

Supplementary Material for Schneider *et al.* (2018)

— Punctuated plastome reduction and host-parasite horizontal gene transfer in the holoparasitic plant genus *Aphyllon* —
Proceedings of the Royal Society B, doi:10.1098/rspb.2018.1535

Table S2. GenBank accession numbers for *A. epigalium* plastomes, partial mitochondrial genomes, and *rbcL* sequences used in this study. Sequences reported for the first time in this study are also accompanied by voucher information, the source of DNA used, and sequencing method (Sanger or Illumina).

Phylogeny Tip Label [species (collector)]	GenBank ID	DNA source	Sequence Source	Voucher
<i>A. bulbosum</i> (Colwell 03-08)	MG954039	Schneider et al. 2016	Illumina	JEPS126150
<i>A. californicum</i> subsp. <i>californicum</i> (Colwell 99-77)	MG954041	Schneider et al. 2016	Illumina	WTU344846
<i>A. chilense</i> (Long 2240)	MG954042	Schneider et al. 2016	Illumina	UC2046156
<i>A. cooperi</i> (Colwell 01-01)	MG954043	Schneider et al. 2016	Illumina	WTU344743
<i>A. dugesii</i> (Santana 5977)	MG954044	Schneider et al. 2016	Illumina	WIS282502
<i>A. “franciscanum”</i> (Colwell 99-CA-RCRS)	MG954003	Schneider et al. 2016	Illumina	WTU344759
<i>A. epigalium</i> subsp. <i>epigalium</i> (Colwell 07-53)	MH129026	Schneider et al. 2016	Illumina + Sanger	YM
<i>A. epigalium</i> subsp. <i>notocalifornicum</i> (Bell 159)	MG987142	Schneider et al. 2016	Illumina + Sanger	SD136414
<i>A. epigalium</i> subsp. <i>epigalium</i> (Colwell 10-107)	MG954004	Schneider et al. 2016	Sanger	YM
<i>A. epigalium</i> subsp. <i>epigalium</i> (Cox 188)	MG954005	Schneider et al. 2016	Sanger	CHSC12931
<i>A. epigalium</i> subsp. <i>epigalium</i> (Harvey s.n.)	MG954006	Schneider et al. 2016	Sanger	UC
<i>A. epigalium</i> subsp. <i>notocalifornicum</i> (Bell 159) plastome	MH050785	Schneider et al. 2016	Illumina	SD136414
<i>A. epigalium</i> subsp. <i>epigalium</i> (Colwell 07-53) plastome	MH050786	Schneider et al. 2016	Illumina	YM
<i>A. fasciculatum</i> (Batten 78-279)	MG954051	Schneider et al. 2016	Illumina	ALAv85763
<i>A. fasciculatum</i> (Merner s.n.)	MG954052	Schneider et al. 2016	Illumina	WIS282500
<i>A. ludovicianum</i> (Colwell 01-114)	MG954045	Schneider et al. 2016	Illumina	WTU351399
<i>A. parishii</i> subsp. <i>parishii</i> (Colwell 03-53)	MG954046	Schneider et al. 2016	Illumina	JEPS126149
<i>A. purpureum</i> (Colwell 04-63)	MG954053	Schneider et al. 2016	Illumina	YM118104

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<i>A. arizonicum</i> (Halse 897)	MG954026	Schneider et al. 2016	Sanger	ARIZ187291
<i>A. bulbosum</i> (Colwell 03-08)	MG954039	Schneider et al. 2016	Illumina	JEPS126150
<i>A. californicum</i> subsp. <i>californicum</i> (Colwell 97-CA-BLO)	MG954027	Schneider et al. 2016	Sanger	WTU344755
<i>A. californicum</i> subsp. <i>californicum</i> (Colwell 99-77)	MG954041	Schneider et al. 2016	Illumina	WTU344846
<i>A. californicum</i> subsp. <i>condensum</i> (Taylor 18565)	MG954028	Schneider et al. 2016	Sanger	JEPS100410
<i>A. chilense</i> (Long 2240)	MG954042	Schneider et al. 2016	Illumina	UC2046156
<i>A. cooperi</i> (Colwell 01-01)	MG954043	Schneider et al. 2016	Illumina	WTU344743
<i>A. dugesii</i> (Santana 5977)	MG954044	Schneider et al. 2016	Illumina	WIS282502
<i>A. epigalium</i> subsp. <i>epigalium</i> (Colwell 07-53)	MH129026	Schneider et al. 2016	Illumina + Sanger	YM
<i>A. epigalium</i> subsp. <i>epigalium</i> (Colwell 07-53) plastome	MH050785	Schneider et al. 2016	Illumina	YM
<i>A. epigalium</i> subsp. <i>epigalium</i> (Colwell 10-107)	MG954004	Schneider et al. 2016	Sanger	YM
<i>A. epigalium</i> subsp. <i>epigalium</i> (Cox 188)	MG954005	Schneider et al. 2016	Sanger	CHSC12931
<i>A. epigalium</i> subsp. <i>epigalium</i> (Harvey s.n.)	MG954006	Schneider et al. 2016	Sanger Illumina +	UC
<i>A. epigalium</i> subsp. <i>notocalifornicum</i> (Bell 159) HGT	MG987142	Schneider et al. 2016	Sanger	SD136414
<i>A. epigalium</i> subsp. <i>notocalifornicum</i> (Bell 159) plastome	MH050786	Schneider et al. 2016	Illumina	SD136414
<i>A. fasciculatum</i> (Batten 78-279)	MG954051	Schneider et al. 2016	Illumina	ALAv85763
<i>A. fasciculatum</i> (Colwell 01-95)	MG954029	Schneider et al. 2016	Sanger	WTU351381
<i>A. fasciculatum</i> (Colwell 99-CA-RCRS)	MG954003	Schneider et al. 2016	Illumina	WTU344759
<i>A. fasciculatum</i> (Egger 1295)	MG954031	Schneider et al. 2016	Sanger	WTU
<i>A. fasciculatum</i> (Merner s.n.)	MG954052	Schneider et al. 2016	Illumina	WIS282500
<i>A. fasciculatum</i> (Schneider 920)	MG954030	Schneider et al. 2016	Sanger	JEPS122893
<i>A. ludovicianum</i> (Collins 2033)	MG954032	Schneider et al. 2016	Sanger	UC 2046173
<i>A. ludovicianum</i> (Colwell 01-114)	MG954045	Schneider et al. 2016	Illumina	WTU351399

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<i>A. multiflorum</i> (Collins 2024)	MG954034	Schneider et al. 2016	Sanger	MO5990497
<i>A. parishii</i> subsp. <i>parishii</i> (Colwell 03-53)	MG954046	Schneider et al. 2016	Illumina	JEPS126149
<i>A. pinorum</i> (Colwell 96-WA-LC)	MG954035	Schneider et al. 2016	Sanger	WTU344760
<i>A. purpureum</i> (Colwell 04-63)	MG954053	Schneider et al. 2016	Illumina	YM118104
<i>A. purpureum</i> (Colwell 14-11)	MG954055	Schneider et al. 2016	Illumina	JEPS126167
<i>A. purpureum</i> (Filey 91)	MG954054	Schneider et al. 2016	Illumina	WS285758
<i>A. riparium</i> (Collins 1620)	MG954036	Schneider et al. 2016	Sanger	MO4903216
<i>A. riparium</i> (Collins 1622)	MG954048	Schneider et al. 2016	Illumina	MO5933323
<i>A. robbinsii</i> (Schneider 293)	MG954049	Schneider et al. 2016	Illumina	JEPS ARIZ 264197
<i>A. sp. nov.</i> (Yatskyevich 85-215)	MG954033	Schneider et al. 2016	Sanger	264197
<i>A. tarapacanam</i> (Ricardi 3326)	MG954050	Schneider et al. 2016	Illumina	CONC19273
<i>A. uniflorum</i> (Anderson 2267)	MG954037	Schneider et al. 2016	Sanger	MIN409677
<i>A. uniflorum</i> (Lipkin 04-324)	MG954056	Schneider et al. 2016	Illumina	ALAv156078
<i>A. validum</i> subsp. <i>howellii</i> (Colwell 02-04)	MG954058	Schneider et al. 2016	Illumina	WTU 351386
<i>A. validum</i> subsp. <i>validum</i> (Colwell 99-73)	MG954038	Schneider et al. 2016	Sanger	WTU344847
<i>A. vallicolum</i> (Schneider 316)	MG954059	Qiagen DNeasy (this study)	Illumina	JEPS121477
<i>Asperula cynanchica</i>	KM360656		Genbank	
<i>Cruciata glabra</i>	X81097		Genbank	
<i>G. album</i>	X81090		Genbank	
<i>G. ambiguum</i> var. <i>siskiyouense</i> (Soza 1760)	MG954007	Soza & Olmstead 2010	Sanger	WTU
<i>G. andrewsii</i> (Bell 159)	MG954002	Qiagen DNeasy (this study)	Sanger	SD136414
<i>G. andrewsii</i> subsp. <i>andrewsii</i> (Soza 1729)	MG954008	Soza & Olmstead 2010	Sanger	WTU
<i>G. andrewsii</i> subsp. <i>intermedium</i> (Soza 1725b)	MG954009	Soza & Olmstead 2010	Sanger	WTU
<i>G. anglicum</i>	MG223563		Genbank	
<i>G. angustifolium</i> subsp. <i>angustifolium</i> (Boyd 11551b)	MG954010	Soza & Olmstead 2010	Sanger	RSA

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<i>G. anisophyllum</i>	KF602232		Genbank	
<i>G. aparine</i>	KY562587		Genbank	SD136414
<i>G. arkansanum</i> (Thomas 7714)	MG954011	Soza & Olmstead 2010	Sanger	WTU
<i>G. asprellum</i>	KJ593428		Genbank	
<i>G. bifolium</i>	MG222058		Genbank	
<i>G. bolanderi</i> (Soza 1758a)	MG954012	Soza & Olmstead 2010	Sanger	WTU
<i>G. boreale</i>	JX848534		Genbank	
<i>G. boreale</i> subsp. <i>septentrionale</i> (Soza 1755)	MG954013	Soza & Olmstead 2010	Sanger	WTU
<i>G. brandegeii</i>	MG221966		Genbank	
<i>G. brevipes</i>	MG221335		Genbank	
<i>G. californicum</i> subsp. <i>flaccidum</i> (Soza 1731)	MG954014	Soza & Olmstead 2010	Sanger	WTU
<i>G. circaezans</i>	KP402639		Genbank	
<i>G. clementis</i> (Wilken & Painter 16123)	MG954015	Soza & Olmstead 2010	Sanger	RSA
<i>G. cliftonsmitthii</i> (Soza 1720)	MG954016	Soza & Olmstead 2010	Sanger	WTU
<i>G. concinnum</i>	KP643725		Genbank	
<i>G. corsicum</i>	X81096		Genbank	
<i>G. elongatum</i>	X81098		Genbank	
<i>G. grande</i> (Soza 1733b)	MG954017	Soza & Olmstead 2010	Sanger	WTU
<i>G. grayanum</i> (Ertter & Schoolcraft 8641)	MG954018	Soza & Olmstead 2010	Sanger	WTU
<i>G. hallii</i> (Soza 1724a)	MG954019	Soza & Olmstead 2010	Sanger	WTU
<i>G. hispidulum</i>	KJ773530		Genbank	
<i>G. kamtschaticum</i>	MG221781		Genbank	
<i>G. labradoricum</i>	MG223948		Genbank	
<i>G. lanceolatum</i>	HQ590110		Genbank	
<i>G. lucidum</i>	X81100		Genbank	
<i>G. megalospermum</i>	KF60223		Genbank	
<i>G. mollugo</i>	AY395538		Genbank	

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<i>G. multiflorum</i>	MG221437		Genbank	
<i>G. nuttallii</i> subsp. <i>nuttallii</i> (Roberts & Bramlet 6036)	MG954020	Soza & Olmstead 2010	Sanger	RSA
<i>G. obtusum</i>	MG222026		Genbank	
<i>G. odoratum</i>	KY562701		Genbank	
<i>G. oreganum</i> (Soza 1761)	MG954021	Soza & Olmstead 2010	Sanger	WTU
<i>G. palustre</i>	X81101		Genbank	
<i>G. parisiense</i>	HM850021		Genbank	
<i>G. pilosum</i>	KJ773531		Genbank	
<i>G. porrigens</i> (Fraga 1281b)	MG954022	Soza & Olmstead 2010	Sanger	RSA
<i>G. proliferum</i> (Turner 24-155)	MG954023	Soza & Olmstead 2010	Sanger	LL/TEX
<i>G. pusillosetosum</i>	KX910849		Genbank	
<i>G. rotundifolium</i> (Montserrat <i>et al.</i> s.n.)	MG954024	Soza & Olmstead 2010	Sanger	JACA
<i>G. saxatile</i>	HM850022		Genbank	
<i>G. scabrum</i>	X81105		Genbank	
<i>G. spurium</i>	MG222097		Genbank	
<i>G. sternerii</i>	JN891489		Genbank	
<i>G. sylvaticum</i>	MG223156		Genbank	
<i>G. tinctorium</i>	HQ590114		Genbank	
<i>G. tricorne</i>	KP098254		Genbank	
<i>G. uliginosum</i>	JN892892		Genbank	
<i>G. uncinulatum</i> (Soza & Yuan 1780)	MG954025	Soza & Olmstead 2010	Sanger	WTU
<i>G. valdepilosum</i>	KJ746286		Genbank	
<i>G. verum</i>	HQ590115		Genbank	
<i>Helianthus annuus</i>	KM360812		Genbank	
<i>Nerium oleander</i>	HM850198		Genbank	
<i>Orobanche hederæ</i> (Schneider 124)	MG954057	Schneider <i>et al.</i> 2016	Illumina	JEPS121581
<i>Rubia sylvatica</i>	KP098247		Genbank	

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<i>Salvia brandegii</i>	AY570398		Genbank	
<i>Syringa vulgaris</i>	KM361002		Genbank	
<i>A. purpureum</i> (Filey 91)	MG954054	Schneider et al. 2016	Illumina	WS285758
<i>A. riparium</i> (Collins 1622)	MG954048	Schneider et al. 2016	Illumina	MO5933323
<i>A. robbinsii</i> (Schneider 293)	MG954049	Schneider et al. 2016	Illumina	JEPS
<i>A. tarapacatum</i> (Ricardi 3326)	MG954050	Schneider et al. 2016	Illumina	CONC19273
<i>A. purpureum</i> (Colwell 14-11)	MG954055	Schneider et al. 2016	Illumina	JEPS126167
<i>A. uniflorum</i> (Lipkin 04-324)	MG954056	Schneider et al. 2016	Illumina	ALAv156078
<i>A. validum</i> subsp. <i>howellii</i> (Colwell 02-04)	MG954058	Schneider et al. 2016	Illumina	WTU 351386
<i>A. vallicolum</i> (Schneider 316)	MG954059	Qiagen DNeasy (this study)	Illumina	JEPS121477
<i>Asperula cynanchica</i>	KM360656		Genbank	
<i>G. mollugo</i>	AY395538		Genbank	
<i>Cruciata glabra</i>	X81097		Genbank	
<i>G. andrewsii</i> (Bell 159)	MG954002	Qiagen DNeasy (this study)	Sanger	SD136414
<i>G. ambiguum</i> var. <i>siskiyouense</i> (Soza 1760)	MG954007	Soza & Olmstead 2010	Sanger	WTU
<i>G. andrewsii</i> subsp. <i>andrewsii</i> (Soza 1729)	MG954008	Soza & Olmstead 2010	Sanger	WTU
<i>G. andrewsii</i> subsp. <i>intermedium</i> (Soza 1725b)	MG954009	Soza & Olmstead 2010	Sanger	WTU
<i>G. angustifolium</i> subsp. <i>angustifolium</i> (Boyd 11551b)	MG954010	Soza & Olmstead 2010	Sanger	RSA
<i>G. aparine</i>	KY562587		Genbank	SD136414
<i>G. arkansanum</i> (Thomas 7714)	MG954011	Soza & Olmstead 2010	Sanger	WTU
<i>G. bolanderi</i> (Soza 1758a)	MG954012	Soza & Olmstead 2010	Sanger	WTU
<i>G. boreale</i> subsp. <i>septentrionale</i> (Soza 1755)	MG954013	Soza & Olmstead 2010	Sanger	WTU
<i>G. californicum</i> subsp. <i>flaccidum</i> (Soza 1731)	MG954014	Soza & Olmstead 2010	Sanger	WTU
<i>G. clementis</i> (Wilken & Painter 16123)	MG954015	Soza & Olmstead 2010	Sanger	RSA
<i>G. cliftonsmitthii</i> (Soza 1720)	MG954016	Soza & Olmstead 2010	Sanger	WTU
<i>G. grande</i> (Soza 1733b)	MG954017	Soza & Olmstead 2010	Sanger	WTU

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<i>G. grayanum</i> (Ertter & Schoolcraft 8641)	MG954018	Soza & Olmstead 2010	Sanger	WTU
<i>G. hallii</i> (Soza 1724a)	MG954019	Soza & Olmstead 2010	Sanger	WTU
<i>G. nuttallii</i> subsp. <i>nuttallii</i> (Roberts & Bramlet 6036)	MG954020	Soza & Olmstead 2010	Sanger	RSA
<i>G. oreganum</i> (Soza 1761)	MG954021	Soza & Olmstead 2010	Sanger	WTU
<i>G. porrigens</i> (Fraga 1281b)	MG954022	Soza & Olmstead 2010	Sanger	RSA
<i>G. proliferum</i> (Turner 24-155)	MG954023	Soza & Olmstead 2010	Sanger	LL/TEX
<i>G. rotundifolium</i> (Montserrat <i>et al.</i> s.n.)	MG954024	Soza & Olmstead 2010	Sanger	JACA
<i>G. uncinulatum</i> (Soza & Yuan 1780)	MG954025	Soza & Olmstead 2010	Sanger	WTU
<i>Helianthus annuus</i>	KM360812		Genbank	
<i>G. parisiense</i>	HM850021		Genbank	
<i>G. saxatile</i>	HM850022		Genbank	
<i>G. lanceolatum</i>	HQ590110		Genbank	
<i>G. tinctorium</i>	HQ590114		Genbank	
<i>G. verum</i>	HQ590115		Genbank	
<i>G. sternerii</i>	JN891489		Genbank	
<i>G. uliginosum</i>	JN892892		Genbank	
<i>G. boreale</i>	JX848534		Genbank	
<i>G. anisophyllum</i>	KF602232		Genbank	
<i>G. megalospermum</i>	KF60223		Genbank	
<i>G. asprellum</i>	KJ593428		Genbank	
<i>G. valdepilosum</i>	KJ746286		Genbank	
<i>G. hispidulum</i>	KJ773530		Genbank	
<i>G. pilosum</i>	KJ773531		Genbank	
<i>G. tricorne</i>	KP098254		Genbank	
<i>G. circaezans</i>	KP402639		Genbank	
<i>G. concinnum</i>	KP643725		Genbank	
<i>G. pusillosetosum</i>	KX910849		Genbank	

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<i>G. odoratum</i>	KY562701		Genbank	
<i>G. brevipes</i>	MG221335		Genbank	
<i>G. multiflorum</i>	MG221437		Genbank	
<i>G. kamtschaticum</i>	MG221781		Genbank	
<i>G. brandegeii</i>	MG221966		Genbank	
<i>G. obtusum</i>	MG222026		Genbank	
<i>G. bifolium</i>	MG222058		Genbank	
<i>G. spurium</i>	MG222097		Genbank	
<i>G. sylvaticum</i>	MG223156		Genbank	
<i>G. anglicum</i>	MG223563		Genbank	
<i>G. labradoricum</i>	MG223948		Genbank	
<i>Nerium oleander</i>	HM850198		Genbank	
<i>A. arizonicum</i> (Halse 897)	MG954026	Schneider et al. 2016	Sanger	ARIZ187291
<i>A. californicum</i> subsp. <i>californicum</i> (Colwell 97-CA-BLO)	MG954027	Schneider et al. 2016	Sanger	WTU344755
<i>A. californicum</i> subsp. <i>condensum</i> (Taylor 18565)	MG954028	Schneider et al. 2016	Sanger	JEPS100410
<i>A. “franciscanum”</i> (Colwell 01-95)	MG954029	Schneider et al. 2016	Sanger	WTU351381
<i>A. “franciscanum”</i> (Schneider 920)	MG954030	Schneider et al. 2016	Sanger	JEPS122893
<i>A. “franciscanum”</i> (Egger 1295)	MG954031	Schneider et al. 2016	Sanger	WTU
<i>Orobanche hederæ</i> (Schneider 124)	MG954057	Schneider et al. 2016	Illumina	JEPS121581
<i>A. ludovicianum</i> (Collins 2033)	MG954032	Schneider et al. 2016	Sanger	UC 2046173 ARIZ
<i>A. sp. nov.</i> (Yatskyevich 85-215)	MG954033	Schneider et al. 2016	Sanger	264197
<i>A. multiflorum</i> (Collins 2024)	MG954034	Schneider et al. 2016	Sanger	MO5990497
<i>A. pinorum</i> (Colwell 96-WA-LC)	MG954035	Schneider et al. 2016	Sanger	WTU344760
<i>A. riparium</i> (Collins 1620)	MG954036	Schneider et al. 2016	Sanger	MO4903216
<i>A. uniflorum</i> (Anderson 2267)	MG954037	Schneider et al. 2016	Sanger	MIN409677
<i>A. validum</i> subsp. <i>validum</i> (Colwell 99-73)	MG954038	Schneider et al. 2016	Sanger	WTU344847

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Rubia sylvatica	KP098247	Genbank
Salvia brandegii	AY570398	Genbank
Syringa vulgaris	KM361002	Genbank
G. album	X81090	Genbank
G. corsicum	X81096	Genbank
G. elongatum	X81098	Genbank
G. lucidum	X81100	Genbank
G. palustre	X81101	Genbank
G. scabrum	X81105	Genbank