

Supplementary table 1. Strains whose sequences were downloaded from the GenBank.

Taxon	Strain identifier	18S	ITS	<i>tufA</i>
<i>Asterarcys quadricellulare</i> (K. Behre) E.Hegewald & A.Schmidt	FACHB-2316	MH176109	MH176123	MH176155
<i>Chodatodesmus australis</i> Sciuto, Verleyen, Moro & La Rocca	II-11	FJ946893	HG514415	HG514387
<i>Chodatodesmus australis</i> Sciuto, Verleyen, Moro & La Rocca	B6-6	FJ946896	HG514416	HG514388
<i>Chodatodesmus mucronulatus</i> (Chodat) Hegewald & al.	SAG 2332	LN875037	HG514419	HG514398
<i>Coelastrella saipanensis</i> N.Hanagata	FACHB-2138 =LY31-2	MF407353	MF383401	MF423120
<i>Coelastrella striolata</i> Chodat	CAUP H 3602	JX513881	JX513881	/
<i>Coelastrella vacuolata</i> (I.Shihira & R.W.Krauss) Hegewald & N.Hanagata	SAG 211-8b	X56104	HG514423	HG514403
<i>Coelastropsis costata</i> (Korshikov) Fott & Kalina	SAG217.5	AF388374	GQ375096	/
<i>Coelastrum proboscideum</i> Bohlin	SAG217-2	KF673364	KF673364	/
<i>Coelastrum</i> sp.	YN15-2	/	/	MK408737
<i>Coelastrum sphaerium</i> N ägeli	SAG217-3	GQ375099	GQ375099	/
<i>Coelastrum sphaerium</i> N ägeli	CCMA_UFSCar 060			KT003382
<i>Desmodesmus armatus</i> (Chodat) E.H.Hegewald	GM4h	AB917135	AB917135	/
<i>Desmodesmus bicellularis</i> (Chodat) S.S.An, T.Friedl & E.Hegewald	GM4g	AB917134	AB917134	/
<i>Desmodesmus communis</i>	SAG 2057	/	/	HG514391
<i>Desmodesmus pannonicus</i> (Hortob ägyi) E.Hegewald	GM4n	AB917139	AB917139	/
<i>Desmodesmus pirkollei</i>	SAG 2042	/	/	HG514394
<i>Flechtneria rotunda</i> Sciuto & L.A.Lewis	BCP-SEV3VF49	AF513373	AY510465	HQ246371
<i>Flechtneria rotunda</i> Sciuto & L.A.Lewis	BCP-SEV3VF4	HQ246317	HQ246446	HQ246372
<i>Hariotina reticulata</i> P.A.Dangeard	SAG 8.81	AH012395	GQ375101	/
<i>Hariotina reticulata</i> P.A.Dangeard	KMMCC1448	/	JQ315777	/
<i>Hariotina reticulata</i> P.A.Dangeard	UTEX 1365	/	/	KC145528
<i>Hariotina reticulata</i>	MMOGRB0030F	/	/	KX131180

P.A.Dangeard				
<i>Hariotina reticulata</i>	/	/	/	KY792686
P.A.Dangeard				
Hydrodictyaceae sp.	HND10-6	MH176112	MH176134	MH176157
<i>Hydrodictyon reticulatum</i>	HAM0289	/	/	KY114065
(Linnaeus) Bory				
<i>Parapediastrum biradiatum</i>	UTEX 37	AY663034	KC145471	/
(Meyen) E.Hegewald				
<i>Pediastrum duplex</i> Meyen	UTEX 1364	AY779859	AY577734	/
<i>Pediastrum duplex</i> Meyen	Mj2008-54	HM021299	HM021299	/
<i>Scenedesmus hindakii</i>	SAG 47.86	AB037098	AY170856	HG514397
E.Hegewald & N.Hanagata				
<i>Scenedesmus obtusus</i> Meyen	CCAP 276/36	AB037091	HG514425	HG514405
<i>Scenedesmus obtusus</i> Meyen	SAG 52.80	X81966	HG514421	HG514400
<i>Tetradesmus bajacalifornicus</i>	SAG 22.81	HQ246319	HQ246448	HQ246374
L.A.Lewis & Flechtner				
<i>Tetradesmus deserticola</i>	BCP-YPGChar	AY510463	AY510472	HQ246380
L.A.Lewis & Flechtner				
<i>Tetradesmus wisconsinensis</i>	ZA1-2	AB037096	HG514430	HG514412
G.M.Smith				
