

1. The top hits obtained after running a BLAST search of ITS for *Astrothelium jiangxiense* sp. nov. (holotype JX19042)

Descriptions	Graphic Summary	Alignments	Taxonomy						
Sequences producing significant alignments									
Download Select columns Show 100									
select all 100 sequences selected									
GenBank Graphics Distance tree of results MSA Viewer									
	Description	Scientific Name	Max Score	Total Score	Query Cover	E value	Per Ident	Acc Len	Accession
	Astrothelium neovariolosum genes for 18S rRNA ITS1 5.8S rRNA ITS2 28S rRNA partial and complete sequ...	Astrothelium neo...	480	480	95%	2e-130	85.33%	545	LC127391.1
	Astrothelium neovariolosum genes for 18S rRNA ITS1 5.8S rRNA ITS2 28S rRNA partial and complete sequ...	Astrothelium neo...	480	480	95%	2e-130	85.33%	544	LC127390.1
	Astrothelium macrostiolatum genes for 18S rRNA ITS1 5.8S rRNA ITS2 28S rRNA partial and complete sequ...	Astrothelium mac...	477	477	97%	7e-130	84.90%	605	LC127389.1
	Astrothelium siamense genes for 18S rRNA ITS1 5.8S rRNA ITS2 28S rRNA partial and complete sequence J...	Astrothelium sia...	452	452	90%	3e-122	85.20%	592	LC127388.1
	Astrothelium flavocoronatum genes for 18S rRNA ITS1 5.8S rRNA ITS2 28S rRNA partial and complete sequ...	Astrothelium flav...	451	451	90%	1e-121	85.65%	543	AB758900.1
	Astrothelium flavocoronatum genes for 18S rRNA ITS1 5.8S rRNA ITS2 28S rRNA partial and complete sequ...	Astrothelium flav...	444	444	90%	4e-120	85.45%	545	LC127381.1
	Astrothelium aenascens genes for 18S rRNA ITS1 5.8S rRNA ITS2 28S rRNA partial and complete sequence...	Astrothelium aen...	442	442	89%	5e-119	84.41%	594	LC127385.1
	Astrothelium siamense genes for 18S rRNA ITS1 5.8S rRNA ITS2 28S rRNA partial and complete sequence J...	Astrothelium sia...	439	439	89%	2e-118	84.86%	583	LC127387.1
	Astrothelium aenascens genes for 18S rRNA ITS1 5.8S rRNA ITS2 partial and complete sequence isolate HR	Astrothelium aen...	433	433	87%	3e-116	84.52%	550	LC127386.1
	Trypethelium sp. DUKE 0000007 isolate AFTOL-ID 110 internal transcribed spacer 1 5.8S ribosomal RNA gene...	Astrothelium cinn...	427	427	88%	1e-114	83.41%	483	DQ782839.1
	Astrothelium neglectum genes for 18S rRNA ITS1 5.8S rRNA ITS2 28S rRNA partial and complete sequence j...	Astrothelium negl...	419	419	90%	2e-112	82.49%	552	LC127394.1
	Astrothelium neglectum genes for 18S rRNA ITS1 5.8S rRNA ITS2 28S rRNA partial and complete sequence j...	Astrothelium negl...	419	419	90%	2e-112	82.49%	568	LC127393.1
	Astrothelium neglectum genes for 18S rRNA ITS1 5.8S rRNA ITS2 28S rRNA partial and complete sequence j...	Astrothelium negl...	419	419	90%	2e-112	82.49%	567	LC127392.1
	Astrothelium sp. ZTY-2020a voucher LCUF GD19282 small subunit ribosomal RNA gene partial sequence intern	Astrothelium sp...	408	408	90%	3e-109	83.29%	603	MT948055.1
	Astrothelium macrocarpum genes for 18S rRNA ITS1 5.8S rRNA ITS2 28S rRNA partial and complete sequen...	Astrothelium mac...	407	484	88%	1e-108	86.57%	784	LC127384.1
	Astrothelium macrocarpum genes for 18S rRNA ITS1 5.8S rRNA ITS2 28S rRNA partial and complete sequen...	Astrothelium mac...	407	484	88%	1e-108	86.57%	800	LC127383.1
	Astrothelium macrocarpum genes for 18S rRNA ITS1 5.8S rRNA ITS2 28S rRNA partial and complete sequen...	Astrothelium mac...	407	484	88%	1e-108	86.57%	800	LC127382.1
	Astrothelium sp. ZTY-2020a voucher LCUF GD19156 small subunit ribosomal RNA gene partial sequence intern	Astrothelium sp...	404	404	90%	1e-107	83.06%	602	MT948056.1
	Astrothelium macrocarpum TNS.YO12392 genes for 18S rRNA ITS1 5.8S rRNA ITS2 28S rRNA partial and co...	Astrothelium mac...	403	475	94%	1e-107	84.43%	810	LC573991.1
	Astrothelium macrocarpum genes for 18S rRNA ITS1 5.8S rRNA ITS2 28S rRNA partial and complete sequence	Astrothelium mac...	402	475	88%	4e-107	86.29%	799	AB759880.1
	Astrothelium macrocarpum voucher HMAS-L0146701 small subunit ribosomal RNA gene partial sequence intern	Astrothelium mac...	402	475	88%	4e-107	86.29%	800	MT948054.1
	Astrothelium macrocarpum TNS.YO12285 genes for 18S rRNA ITS1 5.8S rRNA ITS2 28S rRNA partial and co...	Astrothelium mac...	398	475	89%	5e-106	85.84%	726	LC573990.1
	Astrothelium sp. isolate JAM-177 small subunit ribosomal RNA gene partial sequence internal transcribed space...	Astrothelium sp...	393	393	89%	2e-104	82.35%	621	MT553327.1
	Trypethelium sp. isolate JAM-176 small subunit ribosomal RNA gene partial sequence internal transcribed space	Trypethelium sp...	334	334	71%	5e-87	83.78%	622	MT553326.1
	Uncultured Capnodiales clone H93 18S ribosomal RNA gene partial sequence internal transcribed spacer 1 5.8...	uncultured Capon...	326	326	68%	3e-84	84.28%	617	JX317516.1
	Marcelaria cumingii genes for 18S rRNA ITS1 5.8S rRNA ITS2 28S rRNA partial and complete sequence isola	Marcelaria cumingii	286	286	49%	2e-72	88.03%	556	LC034180.1

2. The top hits obtained after running a BLAST search of ITS for *Astrothelium luminothallinum* sp. nov. (holotype GZ18347)

Descriptions	Graphic Summary	Alignments	Taxonomy						
Sequences producing significant alignments									
Download Select columns Show 100									
select all 100 sequences selected									
GenBank Graphics Distance tree of results MSA Viewer									
	Description	Scientific Name	Max Score	Total Score	Query Cover	E value	Per Ident	Acc. Len	Accession
	Astrothelium macrostiolatum genes for 18S rRNA ITS1 5.8S rRNA ITS2 28S rRNA partial and complete sequence	Astrothelium mac...	551	551	100%	4e-152	87.28%	605	LC127389.1
	Astrothelium neovariolosum genes for 18S rRNA ITS1 5.8S rRNA ITS2 28S rRNA partial and complete sequence	Astrothelium neo...	523	523	92%	2e-143	88.10%	545	LC127391.1
	Astrothelium neovariolosum genes for 18S rRNA ITS1 5.8S rRNA ITS2 28S rRNA partial and complete sequence	Astrothelium neo...	523	523	92%	2e-143	88.10%	544	LC127390.1
	Astrothelium siamense genes for 18S rRNA ITS1 5.8S rRNA ITS2 28S rRNA partial and complete sequence	Astrothelium sia...	517	517	98%	8e-142	86.50%	592	LC127388.1
	Astrothelium siamense genes for 18S rRNA ITS1 5.8S rRNA ITS2 28S rRNA partial and complete sequence	Astrothelium sia...	512	512	100%	3e-140	86.09%	583	LC127387.1
	Astrothelium aenascens genes for 18S rRNA ITS1 5.8S rRNA ITS2 28S rRNA partial and complete sequence	Astrothelium aen...	509	509	92%	1e-139	87.71%	594	LC127385.1
	Astrothelium aenascens genes for 18S rRNA ITS1 5.8S rRNA ITS2 partial and complete sequence isolate HR	Astrothelium aen...	500	500	90%	6e-137	87.89%	550	LC127386.1
	Astrothelium sp. ZTY-2020a voucher LCUF GD19282 small subunit ribosomal RNA gene partial sequence internal	Astrothelium sp...	452	452	92%	3e-122	85.31%	603	MT948055.1
	Astrothelium sp. ZTY-2020a voucher LCUF GD19156 small subunit ribosomal RNA gene partial sequence internal	Astrothelium sp...	447	447	92%	1e-120	85.08%	602	MT948056.1
	Astrothelium flavocoronatum genes for 18S rRNA ITS1 5.8S rRNA ITS2 28S rRNA partial and complete sequence	Astrothelium flav...	425	425	90%	4e-114	83.69%	545	LC127381.1
	Astrothelium flavocoronatum genes for 18S rRNA ITS1 5.8S rRNA ITS2 28S rRNA partial and complete sequence	Astrothelium flav...	422	422	90%	5e-113	83.65%	543	AB758900.1
	Astrothelium neglectum genes for 18S rRNA ITS1 5.8S rRNA ITS2 28S rRNA partial and complete sequence	Astrothelium negl...	407	407	92%	1e-108	81.94%	552	LC127394.1
	Astrothelium neglectum genes for 18S rRNA ITS1 5.8S rRNA ITS2 28S rRNA partial and complete sequence	Astrothelium negl...	407	407	92%	1e-108	81.94%	568	LC127393.1
	Astrothelium neglectum genes for 18S rRNA ITS1 5.8S rRNA ITS2 28S rRNA partial and complete sequence	Astrothelium negl...	407	407	92%	1e-108	81.94%	567	LC127392.1
	Trypethelium sp. DUKE 0000007 isolate AFTOL-ID 110 internal transcribed spacer 1 5.8S ribosomal RNA gene	Astrothelium cinn...	402	402	89%	4e-107	82.82%	483	DQ782839.1
	Astrothelium sp. isolate JAM-177 small subunit ribosomal RNA gene partial sequence internal transcribed space	Astrothelium sp...	373	373	90%	2e-98	81.03%	621	MT553327.1
	Astrothelium macrocarpum genes for 18S rRNA ITS1 5.8S rRNA ITS2 28S rRNA partial and complete sequence	Astrothelium mac...	369	428	73%	3e-97	90.41%	784	LC127384.1
	Astrothelium macrocarpum genes for 18S rRNA ITS1 5.8S rRNA ITS2 28S rRNA partial and complete sequence	Astrothelium mac...	369	428	73%	3e-97	90.41%	800	LC127383.1
	Astrothelium macrocarpum genes for 18S rRNA ITS1 5.8S rRNA ITS2 28S rRNA partial and complete sequence	Astrothelium mac...	369	428	73%	3e-97	90.41%	800	LC127382.1
	Astrothelium macrocarpum TNS.YO12392 genes for 18S rRNA ITS1 5.8S rRNA ITS2 28S rRNA partial and co	Astrothelium mac...	369	432	73%	3e-97	90.41%	810	LC573991.1
	Astrothelium macrocarpum genes for 18S rRNA ITS1 5.8S rRNA ITS2 28S rRNA partial and complete sequence	Astrothelium mac...	364	419	73%	1e-95	90.04%	799	AB759880.1
	Astrothelium macrocarpum voucher HMAS-L0146701 small subunit ribosomal RNA gene partial sequence internal	Astrothelium mac...	364	419	73%	1e-95	90.04%	800	MT948054.1
	Astrothelium macrocarpum TNS.YO12285 genes for 18S rRNA ITS1 5.8S rRNA ITS2 28S rRNA partial and co	Astrothelium mac...	361	420	78%	1e-94	87.41%	726	LC573990.1
	Trypethelium sp. isolate JAM-176 small subunit ribosomal RNA gene partial sequence internal transcribed space	Trypethelium sp...	356	356	72%	2e-93	85.12%	622	MT553326.1
	Uncultured Capnodiales clone H93 18S ribosomal RNA gene partial sequence internal transcribed spacer 1 5.8	uncultured Capn...	332	332	67%	7e-86	86.04%	617	JX317516.1
	Marcelaria cumingii genes for 18S rRNA ITS1 5.8S rRNA ITS2 28S rRNA partial and complete sequence isolate	Marcelaria cumingii	285	285	37%	9e-72	97.09%	556	LC034180.1
	Marcelaria cumingii genes for 18S rRNA ITS1 5.8S rRNA ITS2 28S rRNA partial and complete sequence isolate	Marcelaria cumingii	285	285	37%	9e-72	97.09%	555	LC034179.1

3. The top hits obtained after running a BLAST search of ITS for *Astrothelium pseudocrassum* sp. nov. (holotype GD19061)

Descriptions	Graphic Summary	Alignments	Taxonomy						
Sequences producing significant alignments									
Download Select columns Show 100									
Select all 100 sequences selected									
GenBank Graphics Distance tree of results MSA Viewer									
	Description	Scientific Name	Max Score	Total Score	Query Cover	E value	Per. Ident	Acc. Len	Accession
<input checked="" type="checkbox"/>	Astrothelium macrostolatum genes for 18S rRNA ITS1 5.8S rRNA ITS2 28S rRNA partial and complete sequence	Astrothelium mac...	579	579	100%	3e-160	88.98%	605	LC127389.1
<input checked="" type="checkbox"/>	Astrothelium neovariolosum genes for 18S rRNA ITS1 5.8S rRNA ITS2 28S rRNA partial and complete sequen	Astrothelium neo...	543	543	96%	2e-149	88.01%	545	LC127391.1
<input checked="" type="checkbox"/>	Astrothelium neovariolosum genes for 18S rRNA ITS1 5.8S rRNA ITS2 28S rRNA partial and complete sequen	Astrothelium neo...	543	543	96%	2e-149	88.01%	544	LC127390.1
<input checked="" type="checkbox"/>	Astrothelium siamense genes for 18S rRNA ITS1 5.8S rRNA ITS2 28S rRNA partial and complete sequence is	Astrothelium sia...	527	527	97%	4e-145	87.22%	592	LC127388.1
<input checked="" type="checkbox"/>	Astrothelium aenascens genes for 18S rRNA ITS1 5.8S rRNA ITS2 28S rRNA partial and complete sequence i	Astrothelium aen...	526	526	96%	2e-144	87.84%	594	LC127385.1
<input checked="" type="checkbox"/>	Astrothelium siamense genes for 18S rRNA ITS1 5.8S rRNA ITS2 28S rRNA partial and complete sequence is	Astrothelium sia...	517	517	97%	8e-142	86.80%	583	LC127387.1
<input checked="" type="checkbox"/>	Astrothelium aenascens genes for 18S rRNA ITS1 5.8S rRNA ITS2 partial and complete sequence isolate HR	Astrothelium aen...	517	517	93%	8e-142	88.02%	550	LC127386.1
<input checked="" type="checkbox"/>	Astrothelium flavocoronatum genes for 18S rRNA ITS1 5.8S rRNA ITS2 28S rRNA partial and complete sequ	Astrothelium flav...	425	425	89%	4e-114	83.69%	543	AB758900.1
<input checked="" type="checkbox"/>	Astrothelium flavocoronatum genes for 18S rRNA ITS1 5.8S rRNA ITS2 28S rRNA partial and complete sequ	Astrothelium flav...	423	423	89%	1e-113	83.49%	545	LC127381.1
<input checked="" type="checkbox"/>	Astrothelium sp. ZTY-2020a voucher LCUF GD19282 small subunit ribosomal RNA gene partial sequence intern	Astrothelium sp...	392	392	91%	2e-104	82.13%	603	MT948055.1
<input checked="" type="checkbox"/>	Astrothelium sp. isolate JAM-177 small subunit ribosomal RNA gene partial sequence internal transcribed spacer	Astrothelium sp...	390	390	89%	8e-104	82.27%	621	MT553327.1
<input checked="" type="checkbox"/>	Astrothelium sp. ZTY-2020a voucher LCUF GD19156 small subunit ribosomal RNA gene partial sequence intern	Astrothelium sp...	389	389	91%	3e-103	81.86%	602	AB758900.1
<input checked="" type="checkbox"/>	Trypethelium sp. isolate JAM-176 small subunit ribosomal RNA gene partial sequence internal transcribed spacer	Trypethelium sp...	379	379	72%	1e-100	87.13%	622	MT553326.1
<input checked="" type="checkbox"/>	Astrothelium neglectum genes for 18S rRNA ITS1 5.8S rRNA ITS2 28S rRNA partial and complete sequence i	Astrothelium negl...	379	379	92%	1e-100	81.35%	552	LC127394.1
<input checked="" type="checkbox"/>	Astrothelium neglectum genes for 18S rRNA ITS1 5.8S rRNA ITS2 28S rRNA partial and complete sequence i	Astrothelium negl...	379	379	92%	1e-100	81.35%	568	LC127393.1
<input checked="" type="checkbox"/>	Astrothelium neglectum genes for 18S rRNA ITS1 5.8S rRNA ITS2 28S rRNA partial and complete sequence i	Astrothelium negl...	379	379	92%	1e-100	81.35%	567	LC127392.1
<input checked="" type="checkbox"/>	Astrothelium macrocarpum genes for 18S rRNA ITS1 5.8S rRNA ITS2 28S rRNA partial and complete sequenc	Astrothelium mac...	362	435	85%	4e-95	85.45%	784	LC127384.1
<input checked="" type="checkbox"/>	Astrothelium macrocarpum genes for 18S rRNA ITS1 5.8S rRNA ITS2 28S rRNA partial and complete sequenc	Astrothelium mac...	362	435	85%	4e-95	85.45%	800	LC127383.1
<input checked="" type="checkbox"/>	Astrothelium macrocarpum genes for 18S rRNA ITS1 5.8S rRNA ITS2 28S rRNA partial and complete sequenc	Astrothelium mac...	362	435	85%	4e-95	85.45%	800	LC127382.1
<input checked="" type="checkbox"/>	Astrothelium macrocarpum genes for 18S rRNA ITS1 5.8S rRNA ITS2 28S rRNA partial and complete sequence	Astrothelium mac...	358	426	85%	5e-94	85.15%	799	AB758980.1
<input checked="" type="checkbox"/>	Astrothelium macrocarpum voucher HMAS-L0146701 small subunit ribosomal RNA gene partial sequence intern	Astrothelium mac...	358	426	85%	5e-94	85.15%	800	MT948054.1
<input checked="" type="checkbox"/>	Trypethelium sp. DUKE 0000007 isolate AFTOL-ID 110 internal transcribed spacer 1 5.8S ribosomal RNA gene a	Astrothelium cinn...	356	356	87%	2e-93	80.85%	483	DQ782839.1
<input checked="" type="checkbox"/>	Astrothelium macrocarpum TNS.YO12285 genes for 18S rRNA ITS1 5.8S rRNA ITS2 28S rRNA partial and co	Astrothelium mac...	355	428	85%	6e-93	84.98%	726	LC573990.1
<input checked="" type="checkbox"/>	Astrothelium macrocarpum TNS.YO12392 genes for 18S rRNA ITS1 5.8S rRNA ITS2 28S rRNA partial and co	Astrothelium mac...	352	420	85%	7e-92	84.80%	810	LC573991.1
<input checked="" type="checkbox"/>	Uncultured Capnodiales clone H/93 18S ribosomal RNA gene partial sequence internal transcribed spacer 1 5.8	uncultured Capn...	345	345	66%	3e-90	86.60%	617	JX317516.1
<input checked="" type="checkbox"/>	Marcelaria cumingii genes for 18S rRNA ITS1 5.8S rRNA ITS2 28S rRNA partial and complete sequence isolat	Marcelaria cumingi...	307	307	67%	8e-79	82.81%	555	LC034179.1
<input checked="" type="checkbox"/>	Marcelaria cumingii genes for 18S rRNA ITS1 5.8S rRNA ITS2 28S rRNA partial and complete sequence isolat	Marcelaria cumingi...	303	303	67%	3e-77	82.50%	556	LC034180.1

4. The top hits obtained after running a BLAST search of ITS for *Astrothelium subeustominspersum* sp. nov. (holotype HMAS-L 0152001)

Descriptions	Graphic Summary	Alignments	Taxonomy						
Sequences producing significant alignments									
Download Select columns Show 100									
select all 100 sequences selected									
GenBank Graphics Distance tree of results MSA Viewer									
	Description	Scientific Name	Max Score	Total Score	Query Cover	E value	Per Ident	Acc. Len	Accession
<input checked="" type="checkbox"/>	Astrothelium macrostolatum genes for 18S rRNA ITS1 5.8S rRNA ITS2 28S rRNA partial and complete sequence	Astrothelium mac...	508	508	95%	4e-139	85.78%	605	LC127389.1
<input checked="" type="checkbox"/>	Astrothelium neovariolosum genes for 18S rRNA ITS1 5.8S rRNA ITS2 28S rRNA partial and complete sequence	Astrothelium neo...	490	490	95%	1e-133	85.49%	545	LC127391.1
<input checked="" type="checkbox"/>	Astrothelium neovariolosum genes for 18S rRNA ITS1 5.8S rRNA ITS2 28S rRNA partial and complete sequence	Astrothelium neo...	490	490	95%	1e-133	85.49%	544	LC127390.1
<input checked="" type="checkbox"/>	Astrothelium aenascens genes for 18S rRNA ITS1 5.8S rRNA ITS2 28S rRNA partial and complete sequence	Astrothelium aen...	468	468	91%	4e-127	85.58%	594	LC127385.1
<input checked="" type="checkbox"/>	Astrothelium aenascens genes for 18S rRNA ITS1 5.8S rRNA ITS2 partial and complete sequence isolate HR	Astrothelium aen...	459	459	91%	2e-124	85.11%	550	LC127386.1
<input checked="" type="checkbox"/>	Astrothelium siamense genes for 18S rRNA ITS1 5.8S rRNA ITS2 28S rRNA partial and complete sequence	Astrothelium sia...	449	449	92%	3e-121	84.78%	583	LC127387.1
<input checked="" type="checkbox"/>	Astrothelium siamense genes for 18S rRNA ITS1 5.8S rRNA ITS2 28S rRNA partial and complete sequence	Astrothelium sia...	433	433	92%	3e-116	83.29%	592	LC127388.1
<input checked="" type="checkbox"/>	Astrothelium flavocoronatum genes for 18S rRNA ITS1 5.8S rRNA ITS2 28S rRNA partial and complete sequence	Astrothelium flav...	431	431	89%	9e-116	83.81%	543	AB758900.1
<input checked="" type="checkbox"/>	Astrothelium flavocoronatum genes for 18S rRNA ITS1 5.8S rRNA ITS2 28S rRNA partial and complete sequence	Astrothelium flav...	425	425	89%	4e-114	83.61%	545	LC127381.1
<input checked="" type="checkbox"/>	Astrothelium sp. isolate JAM-177 small subunit ribosomal RNA gene partial sequence internal transcribed spacer	Astrothelium sp...	393	393	88%	2e-104	82.46%	621	MT553327.1
<input checked="" type="checkbox"/>	Astrothelium macrocarpum genes for 18S rRNA ITS1 5.8S rRNA ITS2 28S rRNA partial and complete sequence	Astrothelium mac...	379	436	90%	1e-100	84.17%	784	LC127384.1
<input checked="" type="checkbox"/>	Astrothelium macrocarpum genes for 18S rRNA ITS1 5.8S rRNA ITS2 28S rRNA partial and complete sequence	Astrothelium mac...	379	436	90%	1e-100	84.17%	800	LC127383.1
<input checked="" type="checkbox"/>	Astrothelium macrocarpum genes for 18S rRNA ITS1 5.8S rRNA ITS2 28S rRNA partial and complete sequence	Astrothelium mac...	379	436	90%	1e-100	84.17%	800	LC127382.1
<input checked="" type="checkbox"/>	Astrothelium macrocarpum TNS.YO12392 genes for 18S rRNA ITS1 5.8S rRNA ITS2 28S rRNA partial and complete sequence	Astrothelium mac...	377	438	84%	2e-99	86.20%	810	LC573991.1
<input checked="" type="checkbox"/>	Astrothelium macrocarpum genes for 18S rRNA ITS1 5.8S rRNA ITS2 28S rRNA partial and complete sequence	Astrothelium mac...	375	375	77%	6e-99	83.89%	799	AB758980.1
<input checked="" type="checkbox"/>	Astrothelium macrocarpum voucher HMAS-L0146701 small subunit ribosomal RNA gene partial sequence internal transcribed spacer	Astrothelium mac...	375	375	77%	6e-99	83.89%	800	MT948054.1
<input checked="" type="checkbox"/>	Astrothelium sp. ZTY-2020a voucher LCUF GD19282 small subunit ribosomal RNA gene partial sequence internal transcribed spacer	Astrothelium sp...	371	371	91%	7e-98	81.82%	603	MT948055.1
<input checked="" type="checkbox"/>	Astrothelium macrocarpum TNS.YO12285 genes for 18S rRNA ITS1 5.8S rRNA ITS2 28S rRNA partial and complete sequence	Astrothelium mac...	369	425	84%	3e-97	85.37%	726	LC573990.1
<input checked="" type="checkbox"/>	Astrothelium sp. ZTY-2020a voucher LCUF GD19156 small subunit ribosomal RNA gene partial sequence internal transcribed spacer	Astrothelium sp...	367	367	91%	9e-97	81.59%	602	MT948056.1
<input checked="" type="checkbox"/>	Trypethelium sp. isolate JAM-176 small subunit ribosomal RNA gene partial sequence internal transcribed spacer	Trypethelium sp...	352	352	71%	7e-92	84.64%	622	MT553326.1
<input checked="" type="checkbox"/>	Astrothelium neglectum genes for 18S rRNA ITS1 5.8S rRNA ITS2 28S rRNA partial and complete sequence	Astrothelium negl...	347	347	91%	9e-91	78.33%	552	LC127394.1
<input checked="" type="checkbox"/>	Astrothelium neglectum genes for 18S rRNA ITS1 5.8S rRNA ITS2 28S rRNA partial and complete sequence	Astrothelium negl...	347	347	91%	9e-91	78.33%	568	LC127393.1
<input checked="" type="checkbox"/>	Astrothelium neglectum genes for 18S rRNA ITS1 5.8S rRNA ITS2 28S rRNA partial and complete sequence	Astrothelium negl...	347	347	91%	9e-91	78.33%	567	LC127392.1
<input checked="" type="checkbox"/>	Uncultured Capnodiales clone H/93 18S ribosomal RNA gene partial sequence internal transcribed spacer 1 5.8S	uncultured Capn...	334	334	66%	2e-86	85.48%	617	JX317516.1
<input checked="" type="checkbox"/>	Trypethelium sp. DUKE 0000007 isolate AFTOL-ID 110 internal transcribed spacer 1 5.8S ribosomal RNA gene	Astrothelium cinn...	330	330	87%	2e-85	78.44%	483	DQ782839.1
<input checked="" type="checkbox"/>	Uncultured fungus clone 107A66967 18S ribosomal RNA gene partial sequence internal transcribed spacer 1	uncultured fungus...	286	286	40%	2e-72	94.54%	383	JX333079.1
<input checked="" type="checkbox"/>	Marcelaria cumingii genes for 18S rRNA ITS1 5.8S rRNA ITS2 28S rRNA partial and complete sequence isolate	Marcelaria cumingi...	284	284	43%	9e-72	91.67%	555	LC034179.1

5. The top hits obtained after running a BLAST search of ITS for *Astrothelium subrufescens* sp. nov. (holotype GD19067)

Descriptions	Graphic Summary	Alignments	Taxonomy					
Sequences producing significant alignments								
Download								
Select columns								
Show 100								
GenBank Graphics Distance tree of results MSA Viewer								
<input checked="" type="checkbox"/> select all	100 sequences selected							
Description	Scientific Name	Max Score	Total Score	Query Cover	E value	Per. Ident	Acc. Len	Accession
<input checked="" type="checkbox"/> Astrothelium macrostoliatum genes for 18S rRNA ITS1 5.8S rRNA ITS2 28S rRNA partial and complete sequen...	Astrothelium mac...	605	605	100%	2e-168	90.06%	605	LC127389.1
<input checked="" type="checkbox"/> Astrothelium neovariolosum genes for 18S rRNA ITS1 5.8S rRNA ITS2 28S rRNA partial and complete sequenc...	Astrothelium neo...	578	578	100%	3e-160	88.72%	545	LC127391.1
<input checked="" type="checkbox"/> Astrothelium neovariolosum genes for 18S rRNA ITS1 5.8S rRNA ITS2 28S rRNA partial and complete sequenc...	Astrothelium neo...	578	578	100%	3e-160	88.72%	544	LC127390.1
<input checked="" type="checkbox"/> Astrothelium siamense genes for 18S rRNA ITS1 5.8S rRNA ITS2 28S rRNA partial and complete sequence iso...	Astrothelium sia...	535	535	96%	3e-147	87.64%	592	LC127388.1
<input checked="" type="checkbox"/> Astrothelium aenascens genes for 18S rRNA ITS1 5.8S rRNA ITS2 28S rRNA partial and complete sequence is...	Astrothelium aen...	519	519	100%	2e-142	86.39%	594	LC127385.1
<input checked="" type="checkbox"/> Astrothelium siamense genes for 18S rRNA ITS1 5.8S rRNA ITS2 28S rRNA partial and complete sequence iso...	Astrothelium sia...	509	509	95%	1e-139	86.82%	583	LC127387.1
<input checked="" type="checkbox"/> Astrothelium aenascens genes for 18S rRNA ITS1 5.8S rRNA ITS2 partial and complete sequence isolate HRK98	Astrothelium aen...	509	509	93%	1e-139	87.53%	550	LC127386.1
<input checked="" type="checkbox"/> Astrothelium flavocoronatum genes for 18S rRNA ITS1 5.8S rRNA ITS2 28S rRNA partial and complete sequence	Astrothelium flav...	435	435	89%	2e-117	84.09%	543	AB758900.1
<input checked="" type="checkbox"/> Astrothelium flavocoronatum genes for 18S rRNA ITS1 5.8S rRNA ITS2 28S rRNA partial and complete sequen...	Astrothelium flav...	434	434	89%	7e-117	83.89%	545	LC127381.1
<input checked="" type="checkbox"/> Astrothelium neglectum genes for 18S rRNA ITS1 5.8S rRNA ITS2 28S rRNA partial and complete sequence is...	Astrothelium negl...	400	400	94%	2e-106	81.54%	552	LC127394.1
<input checked="" type="checkbox"/> Astrothelium neglectum genes for 18S rRNA ITS1 5.8S rRNA ITS2 28S rRNA partial and complete sequence is...	Astrothelium negl...	400	400	94%	2e-106	81.54%	568	LC127393.1
<input checked="" type="checkbox"/> Astrothelium neglectum genes for 18S rRNA ITS1 5.8S rRNA ITS2 28S rRNA partial and complete sequence is...	Astrothelium negl...	400	400	94%	2e-106	81.54%	567	LC127392.1
<input checked="" type="checkbox"/> Astrothelium sp. ZTY-2020a voucher LCUF GD19156 small subunit ribosomal RNA gene partial sequence internal...	Astrothelium sp...	398	398	89%	5e-106	82.51%	602	MT948056.1
<input checked="" type="checkbox"/> Astrothelium sp. ZTY-2020a voucher LCUF GD19282 small subunit ribosomal RNA gene partial sequence internal...	Astrothelium sp...	398	398	89%	5e-106	82.55%	603	MT948055.1
<input checked="" type="checkbox"/> Trypethelium sp. DUKE 0000007 isolate AFTOL-ID 110 internal transcribed spacer 1 5.8S ribosomal RNA gene a...	Astrothelium cinn...	396	396	92%	2e-105	81.53%	483	DQ782839.1
<input checked="" type="checkbox"/> Astrothelium sp. isolate JAM-177 small subunit ribosomal RNA gene partial sequence internal transcribed spacer...	Astrothelium sp...	390	390	89%	8e-104	82.27%	621	MT553327.1
<input checked="" type="checkbox"/> Trypethelium sp. isolate JAM-176 small subunit ribosomal RNA gene partial sequence internal transcribed spacer...	Trypethelium sp...	386	386	71%	3e-102	87.35%	622	MT553326.1
<input checked="" type="checkbox"/> Astrothelium macrocarpum genes for 18S rRNA ITS1 5.8S rRNA ITS2 28S rRNA partial and complete sequence	Astrothelium mac...	360	433	92%	1e-94	83.61%	784	LC127384.1
<input checked="" type="checkbox"/> Astrothelium macrocarpum genes for 18S rRNA ITS1 5.8S rRNA ITS2 28S rRNA partial and complete sequence	Astrothelium mac...	360	433	92%	1e-94	83.61%	800	LC127383.1
<input checked="" type="checkbox"/> Astrothelium macrocarpum genes for 18S rRNA ITS1 5.8S rRNA ITS2 28S rRNA partial and complete sequence	Astrothelium mac...	360	433	92%	1e-94	83.61%	800	LC127382.1
<input checked="" type="checkbox"/> Astrothelium macrocarpum TNS.YO12392 genes for 18S rRNA ITS1 5.8S rRNA ITS2 28S rRNA partial and com...	Astrothelium mac...	356	425	85%	2e-93	85.11%	810	LC573991.1
<input checked="" type="checkbox"/> Astrothelium macrocarpum genes for 18S rRNA ITS1 5.8S rRNA ITS2 28S rRNA partial and complete sequence	Astrothelium mac...	355	424	92%	6e-93	83.33%	799	AB759880.1
<input checked="" type="checkbox"/> Astrothelium macrocarpum voucher HMAS-LQ146701 small subunit ribosomal RNA gene partial sequence internal...	Astrothelium mac...	355	424	92%	6e-93	83.33%	800	MT948054.1
<input checked="" type="checkbox"/> Astrothelium macrocarpum TNS.YO12285 genes for 18S rRNA ITS1 5.8S rRNA ITS2 28S rRNA partial and com...	Astrothelium mac...	351	424	91%	7e-92	83.38%	726	LC573990.1
<input checked="" type="checkbox"/> Uncultured Capnodiales clone HJ93 18S ribosomal RNA gene partial sequence internal transcribed spacer 1 5.8S...	uncultured Capno...	332	332	66%	7e-86	85.29%	617	JX317516.1
<input checked="" type="checkbox"/> Marcelaria cumingii genes for 18S rRNA ITS1 5.8S rRNA ITS2 28S rRNA partial and complete sequence isolat...	Marcelaria cumingii	312	312	67%	6e-80	83.12%	555	LC034179.1
<input checked="" type="checkbox"/> Marcelaria cumingii genes for 18S rRNA ITS1 5.8S rRNA ITS2 28S rRNA partial and complete sequence isolat...	Marcelaria cumingii	303	303	67%	3e-77	82.50%	556	LC034180.1