

WALKER, J.B., K. J. SYTSMA, J. TREUTLEIN, AND M. WINK. 2004. *Salvia* is not monophyletic: implications for the systematics, radiations and ecological specializations of *Salvia* and tribe Mentheae. *American Journal of Botany* 91(7): 1115-1125.

Appendix. Plant materials included in this study.

Taxon	Collector	Locality	<i>rbcL</i>	<i>trnL-F</i>
Verbenaceae				
<i>Verbena officinalis</i> L.				AF231885
<i>Verbena officinalis</i> L.		cult. Heidelberg Botanical Garden, Germany	Z37473	
Lamiaceae				
<i>Agastache foeniculum</i> (Pursh) Kuntz		cult. Mainz Botanical Garden, Germany	Z37381	
<i>Agastache mexicana</i> (Kunth) H.P.Kelsey & Dayton		Willner (Ketsch), Germany	Z37382	
<i>Agastache rugosa</i> Kuntze		cult. Nizza Botanical Garden, France	Z37383	
<i>Agastache urticifolia</i> Kunth	JBW 815	Cache County, Utah		AY570452
<i>Caryopteris bicolor</i> (Roxb.ex Hardw.) D.J.Mabberley			U78711	
<i>Collinsonia canadensis</i> L.		cult. Heidelberg Botanical Garden, Germany	Z37386	
<i>Collinsonia canadensis</i> L.	JBW 958	Transylvania County, North Carolina, USA		AY570453
<i>Dorystaechas hastata</i> Boiss. & Heldr.ex Benth.		cult. Royal Botanical Gardens, Edinburgh. #19720177	AY570383	AY570454
<i>Dracocephalum grandiflorum</i> L.		cult. Heidelberg Botanical Garden, Germany	Z37388	
<i>Dracocephalum moldavica</i> L.		cult. Mainz Botanical Garden, Germany	Z37389	
<i>Dracocephalum ruschiana</i> Linn.		cult. Berlin Botanical Garden, Germany	Z37390	
<i>Glechoma hederacea</i> L.	JBW 2579	Madison, Wisconsin	AY570384	AY570455
<i>Horminum pyrenaicum</i> L.		cult. Royal Botanical Gardens, Edinburgh. #19972109	AY570385	AY570456
<i>Lamium album</i> L.		cult. Heidelberg Botanical Garden, Germany	Z37396	
<i>Lamium amplexicaule</i> L.		cult. Berlin Botanical Garden, Germany	Z37399	
<i>Lamium galeobdolon</i> Crantz		cult. Heidelberg Botanical Garden, Germany	Z37400	
<i>Lamium garganicum</i> L.		cult. Heidelberg Botanical Garden, Germany	Z37401	
<i>Lamium maculatum</i> L.		Heidelberg, Germany	Z37402	
<i>Lamium purpureum</i> L.		Heidelberg, Germany	Z37403	
<i>Lamium purpureum</i> L.				AF363664
<i>Lavandula angustifolia</i> Mill.		cult. Heidelberg Botanical Garden, Germany	Z37407	
<i>Lavandula angustifolia</i> Mill.	JBW 2565	cult. Univ. Wisc., Madison Greenhouse		AY570457
<i>Lavandula lanata</i> Boiss.		Willner (Ketsch), Germany	Z37405	
<i>Lavandula latifolia</i> Medic.		cult. Heidelberg Botanical Garden, Germany	Z37406	
<i>Lavandula stoechas</i> L.		cult. Freiburg Botanical Garden, Germany	Z37408	
<i>Lepechinia calycina</i> Epl.	JBW 1344	Monterey County, California, USA	AY570386	AY570458
<i>Lepechinia chamaedryoides</i> Epl.	JBW 2537	cult. Rancho Santa Ana Botanical Garden, California, USA	AY570387	AY570459

<i>Lepechinia fragrans</i> (Greene) Epl.	JBW 1333	Catalina Island, Los Angeles County, California, USA	AY570388	AY570460
<i>Majorana hortensis</i> Moench	Wink	cult. Mainz Botanical Garden, Germany	AY570389	
<i>Marrubium incanum</i> Desr.		cult. Heidelberg Botanical Garden, Germany	Z37410	
<i>Marrubium peregrinum</i> L.		cult. Heidelberg Botanical Garden, Germany	Z37409	
<i>Marrubium supinum</i> L.				AF335720
<i>Marrubium vulgare</i> L.		cult. Heidelberg Botanical Garden, Germany	Z37412	
<i>Melissa officinalis</i> L.		cult. Heidelberg Botanical Garden, Germany	Z37414	
<i>Mentha longifolia</i> (L.) Huds.	Wink	cult. Heidelberg Botanical Garden, Germany	AY570390	
<i>Mentha rotundifolia</i> (L.) Huds.		cult. Heidelberg Botanical Garden, Germany	Z37417	
<i>Mentha spicata</i> L.	JBW 2566	cult. Univ. Wisc., Madison Greenhouse		AY570461
<i>Monarda didyma</i> L.		Willner (Ketsch), Germany	Z37418	
<i>Monarda fistulosa</i> L.		cult. Heidelberg Botanical Garden, Germany	Z37419	
<i>Monarda fistulosa</i> L. *		cult. Leipzig Botanical Garden, Germany	Z37420	
<i>Nepeta cataria</i> L.		Willner (Ketsch), Germany	Z37421	
<i>Nepeta tuberosa</i> L.		cult. Nizza Botanical Garden, France	Z37423	
<i>Nepeta x faassenii</i> Bergmans		cult. Heidelberg Botanical Garden, Germany	Z37422	
<i>Ocimum basilicum</i> L.		cult. Mainz Botanical Garden, Germany	Z37425	
<i>Ocimum basilicum</i> L.	JBW 2557	cult. Univ. Wisc., Madison Greenhouse		AY570462
<i>Origanum laevigatum</i> Boiss.		cult. Linz Botanical Garden, Austria	Z37426	
<i>Origanum vulgare</i> L.		cult. Heidelberg Botanical Garden, Germany	Z37427	
<i>Origanum vulgare</i> L.	JBW 2567	cult. Univ. Wisc., Madison Greenhouse		AY570463
<i>Perovskia abrotanoides</i> Karel.		cult. Heidelberg Botanical Garden, Germany	Z37428	
<i>Perovskia atriplicifolia</i> Benth.	JBW 2524	cult. Univ. Wisc., Madison Greenhouse	AY570391	AY570464
<i>Plectranthus barbatus</i> Andr.			U28882	
<i>Prunella grandiflora</i> Jacq.		cult. Essen Botanical Garden, Germany	Z37431	
<i>Prunella hyssopifolia</i> Linn.		cult. Nizza Botanical Garden, France	Z37432	
<i>Prunella vulgaris</i> L.		cult. Heidelberg Botanical Garden, Germany	Z37433	
<i>Rosmarinus officinalis</i> L.		cult. Heidelberg Botanical Garden, Germany	Z37434	
<i>Rosmarinus officinalis</i> L.	JBW 2558	cult. Univ. Wisc., Madison Greenhouse		AY570465
<i>Salvia aethiopsis</i> L.		cult. Mainz Botanical Garden, Germany	Z37436	
<i>Salvia aethiopsis</i> L.	Classen- Bockhoff 26/6/02	Armenia		AY570466
<i>Salvia africana-caerulea</i> L.	Wink	cult. Wellington Botanical Garden, South Africa	AY570392	
<i>Salvia amarissima</i> Ort.	Wink	cult. Giardini Botanici Hanbury, Italy	AY570393	
<i>Salvia amplexicaulis</i> Lam.	Wink	cult. Kiel Botanical Garden, Germany # 190/637	AY570394	
<i>Salvia argentea</i> Linne		Willner (Ketsch), Germany	Z37437	
<i>Salvia aurita</i> L. fil.	Wink	cult. Giardini Botanici Hanbury, Italy	AY570395	
<i>Salvia ballotiflora</i> Benth.	JBW 2547	cult. Univ. Wisc., Madison Greenhouse	AY570396	AY570467

<i>Salvia barrelieri</i> Etl. *	Wink		Z37448	
<i>Salvia brachyantha</i> (Bordz.) Pobed.	Wink	cult. Leipzig Botanical Garden, Germany	AY570397	
<i>Salvia brandegei</i> Munz	JBW 2544	cult. Rancho Santa Ana Botanical Garden, California, USA	AY570398	
<i>Salvia bucharica</i> M. Popov		cult. Leipzig Botanical Garden, Germany	Z37438	
<i>Salvia cadmica</i> Boiss.	Wink	cult. Wageningen Botanical Garden, Netherlands # 93/48/20089	AY570399	
<i>Salvia californica</i> Brandegee	JBW 2520	cult. Univ. Wisc., Madison Greenhouse	AY570400	AY570468
<i>Salvia canariensis</i> L.		cult. Bern Botanical Garden, Switzerland	Z37439	
<i>Salvia canariensis</i> L.		cult. Royal Botanical Gardens, Edinburgh. #19860478		AY570469
<i>Salvia candelabrum</i> Boiss.	Wink	cult. Montpellier Botanical Garden, France	AY570401	
<i>Salvia candidissima</i> Vahl	Wink	cult. Heidelberg Botanical Garden, Germany	AY570402	
<i>Salvia cedrocensis</i> Greene	JBW 2539	cult. Rancho Santa Ana Botanical Garden, California, USA	AY570403	AY570470
<i>Salvia cf. Sagittata</i> Ruiz et. Pav.	JBW 2543	cult. Rancho Santa Ana Botanical Garden, California, USA	AY570404	
<i>Salvia chamaedryoides</i> Cav.	JBW 2009	Coahuila, Mexico	AY570405	AY570471
<i>Salvia chionoeplica</i> Epl.	JBW 2545	cult. Rancho Santa Ana Botanical Garden, California, USA	AY570406	AY570472
<i>Salvia clevelandii</i> (Gray) Greene	JBW 2508	cult. San Diego, CA, USA	AY570407	AY570473
<i>Salvia coccinea</i> Juss. ex Murr.	JBW 2513	cult. Univ. Wisc., Madison Greenhouse	AY570408	AY570474
<i>Salvia columbariae</i> Benth.	JBW 1300	Los Angeles County, California	AY570409	AY570475
<i>Salvia corrugata</i> Vahl	JBW 2531	cult. Rancho Santa Ana Botanical Garden, California, USA	AY570410	AY570476
<i>Salvia digitaloides</i> Diels		cult. Royal Botanical Gardens, Edinburgh. #19992200	AY570411	AY570477
<i>Salvia disermis</i> L.	Wink	cult. Giardini Botanici Hanbury, Italy	AY570412	
<i>Salvia disermis</i> L.	Linder 4117	Calvinia, South Africa		AY570478
<i>Salvia divinorum</i> Epl. et Jativa	Wink	cult. Heidelberg Botanical Garden, Germany	AY570413	
<i>Salvia dorrii</i> (Kell.) Abrams	JBW 2541	cult. Rancho Santa Ana Botanical Garden, California, USA	AY570414	
<i>Salvia elegans</i> Carr. *	Wink		Z37449	
<i>Salvia eremostachya</i> Jeps.	JBW 2533	cult. Rancho Santa Ana Botanical Garden, California, USA	AY570415	
<i>Salvia farinacea</i> Benth.	JBW 2525	cult. Univ. Wisc., Madison Greenhouse	AY570416	AY570479
<i>Salvia fruticosa</i> Miller	Wink	cult. Heidelberg Botanical Garden, Germany	AY570417	
<i>Salvia glutinosa</i> L.		cult. Heidelberg Botanical Garden, Germany	Z37440	
<i>Salvia glutinosa</i> L.	JBW 2568	cult. Univ. Wisc., Madison Greenhouse		AY570480
<i>Salvia greatai</i> Brandegee	JBW 2511	Imperial County, California, USA	AY570418	AY570481
<i>Salvia greggii</i> Gray	Wink	cult. Montpellier Botanical Garden, France	AY570419	
<i>Salvia guaranitica</i> St.-Hil. ex Benth.	Wink	cult. Montpellier Botanical Garden, France	AY570420	
<i>Salvia henryi</i> Gray	JBW 2516	cult. Univ. Wisc., Madison Greenhouse	AY570421	AY570482
<i>Salvia hians</i> Royle	JBW 2577	cult. Univ. Wisc., Madison Greenhouse	AY570422	AY570483
<i>Salvia hirsuta</i> Jacq.	Wink	cult. Montpellier Botanical Garden, France	AY570423	
<i>Salvia indica</i> L.		cult. Nizza Botanical Garden, France	Z37443	
<i>Salvia involucrata</i> Cav.	Wink	cult. Montpellier Botanical Garden, France	AY570424	
<i>Salvia lavandulifolia</i> Vahl		Willner (Ketsch), Germany	Z37444	

<i>Salvia lycioides</i> Gray	JBW 2047	cult. Univ. Wisc., Madison Greenhouse	AY570425	AY570484
<i>Salvia lyrata</i> L.	JBW 2554	cult. Univ. Wisc., Madison Greenhouse	AY570426	AY570485
<i>Salvia microphylla</i> Kunth.	Wink	cult. Heidelberg Botanical Garden, Germany	AY570427	
<i>Salvia microphylla</i> Kunth.	JBW 1208	cult. San Diego Wild Animal Park, California, USA		AY570486
<i>Salvia misella</i> Kunth.	Wink	cult. Giardini Botanici Hanbury, Italy	AY570428	
<i>Salvia nilotica</i> Juss. ex Jacq.	Wink	cult. Mainz Botanical Garden, Germany	AY570429	
<i>Salvia nilotica</i> Juss. ex Jacq.	A.G. & L.C. Miller 1193	Cherangani Mtns., Kenya		AY570487
<i>Salvia nubicola</i> Wall. ex Sweet	Wink	cult. Göttingen Botanical Garden, Germany	AY570430	
<i>Salvia officinalis</i> L.	JBW 2580	cult. Univ. Wisc., Madison Greenhouse	AY570431	AY570488
<i>Salvia pachyphylla</i> Epl. ex Munz	JBW 2535	cult. Rancho Santa Ana Botanical Garden, California, USA	AY570432	
<i>Salvia palaestina</i> Benth.	Wink	cult. Botanical Garden of Nice (Nizza), France	AY570433	
<i>Salvia penstemonoides</i> Kunth. et Bouche	JBW 2578	cult. Univ. Wisc., Madison Greenhouse	AY570434	AY570489
<i>Salvia polystachya</i> Ort.	Wink	cult. Giardini Botanici Hanbury, Italy	AY570435	
<i>Salvia pratensis</i> L.	JBW 2523	cult. Univ. Wisc., Madison Greenhouse	AY570436	AY570490
<i>Salvia ringens</i> Sm.	Wink	cult. Giardini Botanici Hanbury, Italy	AY570437	
<i>Salvia roemeriana</i> Scheele	JBW 2515	cult. Univ. Wisc., Madison Greenhouse	AY570438	AY570491
<i>Salvia sclarea</i> L.	JBW 2527	cult. Univ. Wisc., Madison Greenhouse	AY570439	AY570492
<i>Salvia sect. Biflorae</i>	JBW 2538	cult. Rancho Santa Ana Botanical Garden, California, USA	AY570440	AY570493
<i>Salvia spathacea</i> Greene	JBW 2552	cult. San Diego, CA, USA	AY570441	AY570494
<i>Salvia staminea</i> Benth.	JBW 2576	cult. Univ. Wisc., Madison Greenhouse	AY570442	
<i>Salvia subincisa</i> Benth.	JBW 2517	cult. Univ. Wisc., Madison Greenhouse	AY570443	AY570495
<i>Salvia summa</i> A. Nels.	JBW 1972	cult. Univ. Wisc., Madison Greenhouse	AY570444	AY570496
<i>Salvia sylvestris</i> L.	JBW 2569	cult. Univ. Wisc., Madison Greenhouse	AY570445	AY570497
<i>Salvia taraxicifolia</i> Hook. fil.	JBW 2521	cult. Univ. Wisc., Madison Greenhouse	AY570446	AY570498
<i>Salvia texana</i> (Scheele) Torr.	JBW 2562	cult. Univ. Wisc., Madison Greenhouse	AY570447	AY570499
<i>Salvia tiliifolia</i> Vahl	Wink	cult. Giardini Botanici Hanbury, Italy	AY570448	
<i>Salvia uliginosa</i> Benth.		cult. Mainz Botanical Garden, Germany	Z37451	
<i>Salvia verbenaca</i> L.	Wink		AY570449	
<i>Salvia verticillata</i> L.		Rust (Baden), Germany	Z37452	
<i>Salvia verticillata</i> L.	Classen- Bockhoff 26/6/02	Armenia		AY570500
<i>Salvia viridis</i> L.	JBW 3052	cult. Univ. Wisc., Madison Greenhouse	AY570450	AY570501
<i>Salvia viscosa</i> Jacq.	Wink	cult. Giardini Botanici Hanbury, Italy	AY570451	
<i>Satureia hortensis</i> L.		cult. Heidelberg Botanical Garden, Germany	Z37454	
<i>Satureia montana</i> L.		Willner (Ketsch), Germany	Z37455	
<i>Stachys lavandulaefolia</i> Vahl			AF502012	
<i>Stachys lavandulaefolia</i> Vahl				AF502053

<i>Thymus alsinoides</i> Form.		cult. Heidelberg Botanical Garden, Germany	Z37470	
<i>Thymus serpyllum</i>	<i>JBW 2564</i>	cult. Univ. Wisc., Madison Greenhouse		AY570502
<i>Thymus vulgaris</i> L.		cult. Heidelberg Botanical Garden, Germany	Z37471	
<i>Trichostema dichotomum</i> L.			U28887	
<i>Vitex agnus-castus</i> L.			U78716	
<i>Westringia rosmariniformis</i> Sm.			Z37474	
