247	MK684743	<i>L. lithophila</i> (Ach.) Ach.	Austria
EU259903	GU074497	<i>L. plana</i> (J. Lahm) Nyl.	Sweden
MK620081	MK684572	<i>L. polypycnidophora</i> U. Rupr. & Türk	Antarctica, MacRobertson Land
MK620180	MK684678	<i>L. promiscens</i> Nyl.	Argentina, El Chalten
EU263926	GU074491	<i>L. tessellata</i> Flörke	Austria
KX120216	MK684593	<i>Poeltiaria navarina</i> (U. Rupr. & Türk) U. Rupr. & Fryday	Chile, Isla Navarino
MK620101	MK684581	<i>Poeltidea</i> sp. 1	Argentina, Ushuaia
MK620111	-	<i>P. perusta</i> (Nyl.) Hertel & Hafellner	Chile, Isla Navarino
KJ653476	KJ653472	<i>Porpidia albocaerulescens</i> (Wulfen) Hertel & Knoph	USA, North Carolina
KJ162306	KF683104	<i>P. cineroatra</i> (Ach.) Hertel & Knoph	Ireland
KJ162298	-	<i>P. contraponenda</i> (Arnold) Knoph & Hertel	Austria
KJ653480	KJ653474	<i>P. degelii</i> (H. Magnusson) Lendemer	USA, West Virginia
KJ162332	-	<i>P. flavicunda</i> (Ach.) Gowan	Norway
KY509524	-	<i>P. grisea</i> Gowan 1989	
KJ162319	-	<i>P. hydrophila</i> (Fr.) Hertel & A.J.Schwab	UK, Wales
KR069080	-	<i>P. hypostictica</i> L. Hu & Z.T. Zhao	China
KJ162302	-	<i>P. irrigua</i> A. Orange	UK, Wales
KJ162313	-	<i>P. islandica</i> Fryday	Faroe Islands
MW641995	-	<i>P. kashmirensis</i> Fayyaz, Afshan, Niazi & Khalid	Pakistan
HQ605941	-	<i>P. macrocarpa</i> (DC.) Hertel & A.J.Schwab	Austria
KJ162326	-	<i>P. melinodes</i> (Körb.) Gowan & Ahti	Norway
HQ605939	-	<i>P. musiva</i> (Körb.) Hertel & Knoph	Turkey
KJ162320	-	<i>P. rugosa</i> (Taylor) Coppins & Fryday	Faroe Islands
KY509522	-	<i>P. speirea</i> (Ach.) Kremp	China
KJ162316	-	<i>P. striata</i> Fryday	UK, Wales
KX120229	MK684589	inc. sed. <i>Porpidia</i> sp. 1	Chile, Isla Navarino
MK970665	MN023039	<i>Rhizoplaca macleanii</i> (C.W. Dodge) M. Castello	Antarctica, Southern Victoria Land