

Appendix 1. Taxa included in the study with collection information, voucher information and GenBank accession numbers.

N	TipName	Species names (FNA names are in bold)	Population/Locality	Collection Number	Herbarium
1	S.tortuosus_e002	Streptanthus tortuosus Kellogg	seed from Bidwell Bridge, CA	seed; 4dna#52	DAV
2	C.flavescens_e003	Caulanthus flavescens (Hooker) Payson	seed from Contra Costa, CA	seed; 4dna#7A	DAV
3	S.insignis_e004	Streptanthus insignis Jepson subsp. insignis	Tucker Mountain	seed; 4dna#69	DAV
4	C.inflatus_e005	Caulanthus inflatus S. Watson	Ballinger Canyon	NIC-s-066	DAV
5	C.anceps_e006	Caulanthus anceps Payson	Soda Lake	NIC-s-053	DAV
6	C.amp. barbara_e007	<i>Caulanthus amplexicaulis</i> var. <i>barbarae</i> (J. T. Howell) Munz	Davy Campground	NIC-s-076	DAV
7	S.glandulosus_e008	Streptanthus glandulosus Hooker subsp. hoffmanii (Kruckeberg) M. S.	San Geronimo	seed; 4dna-34A	DAV
8	S.batrachopus_e009	Streptanthus batrachopus J. L. Morrison	San Geronimo	seed; 4dna-14B	DAV
9	S.breweri_e010	Streptanthus breweri A. Gray	Turtle Rock	seed; 4dna-20A	DAV
10	S.polygaloides_e011	Streptanthus polygaloides A. Gray	Washington Road	seed; 4dna-45	DAV
11	C.californicus_e012	Caulanthus californicus (S. Watson) Payson	ROD	ROD s/n	DAV
12	Stella.longirostris_e013	Streptanthella longirostris (S. Watson) Rydberg	Coyote Canyon	NIC-s-020	DAV
13	Sisym. irio_e014	Sisymbrium irio Linnaeus	Coyote Canyon	NIC-s-022	DAV
14	C.coulter. coulteri_e015	Caulanthus coulteri S. Watson	Caliente-Bodfish Road	NIC-s-001	DAV
15	S.morrisonii_e016	Streptanthus morrisonii F. W. Hoffman	Napa county: Hunting Creek	NIC s/n	DAV
16	C.cooperi_e017	Caulanthus cooperi (S. Watson) Payson	ca. 4.74 mi N of Highway 10 and Box C	NIC-s-055	DAV
17	Stan.pinnata_e018	Stanleya pinnata (Pursh) Britton	ca. 4.74 mi N of Highway 10 and Box C	NIC-s-054	DAV
18	S.diversifolius_e019	Streptanthus diversifolius S. Watson	Table Mtn	NIC-s-085	DAV
19	C.amp. amplexicaulis_e020	Caulanthus amplexicaulis S. Watson	Mt. Baldy	NIC-s-141	DAV
20	S.hesperidis_e021	Streptanthus hesperidis Jepson	Lake county	seed; 4dna-21A	DAV
21	S.drepanoides_e022	Streptanthus drepanoides Kruckeberg & J. L. Morrison	Lime Saddle	seed; 4dna27A	DAV
22	C.het. heterophyllus_e023	Caulanthus heterophyllus (Nuttall) Payson	Delvino Court Rd	seed; 4dna-66	DAV
23	S.farnsworthianus_e024	Streptanthus farnsworthianus J. T. Howell	Peterson Road	seed; T-382	DAV
24	C.hallii_e025	Caulanthus hallii Payson	Pinyon Mountain Road	NIC-s-015	DAV
25	C.glaucus_e027	Caulanthus glaucus S. Watson	Silver Canyon Road	NIC-s-112	DAV
26	C.major nevadensis_e028	Caulanthus major (M. E. Jones) Payson	Fredoyner Pk	NIC-s-130	DAV
27	C.cordatus_e029	Streptanthus cordatus Nuttall	Warner Peak	NIC-s-139A	DAV
28	S.howellii_e030	Streptanthus howellii S. Watson	Road 305	NIC-s-152	DAV
29	S.barbatus_e031	<i>Streptanthus albidus</i> Greene ssp. <i>peramoenus</i> (Greene) Kruckeb.	Highway 03	NIC-s-176	DAV
30	S.longisiliquus_e032	Streptanthus longisiliquus G. L. Clifton & R. E. Buck	Humboldt Road to Buttes Meadow	NIC-s-180	DAV
31	Sisymofficinale_e033a**	Sisymbrium officinale (Linnaeus) Scopoli	seed from Lleida, Spain	seed; d-008	DAV
32	S.farnsworthianus_e034a	Streptanthus farnsworthianus J. T. Howell	Peterson Road	seed; d-066	DAV
33	S.breweri_e035a	Streptanthus breweri A. Gray	Colusa county	seed; d-045	DAV
34	Sisym. irio_e036a	Sisymbrium irio Linnaeus	seed from Lleida, Spain	seed; d-004	DAV
35	S.breweri_e039	Streptanthus breweri A. Gray	Lake county	seed; d-181	DAV
36	S.tortuosus_e040	Streptanthus tortuosus Kellogg	Rich Bar	seed; k-435	DAV
37	S.glandulosus_e041A	Streptanthus glandulosus Hooker subsp. secundus (Greene) Kruckeberg	Fairfax-Bolinas Road	seed; k-788	DAV
38	S.callistus_e042	Streptanthus callistus J. L. Morrison	Mt. Hamilton	seed; d-41A	DAV
39	S.hesperidis_e043	Streptanthus hesperidis Jepson	Lake county	seed; d-184	DAV
40	C.inflatus_e044	Caulanthus inflatus S. Watson	Shadow Mountain Road	PJM s/n	n/a
41	S.barbiger_e045	Streptanthus barbiger Greene	The Cedars	NIC-s-193	n/a
42	C.coulter. lemmonii_e046	Caulanthus lemmonii S. Watson	Davis Road	NIC-s-070	DAV
43	C.het. pseudosimulans_e047	<i>Caulanthus heterophyllus</i> var. <i>pseudosimulans</i> R.E. Buck	Highway 74	NIC-s-029	DAV
44	C.het. heterophyllus_e048	Caulanthus heterophyllus (Nuttall) Payson	Highway 78	NIC-s-025	DAV
45	C.simulans_e049	Caulanthus simulans Payson	Highway 54	NIC-s-010	DAV
46	S.brachiatus_e050	Streptanthus brachiatus F. W. Hoffman	seed from Mayacamas	seed; d-018	DAV
47	Thys.curvipes_e051	Thysanocarpus curvipes Hooker,	Table Mtn	NIC-s-185	DAV
48	S.tortuosus_e052	Streptanthus tortuosus Kellogg	Table Mtn	NIC-s-188	DAV
49	C.pilosus_e053	Caulanthus pilosus S. Watson	Crawley Lake Road	NIC-s-120	DAV
50	C.cordatus_e054	Streptanthus cordatus Nuttall	Silver Canyon Road	NIC-s-104	DAV
51	S.shastensis_e055	Streptanthus longisiliquus G. L. Clifton & R. E. Buck	Stirling City	seed; d-047a	DAV
52	S.vernalis_e056	Streptanthus vernalis R. O'Donnell & R. W. Dolan	Three Peaks	seed; d-057	DAV
53	C.amp. amplexicaulis_e057	Caulanthus amplexicaulis S. Watson	Green Valley Road	seed; T-394	DAV
54	S.glandulosus_e058	Streptanthus glandulosus Hooker subsp. hoffmanii (Kruckeberg) M. S.	The Cedars	NIC-s-195	n/a
55	S.morrisonii_e059	Streptanthus morrisonii F. W. Hoffman	The Cedars	NIC-s-197	n/a
56	S.tortuosus_e060	Streptanthus tortuosus Kellogg	Iowa Hill Road	seed; d-065	DAV
57	C.lasiophyllus_e061	Caulanthus lasiophyllus (Hooker & Arnott) Payson	Kramer Junction	NIC-s-006	DAV
58	S.niger_e062	Streptanthus niger	Ave. Miraflores, CA	seed; d-043A	DAV
59	S.glandulosus_e063	Streptanthus glandulosus Hooker subsp. secundus (Greene) Kruckeberg	Fairfax-Bolinas Road	NIC-s-203	DAV
60	S.tortuosus_e064	Streptanthus tortuosus Kellogg	Highway 108	NIC-s-101	DAV
61	Stella.longirostris_e065	Streptanthella longirostris (S. Watson) Rydberg	Pisgaw Crater	NIC-s-034	DAV
62	S.tortuosus_e066	Streptanthus tortuosus Kellogg	Highway 299	NIC-s-158	DAV
63	S.polygaloides_e071	Streptanthus polygaloides A. Gray	Skyway Road	seed; d-082	DAV
64	S.insignis_e072	Streptanthus insignis Jepson subsp. insignis	Jade Mill	seed; d-144	DAV
65	S.tortuosus_e073	Streptanthus tortuosus Kellogg	Highway 180	NIC-s-214	DAV
66	S.farnsworthianus_e074	Streptanthus farnsworthianus J. T. Howell	Highway 180	NIC-s-212	DAV
67	C.anceps_e075	Caulanthus anceps Payson	Ballinger Canyon	NIC-s-056	DAV
68	C.cooperi_e076	Caulanthus cooperi (S. Watson) Payson	Hwy 78, Stag Cove	NIC-s-007	DAV
69	S.diversifolius_e077	Streptanthus diversifolius S. Watson	Highway 180	NIC-s-204	DAV

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70	C.hallii_e078	<i>Caulanthus hallii</i> Payson	Mine Wash	NIC s/n	DAV
71	S.fenestratus_e079	<i>Streptanthus fenestratus</i> (Greene) J. T. Howell	Highway 180	NIC-s-223	DAV
72	C.coult. coulteri_e080**	<i>Caulanthus coulteri</i> S. Watson	Mt. Road 109, CA	NIC s/n	DAV
73	S.alb.albidus_e081a**	<i>Streptanthus albidus</i> Hooker subsp. albidus (Greene) Al-Shehbaz	Metcalf Road	seed; d-107	DAV
74	S.polygaloides_e082a	<i>Streptanthus polygaloides</i> A. Gray	Lime Saddle	seed; d-080	DAV
75	S.breweri_e083a	<i>Streptanthus breweri</i> A. Gray	Lake county	seed; d-183	DAV
76	Thel.crispum_e084	<i>Thelypodium crispum</i> Greene ex Payson	Highway 395	NIC-s-267	DAV
77	C.pilosus_e085	<i>Caulanthus pilosus</i> S. Watson	Crawley Lake Road	NIC-s-242	DAV
78	C.cordatus_e086	<i>Streptanthus cordatus</i> Nuttall	Forest Service Rd 10S106	NIC-s-258	DAV
79	C.crassicaulis_e087	<i>Caulanthus crassicaulis</i> (Torrey) S. Watson	Saline Valley Road	NIC-s-252	DAV
80	Stan.pinnata_e090	<i>Stanleya pinnata</i> (Pursh) Britton	Shadow Mountain Road	NIC-s-190	DAV
81	S.hesperidis_e092	<i>Streptanthus hesperidis</i> Jepson	Lake county	NIC-s-096	DAV
82	Stan.elata_e093	<i>Stanleya elata</i> M. E. Jones	Wuaucoma Road	NIC-s-250	DAV
83	Thel.laciniatum_e094	<i>Thelypodium laciniatum</i> (Hooker) Endlicher	seed from Western Regional Plant Stat	seed; d-57b	DAV
84	S.bernardinus_e095	<i>Streptanthus bernardinus</i> (Greene) Parish	San Diego county	JR18016	SDNHM
85	S.bernardinus_e096	<i>Streptanthus bernardinus</i> (Greene) Parish	San Diego county	LH2288A	SDNHM
86	S.campestris_e097	<i>Streptanthus campestris</i> S. Watson	San Diego county	JR9956	SDNHM
87	S.campestris_e098	<i>Streptanthus campestris</i> S. Watson	San Diego county	JR19575	SDNHM
88	S.brachiatus_e100	<i>Streptanthus brachiatus</i> F. W. Hoffman	Mayacamas	NIC-s-272	DAV
89	S.insignis_e101	<i>Caulanthus californicus</i> (S. Watson) Payson	Kreyenhagen Hills	ROD s/n	n/a
90	Thys.curvipes_e102	<i>Thysanocarpus curvipes</i> Hooker,	Highway 78	NIC-s-028	DAV
91	Thys.curvipes_e103	<i>Thysanocarpus curvipes</i> Hooker,	Lake county	NIC s/n	DAV
92	S.barbiger_e104	<i>Streptanthus barbiger</i> Greene	Whispering Pines	NIC-s-270	DAV
93	S.brachiatus_e105	<i>Streptanthus brachiatus</i> F. W. Hoffman	Pine Flat Road	NIC-s-273	DAV
94	C.coult. coulteri_e106	<i>Caulanthus coulteri</i> S. Watson	Ballinger Canyon	NIC-s-059	DAV
95	S.breweri_e107	<i>Streptanthus breweri</i> A. Gray	Colusa county	ROD s/n	DAV
96	S.polygaloides_e108	<i>Streptanthus polygaloides</i> A. Gray	Hwy 80 at Casa Loma	NIC-s-233	DAV
97	Sib.hammittii_e110	<i>Sibaropsis hammittii</i> S. Boyd & T. S. Ross	Elsinore Peak	JR8303	SDNHM
98	S.carinatus_e113	<i>Streptanthus carinatus</i> C. Wright ex A. Gray subsp. arizonicus (S. Watsc	Oregon Pipe	SYS s/n	n/a
99	S.carinatus_e114	<i>Streptanthus carinatus</i> C. Wright ex A. Gray subsp. arizonicus (S. Watsc	Oregon Pipe	SYS s/n	n/a
100	S.hispidus_e115	<i>Streptanthus hispidus</i> A. Gray	Contra Costa, CA	SYS s/n; 745	n/a
101	S.hispidus_e116	<i>Streptanthus hispidus</i> A. Gray	Contra Costa, CA	SYS s/n; 741	n/a
102	C.californicus_e117	<i>Caulanthus californicus</i> (S. Watson) Payson	San Luis Obispo county; Carrizo Plain	ROD s/n	n/a
103	C.californicus_e118	<i>Caulanthus californicus</i> (S. Watson) Payson	San Luis Obispo county; Carrizo Plain	ROD s/n	DAV
104	S.callistus_e119	<i>Streptanthus callistus</i> J. L. Morrison	Mt. Hamilton	SYS s/n; 02	DAV
105	S.bracteatus_e120	<i>Streptanthus bracteatus</i> A. Gray	Barrell	seed; d-056	n/a
106	S.glandulosus_e121	<i>Streptanthus glandulosus</i> Hooker	Napa county	SYS s/n	n/a
107	C.major nevadensis_e122	<i>Caulanthus major</i> (M. E. Jones) Payson	Humboldt NV	SYS s/n	n/a
108	S.alb. peramoenus_e123	<i>Streptanthus albidus</i> Hooker subsp. albidus (Greene) Al-Shehbaz	vicinity of Sta. Theresa County Park	SYS s/n	n/a
109	C.lasiophyllus_e124	<i>Caulanthus lasiophyllus</i> (Hooker & Arnott) Payson	San Luis Obispo county	PJM 101	n/a
110	S.alb.albidus_e125	<i>Streptanthus albidus</i> Hooker subsp. albidus (Greene) Al-Shehbaz	Metcalf Road	SYS s/n	n/a
111	S.glandulosus_e126	<i>Streptanthus glandulosus</i> Hooker	Bohemian Road	SYS s/n	n/a
112	S.alb. peramoenus_e127	<i>Streptanthus albidus</i> Greene ssp. <i>peramoenus</i> (Greene) Kruckeb.	Oakglen Road	SYS s/n	n/a
113	Thel.integrifolium_e128	<i>Thelypodium integrifolium</i> (Nuttall) Endlicher	NA	Arnold Tiehm 16277	UCD-191068
114	C.lasiophyllus_e129	<i>Caulanthus lasiophyllus</i> (Hooker & Arnott) Payson	Payne Ranch BLM	Craig Thomsen 272	UCD-179650
115	C.flavescens_e130**	<i>Caulanthus flavescens</i> (Hooker) Payson	Payne Ranch BLM	Ellen Dean 3530	UCD-179650
116	S.hyacinthoides_e131	<i>Streptanthus hyacinthoides</i> Hooker	Lousiana	R. Dale Thomas 9974	UCD-115948
117	C.lasiophyllus_e132	<i>Caulanthus lasiophyllus</i> (Hooker & Arnott) Payson	Kern county	Ellen Dean 4577	UCD-182051
118	Thel.crispum_e133	<i>Thelypodium crispum</i> Greene ex Payson	Alpine Co. Grover Hot Springs	Ellen Dean	UCD-189991
119	S.hyacinthoides_e134**	<i>Streptanthus hyacinthoides</i> Hooker	Lucky Ranch	R. Dale Thomas 4371	DAV
120	S.carinatus_e135	<i>Streptanthus carinatus</i> C. Wright ex A. Gray subsp. arizonicus (S. Watsc	Tres Virgenes, Baja California, Mexico	Reid Moran 20210	UCD-88814
121	Thel.flexuosum_e136	<i>Thelypodium flexuosum</i> B. L. Robinson	Lassen County	Ellen Dean 2084	UCD172211
122	S.glandulosus_e137	<i>Streptanthus glandulosus</i> Hooker	Quimby Road	seed; d-121	DAV
123	S.glandulosus_e138	<i>Streptanthus glandulosus</i> Hooker	Mayacamas-PineFlat Rd	seed; d-127	DAV
124	S.tortuosus_e139	<i>Streptanthus tortuosus</i> Kellogg	seed from Iron Mtn., CA	seed; d-065	DAV
125	S.glandulosus_e140	<i>Streptanthus glandulosus</i> Hooker	seed from Bartlett Springs Rd., CA	seed; d-031	DAV
126	S.glandulosus_e141	<i>Streptanthus glandulosus</i> Hooker	Stiles Ranch	SYS s/n; SR5-2	n/a
127	C.coult. coulteri_e142	<i>Caulanthus coulteri</i> S. Watson	vicinity of Frazier Peak	pjm	DAV
128	S.tortuosus_e143	<i>Streptanthus tortuosus</i> Kellogg	Iowa Hill Road	seed; k-452	DAV
129	S.tortuosus_e144	<i>Streptanthus tortuosus</i> Kellogg	Washington Road	seed; k-026	DAV
130	S.bracteatus_e146	<i>Streptanthus bracteatus</i> A. Gray	NA	AP 1502	n/a
131	S.carinatus_e147	<i>Streptanthus carinatus</i> C. Wright ex A. Gray subsp. arizonicus (S. Watsc	NA	AMB	n/a
132	S.hyacinthoides_e148	<i>Streptanthus hyacinthoides</i> Hooker	NA	AP	n/a
133	S.cutleri_e149	<i>Streptanthus cutleri</i> Cory	NA	AMB	n/a
134	S.sparsiflorus_e150	<i>Streptanthus platycarpus</i> A. Gray	NA	AMB	n/a
135	S.platycarpus_e151	<i>Streptanthus platycarpus</i> A. Gray	NA	AMB	n/a
136	S.maculatus_e152	<i>Streptanthus maculatus</i> Nuttall	NA	AP	n/a
137	S.hyacinthoides_e153	<i>Streptanthus hyacinthoides</i> Hooker	Willmore, KS	P. Scherich s/n	n/a
138	S.hyacinthoides_e154	<i>Streptanthus hyacinthoides</i> Hooker	Willmore, KS	P. Scherich s/n	n/a

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139	S.hyacinthoides_e155	Streptanthus hyacinthoides Hooker	Willmore, KS	P. Scherich s/n	n/a
140	S.maculatus_e156	Streptanthus maculatus Nuttall	Texas	Holmes sn 2012	BAYLU
141	S.hyacinthoides_e157	Streptanthus hyacinthoides Hooker	Texas	Holmes 15537	BAYLU
142	S.hyacinthoides_e158	Streptanthus hyacinthoides Hooker	Texas	Holmes 12982	BAYLU
143	S.hyacinthoides_e159	Streptanthus hyacinthoides Hooker	Texas	BL Turner 95-85	BAYLU
Genbank Accession Numbers					
	G34 (AT4G34700)	KJ025718 - KJ025842			
	G56 (AT1G56590)	KJ025843 - KJ025955			
	G61 (AT1G61620)	KJ025608 - KJ025717			
	ITS	KF730101 - KF730239			
	phyA	KF934631 - KF934767			
	PEPC	KF934500 - KF934630			
	trnH-psbA	KF973398 - KF973452			
	trnLF	KF973342 - KF973397			