

**Molecular phylogenetics and biogeography of the mint tribe Elsholtzieae
(Nepetoideae, Lamiaceae), with an emphasis on its diversification in East Asia**

Pan Li^{1,#}, Zhe-Chen Qi^{2,#}, Lu-Xian Liu¹, Tetsuo Ohi-Toma³, Joongku Lee⁴,
Tsung-Hsin Hsieh⁵, Cheng-Xin Fu¹, Kenneth M. Cameron⁶, Ying-Xiong Qiu^{1,*}

¹Key Laboratory of Conservation Biology for Endangered Wildlife of the Ministry of Education, and Laboratory of Systematic & Evolutionary Botany and Biodiversity, College of Life Sciences, Zhejiang University, Hangzhou 310058, People's Republic of China. ²College of Life Sciences, Zhejiang Sci-Tech University, Hangzhou 310018, People's Republic of China. ³Botanical Gardens, Graduate School of Science, The University of Tokyo, Tokyo 112-0001, Japan. ⁴Department of Environment and Forest Resources, Chungnam National University, Daejeon 34134, South Korea. ⁵Department of Ecoscience and Ecotechnology, National University of Tainan, Tainan 700, Republic of China. ⁶Department of Botany, University of Wisconsin, Madison, Wisconsin 53706, USA. [#]These authors contributed equally to this work. *Correspondence and requests for materials should be addressed to Y.X.Q. (qyxhero@zju.edu.cn)

Appendix 1 List of species included in this study with their classification, authorities and GenBank accession numbers for all sequences.

Sequences newly obtained are indicated by an asterisk (*), missing sequences are indicated by a double slash (/).

Taxon	ITS	ETS	ycf1	ycf1-rps15	trnL-F	rbcL	matK
Elsholtzieae							
<i>Collinsonia anisata</i> Sims	*KY552484	*KY552552	*KY625114	//	*KY624984	*KY624915	//
<i>Collinsonia canadensis</i> L.	*KY552485	*KY552553	*KY625115	*KY625052	*KY624985	*KY624916	*KY624850
<i>Collinsonia canadensis</i> L.	*KY552486	*KY552554	*KY625116	*KY625053	*KY624986	*KY624917	*KY624851
<i>Collinsonia canadensis</i> L.	*KY552487	*KY552555	*KY625117	*KY625054	*KY624987	*KY624918	*KY624852
<i>Collinsonia punctata</i> Elliott	*KY552488	*KY552556	*KY625118	//	//	*KY624919	//
<i>Collinsonia serotina</i> Walter	*KY552489	*KY552557	*KY625119	*KY625055	*KY624988	*KY624920	*KY624853
<i>Collinsonia verticillata</i> Baldwin ex Elliott	*KY552490	*KY552558	*KY625120	*KY625056	*KY624989	*KY624921	*KY624854
<i>Elsholtzia argyi</i> H.Lév.	*KY552491	*KY552559	*KY625121	*KY625057	*KY624990	*KY624922	*KY624855
<i>Elsholtzia blanda</i> (Benth.) Benth.	*KY552492	*KY552560	*KY625122	*KY625058	*KY624991	*KY624923	*KY624856
<i>Elsholtzia bodinieri</i> Vaniot	*KY552493	*KY552561	*KY625123	*KY625059	*KY624992	*KY624924	*KY624857
<i>Elsholtzia capituligera</i> C.Y.Wu	*KY552494	*KY552562	*KY625124	*KY625060	*KY624993	*KY624925	*KY624858
<i>Elsholtzia cephalantha</i> Hand.-Mazz.	*KY552495	*KY552563	*KY625125	*KY625061	*KY624994	*KY624926	*KY624859
<i>Elsholtzia ciliata</i> (Thunb.) Hyl.	*KY552496	*KY552564	*KY625126	*KY625062	*KY624995	*KY624927	*KY624860
<i>Elsholtzia communis</i> (Collett & Hemsl.) Diels	*KY552497	*KY552565	*KY625127	*KY625063	*KY624996	*KY624928	*KY624861
<i>Elsholtzia cyprianii</i> (Pavol.) C.Y.Wu & S.Chow	*KY552498	*KY552566	*KY625128	*KY625064	*KY624997	*KY624929	*KY624862
<i>Elsholtzia cyprianii</i> var. <i>angustifolia</i> C.Y.Wu & S.C.Huang	*KY552499	*KY552567	*KY625129	*KY625065	*KY624998	*KY624930	*KY624863
<i>Elsholtzia densa</i> Benth.	*KY552500	*KY552568	*KY625130	*KY625066	*KY624999	*KY624931	*KY624864
<i>Elsholtzia densa</i> Benth.	*KY552501	*KY552569	*KY625131	*KY625067	*KY625000	*KY624932	*KY624865
<i>Elsholtzia densa</i> var. <i>ianthina</i> (Maxim. ex Kanitz) C.Y.Wu & S.C.Huang	*KY552502	*KY552570	*KY625132	*KY625068	*KY625001	*KY624933	*KY624866
<i>Elsholtzia densa</i> var. <i>ianthina</i> (Maxim. ex Kanitz)	*KY552503	*KY552571	*KY625133	*KY625069	*KY625002	*KY624934	*KY624867

C.Y.Wu & S.C.Huang							
<i>Elsholtzia eriocalyx</i> C.Y.Wu & S.C.Huang	*KY552504	*KY552572	*KY625134	*KY625070	*KY625003	*KY624935	*KY624868
<i>Elsholtzia eriostachya</i> (Benth.) Benth.	*KY552505	*KY552573	*KY625135	*KY625071	*KY625004	*KY624936	*KY624869
<i>Elsholtzia eriostachya</i> (Benth.) Benth.	*KY552506	*KY552574	*KY625136	*KY625072	*KY625005	*KY624937	*KY624870
<i>Elsholtzia feddei</i> H.Lév.	*KY552507	*KY552575	*KY625137	*KY625073	*KY625006	*KY624938	*KY624871
<i>Elsholtzia feddei</i> f. <i>robusta</i> C.Y.Wu & S.C.Huang	*KY552508	*KY552576	*KY625138	*KY625074	*KY625007	*KY624939	*KY624872
<i>Elsholtzia flava</i> Benth.	*KY552509	*KY552577	*KY625139	*KY625075	*KY625008	*KY624940	*KY624873
<i>Elsholtzia flava</i> Benth.	*KY552510	*KY552578	*KY625140	*KY625076	*KY625009	*KY624941	*KY624874
<i>Elsholtzia fruticosa</i> (D.Don) Rehder	*KY552511	*KY552579	*KY625141	*KY625077	*KY625010	*KY624942	*KY624875
<i>Elsholtzia glabra</i> C.Y.Wu & S.C.Huang	*KY552512	*KY552580	*KY625142	*KY625078	*KY625011	*KY624943	*KY624876
<i>Elsholtzia hallasanensis</i> Y.N.Lee	*KY552513	*KY552581	*KY625143	*KY625079	*KY625012	*KY624944	*KY624877
<i>Elsholtzia kachinensis</i> Prain	*KY552514	*KY552582	*KY625144	*KY625080	*KY625013	*KY624945	*KY624878
<i>Elsholtzia lamprophylla</i> C. L.Xiang & E.D.Liu	*KY552515	//	*KY625145	*KY625081	*KY625014	*KY624946	*KY624879
<i>Elsholtzia litangensis</i> C.X.Pu & W.Y.Chen	*KY552516	*KY552583	*KY625146	*KY625082	*KY625015	*KY624947	*KY624880
<i>Elsholtzia luteola</i> Diels	*KY552517	*KY552584	*KY625147	*KY625083	*KY625016	*KY624948	*KY624881
<i>Elsholtzia minima</i> Nakai	*KY552518	*KY552585	*KY625148	*KY625084	*KY625017	*KY624949	*KY624882
<i>Elsholtzia ochroleuca</i> Dunn	*KY552519	*KY552586	*KY625149	*KY625085	*KY625018	*KY624950	*KY624883
<i>Elsholtzia ochroleuca</i> var. <i>parvifolia</i> C.Y.Wu & S.C.Huang	*KY552520	*KY552587	*KY625150	*KY625086	*KY625019	*KY624951	*KY624884
<i>Elsholtzia penduliflora</i> W.W.Sm.	*KY552521	*KY552588	*KY625151	*KY625087	*KY625020	*KY624952	*KY624885
<i>Elsholtzia penduliflora</i> W.W.Sm.	*KY552522	*KY552589	*KY625152	*KY625088	*KY625021	*KY624953	*KY624886
<i>Elsholtzia pilosa</i> (Benth.) Benth.	*KY552523	*KY552590	*KY625153	*KY625089	*KY625022	*KY624954	*KY624887
<i>Elsholtzia rugulosa</i> Hemsl.	*KY552524	*KY552591	*KY625154	*KY625090	*KY625023	*KY624955	*KY624888
<i>Elsholtzia saxatilis</i> (Kom.) Nakai ex Kitag.	*KY552525	*KY552592	*KY625155	*KY625091	*KY625024	*KY624956	*KY624889
<i>Elsholtzia souliei</i> H.Lév.	*KY552526	*KY552593	*KY625156	//	*KY625025	*KY624957	//
<i>Elsholtzia splendens</i> Nakai ex F.Maek.	*KY552527	*KY552594	*KY625157	*KY625092	*KY625026	*KY624958	*KY624890

<i>Elsholtzia splendens</i> Nakai ex F.Maek.	*KY552528	*KY552595	*KY625158	*KY625093	*KY625027	*KY624959	*KY624891
<i>Elsholtzia stachyodes</i> (Link) Raizada & H.O.Saxena	*KY552529	*KY552596	*KY625159	*KY625094	*KY625028	*KY624960	*KY624892
<i>Elsholtzia stauntonii</i> Benth.	*KY552530	*KY552597	*KY625160	*KY625095	*KY625029	*KY624961	*KY624893
<i>Elsholtzia strobilifera</i> (Benth.) Benth.	*KY552531	*KY552598	*KY625161	*KY625096	*KY625030	*KY624962	*KY624894
<i>Elsholtzia winitiana</i> Craib	*KY552532	*KY552599	*KY625162	*KY625097	*KY625031	*KY624963	*KY624895
<i>Elsholtzia</i> sp. nov.	*KY552533	*KY552600	*KY625163	*KY625098	*KY625032	*KY624964	*KY624896
<i>Keiskea australis</i> C.Y.Wu & H.W.Li	*KY552534	*KY552601	*KY625164	*KY625099	*KY625033	*KY624965	*KY624897
<i>Keiskea elsholtzioides</i> Merr.	*KY552535	*KY552602	*KY625165	*KY625100	*KY625034	*KY624966	*KY624898
<i>Keiskea elsholtzioides</i> Merr.	*KY552536	*KY552603	*KY625166	*KY625101	*KY625035	*KY624967	*KY624899
<i>Keiskea glandulosa</i> C.Y.Wu	//	*KY552604	*KY625167	//	*KY625036	*KY624968	*KY624900
<i>Keiskea japonica</i> Miq.	*KY552537	*KY552605	*KY625168	*KY625102	*KY625037	*KY624969	*KY624901
<i>Keiskea japonica</i> Miq.	*KY552538	*KY552606	*KY625169	*KY625103	*KY625038	*KY624970	*KY624902
<i>Keiskea macrobracteata</i> Masam.	*KY552539	*KY552607	*KY625170	//	*KY625039	*KY624971	//
<i>Mosla cavaleriei</i> H.Lév.	*KY552545	*KY552608	*KY625171	*KY625104	*KY625040	*KY624972	*KY624903
<i>Mosla chinensis</i> Maxim.	*KY552540	*KY552609	*KY625172	*KY625105	*KY625041	*KY624973	*KY624904
<i>Mosla dianthera</i> (Buch.-Ham. ex Roxb.) Maxim.	*KY552544	*KY552610	*KY625173	*KY625106	*KY625042	*KY624974	*KY624905
<i>Mosla hangchowensis</i> Matsuda	*KY552541	*KY552611	*KY625174	*KY625107	*KY625043	*KY624975	*KY624906
<i>Mosla japonica</i> (Benth. ex Oliv.) Maxim.	*KY552546	*KY552612	*KY625175	//	*KY625044	*KY624976	*KY624907
<i>Mosla scabra</i> (Thunb.) C.Y.Wu & H.W.Li	*KY552542	*KY552613	*KY625176	*KY625108	*KY625045	*KY624977	*KY624908
<i>Mosla soochowensis</i> Matsuda	*KY552547	*KY552614	*KY625177	*KY625109	*KY625046	*KY624978	*KY624909
<i>Mosla tamdaoensis</i> Phuong	*KY552543	*KY552615	*KY625178	//	*KY625047	*KY624979	*KY624910
<i>Ombrocharis dulcis</i> Hand.-Mazz.	KT210250	KT210223	KT210358	KT210307	KT210334	KT210258	//
<i>Perilla frutescens</i> (L.) Britton	*KY552548	*KY552616	*KY625179	*KY625110	*KY625048	*KY624980	*KY624911
<i>Perilla frutescens</i> var. <i>auriculato-dentata</i> C.Y.Wu & S.J.Hsuan ex H.W.Li	*KY552549	*KY552617	*KY625180	*KY625111	*KY625049	*KY624981	*KY624912
<i>Perillula reptans</i> Maxim.	*KY552550	*KY552618	*KY625181	*KY625112	*KY625050	*KY624982	*KY624913

<i>Perillula reptans</i> Maxim.	*KY552551	*KY552619	*KY625182	*KY625113	*KY625051	*KY624983	*KY624914
Ocimeae							
<i>Hyptis laniflora</i> Benth.	JF301548	JF304259	JF289024	JF289024	JF301370	//	//
<i>Isodon dawoensis</i> (Hand.-Mazz.) H. Hara	KF855429	//	JF289025	JF289025	JF301372	//	//
<i>Lavandula angustifolia</i> Mill.	FJ593399	//	JF289028	JF289028	AY570457	Z37407	HE967430
<i>Ocimum basilicum</i> L.	DQ667240	//	JF289049	JF289049	AY570462	KX015763	KX096054
<i>Plectranthus cremnus</i> B.J.	//	//	JF289052	JF289052	JF301393	//	//
Mentheae							
<i>Melissa officinalis</i> L.	JF301353	JF301325	JF289042	JF289042	JF301386	KM360879	KP172051
<i>Mentha arvensis</i> L.	JQ669115	JQ669190	JF289043	JF289043	JF301387	KC571787	KP172052
<i>Monarda citriodora</i> Cerv. ex Lag.	JQ669124	JQ669200	JF289045	JF289045	JF301388	JX254905	//
<i>Neoeplingia leucophylloides</i> Ramamoorthy, Hiriart & Medrano	JF301354	JF301327	JF289047	JF289047	JF301390	//	//
<i>Nepeta cataria</i> L.	JQ669126	JQ669202	JF289048	JF289048	JF301391	KT178127	KT176606
<i>Prunella vulgaris</i> L.	JQ669130	JQ669206	JF289055	JF289055	DQ667508	KP644119	KJ593074
<i>Rosmarinus officinalis</i> L.	DQ667241	JF301329	JF289058	JF289058	AY570465	KM360960	KP172065
<i>Salvia glutinosa</i> L.	KJ584253	KF307496	JF289061	JF289061	AY570480	Z37440	KP852741
Outgroup							
<i>Caryopteris incana</i> (Thunb. ex Houtt.) Miq.	EF508064	*KY552620	JF289003	JF289003	JF301359	U28869	AF315295
<i>Lamium maculatum</i> L.	KF055056	//	JF289027	JF289027	JF301374	Z37402	AF531780

Appendix 2. Voucher information for species newly sequenced for this study, including collector's name and collection number, collection locality and country, and herbarium acronym where the specimen is deposited.

Taxon	*Collector, Coll. N°	locality	Country	Herbarium
<i>Caryopteris incana</i> (Thunb.) Miq.	Pan Li, PNLI20120421-1	Yongkang, Zhejiang	China	HZU
<i>Collinsonia anisata</i> Sims	Steve L. Orzell and Edwin L. Bridges 16469	Gadsden County, Florida	United States	FLAS
<i>Collinsonia canadensis</i> L.	Lucas C. Majure 2722	Alachua County, Florida	United States	FLAS
<i>Collinsonia canadensis</i> L.	Pan Li, LP1007189	Gill State Forest, North Carolina	United States	HZU
<i>Collinsonia canadensis</i> L.	Pan Li, LP150411-1	Giles County, Virginia	United States	HZU
<i>Collinsonia punctata</i> Elliott	R. Kral 3705	Leon County, Florida	United States	FLAS
<i>Collinsonia serotina</i> Walter	J. Richard Abbott 14105	Suwannee County, Florida	United States	FLAS
<i>Collinsonia verticillata</i> Baldwin ex Elliott	Wilbur H. Duncan 18484	Forsyth County, Georgia	United States	FLAS
<i>Elsholtzia argyi</i> H.Lév.	Pan Li, PNLI20120255	Lin'an, Zhejiang	China	HZU
<i>Elsholtzia blanda</i> (Benth.) Benth.	Pan Li, PNLI20120028-1	Yongde, Yunnan	China	HZU
<i>Elsholtzia bodinieri</i> Vaniot	Pan Li, PNLI20120404-1	Fumin, Yunnan	China	HZU
<i>Elsholtzia capituligera</i> C.Y.Wu	Pan Li, PNLI20120291-1	Shangri-La, Yunnan	China	HZU
<i>Elsholtzia cephalantha</i> Hand.-Mazz.	Pan Li, LP150610-1	Kangle, Gansu	China	HZU
<i>Elsholtzia ciliata</i> (Thunb.) Hyl.	Pan Li, PNLI20120089	Yichun, Heilongjiang	China	HZU
<i>Elsholtzia communis</i> (Collett & Hemsl.) Diels	Pan Li, PNLI20130568-1	Firmenich Aromatics, Shanghai	China	HZU
<i>Elsholtzia cyprianii</i> (Pavol.) C.Y.Wu & S.Chow	Pan Li, PNLI20120304	Yulong, Yunnan	China	HZU
<i>Elsholtzia cyprianii</i> var. <i>angustifolia</i> C.Y.Wu & S.C.Huang	Pan Li, PNLI20120303-1	Yulong, Yunnan	China	HZU
<i>Elsholtzia densa</i> Benth.	Yongming Yuan, YGY2012-034①	Yuzhong, Gansu	China	HZU
<i>Elsholtzia densa</i> Benth.	Yongming Yuan, YGY2012-033①	Yuzhong, Gansu	China	HZU
<i>Elsholtzia densa</i> var. <i>ianthina</i> (Maxim. ex Kanitz) C.Y.Wu & S.C.Huang	Pan Li, LP150583-1	Yuzhong, Gansu	China	HZU
<i>Elsholtzia densa</i> var. <i>ianthina</i> (Maxim. ex Kanitz)	Pan Li, LP150583-2	Yuzhong, Gansu	China	HZU

C.Y.Wu & S.C.Huang					
<i>Elsholtzia eriocalyx</i> C.Y.Wu & S.C.Huang	Pan Li, PNLI20120300	Yulong, Yunnan	China	HZU	
<i>Elsholtzia eriostachya</i> (Benth.) Benth.	Pan Li, PNLI20120227-1	Xiangcheng, Sichuan	China	HZU	
<i>Elsholtzia eriostachya</i> (Benth.) Benth.	Pan Li, PNLI20120227-2	Xiangcheng, Sichuan	China	HZU	
<i>Elsholtzia feddei</i> H.Lév.	Pan Li, PNLI20120190	Yajiang, Sichuan	China	HZU	
<i>Elsholtzia feddei</i> f. <i>robusta</i> C.Y.Wu & S.C.Huang	Pan Li, PNLI20120192	Yajiang, Sichuan	China	HZU	
<i>Elsholtzia flava</i> Benth.	Pan Li, PNLI20120353	Yanyuan, Sichuan	China	HZU	
<i>Elsholtzia flava</i> Benth.	Pan Li, PNLI20120017-1	Yongde, Yunnan	China	HZU	
<i>Elsholtzia fruticosa</i> (D.Don) Rehder	Pan Li, PNLI20120267	Eryuan, Yunnan	China	HZU	
<i>Elsholtzia glabra</i> C.Y.Wu & S.C.Huang	Pan Li, PNLI20120332-1	Yongsheng, Yunnan	China	HZU	
<i>Elsholtzia hallasanensis</i> Y.N.Lee	Joongku Lee, PNLI20120474	Jeju-do	South Korea	HZU	
<i>Elsholtzia kachinensis</i> Prain	Pan Li, PNLI20120266	Eryuan, Yunnan	China	HZU	
<i>Elsholtzia lamprophylla</i> C. L.Xiang & E.D.Liu	Pan Li, LP150703-1	Xiangcheng, Sichuan	China	HZU	
<i>Elsholtzia litangensis</i> C.X.Pu & W.Y.Chen	Pan Li, PNLI20120220-1	Litang, Sichuan	China	HZU	
<i>Elsholtzia luteola</i> Diels	Pan Li, PNLI20120327-1	Yulong, Yunnan	China	HZU	
<i>Elsholtzia minima</i> Nakai	Joongku Lee, PNLI20120473	Jeju-do	South Korea	HZU	
<i>Elsholtzia ochroleuca</i> Dunn	Pan Li, PNLI20120401	Fumin, Yunnan	China	HZU	
<i>Elsholtzia ochroleuca</i> var. <i>parvifolia</i> C.Y.Wu & S.C.Huang	Pan Li, PNLI20120153	Maerkang, Sichuan	China	HZU	
<i>Elsholtzia penduliflora</i> W.W.Sm.	Pan Li, PNLI20120021-1	Yongde, Yunnan	China	HZU	
<i>Elsholtzia penduliflora</i> W.W.Sm.	Pan Li, PNLI20120037	Kuming Botanical Garden	China	HZU	
<i>Elsholtzia pilosa</i> (Benth.) Benth.	Pan Li, PNLI20120201-1	Yajiang, Sichuan	China	HZU	
<i>Elsholtzia rugulosa</i> Hemsl.	Pan Li, PNLI20120005-1	Anning, Yunnan	China	HZU	
<i>Elsholtzia saxatilis</i> (Kom.) Nakai ex Kitag.	Pan Li, PNLI20120060	Shangzhi, Heilongjiang	China	HZU	
<i>Elsholtzia souliei</i> H.Lév.	Pan Li, PNLI20120148	Maerkang, Sichuan	China	HZU	
<i>Elsholtzia splendens</i> Nakai ex F.Maek.	Pan Li, PNLI20120059	Shangzhi, Heilongjiang	China	HZU	

<i>Elsholtzia splendens</i> Nakai ex F.Maek.	Joongku Lee, PNLI20120476	Geumsan, Sindaeri	South Korea	HZU
<i>Elsholtzia stachyodes</i> (Link) Raizada & H.O.Saxena	Pan Li, PNLI20120295-1	Shangri-La, Yunnan	China	HZU
<i>Elsholtzia stauntonii</i> Benth.	Yongming Yuan, YGY2012-026①	Dangchang, Gansu	China	HZU
<i>Elsholtzia strobilifera</i> (Benth.) Benth.	Pan Li, PNLI20120340	Ninglang, Yunnan	China	HZU
<i>Elsholtzia winitiana</i> Craib	Pan Li, PNLI20120029-1	Yongde, Yunnan	China	HZU
<i>Elsholtzia</i> sp. nov.	Pan Li, PNLI20120191	Yajiang, Sichuan	China	HZU
<i>Keiskea australis</i> C.Y.Wu & H.W.Li	Binjie Ge, TQ02438	Ningde, Fujian	China	CSH
<i>Keiskea elsholtzioides</i> Merr.	Pan Li, PNLI20120430-1	Songyang, Zhejiang	China	HZU
<i>Keiskea elsholtzioides</i> Merr.	Pan Li, PNLI20120458-1	Fuzhou, Fujian	China	HZU
<i>Keiskea glandulosa</i> C.Y.Wu	Wuyishan Expedition 801502	Guangze, Fujian	China	FNU
<i>Keiskea japonica</i> Miq.	Tetsuo Ohi-Toma, PNLI20120049-1	Koishikawa Botanical Garden	Japan	HZU
<i>Keiskea japonica</i> Miq.	Tetsuo Ohi-Toma, PNLI20120049-2	Koishikawa Botanical Garden	Japan	HZU
<i>Keiskea macrobracteata</i> Masam.	Shih Wen Chung 3244	Hualian, Taiwan	China	TAIF
<i>Mosla cavaleriei</i> H.Lév.	Pan Li, PNLI20120445	Cangnan, Zhejiang	China	HZU
<i>Mosla chinensis</i> Maxim.	Pan Li, PNLI20120245	Hangzhou, Zhejiang	China	HZU
<i>Mosla dianthera</i> (Buch.-Ham. ex Roxb.) Maxim.	Pan Li, PNLI20120248	Ningguo, Anhui	China	HZU
<i>Mosla hangchowensis</i> Matsuda	Pan Li, PNLI20120424-1	Yongkang, Zhejiang	China	HZU
<i>Mosla japonica</i> (Benth. ex Oliv.) Maxim.	Tadashi Minamitani, PNLI20120416	Miyazaki Pref.	Japan	HZU
<i>Mosla scabra</i> (Thunb.) C.Y.Wu & H.W.Li	Pan Li, PNLI20120427	Songyang, Zhejiang	China	HZU
<i>Mosla soochowensis</i> Matsuda	Pan Li, PNLI20120414	Hangzhou, Zhejiang	China	HZU
<i>Mosla tamdaoensis</i> Phuong	Zhuozhou, C-K-393	Tam Dao	Vietnam	KUN
<i>Perilla frutescens</i> (L.) Britton	Pan Li, PNLI20120096	Wenchuan, Sichuan	China	HZU
<i>Perilla frutescens</i> var. <i>auriculato-dentata</i> C.Y.Wu & S.J.Hsuan ex H.W.Li	Pan Li, PNLI20130589	Jinzhai, Anhui	China	HZU
<i>Perillula reptans</i> Maxim.	Tadashi Minamitani, PNLI20120417-1	Miyazaki Pref.	Japan	HZU
<i>Perillula reptans</i> Maxim.	Tadashi Minamitani, PNLI20120417-2	Miyazaki Pref.	Japan	HZU