

SUPPORTING INFORMATION

***Elliptochloris*, not *Coccomyxa*, is the photobiont of three lichenized *Multiclavula* species collected in Japan**

Hiroshi Masumoto, Shinji Handa, Chihiro Tanaka & Yousuke Degawa

Appendix S2. GenBank accession numbers of the DNA sequences used in this study. The sequences registered in this study are shown in bold.

Taxon	Strain	Locality	Isolation source	18S rDNA	ITS2	<i>rbcL</i>
<i>Coccomyxa dispar</i>	SAG 49.84	Germany	basidiolichen (<i>Multiclavula vernalis</i>)	HG972998	HG972998	JF502549
<i>Coccomyxa subellipsoidea</i>	SAG 216-7	Finland	basidiolichen (<i>Botrydina vulgaris</i>)	HG972976	HG972976	JF502548
<i>Elliptochloris antarctica</i>	SAG 62.90 ^T	Antarctica	cryptoendolithic	HG972970	HG972970	HQ317294
<i>Elliptochloris antarctica</i>	SAG 2200	Japan	on tombstone	LT560355	LT560355	–
<i>Elliptochloris bilobata</i>	SAG 245.80 ^T	Austria	ascolichen (<i>Catolechia wahlenbergii</i>)	HG972969	HG972969	FJ217379
<i>Elliptochloris reniformis</i>	CAUP H7102 ^T	Japan: Nara	soil	LT560354	LT560354	LC*****
<i>Elliptochloris marina</i>	ZC101	USA: Washington	sea anemone (<i>Anthopleura xanthogrammica</i>)	FJ217363	–	FJ217368

<i>Elliptochloris marina</i>	ZC102	USA: Alaska	sea anemone (<i>Anthopleura xanthogrammica</i>)	FJ217366	–	FJ217369
<i>Elliptochloris marina</i>	ZC103	USA: Oregon	sea anemone (<i>Anthopleura xanthogrammica</i>)	FJ217362	JF913551	FJ217375
<i>Elliptochloris marina</i>	ZC104	USA: Alaska	sea anemone (<i>Anthopleura xanthogrammica</i>)	FJ217359	–	FJ217370
<i>Elliptochloris marina</i>	ZC114	USA: Washington	sea anemone (<i>Anthopleura elegantissima</i>)	FJ217358		FJ217378
<i>Elliptochloris marina</i>	ZC141	USA: Washington	sea anemone (<i>Anthopleura xanthogrammica</i>)	FJ217365		FJ217373
<i>Elliptochloris parasphaerica</i>	S-253-PPSC-004	Japan: Mt. Nekomake, Ueda, Nagano	basidiolichen (<i>Multiclavula vernalis</i> ; GMNHJ- FF1008191)	LC660152	LC660436	LC660407
	NIES-4523					
<i>Elliptochloris parasphaerica</i>	(=S-253-PPSC- 007)	Japan: Mt. Nekomake, Ueda, Nagano	basidiolichen (<i>Multiclavula vernalis</i> ; GMNHJ- FF1008191)	LC597448	LC597447	LC597449
<i>Elliptochloris parasphaerica</i>	S-253-PPSC-008	Japan: Mt. Nekomake, Ueda, Nagano	basidiolichen (<i>Multiclavula vernalis</i> ; GMNHJ- FF1008191)	LC660153	LC660437	LC660408

<i>Elliptochloris parasphaerica</i>	S-253-PPSC-009	Japan: Mt. Nekodake, Ueda, Nagano	basidiolichen (<i>Multiclavula vernalis</i> ; GMNHJ-FF1008191)	LC660154	–	LC660409
<i>Elliptochloris parasphaerica</i>	NIES-4524 (=S-356-PL-003)	Japan: Katashima, Gunma	basidiolichen (<i>Multiclavula petricola</i> ; GMNHJ-FF1008198)	LC660155	LC660438	LC660410
<i>Elliptochloris parasphaerica</i>	S-356-PL-004	Japan: Katashima, Gunma	basidiolichen (<i>Multiclavula petricola</i> ; GMNHJ-FF1008198)	LC660156	LC660439	LC660411
<i>Elliptochloris parasphaerica</i>	S-356-PL-005	Japan: Katashima, Gunma	basidiolichen (<i>Multiclavula petricola</i> ; GMNHJ-FF1008198)	LC660157	–	LC660412
<i>Elliptochloris parasphaerica</i>	S-356-PL-008	Japan: Katashima, Gunma	basidiolichen (<i>Multiclavula petricola</i> ; GMNHJ-FF1008198)	LC660158	–	LC660413
<i>Elliptochloris perforata</i>	CAUP H7103	Indonesia: Cibodas Botanical Garden	bark (<i>Cleistocalyx operculata</i>)	LT560341	LT560341	KM462887
<i>Elliptochloris perforata</i>	SAG 2201	Japan: Shizuoka	tombstone	LT560342	LT560342	FJ217381
<i>Elliptochloris perforata</i>	SAG 2509 ^T	Ukraine	ascolichen (<i>Micarea prasina</i>)	LT560343	LT560343	–

<i>Elliptochloris subsphaerica</i>	SAG 2117	Germany	rooftile	LT560351	LT560351	FJ217380
<i>Elliptochloris subsphaerica</i>	SAG 2202 ^T	Japan: Hiroshima	bark	LT560349	LT560349	FJ217382
<i>Elliptochloris subsphaerica</i>	CCAP 211/56	Antarctica	soil	LT560345	LT560345	–
<i>Elliptochloris subsphaerica</i>	CAUP H7101	Japan: Kyoto	soil	LT560348	LT560348	–
<i>Elliptochloris subsphaerica</i>	EL-1	Ukraine	soil	LT560344	LT560344	–
<i>Elliptochloris subsphaerica</i>	EL-2	Germany	bark	LT560347	LT560347	–
<i>Elliptochloris subsphaerica</i>	EL-3	Austria	limestone	LT560350	LT560350	–
<i>Elliptochloris subsphaerica</i>	EL-4	Germany	bark	LT560352	LT560352	–
<i>Elliptochloris subsphaerica</i>	EL-5	Germany	bark	LT560353	LT560353	–
<i>Elliptochloris subsphaerica</i>	EL-6	Germany	bark	LT560346	LT560346	–
<i>Elliptochloris subsphaerica</i>	S-200-PL-001	Japan: Mt. Daimonji, Sakyo Ward, Kyoto	basidiolichen (<i>Multiclavula mucida</i> ; OSA-MY-9325)	LC660159	–	LC660414

<i>Elliptochloris subsphaerica</i>	NIES-4525 (=S-200-PL-009)	Japan: Mt. Daimonji, Sakyo Ward, Kyoto	basidiolichen (<i>Multiclavula mucida</i> ; OSA-MY-9325)	LC660160	LC660440	LC660415
<i>Elliptochloris subsphaerica</i>	S-200-PL-015A	Japan: Mt. Daimonji, Sakyo Ward, Kyoto	basidiolichen (<i>Multiclavula mucida</i> ; OSA-MY-9325)	LC660161	LC660441	LC660416
<i>Elliptochloris subsphaerica</i>	S-208-PL-005	Japan: Mt. Arikasa, Nakanojo, Gunma	basidiolichen (<i>Multiclavula mucida</i> ; GMNHJ-FF1008189)	LC660162	–	LC660417
<i>Elliptochloris subsphaerica</i>	S-208-PL-009	Japan: Mt. Arikasa, Nakanojo, Gunma	basidiolichen (<i>Multiclavula mucida</i> ; GMNHJ-FF1008189)	LC660163	–	LC660418
<i>Elliptochloris subsphaerica</i>	S-208-PL-019	Japan: Mt. Arikasa, Nakanojo, Gunma	basidiolichen (<i>Multiclavula mucida</i> ; GMNHJ-FF1008189)	LC660164	–	LC660419
<i>Elliptochloris subsphaerica</i>	S-216-PL-004	Japan: Lake Sugawa, Ueda, Nagano	basidiolichen (<i>Multiclavula mucida</i> ; GMNHJ-FF1008190)	LC660165	–	LC660420

<i>Elliptochloris subsphaerica</i>	S-216-PL-021	Japan: Lake Sugawa, Ueda, Nagano	basidiolichen (<i>Multiclavula mucida</i> ; GMNHJ-FF1008190)	LC660166	–	LC660421
<i>Elliptochloris subsphaerica</i>	S-278-PL-001	Japan: Otari, Nagano	basidiolichen (<i>Multiclavula mucida</i> ; GMNHJ-FF1008193)	LC660167	–	LC660422
<i>Elliptochloris subsphaerica</i>	S-278-PL-002	Japan: Otari, Nagano	basidiolichen (<i>Multiclavula mucida</i> ; GMNHJ-FF1008193)	LC660168	–	LC660423
<i>Elliptochloris subsphaerica</i>	S-279-PL-001	Japan: Kumorizawa, Naganohara, Gunma	basidiolichen (<i>Multiclavula mucida</i> ; GMNHJ-FF1008194)	LC660169	–	LC660424
<i>Elliptochloris subsphaerica</i>	S-280-PL-001	Japan: Tambarakogen, Numata, Gunma	basidiolichen (<i>Multiclavula mucida</i> ; GMNHJ-FF1008195)	LC660170	–	LC660425
<i>Elliptochloris subsphaerica</i>	NIES-4526 (=Handa-3562-e)	Japan: Hiroshima	concrete	LC660171	LC660442	LC660426
<i>Elliptochloris subsphaerica</i>	Handa-3580-k	Japan: Hiroshima	bark (<i>Symplocos glauca</i>)	LC660172	LC660443	LC660427

<i>Elliptochloris subsphaerica</i>	NIES-4527 (=Handa-3722-b)	Japan: Hiroshima	wooden fence	LC660173	–	LC660428
<i>Elliptochloris subsphaerica</i>	NIES-4528 (=Handa-3935-e)	Japan: Oita	stone	LC660174	–	LC660429
<i>Elliptochloris subsphaerica</i>	Handa-3965B-a	Japan: Hiroshima	stone	LC660175	–	LC660430
<i>Elliptochloris subsphaerica</i>	NIES-4529 (=Handa-3968-a)	Japan: Kyoto	basidiolichen (<i>Multiclavula mucida</i>)	LC660176	–	LC660431
<i>Elliptochloris subsphaerica</i>	NIES-4530 (=Handa-4057-a)	Japan: Hiroshima	bark (<i>Zelkova serrata</i>)	LC660177	LC660444	LC660432
<i>Elliptochloris subsphaerica</i>	Handa-4075-f	Japan: Hiroshima	bark (<i>Cerasus</i> × <i>yedoensis</i>)	LC660178	–	LC660433
<i>Elliptochloris subsphaerica</i>	NIES-4531 (=Handa-4105-b)	Japan: Hiroshima	bark (<i>Cerasus</i> × <i>yedoensis</i>)	LC660179	–	LC660434
<i>Elliptochloris subsphaerica</i>	NIES-4532	Japan: Kumamoto	basidiolichen (<i>Bryoclavula phycophila</i>)	LC660180	LC660445	LC660435

(=Handa-S-293-c)
