

## SI Appendix

Voucher information and GenBank accession numbers for species used in this study. Voucher specimens are deposited in the following herbaria: FLAS = Florida Museum of Natural History, IND = Indiana University; K = Royal Botanic Gardens, Kew; MICH = University of Michigan; MO = Missouri Botanical Garden; SIU = Southern Illinois University; WS = Marion Ownbey Herbarium, Washington State University; WTU = University of Washington. Dashes indicate missing data.

*Species*— GenBank accession numbers: 18S, 26S, *atpB*, *matK*, *rbcL*, *ndhF*, *psbBTNH*, *rpoC2*, *rps4*; *Voucher specimen*.

### EUROSID I

#### Geraniales

**Geraniaceae:** *Hypseocharis bilobata* Killip — —, —, —, —, L14699 [*Hypseocharis* sp.], EU002234, EU002421, EU002511, EU002333; *M. W. Chase* 2785 (K). *Pelargonium* × *hortorum* L.H. Bailey — AF206982 [*P. cotyledonis* (L.) L'Hér.], —, NC\_008454, NC\_008454, NC\_008454, NC\_008454, NC\_008454, NC\_008454, NC\_008454. **Ledocarpaceae:** *Wendtia gracilis* Meyen — —, —, —, —, L14708, —, —, EU002555, EU002376; *P. Garcia* 2315 (MO). **Melanthaceae:** *Melianthus comosus* Vahl.— —, —, AJ235532 [*M. major* L.], EU002184, —, EU002242, EU002432, EU002522, EU002344; *R. G. Olmstead* 2005-4 (WTU). **Vivianiaceae:** *Viviania marifolia* Cav.—AF207054, AF479130, AF209696, —, L14707, EU002272, EU002464, EU002554, EU002375; *Penalillo* 91000 (IND).

#### Myrtales

**Combretaceae:** *Terminalia cattapa* L.—AF207037, AF479147 [*T. boivinii* Tul.], AF209686, —, AF206826, EU002267, EU002459, EU002549, EU002370; *E. Conti* 103 (WIS). **Crypteroniaceae:** *Crypteronia paniculata* Blume — —, EU002152, —, AY151566, AY078153, EU002217, EU002401, EU002493, EU002313; *M. W. Chase* 1235 (K). **Lythraceae:** *Lythrum flagellare* Shuttlw. ex Chapman —AF206955 [*L. salicaria* L.], AF479240 [*L. salicaria* L.], AF209621 [*L. salicaria* L.], EU002183, —, EU002240, EU002430, EU002520, EU002342; *D. Soltis* 2704 (FLAS). **Melastomaceae:** *Clidemia dentata* D. Don — —, —, AJ235777, EU002173, AF215535 [*C. rubra* G. Don. F], EU002211, EU002396, EU002487, EU002307; *D. Soltis* 2708 (FLAS). **Myrtaceae:** *Eucalyptus globulus* Labill.—AM235528 [*E. lehmanii* (Schauer) Benth.], AM235600 [*E. lehmanii* (Schauer) Benth.], NC\_008115, NC\_008115, NC\_008115, NC\_008115, NC\_008115, NC\_008115, NC\_008115. *Myrtus communis* L.— —, EU002154, —, AY525136, AF294254, EU002244, EU002434, EU002524, EU002346; *W. Judd* 8066 (FLAS). **Onagraceae:** *Oenothera elata* H. B. & K.— —, —, NC\_002693, NC\_002693, NC\_002693, NC\_002693, NC\_002693, NC\_002693. **Penaecaceae:** *Penaecia mucronata* L.—AM235506, AM235578, —, AY151589, —, AJ605090, AF270756, —, —, EU002352; *D. J. McDonald* (MO accession # 5708989). **Vochysiaceae:** *Qualea parviflora* Mart.—AF207002 [*Q. sp.*], —, AF209662 [*Q. sp.*], AF368216 [*Q. grandiflora* Mart.], U02730 (*Q. sp.*), EU002253, EU002444, EU002534, EU002356; *M. W. Chase* 168 (K).

## Crossosomatales

**Crossosomataceae:** *Crossosoma californicum* Nutt.—U42529, AF479131, AF209571, DQ443456 [*C. bigelovii* S. Watson], AY101844, EU002216, EU002400, EU002492, EU002312; cult. at Rancho Santa Ana Bot Gard. **Stachyuraceae:** *Stachyurus praecox* Siebold & Zucc.—AF207025, —, AJ235609, DQ443457, AJ235794, EU002260, EU002452, EU002542, EU002363; M. W. Chase 800 (K). **Staphyleaceae:** *Staphylea trifoliata* Payer —AJ235978, AF479133, EU002168, EU002189, EU002285, EU002261, EU002453, EU002543, EU002364; Univ. of Washington Arboretum accession # 294-38.

## Fabales

**Fabaceae:** *Albizia julibrissin* Durazz.—U42536, X66754, AF209524, AY386855, Z70147, EU002195, EU002379, EU002468, EU002288; *D. Soltis* 2633 (FLAS). *Medicago truncatula* Gaertn.—AF093506, Z11498 [*M. sativa* L.], NC\_003119, NC\_003119, NC\_003119, NC\_003119, NC\_003119, NC\_003119. *Lotus japonicus* Regel) K.Larsen.— —, AJ298103, NC\_002694, NC\_002694, NC\_002694, NC\_002694, NC\_002694, NC\_002694, NC\_002694. **Polygalaceae:** *Polygala cruciata* L.—U42797 [*P. pauciflora* Thunb.], AF479233, AJ235568, AY386842 [*P. californica* Nutt. ex Torr. & A.Gray], L01945, —, EU002443, EU002533, EU002355; M. W. Chase 155 (K). *Securidaca diversifolia* S. F. Blake —AF207019, AF479104, AF209673, —, L01955, EU002258, EU002450, EU002540, —; *Bruce Barrett* 238 (MO). **Quillajaceae:** *Quillaja saponaria* Molina — —, —, —, AY386843, U06822, EU002255, EU002446, EU002536, EU002358; M. W. Chase 10931 (K). **Surianaceae:** *Stylobasium spathulatum* Desf.—AF207030, —, AF209681, —, U06828, EU002263, EU002455, EU002545, EU002366; Brummitt, George & Oliver 21242 (K). *Suriana maritima* L.— —, —, —, AY386950, U07680, EU002264, EU002456, EU002546, EU002367; *D. Soltis* R86 (FLAS).

## Fagales

**Betulaceae:** *Alnus sinuata* Rydb.—AY263900, AF479106 [*A. glutinosa* Medik.], AY147101, AB060053 [*A. firma* Siebold & Zucc.], AY263926, EU002196, EU002380, EU002469, EU002289; *R. G. Olmstead* 2005-5 (WTU). **Fagaceae:** *Quercus nigra* L.—AY147108 [*Q. multinervis* (W. C. Cheng & T. Hong) Govaerts], AY094177 (*Q. suber* Kotschy), EU002167, EU002188, EU002284, EU002254, EU002445, EU002535, EU002357; *M. J. Moore* 311 (FLAS). **Juglandaceae:** *Juglans nigra* L.—AF206943, AF479105, AF209609, AF118036, AF206785, EU002237, EU002425, EU002515, EU002337; *D. Soltis* 2520 (WS). **Myricaceae:** *Myrica cerifera* L.—AF206967, AF479247, AJ235537, AY191715 [*M. gale* L.], AF119179, EU002243, EU002433, EU002523, EU002345; *D. Soltis* 2699 (FLAS).

## Cucurbitales

**Anisophylleaceae:** *Anisophyllea fallax* Scott-Elliot—AY968390, AY968401, AY968424, AY968444, AF027109, AY968487, —, EU002470, —; *L. Gautier* 3256 (MO). **Begoniaceae:** *Begonia cucullata* Willd.—AF008950 [*B. oxyloba* Welw. ex Hook. f.], AY968403 [*B. oxyloba* Welw. ex Hook. f.], AY968426 [*B. oxyloba* Welw. ex Hook. f.].

f.], AY968445 [*B. oxyloba* Welw. ex Hook. f.], L01888, EU002200, EU002384, EU002475, EU002294; *D. Soltis* 2696 (FLAS). **Coriariaceae:** *Coriaria nepalensis* Wall.—AY968394, AY968407, AY968429, AB016460, AY968522, EU002214, EU002399, EU002490, EU002310; *M. W. Chase* 6416 (K). **Cucurbitaceae:** *Cucumis sativa* L.—AF206894, —, NC\_007144, NC\_007144, NC\_007144, NC\_007144, NC\_007144, NC\_007144, NC\_007144. **Datisceae:** *Datisca cannabina* L.—AF008952, AY968410, AJ235450, AY491654, L21939, EU002219, EU002403, EU002495, EU002315; *M. W. Chase* 2745 (K).

## Malpighiales

**Achariaceae:** *Hydnocarpus heterophylla* Blume —AF206932, AF479121, AF209600, —, AJ235781, AY425058 (*H. sp.*), —, —, —. **Chrysobalanaceae:** *Atuna racemosa* Raf.—AY674575, —, AY788203, —, AF089758, EU002198, EU002382, EU002473, EU002292; *M. W. Chase* 2118 (K) (CCD 261). **Hirtella bicornis** Mart. & Zucc.—AY674603, —, AY788225, —, AF089756, EU002229, EU002416, EU002507, EU002328; *Ducke Res* 2-303Z.489 (CCD 361). **Clusiaceae:** *Clusia rosea* Jacq.—AB233537, —, AB233641 [*C. rosea* Jacq.], AB233745, —, EU002212, EU002397, EU002488, EU002308; *CCD Matthaei* 15254 2667 3431 (CCD 986). **Elatinaceae:** *Elatine triandra* Schkuhr —AB233541, —, AB233645, AB233749, AB233853, AY425050, EU002407, EU002498, EU002319; *D. F. Burton, K. L. McIntosh & C. A. Caplen* 13384 (MICH) (CCD 521). **Euphorbiaceae:** *Manihot esculenta* Crantz — —, EU002153, AB233672, AB233776, AY794875 [*M. grahamii* Hook.], EU002241, EU002431, EU002521, EU002343; *D. Soltis* 2640 (FLAS). **Humiriaceae:** *Humiria balsaminifera* Aublet —AY929369, —, AJ235495, AB233785, AB233889, EU002231, EU002418, —, EU002330; *W. R. Anderson* 13654 (MICH) (CCD 214). **Hypericaceae:** *Hypericum perforatum* L.—AF206934, AF479122, AF209602 [*H. perforatum* L.], —, AF206779 [*H. perforatum* L.], EU002233, EU002420, EU002510, EU002332; *CCD* 60-03 (CCD 901). **Irvingiaceae:** *Irvingia malayana* Oliver ex A. Benn.—AF206939, —, AF209605, AB233788, AF123278, AY425061, EU002422, EU002512, EU002334; *D. Simpson* 2638 (K?) (CCD 567). **Linaceae:** *Reinwardtia indica* Dum.—AF207005, AF222371, AJ235577 [*R. indica* Dum.], AB048380, L13188, —, —, —, —. **Malpighiaceae:** *Byrsonima crassifolia* Steud —AY674579, EU002150, AY788206, AF344535, L01892, EU002207, —, EU002480, —; *I. G. de la Cerda* 3893 (CCD 202). **Ochnaceae:** *Ochna mossambicensis* Klotzsch —AF206974 [*O. multiflora* Mogeia.], —, AJ235546 [*O. multiflora* Mogeia.], AB233804 [*O. serrulata* (Hochst.) Walp], Z75273 [*O. serrulata* (Hochst.) Walp], EU002247, EU002437, EU002527, EU002349; *D. Soltis* 2715 (FLAS). **Phyllanthaceae:** *Phyllanthus calycinus* Labill.—AB233609 [*P. flexuosus* (Nees ex Steudel) J.F. Watson], EU002156, AY830233, AY936643 [*P. sp.*], AY663603, EU002250, EU002440, EU002530, EU002353; *M. W. Chase* 2163 (K). **Ixonanthaceae:** *Ixonanthes icosandra* Jack.—AB233581 [*I. reticulata* Hance.], —, AF530709 [*I. reticulata* Hance.], AB233789, AB233893 [*I. reticulata* Hance.], EU002236, EU002424, EU002514, EU002336; *M. W. Chase* 1301 (K). **Rhizophoraceae:** *Bruguiera gymnorhiza* (L.) Sav.—AF530720, —, AB233719, AF105088, U26320, EU002204, —, —, EU002298; *M. W. Chase* 12838 (K) (CCD 575). **Putranjivaceae:** *Drypetes roxburghii* (Wall.) Hurus.—U42534, —, AF209578, AY552457 [*D. madagascariensis* (Lam.) Humbert & Leandri], M95757, EU002220, EU002404, —, EU002316; *FTG*

83463A (K) (CCD 251). **Salicaceae: *Populus alba* L.**—DQ371807, AF479118 [*P. tremuloides* Michx.], NC\_008235, NC\_008235, NC\_008235, NC\_008235, NC\_008235, NC\_008235, NC\_008235. **Violaceae: *Hymenanchera alpina* (T. Kirk) W. R. B. Oliv.**—AF206933, —, AJ235499, —, Z75692, EU002232, EU002419, EU002509, EU002331; *M. W. Chase 501* (K) (CCD 352). ***Leonia glycyarpa* Ruiz & Pav.** —AY674613, —, AY788234 [*L. glycyarpa* Ruiz & Pav.], —, Z75693 [*L. glycyarpa* Ruiz & Pav.], AY425065, EU002428, EU002518, EU002340; *Pennington 13852* (K).

### Oxalidales

**Brunelliaceae: *Brunellia* sp.**—AY929367, —, AY935850, AY935926, AJ402932, —, —, —. **Cephalotaceae: *Cephalotus follicularis* Labill.**—U42516, —, AY788265, —, L01894, —, EU002395, EU002486, EU002306; Strybing Arboretum accession no. 70.0162. **Connaraceae: *Connarus conchocarpus* F. Muell.**—AY929368 [*C. championii* Thwaites], AY935810 [*C. championii* Thwaites], AY935852 [*C. championii* Thwaites], EU002174, U06798, EU002213, EU002398, EU002489, EU002309; *JLD*. **Cunoniaceae: *Eucryphia lucida* (Labill.) Baill.** —U42533, AF036494, AF209584, EU002176, L01918, EU002223, EU002408, EU002499, EU002320; Strybing Arboretum accession no. 74.0135. **Elaeocarpaceae: *Elaeocarpus angustifolius* Blume** —AF206906 [*E. sphaericus* Schum.], AF479128 [*E. sphaericus* Schum.], AY935854 [*E. reticulatus* Sm.], AY935931 [*E. reticulatus* Sm.], AF206765, EU002222, EU002406, EU002497, EU002318; *Johns 10685* (K). **Oxalidaceae: *Oxalis latifolia* Kunth.**—AF206978 [*O. dillenii* Jacq.], AF479230 [*O. dillenii* Jacq.], EU002165, EU002186, EU002282, EU002248, EU002438, EU002528, EU002350; *M. J. Moore 316* (FLAS).

### Celastrales

**Celastraceae: *Brexia madagascarensis* Thouars ex Ger. Gawl.**—U42543, AF479112, AJ235419, AY935899, X83987, EU002203, EU002387, EU002477, EU002297; *D. Soltis 2714* (FLAS). ***Euonymus americana* L.**— —, EU002149, EU002160, EU002170, EU002277, EU002193, EU002409, EU002500, EU002321; *W. Judd 8071* (FLAS). **Lepidobotryaceae: *Ruptiliocarpon caracolito* Hammel & N. Zamora** —AY929361, —, AY935845, AY935918, AJ402997, —, EU002448, EU002538, EU002360; *M. W. Chase 2311* (K). **Parnassiaceae: *Parnassia palustris* L.**—AY929352, AF222381, AJ235552, AY935911, AY935732, EU002249, EU002439, EU002529, EU002351; *Fay s.n.* (K).

### Rosales

**Cannabaceae: *Cannabis sativa* L.**— —, EU002151, —AF345317, AJ402933, AY289250, EU002390, EU002481, EU002301; *W. Hahn s.n.* (WIS). **Celtidaceae: *Celtis occidentalis* L.**—U42818 [*C. yunnanensis* C. K. Schneid.], AF479098 [*C. yunnanensis* C. K. Schneid.], AY263961, AY263925, AY263941, AY289249, EU002394, EU002485, EU002305; *D. Soltis 2701* (FLAS). **Elaeagnaceae: *Elaeagnus* sp.**—L24090 [*E. umbellata* Thunb.], AF479235, AJ235462, AY257529 [*E. umbellata* Thunb.], AJ235462, EU002221, EU002405, EU002496, EU002317; *Nickrent 2898* (SIU). **Moraceae: *Ficus* sp.**—AF206911, —, EU002161, EU002177, EU002278, EU002224, EU002410, EU002501, EU002322; *M. J. Moore 315* (FLAS). ***Morus indica* L.**—L24398 [*M. alba* Sudw.], AF479232 [*M. nigra* L.], NC\_008359, NC\_008359, NC\_008359, NC\_008359, NC\_008359. **Rhamnaceae: *Ceanothus***

*prostratus* Benth.—U42799, AF479102, AF209558 [*C. sanguineus* Nutt.], AF049815 [*C. sanguineus* Nutt.], U06795, EU002210, EU002393, EU002484, EU002304; *D. Soltis* 2712 (FLAS). **Rosaceae:** *Spiraea tomentosa* L.—U42801 [*S. vanhouttei* (Briot) E.A.Carrière], AF479103 [*S. betulifolia* Wats.], AJ235608 [*S. betulifolia* Wats.], AF288127 [*S. cantoniensis* Lour.], L11206 [*S. vanhouttei* (Briot) E.A.Carrière], EU002259, EU002451, EU002541, EU002362; *D. Soltis* 2691 (FLAS). **Ulmaceae:** *Zelkova serrata* Makino —U42819, AF479099, AF209699, AF345328 [*Z. schneideriana* Hand.-Mazz.], AF206835, EU002273, EU002465, EU002556, —; *R. G. Olmstead* 2001-2 (WTU). **Urticaceae:** *Urtica dioica* L.— —, —, AJ235635, EU002192, AF500361, EU002271, EU002463, EU002553, EU002374; *D. Soltis* 2709 (FLAS).

### Zygophyllales

**Krameriaceae:** *Krameria lanceolata* Torr.—AF206948 [*K. ixine* Loefl.], AF479116 [*K. ixine* Loefl.], AJ235514 [*K. ixine* Loefl.], —, AJ235514, —, EU002426, EU002516, EU002338; *M. W. Chase* 103 (K). **Zygophyllaceae:** *Bulnesia arborea* (Jacq.) Engl.— —, —, EU002158, EU002172, EU002275, EU002205, EU002388, EU002478, EU002299; *M. J. Moore* 334 (FLAS). *Guaiacum officinale* L.— —, —, AJ235486 [*G. sanctum* L.], —, —, EU002225, EU002412, EU002503, EU002324; ex MC Sheahan, Kew DNA Bank No. 644.

### Unplaced in eurosid I

**Huaceae:** *Hua gabonii* Pierre ex De Wild. —AY929345, AY935796, AY935830, AY935903, AY935726, EU002230, EU002417, EU002508, EU002329; *J. L. Doucet* 456 (MO).

### EUROSID II

#### Brassicales

**Bataceae:** *Batis maritima* L.—U42504, —, AF209538, AY483219, M88341, EU002199, EU002383, EU002474, EU002293; *D. Soltis* 2710 (FLAS). **Brassicaceae:** *Capparis flexuosa* (L.) L.— —, AF479140 [*C. sandwichiana* DC.], AF035900 [*C. spinosa* L.], AY483228 [*C. hastata* Jacq.], M95754 [*C. hastata* Jacq.], EU002208, EU002391, EU002482, EU002302; *D. Soltis* 2644 (FLAS). **Caricaceae:** *Carica papaya* L.—U42514, AF479145, AF035901, AY483221, M95671, EU002209, EU002392, EU002483, EU002303; *D. Soltis* 2707 (FLAS). **Limnanthaceae:** *Floerkea proserpinacoides* Willd.—U42784, AF479143, AF035904, EU002178, —, —, EU002411, EU002502, EU002323; Reznicek 8609 (MICH). **Resedaceae:** *Reseda lutea* L.—AF070973 [*R. alba* L.], —, AJ132283 [*R. alba* L.], AY483241, AY483273, EU002256, EU002447, EU002537, EU002359; *Rodman* 535 (WIS). **Tropaeolaceae:** *Tropaeolum majus* L.—L28750, AF479144 [*T. tricolor* Lindl.], AF035917 [*T. tricolor* Lindl.], AY483224, L14706, EU002270, EU002462, EU002552, EU002373; *D. Soltis* 2641 (FLAS).

#### Malvales

**Bixaceae:** *Bixa orellana* L.—AF206868, AF479229, AF035897, —, Y15139, EU002202, EU002386, EU002476, EU002296; *D. Soltis* 2695 (FLAS). **Cistaceae:** *Helianthemum grandiflorum* DC.—AF206926, —, AF035907, DQ092969, Y15141,

EU002227, EU002414, EU002505, EU002326; *M. W. Chase 524* (K).

**Dipterocarpaceae:** *Anisoptera marginata* Korth.—AF206849, —, AF035918, AB006371 [*A. oblonga* Dyer.], Y15144, EU002197, EU002381, EU002471, EU002290; *M. W. Chase 2486* (K). **Malvaceae:** *Gossypium barbadense* L.— —, —, NC\_008641, NC\_008641, NC\_008641, NC\_008641, NC\_008641, NC\_008641.

**Neuradaceae:** *Neurada procumbens* L.—AF206970, AF479225, AF209637, —, U06814, EU002245, EU002435, EU002525, EU002347; *Collenette 8193* (K).

**Thymelaeaceae:** *Thymelaea sanamunda* All.—AF207041 [*T. hirsuta* Endl.], AF479234 [*T. hirsuta* Endl.], AJ233097 [*T. hirsuta* Endl.], EU002191, Y15151 [*T. hirsuta* Endl.], EU002268, EU002460, EU002550, EU002371; *M. W. Chase 1882* (K).

## Sapindales

**Anacardiaceae:** *Schinus terebinthifolius* Raddi.—AF207015 [*S. molle* L.], —, AF035914 [*S. molle* L.], AY491645 [*S. sp.*], U39270, EU002257, EU002449, EU002539, EU002361; *D. Soltis 2705* (FLAS). **Burseraceae:** *Bursera simaruba* (L.) Sarg.—AF206877 [*B. inaguensis* Britton.], AY177421 [*B. inaguensis* Britton.], AF035899, —, L01890 [*B. inaguensis* Britton.], EU002206, EU002389, EU002479, EU002300; *D. Soltis 2649* (FLAS). **Meliaceae:** *Swietenia macrophylla* King —AF207031, AF479241, AJ235616, AY128200, AY128241, EU002265, EU002457, EU002547, EU002368; *M. W. Chase 250* (K). **Nitrariaceae:** *Nitraria retusa* Asch.— —, EU002155, —, EU002185, U39278, EU002246, EU002436, EU002526, EU002348; *M. W. Chase 597* (K). **Rutaceae:** *Citrus sinensis* Osbeck.—AY177420 [*C. aurantium* L.], AY177420 [*C. aurantium* L.], NC\_008334, NC\_008334, NC\_008334, NC\_008334, NC\_008334, NC\_008334. **Sapindaceae:** *Cupaniopsis anacardioides* Radlk.—AF206896, AF479139, AF035903, AY724283, L13182, EU002218, EU002402, EU002494, EU002314; *M. W. Chase 217* (K). **Simaroubaceae:** *Ailanthus altissima* (Mill.) Swingle —AF206842, —, AF035895, AY128208, AY128247, EU002194, EU002378, EU002467, EU002287; *M. W. Chase 126* (K).

## Unplaced in eurosid II

**Tapisciaceae:** *Tapiscia sinensis* Oliver —AF207034, AF479146, AF209685, EU002190, —, EU002266, EU002458, EU002548, EU002369; *M. W. Chase 1201* (K).

## Unplaced in rosids in APGII

**Aphloiaceae:** *Aphloia theiformis* (Vahl) Benn.—AF206851, AF479132, AF209528, —, AF206735, —, —, EU002472, EU002291; *C. C. Davis 6-01* (CCD 387). **Ixerbaceae:** *Ixerba brexioides* A. Cunn.—AF084476, —, AF209606, EU002181, —, EU002235, EU002423, EU002513, EU002335; *Small s.n.* (WS). **Picramniaceae:** *Picramnia pentandra* Sw.— —, —, AJ235559, —, AF127025 [*P. polyantha* Planch.], EU002251, EU002441, EU002531, EU002286; *M. W. Chase 2571* (K). **Strasburgeriaceae:** *Strasburgeria robusta* (Vieill. ex Panch. & Sebert) Guillaumin —AF502596, —, AF502597, —, AJ403007, EU002262, EU002454, EU002544, EU002365; *Pillon Y. et al. 60* (K).

## Vitaceae

*Leea guineensis* G. Don.—AF206951, AF274653, AJ235520, AF274621, AJ235783, EU002238, EU002427, EU002517, EU002339; *M. W. Chase 17676* (K). *Vitis vinifera* L.—AF207053 [*Vitis* sp.], AF479207 [*V. aestivalis* Michx.], NC\_007957, NC\_007957, NC\_007957, NC\_007957, NC\_007957, NC\_007957.

### Saxifragales

**Cercidiphyllaceae:** *Cercidiphyllum japonicum* Siebold & Zucc.—U42518, AF274639, AF092112, AF274608, AF274596, EF207460, EF207484, EF207509, EF207534.

**Hamamelidaceae:** *Liquidambar styraciflua* L.—U42553, AF274654, EU002164, EU002182, EU002281, EU002239, EU002429, EU002519, EU002341; *M. J. Moore 307* (FLAS). **Saxifragaceae:** *Heuchera sanguinea* Engelm.—L28139 [*H. micrantha* Dougl.], AF274649 [*H. micrantha* Dougl.], EU002163, EU002180, EU002280, EU002228, EU002415, EU002506, EU002327; *M. J. Moore 329* (FLAS).

**Hamamelis japonica** Siebold & Zucc.—AF094551 (*H. virginiana* L.), AF036495 (*H. virginiana* L.), AF093380 (*H. virginiana* L.), AF274617 (*H. virginiana* L.), L01922 (*H. mollis* Oliv.), EF207467, EF207491, EF207516, EF207541.

### OUTGROUPS

#### Apiales

**Araliaceae:** *Panax ginseng* C. A. Mey—D83275, AF479193 (*P. quinquefolius* L.), NC\_006290, NC\_006290, NC\_006290, NC\_006290, NC\_006290, NC\_006290, NC\_006290.

#### Caryophyllales

**Plumbaginaceae:** *Plumbago auriculata* Lam.—U42795, AF036492, EU002166, EU002187, EU002283, EU002252, EU002442, EU002532, EU002354; *M. J. Moore 306* (FLAS).

#### Cornales

**Cornaceae:** *Cornus florida* Hook.—X17370, AF297532, EU002157, EU002175, EU002276, EU002215, EU002377, EU002491, EU002311; *M. J. Moore 328* (FLAS).

#### Berberidopsidales

**Flacourtiaceae:** *Berberidopsis corallina* Hook. f.—AF206866, AF389242, EU002158, EU002171, EU002274, EU002201, EU002385, EU002466, EU002295; *M. J. Moore 326* (FLAS).

#### Gunnerales

**Gunneraceae:** *Gunnera manicata* Linden.—U43787, AF389250, EU002162, EU002179, EU002279, EU002226, EU002413, EU002504, EU002325; *M. J. Moore 325* (FLAS).

#### Proteales

**Platanaceae:** *Platanus occidentalis* L. —U42794, AF274662, NC\_008335, NC\_008335, NC\_008335, NC\_008335, NC\_008335.

**Solanales**

**Solanaceae:** *Nicotiana tabacum* L. —AJ236016, AF479172, NC\_001879, NC\_001879, NC\_001879, NC\_001879, NC\_001879, NC\_001879, NC\_001879.

**Trochodendrales**

**Trochodendraceae:** *Trochodendron aralioides* Siebold & Zucc.—U42816, AF274671, EU002169, —, L01958, EU002269, EU002461, EU002551, EU002372; Univ. of Washington Arboretum accession # 581-4C.