

A Synoptical Classification of the Lamiales

Version 2.6.2
(This is a working document)

Compiled by
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With the help of:

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[estimated 25 families, 1041 genera, and ca. 21,878 species in Lamiales]

The goal of this project is to produce a working infraordinal classification of the Lamiales to genus with information on distribution and species richness. All recognized taxa will be clades; adherence to Linnaean ranks is optional. Synonymy is very incomplete (comprehensive synonymy is not a goal of the project, but could be incorporated). Although I anticipate producing a publishable version of this classification at a future date, my near-term goal is to produce a web-accessible version, which will be available to the public and which will be updated regularly through input from systematists familiar with taxa within the Lamiales. For further information on the project and to provide information for future versions, please contact R. Olmstead via email at olmstead@uw.edu, or by regular mail at: Department of Biology, Box 355325, University of Washington, Seattle WA 98195, USA.

Acanthaceae (~201/3510) Durande, Notions Elém. Bot.: 265. 1782, nom. cons. – Synopsis compiled by R. Scotland & K. Vollesen (Kew Bull. 55: 513-589. 2000). *Avicennia* included (Schwarzbach & McDade, 2002). Revised based on McDade et al., 2008; Tripp et al., 2013.

Nelsonioideae (7/~170) Lindl. ex Pfeiff., Nomencl.

Bot. 1(1): 10. 8 Dec 1871

Anisosepalum E. Hossain (3) C. Africa
Elytraria Michx. (~20) warm & trop. NW & OW

Gynocraterium Bremek. (1) trop. S. Amer.

Nelsonia R. Br. (1-5) trop. OW

Ophiorrhizophyllum Kurz (2) SE Asia

Saintpauliopsis Staner (1) trop. Africa

Staurogyne Wall. (~140) trop. OW & NW

Thunbergioideae (5/~170) Kostel., Allg. Med.-

Pharm. Fl. 3: 923. Apr-Dec 1834

Anomacanthus R.D. Good (1) Zaire, Angola
Mendoncia Vell ex Vand. (~60) trop. Amer. & Africa, Madag.

Meyenia Nees (1) India, Sri Lanka

Pseudocalyx Radlk. (7) trop. Africa, Madag.

Thunbergia Retz. (~100) trop. OW

Acanthoideae (189/) Link, Handbuch 1:500. Jan-Aug 1829

Acantheae (21/~480) Dunmort., Anal. Fam. Pl.: 23 1829

Acanthopsis Harv. (4) S. Africa

Acanthus L. (20) warm & trop. OW

Achyrocalyx Benoist (3) Madag.

Aphelandra R. Br. (175) Trop. Amer.

Blepharis Juss. (129) OW trop., Medit., S. Africa

Crossandra Salisb. (52) trop. Africa & Asia, Madag., Arabian Penin.

Crossandrella C.B. Clarke (2) trop. Africa

Cynarospermum Vollesen (1) India

Cyphacanthus Leonard (1) Columbia

Encephalosphaera Lindau (3) trop. S. Amer.

Geissomeria Lindl. (15) trop Amer, most Brazil

Holographis Nees (16) Arid Mexico

Neriacanthus Benth. (5) trop. Amer.

Orophochilus Lindau (1) Peru

Rhombochlamys Lindau (2) Columbia

Salpicantha Hook. (1) Jamaica

Sclerochiton Harv. (18) trop. & S. Africa

Stenandrium Nees (~60-65) trop NW, Afr

Streptosiphon Mildbr. (1) Tanzania

Strobilacanthus Griseb. (1) Panama

Xantheranthemum Lindau (1) Peru

Ruellieae (0)

Erantheminae Nees (6/53)

Brunoniella Bremek. (6) New Guinea, Austral

Eranthemum L. (30) trop. Asia

Kosmosiphon Lindau (1) trop. W. Afr

Leptosiphonium F. Muell. (10) Papuaasia

Pararuellia Bremek. (5) Malaysia

Pseudosiphonium ined (1) China

Ruelliinae Nees (4/~335)

Acanthopale C.B. Clarke (150) OW trop.

Beniocanthus Heine & A. Raynal (= *Ruellia*) (2) Mad

Dischistocalyx T. Anderson ex Benth. (20) Afr

Lychniothyrsus Lindau (= *Ruellia*) (5) Brazil

Polylychnis Bremek. (= *Ruellia*) (2) NE S.

Amer.

Pseudoruellia Benoist (= *Ruellia*) (1) Madag.

Ruellia L. (150) pantrop.

Satanocrater Schweinf. (4) trop. Africa

Spirostigma Nees (= *Ruellia*) (1) Brazil

Trichantherinae Benth. & Hook.f. (6/32)

Bravaisia DC. (3) trop. Amer.

Louteridium S. Watson (6) Mex. & C. Amer.

Sanchezia Ruiz & Pav. (20) trop. Amer.

Suessenguthia Merm. (1) Bolivia

Trichanthera Kunth (2) N. S. Amer.

Trichosanchezia Mildbr. (1) trop. Peru

Hygrophilinae Nees (2/34)

Brillantaisia P. Beauv. (9) trop. Africa, Madag.

Hygrophila R. Br. (25) trop. OW & NW

Mimulopsinae E. Tripp (4/14)

Epiclastopelma Lindau (= *Mimulopsis*) (2) trop Afr

Eremomastax Lindau (2) Africa

Heteradelphia Lindau (1) W. Africa

Ionacanthus Beniost (= *Mellera*) (1) Madag.

Mellera S. Moore (5) warm Africa

Mimulopsis Schweinf. (3) trop. Africa, Madag.

Petalidiinae Benth. & Hook.f. (6/144)

Apassalus Kobuski (= *Dyschoriste*) (3) SE US, W.I.

Duosperma Dayton (12) trop. & S. Africa

Dyschoriste Nees (65) warm & trop. NW & OW

Phaulopsis Willd. (20) Afr. Mascarenes, India

Petalidium Nees (35) trop & S Afr, Himal, India

Ruelliospis C.B. Clarke (3) trop. & S. Africa

Sautiera Decne. (= *Dyschoriste*) (1) Timor

Strobilanthesis S. Moore (5) trop. Africa

Strobilanthinae T. Anderson (4/345)

Clarkeasia J.R.I. Wood (2) India, China

Hemigraphis Nees (90) Asia to New Caledonia

Stenosiphonium Nees (3) India, Sri Lanka

Strobilanthes Blume (250) trop. Asia

Unplaced within Ruellieae (5/25)

Calacanthus T. Anderson ex Benth. (1) Indomal.

Diceratotheca J.R.I. Wood & R.W. Scotland (1) Thailand

Echinacanthus Nees (4) Himal., China

Sinoacanthus ined. (1?) China

Stenothyrsus C.B. Clarke (1) Malaya

Aechmanthera Nees (3) Himal.

Blechum P. Brown (6) trop. Amer.

Eusiphon Benoist (3) Madag.

Physacanthus Benth. (5) trop. Africa

Justicieae (103/)

Afrofittonia Lindau (1) trop. W. Africa

Ambongia Beniost (1) Madag.

Ancistranthus Lindau (1) Cuba

Angkalanthus Balf.f. (2) Socotra, Transvaal

- Anisacanthus* Nees (8) SW US, Mex.
Anisotes Nees (19) trop. Africa, Madag.
Anthacanthus Nees (?) Unknown
Aphanosperma T.F. Daniel (1) NW Mex.
Ascotheca Heine (1) trop. W. Africa
Asystasia Blume (70) OW trop.
Ballochia Balf.f. (3) Socotra
Brachystephanus Nees (10) trop. Africa, Madag.
Calycacanthus K. Schum. (1) New Guinea
Carlowrightia A.Gray (23) SW US, Mex, C. Amer.
Celerina Benoist (1) Madag.
Centrilla Lindau (?) Unknown
Cephalacanthus Lindau (1) Peru
Chalarothyrsus Lindau (1) Mex.
Chamaeranthemum Nees (4) trop. Amer.
Chileranthemum Oerst. (2) Mex.
Chlamydocardia Lindau (4) trop. W. Africa
Chlamydostachya Mildbr. (1) trop. E. Africa
Chorisochora Vollesen
Clinacanthus Nees (2) S. China to Malaysia
Clistax Mart. (2) Brazil
Codonacanthus Nees (2) NE India, S. China, Japan
Conocalyx Benoist (1) Madag.
Cosmianthemum Bremek. (8) W. Borneo
Cyclacanthus S. Moore (2) SE. Asia
Cylindrosolenium Lindau (1) Peru
Danguya Beniost (1) Madag.
Dasytropis Urb. (1) E. Cuba
Dichazothece Lindau (1) E. Brasil
Dicladantha F. Muell. (2) W. Australia
Dicliptera Juss. (150) warm & trop. NW & OW
Ecbolium Kurz (19) trop. & S. Africa, Madag., Socotra, India
Filetia Miq. (8) Sumatra, Indomal.
Fittonia Coem. (2) Peru
Glossochilus Nees (2) S. Africa
Graptophyllum Nees (10) Australia, SW Pacific Isl.
Gypsacanthus Lott, Jarmillo & Rzed. (1) Mex.
Harpochilus Nees (3) Brasil
Henrya Nees (2) C. Amer.
Herpetacanthus Nees (10) Panama to Brasil
Hoverdenia Nees (1) Mex.
Hypoestes Sol. Ex R.Br. (40) OW trop.
Ichtyostoma Hedren and Vollesen
Isoglossa Oerst. (50) OW trop. & Arabian Penin.
Isotheca Turrill (1) Trinidad
Jadunia Lindau (1) New Guinea
Juruasia Lindau (2) Brazil
Justicia L. (600) trop. & warm temp. NW
Kalbreyeriella Lindau (3) Panama, Columbia
Linariantha B.L. Burt & Ros.M.Sm. (1) Borneo
Mackaya Harv. (15) Africa
Marcania J.B. Imlay (1) Thailand
Megalochlamys Lindau (3) SW Africa
Megalostoma Leonard (1) C. Amer.
Megaskepasma Lindau (1) Venezuela
Mellitacanthus S. Moore (1) Madag.
Metarungia Baden (3) trop. & S. Africa
Mexacanthus T.F. Daniel (1) Mex.
Mirandea Rzed. (2) Mex.
Monechma Hochst. (60) Africa, India
Monothecium Hochst. (3) trop. Africa, S. India
Odontonema Nees 936) Mex., C. & S. Amer., W. I.
Oplonia Raf. (19) trop. Amer., Africa (extinct?), Madag.
Oreacanthus Benth. (4) C. Africa
Pachystachys Nees (12) trop. Amer.
Pelecostemon Leonard (1) Columbia
Peristrophe Nees (15) trop. OW
Phialacanthus Benth. (5) Himal. to Malay Penin.
Podorungia Baill. (1) Madag.
Poikilacanthus Lindau (6) trop. Amer.
Populina Baill. (2) Madag.
Pranceacanthus Wassh. (1) Brazil
Pseuderanthemum Radlk. (60) trop. OW & NW
Pseudodictyera Benoist (2) Madag.
Psilanthele Lindau (1) Ecuador
Ptyssiglottis T. Anderson (60) Indomal.
Pulchranthus V.M. Baum, Reveal and Nowicke (4) trop. S. Amer.
Razisea Oerst. (3) C. Amer.
Rhinacanthus Nees (15) trop. OW
Ritonia Benoist (3) Madag.
Rungia Nees (50) trop. OW
Ruspolia Lindau (4) trop. Africa
Ruttya Harv. (3) trop. & S. Africa, Arabian Penin.
Samuelessonia Urb. & Ekman (1) Hispaniola
Sapphoa Urb. (2) Cuba
Schaueria Nees (8) Brazil
Sebastianio-Schaueria Nees (1) Brazil
Spathacanthus Baill. (5) C. Amer.
Sphinctacanthus Benth. (1) NE India to Burma
Stenostephanus Nees (6) S. Amer.
Streblacanthus Kuntze (6) C. Amer.
Tessmanniacanthus Mildbr. (1) trop. Peru
Tetramerium Nees (28) C. Amer.
Thysanostigma J.B. Imlay (2) Thailand, Malayan Penin.
Trichaulax Vollesen
Trichocalyx Balf.f. (2) Socotra
Xerothamnella C.T. White (2) E. Australia
Yeatesia Small (3) SE US, NE Mex.
- Whitfieldae (?)**
- Camarotea* Scott Elliot (1) Madag.
Chlamydacanthus Lindau (4) trop. E. Africa, Madag.
Forcipella Baill. (5) Madag.
Lankesteria Lindl. (7) trop. Africa, Madag.
Leandriella Benoist (1) Madag.
Whitfieldia Hook. (10) trop Africa
Zygoruella Baill. (1) Madag.
- Andrographideae (8/)**
- Andrographis* Wall. ex Nees (20) trop. Asia

Cystacanthus T. Anderson (10) SE Asia
 Diotacanthus Benth. (2) Indomal.
 Graphandra J.B. Imlay (1) Thailand
 Gymnostachyum Nees (30) India to C Malaysia.
 Haplanthodes Kuntze (4) India
 Indoneesiella Sreem. (2) India
 Phlogacanthus Nees (15) Indomal.

Barlerieae (9/)

Acanthostelma Bidgood and Brummitt (1) Somalia
 Barleria L. (250) OW & NW trop.
 Barleriola Oerst. (6) W. I.
 Borneacanthus Bremek. (6) Borneo
 Boutonia DC. (1) Madag.
 Chroesthes Beniost (3) China, SE Asia
 Crabbea Harv. (12) trop. & S. Africa
 Golaea Chiov. (1) Somalia
 Hulemacanthus S. Moore (1) New Guinea
 Lasiocladus Bojer ex Nees (5) Madag.

Lepidagathis Willd. (100) warm & trop. NW & OW
 Lophostachys Pohl. (15) trop. Amer.

Unplaced within Acanthoideae (20/)

Acanthura Lindau (1) Brazil
 Aphelandrella Mildbr. (1) Peru (= Aphelandra?)
 Dolichostachys Benoist (1) Madag.
 Idiacanthus Leonard (= Stenostephanus?)
 Kudoacanthus Hosok. (1) taiwan
 Morsacanthus Rizzini (1) Brazil (= Pseuderanthemum?)
 Neuracanthus Nees (20) trop. Africa, Arabian Penin. to India
 Perenideboles Ram. Goyena (1) Nicaragua (??)
 Pericalypta Beniost (1) Madag.
 Sphacanthus Benoist (2) Madag.
 Vavara Benoist (1) Madag.
 Vindasia Benoist (1) Madag.

Unplaced within Acanthaceae (1/4-7)

Avicennia (4-7) warm cosmop

Bigoniaceae (82/~812) Durande, Notions Elém. Bot.: 265. 1782, nom. cons. - Synoptical classification by tribe following Gentry 1980, 1992; Spangler & Olmstead 1999, Zjhra et al. 2003, Lohman 2006, Grose & Olmstead, 2007; Olmstead et al., 2009, Lohmann & Taylor, 2014, Sutee Duangjai, pers. comm..

Bignoniaceae Dumort., Anal. Fam. Pl.: 23. 1829

(treatment following L. Lohmann, 2005) (21/394

Lohmann&Taylor, 2014, and following papers)

Adenocalymma Mart. ex Meisn. (82) trop Am
 Amphilophium Kunth (47) trop Am
 Anemopaegma Mart. ex Meisn. (45) trop Am
 Arrabidaea DC. (= Cuspidaria, Fridericia, Tanaecium, Xylophragma)
 Bignonia L. (28) trop Am (incl. SE USA)
 Callichlamys Miq. (1) trop Am
 Ceratophytum Pittier (= Paragonia Bureau)
 Clytostoma Miers ex Bureau (= Bignonia L.)
 Cuspidaria DC. (19) trop Am
 Cydista Miers (= Bignonia L.)
 Distictella Kuntze (= Amphilophium Kunth)
 Distictis Mart. ex. Meisn. (= Amphilophium Kunth)
 Dolichandra Cham. (8) trop Am
 Fridericia (67) Colomb, Ecuad, Peru, Brazil
 Gardnerodoxa Sandwith (= Neojobertia Baill.)
 Glaziova Bureau (= Amphilophium Kunth)
 Haplolophium Cham. (= Amphilophium Kunth)
 Leucocalantha Barb. Rodr. (= Pachyptera DC. ex Meisn.)
 Lundia DC. (13) trop Am
 Macfadyena A. DC. (= Dolichandra Cham.)
 Macranthisiphon Bureau ex K. Schum. (= Bignonia L.)
 Manaosella J.C. Gomes (1) Bolivia & Brazil
 Mansoa DC. (12) trop Am
 Martinella Baill. (2) trop Am
 Melloa Bureau (= Dolichandra Cham.)

Memora Miers (= Adenocalymma Mart. ex Meisn.)
 Mussatia Bureau ex Baill. (= Bignonia L.)
 Neojobertia Baill. (2) Eastern Brazil
 Pachyptera DC. ex Meisn. (4) trop Am
 Parabignonia Bureau ex K. Schum. (= Dolichandra Cham.)
 Paragonia Bureau (= Tanaecium)
 Perianthomega Bureau ex Baill. (1) SE Brazil, NE Parag. and SE Bolivia
 Periarabidaea A. Samp. (= Paragonia Bureau)
 Phryganocydia Mart. ex Bureau (= Bignonia)
 Piriadacus Pichon (= Arrabidaea DC.)
 Pithecoctenium Mart. ex Meisn. (= Amphilophium Kunth)
 Pleonotoma Miers (17) trop Am
 Potamogonos Sandwith (= Bignonia L.)
 Pseudocatalpa A. H. Gentry (= Paragonia Bureau)
 Pyrostegia C. Presl (2) trop S Am
 Roentgenia Urb. (= Bignonia L.)
 Saritaea Dugand (= Bignonia L.)
 Spathicalyx J. C. Gomes (= Paragonia Bureau)
 Spingiphila A. H. Gentry (= Tanaecium) Bolivia, Paraguay
 Stizophyllum Miers (3) trop Am
 Tanaecium Sw (18) neotropical forests
 Tynanthus Miers (15) trop Am
 Urbanolophium Melch. (= Amphilophium Kunth)
 Xylophragma Sprague (7) C & S Am
Catalpeae DC. ex Meisn. (3/11)
 Catalpa Scop. (8) E Asia, N Am, Antilles

- Sect. *Catalpa* (4) E Asia, N Am
 Sect. *Macrocatalpa* Griseb. (4) Antilles
Chilopsis D. Don (1) SW US, Mex
 x*Chitalpa* Elias & Wisura (= *Catalpa* X
Chilopsis)
- Oroxyleae Gentry 1980 (4/6)**
Hieris Steenis (1) Penang
Millingtonia L.f. (1) SE Asia, Malaysia
Nyctocalos Teijsm. & Binn. (3) Indomalaysia
Oroxylum Vent. (1) Indomalaysia
- Crescentioideae Kostel. (34/~305)**
Paleotropical clade (20/~151)
Coleeae Bojer 1837 (4/60)
Colea Bojer ex Meisn. (21) Madagascar,
 Mascarenes
Ophiocolea H. Perrier (5) Madagascar,
 Comores
Phyllarthron DC. (17) Madagascar, Comores
Phylloctenium Baill. (= *Phyllarthron*)
Rhodocolea Baill. (7) Madagascar
- Paleotropical clade unassigned (16/91)**
Barnettia (= *Santisukia*)
Catophractes D. Don (1) tropical & S Africa
Dolichandrone (Fenzl) Seem. (10) E Afr,
 Indomal, trop. Austral, New Caledonia
Fernandoa Welw. ex Seem. (14) Afr, Mad, S
 China, SE Asia to Sumatra
Haplophragma Dop. (= *Fernandoa*)
Heterophragma DC. (2) India, SW Asia
Kigelia DC. (2) tropical Africa
Markhamia Seem. ex Baill. (10) trop Afr & SE
 Asia
Mayodendron Kurz (= *Radermachera*)
Newbouldia Seem. ex Bureau (1) tropical W
 Africa
Pajanelia DC. (1) Indomalaysia
Pauldopia Steenis (1) NE India to SE Asia
Perichlaena Baill. (1) Madagascar
Radermachera Zoll. & Moritzi. (17) SE Asia,
 Malaysia
Rhigozum Burch. (7) trop & S Afr, Ethiop,
 Somal, Madag
Santisukia Brummitt (2) Thailand
Spathodea P. Beauv. (1) tropical Africa
Stereospermum Cham. (20) trop Afr & Asia
Tecomella Seem. (1) Arabia to W India
- Tabebuia Alliance Grose & Olmstead, 2007
 (Digitifolieae, sensu Bentham & Hooker,
 1876) (14/~154)**
**Crescentieae G. Don, Gen. Hist. 4: 216, 232.
 1837-8 Apr 1838 (3/33)**
- Amphitecna** Miers (18) tropical Am
Crescentia L. (6) tropical Am
Enallagma (Miers) Baill. (= *Amphitecna*)
Parmentiera DC. (10) C Am, NW Columbia
- Tabebuia Alliance unassigned (11/~121)**
Cybistax Mart. ex Meisn. (1) trop S Am
Ekmanianthe Urb. (2) Cuba, Hispaniola
Handroanthus (34) Neotrop.
Godmania Hemsl. (2) tropical Am
Paratecoma Kuhlm. (1) Brazil
Romeroa Dugand (1) Colombia
Roseodendron (2) Neotrop.
Sparattosperma Mart. Ex Meisn. (2) trop. S.
 Am.
Spirotecoma Baill. ex Dalla Torre & Harms (4)
 Cuba, Hispaniola
Tabebuia Gomes ex DC. (~70) tropical Am
Zeyheria Mart. (2) Brazil, Bolivia
- Tecomeae Endl., Gen. Pl.: 711. Jan 1839 (13/57)**
Astianthus D. Don (1) C Am **CATALPEAE?**
Campsidium Seem. (1) Chile, Argentina
Campsis Lour. (2) E Asia, E US
Deplanchea Vieill. (5) Malaysia, Austr, New Cal
Dinklageodoxa Heine & Sandwith (1) Liberia
Incarvillea Juss. (16) Himalaya, C to E Asia
Lamiodendron Steenis (1) New Guinea
Neosepicaea Diels (4) N Guinea, Queensl,
 Moluccas
Pandorea (Endl.) Spach (6) E Malay, Austr,
 New Cal
Podranea Sprague (1) tropical to S Africa
Tecoma Juss. (12) tropical Am (Andes) to Ariz
Tecomathe Baill. (5) Malaysia, Austr, NZ
Tecomaria (Endl.) Spach (2) E & S Africa
- Tourrettieae G. Don, Gen. Hist. 4: 215, 231.
 1837-8 Apr 1838 (2/4)**
Eccremocarpus Ruiz & Pav. (3) Colombia to
 Chile
Tourrettia Foug. (1) Andes to Mexico
- Jacarandaeae Seem., Ann. Mag. Nat. Hist., ser.
 3, 10: 31. Jul 1862 (2/52)**
Digomphia Benth. (3) Guayana highland
Jacaranda Juss. (49) Guatemala/Antilles to
 Argentina
- Bignoniaceae unassigned to more inclusive
 clade (2/16)**
Argylia D. Don (12) Peru, Chile, Argentina
Delostoma D. Don (4) Andes of Peru, Ecuador,
 Colombia
- Byblidaceae** (Engl. & Gilg) Domin, Acta Bot. Bohem. 1:3. 1922, nom. cons. (1/2) [maybe Lentibulariaceae?]
Byblis (2) Aus, New Guinea
- Calceolariaceae (2/275)** (G. Don) R. Olmstead 2001 (Olmstead et al. 2001) (see Molau 1988; Andersson 2006)
Calceolaria L. (240-270 sensu Molau) C to S Am
Jovellana Ruiz & Pav. (6) NZ, Chile
Porodittia G. Don (= *Calceolaria*) Peru

Carlemanniaceae Airy Shaw (1964) (APG II, 2002) (2/5)

Carlemannia Benth (3) Indomal
Silvianthus Hook.f. (2) India to SE Asia

Gesneriaceae (~135-140/>3000) – synopsis compiled by **A. Weber**, provisional state 1999 (classification after WIEHLER & BURTT 1995; modified with assistance from A. Weber & J. Smith)

Gesnerioideae Link, Handbuch 1: 505. Jan-Aug 1829

Gloxinieae (G. Don) G. Don in Sweet, Hort. Brit., ed. 3: 526. late 1839
Achimenes Pers. (24), mainly Mexico and Central America
Anodiscus Benth. (1), Peru
Bellonia L. (2), Cuba and Hispaniola
Capanea Planch. (11), Peru to Guatemala
Diastema Benth. (>20), Bolivia to Mexico, Venezuela, Colombia, Ecuador, Peru
Eucodonia Hanst. (2), C and S Mexico
Gloxinia L'Hér.(15), central America and trop. S America
Goyazia Taub. (2), C Brazil
Heppiella Regel (4), Peru, W Venezuela
Koellikeria Regel (1), C and trop. S America
Kohleria Regel (>20), Peru to Mexico, Venezuela, Trinidad, Guianas
Lembocarpus Leeuwenb. (1), Surinam and French Guiana
Monopyle Benth. (>27), Bolivia to Guatemala
Moussonia Regel (11), Mexico to Panama
Niphaea Lindl. (5), Mexico, Guatemala, Venezuela, Peru
Pearcea Regel (incl. Parakohleria Wiehler) (17), eastern slopes of the Andes (Colombia, Ecuador, Peru, Bolivia), 1 sp. also on the western slopes (Ecuador)
Phinaea Benth. (>16), Mexico to Peru, Venezuela, Cuba, Haiti
Smithiantha Kuntze (5), C & N Mexico, Guatemala
Solenophora Benth. (> 20), central America

Sinningieae

Paliavana Vand. (8), SE Brazil
Sinningia Nees (>60), throughout the Neotropics
Vanhouttea Lem. (6), SE Brazil

Episcieae

Alloplectus Mart. (5), Costa Rica to Andean Peru
Chrysothemis Decne. (7), Ecuador to Guatemala, C Brazil, the Guianas, Venezuela and Lesser Antilles
Cobananthus Wiehler (1), Guatemala
Codonanthe (Mart.)Hanst. (>20), throughout the Neotropics
Codonanthopsis Mansf. (5), Peru to Brazil (Amazon system)
Columnea L. s. lat.

Bucinellina Wiehler (2), SW Colombia, NW Ecuador
Columnea L. s. str. (>75), C America, Carrib. Islands, Colombia, Ecuador, Venezuela, Guayana Highlands, NE Brazil
Dalbergaria Tussac (>120), Bolivia to Guiana Highlands, Mexico, Greater Antilles
Pentadenia (Planch.)Hanst. (>35), Bolivia to Mexico
Trichantha Hook.f. (>70), Bolivia to Guatemala, Greater Antilles, Guayana Highlands
Corytoplectus Oerst. (15), Bolivia to Panama, coastal Venezuela, Guayana Highlands
Crantzia Scop. (4) Carib, N S Am.
Drymonia Mart. (>140) throughout the Neotropics
Episcia Mart. s.l.
Episcia Mart. s str. (9) trop. S America to Nicaragua)
Alsobia Hanst. (2), Mexico and central America
Glossoloma Hanst. (27) Mexico to Panama; NW S Am to Bolivia
Nautilocalyx [Linden ex] Hanst. (>70), throughout trop. America, except SE Brazil
Nematanthus Schrad. (30), S & SE Brazil
Neomortonia Wiehler (3), central America and W Colombia
Oerstedina Wiehler (3), Central America
Paradrymonia Hanst. (>70), throughout the Neotropics, except SE Brazil
Rhoogeton Leeuwenb. (3), British Guiana
Rufodorsia Wiehler (4), Costa Rica, Panama

Beslerieae

Anetanthus Benth. (2), Peru, Bolivia, C Colombia, SE Brazil
Besleria L. (>200), throughout the Neotropics, esp. Andes of Colombia and Ecuador
Cremosperma Benth. (23), Costa Rica to Andes of Peru
Gasteranthus Benth. (35), S Mexico, central America, SW South America to Bolivia
Reldia Wiehler (5), Panama to N Peru
Resia H.E.Moore (2), Colombia, Venezuela
Tylopsacas Leeuwenb. (1), Guayana Highlands

Napeantheae

Napeanthus Gardn. (>30), throughout the Neotropics

Gesnerieae

Gesneria L. s. lat.

- Gesneria L. s. str. (Skog) (46), Carribean islands
 Pheidonocarpa L. E. Skog (3), Carribean islands
 Rhytidophyllum Mart. (c. 20), Carribean islands
- Coronantheroideae**
Coronanthereae
 Asteranthera Hanst. (1), Chile
 Coronanthera C.B.Clarke (11), New Caledonia, one sp. in Solomon Islands
 Depanthus S.Moore (2), New Caledonia
 Fieldia Cunn. (1), SE Australia
 Lenbrassia G.W.Gillett (1), NE Australia
 Mitraria Cav. (1), Chile, nearby Argentina
 Negria F. Muell. (1), Lord Howe Island (SW Pacific)
 Rhabdothamnus Cunn. (1), New Zealand
 Sarmienta Ruiz & Pav. (1), Chile
- Cyrtandroideae** Burnett, Outl. Bot.: 963, 1095, 1107. Jun 1835
Epithemateae (= Klugieae) Klugieae Fritsch in Engl. & Prantl, Nat. Pflanzenfam. 4(3b): 143. Mai 1893
 Cyrtandromoea (11) SE Asia, Mal
 Epithema Blume (> 20), S & SE Asia, one sp. in W Africa
 Gyrogynne W. T. Wang (1), S China
 Loxonia Jack (3), W Malesia (Sumatra, Malay Penins., Borneo)
 Monophyllaea R. Br. (32), Malesia (Sumatra to New Guinea, S Thailand and Luzon to Java)
 Rhynchoglossum Blume (c. 12), Malesia (India and S China to New Guinea), 1 (or more?) spp. in C America, Columbia, Venezuela
 Stauranthera Benth. (5-8), NE India and S China over Malesia to New Guinea
 Whytockia W. W. Sm. (6), S China, Taiwan
- Didymocarpeae** Endl., Gen. Pl.: 716. Jan 1839
 Acanthonema Hook.f. (2), trop. W Africa
 Allocheilos W.T.Wang (2), S China
 Allostigma W.T.Wang (1), S China
 Ancylostemon Craib (11), C & S China
 Anna Pellegr. (3), S China
 Beccarinda Kuntze (c. 8), NE India, Burma, S China, Hainan, Vietnam, Sumatra
 Boea [Comm. ex] Lam.(17), S China, NE India, N Thailand, Vietnam, Philipp. Sulawesi, Sumbawa, Flores, Ne Guinea, Solomon Islands, Bismarck and Lousiade Archipelago
 Boeica C.B.Clarke (9), NE India, Bangla-desh, Burma, S China, Malaysia
 Bournea Oliv. (2), SE China
 Briggsia Craib (21), C & S China
 Briggsiopsis K.Y.Pan (1), S China
 Calcareofoea H.W.Wu (1), S China
 Cathayanthe Chun (1), S China
 Championia Gard. (1), Sri Lanka
 Chirita D.Don (>130), S China to Borneo
 Chiritopsis W.T.Wang (8), S China
 Colpogyne B.L.Burttt (1), Madagascar
 Conandron Sieb. & Zucc. (1), China, Taiwan, Japan
 Corallodiscus Batalin (17), India, Bhutan, Nepal, Sikkim, C & S China
 Dayaoshania W.T.Wang (1), S China
 Deinocheilos W.T.Wang (2), S China
 Deinostigma [W.T.Wang ex] Z.Y.Li (8), W Malesia
 Didymocarpus Wall. (c. 80), S China to Malay Peninsula and Sumatra
 Didymostigma W.T.Wang (1), SE China
 Dolicholoma D.Fang & W.T.Wang (1), SE China
 Gyrocheilos W.T.Wang (4), S China
 Haberlea Friv. (2), Balkan Peninsula
 Hemiboea C.B.Clarke (21), C & S China, N Vietnam, Taiwan, Japan
 Hemiboeopsis W.T.Wang (1), S China
 Henckelia Spreng. (Didymocarpus p.p., Loxocarpus, Platyadenia) (c. 180), from S India and Sri Lanka throughout Malesia to New Guinea
 Hexatheca C.B.Clarke (3), Borneo
 Hovanella A.Weber & B.L.Burttt (Didymocarpus p.p.) (2), E & C Madagascar
 Isometrum Craib (13), C China
 Jancaea Boiss. (1), Greece
 Lagarosolen W.T.Wang (2), S China
 Leptoboea Benth. (4), NE India, Sikkim, Bhutan, Burma, S China
 Linnaeopsis Engl. (3), E Africa
 Metabriggsia W.T.Wang (2), S China
 Metapetrocosmea W.T.Wang (1), S China
 Nodonema B.L.Burttt (1), trop. W Africa
 Opithandra B.L.Burttt (9), S China, Japan
 Orchardocarpa Ridl. (1), Malay Peninsula
 Orecharis Benth. (27), C & S China, N Vietnam, Thailand
 Ornithoboea [Parish ex] C.B.Clarke (11), S China to N Malay Peninsula
 Paraboea (C.B.Clarke) Ridl. (>80), Malesia (Sumatra to New Guinea, S Thailand to Borneo)
 Paraisometrum W.T.Wang (1), S China
 Petrocodon Hance (1), China
 Petrocosmea Oliv. (27), S China, NE India, Burma, Thailand Vietnam
 Phylloboea Benth. (1), Burma
 Platystemma Wall. (1), Nepal, SW China
 Primulina Hance (1), S China
 Pseudochirita W.T.Wang (1), S China
 Ramonda Rich. (3), Iberian (Pyrenees) and Balkan Peninsula
 Raphiocarpus Chun (Didissandra p.p.) (11), China, Vietnam
 Rhabdothamnopsis Hemsl. (1), S China

Ridleyandra A.Weber & B.L.Burt
(*Didissandra* p.p.) (c. 23), Malay Peninsula,
Borneo

Saintpaulia H.Wendl. (>20), E Africa

Schizoboea (Fritsch) B.L.Burt (1), W, C & E
Africa

Streptocarpus Lindl. (>130), Africa,

Madagascar, Comoro Islands

Tengia Chun (1), S China

Tetraphyllum [Griff. ex] C.B.Clarke (2-3), NE
India, Bangladesh, Thailand, ?Burma

Thamnocharis W.T.Wang (1), S China

Trachystigma C.B.Clarke (1), W Africa

Tremacron Craib (7), S China

Trisepalum C.B.Clarke (15), S China, Burma,
Thailand, N Malay Peninsula

Trichospreae

Aeschynanthus Jack (c. 150), S China, Nepal, S
India, Sri Lanka, throughout Malesia to New
Guinea, Solomon Islands

Agalmyla Blume (>50), Malesia

Loxostigma C.B.Clarke (7 or more), NE India,
Sikkim, Bhutan, Nepal, Burma, S China, N
Vietnam

Lysionotus G.Don (c. 30) from N India and
Nepal to Thailand, Vietnam, S China, S
Japan

Micraeschynanthus Ridl. (1, doubtful), Malay
Peninsula

Cyrtandreae

Cyrtandra J.R. & G.Forst. (>450), Nicobar
Islands, Sumatra, S Thailand, Taiwan,
throughout Malesia to the Pacific and
Hawaiian Islands

Rhynchotechum Blume (12), SE Asia, position
somewhat uncertain, eventually to
Didymocarpeae

Sepikaea Schltr. (1), New Guinea, probably to
be included in Cyrtandra

Genera of uncertain position:

Sanango Bunting & Duke (1), C America,
eastern slopes of the Andes (Ecuador and
Peru), included in Gesnerioideae-Gesnerieae
by Wiehler (1994), appears to be sister to
rest of family (Perret et al., 2013 BJLS)

Titanotrichum Soler. (1), S China, Taiwan, S
Japan (accomodated in a monotypic tribe,
Cyrtandroideae-Tiitanotricheae, by C.-
N.Wang, Syst. Bot. 2004)

Lamiaceae (= Labiatae) (~252/6700) Genera by subfamily and tribe (after Cantino et al. 1992, 1997, Wagstaff et al. 1997, Olmstead, unpubl.; Harley et al, 2004; Harley & Pastore 2012; Bramley et al., 2009; Drew et al., 2012; Cantino pers. comm.). Nomenclature follows Cantino et al 1997; 1998.

Prostantheroideae (14/309) Leurss., Handb.

Syst. Bot. 2: 1014, 1016. Sep 1882 [v11/12/15]

Chloantheae (9/99) Benth. & Hook.f., Gen. Pl. 2:
1132. 1-16 Mai 1876

Brachysola (F. Muell.) Rye (2) Australia

Chloanthes R. Br. (4) Australia

Cyanostegia Turcz. (5) Australia

Denisonia (=Pityrodia)

Dicrastylis J.L. Drumm. ex Harv. (28)

Australia

Hemiphora (F. Muell.) F. Muell. (1) Australia

Lachnostachys Hook. (6) Australia

Mallophora Endl. (= Dicrastylis) Australia

Newcastelia F. Muell. (12) Australia

Physopsis Turcz. (3) Australia

Pityrodia R. Br. (39) Australia

Westringieae Bartl., Ord. Nat. Pl.: 182. Sep
1830. (5/210)

Cryphia (= Prostanthera)

Eichlerago (= Prostanthera)

Hemiandra R. Br. (14) Australia

Hemigenia R. Br. (~50) Australia

Microcorys R. Br. (16) Australia

Prostanthera Labill. (~100) Australia

Westringia Sm. (~30) Australia

Wrixonia (= Prostanthera)

Symphorematoideae (3/24) [v12/6/12]

Congea Roxb. (7-10) SE Asia & W. Malaysia

Sphenodesme Jack (14) SE Asia & W. Malaysia

Symphorema Roxb. (3) Indomal

Ajugoideae (26/~750) [v12/6/12]

Adelosa Blume (= Clerodendrum)

Aegiphila Jacq. (120) trop Am

Ajuga L. (40-50) mainly Eurasia

Amasonia L.f. (8) trop Am

Amethystea L. (1) Asia

Archboldia E. Beer & H.J. Lam (=
Clerodendrum)

Cardioteucris (= Rubiteucris)

Caryopteris Bunge (7) E Asia

Clerodendrum L. (~150) trop/subtrop

Cyclonema (= Rothea)

Discretitheca (1) Nepal

Eplingia L.O. Williams (= Trichostema)

Faradaya F. Muell. (= Oxera)

Glossocarya Wall. ex Griff. (9-13)

Australia/Indomal/SE Asia

Hosea Ridl. (1) Indomal

Huxleya Ewart (= Clerodendrum)

Isanthus (= Trichostema) N Am

Kalaharia (1) SW Africa

Karomia Dop. (9) Afr/Mad/Viet Nam

Kinostemon (= Teucrium) China

Monochilus Fisch. & C.A. Mey. (2) Brazil

Oncinocalyx F. Muell. (1) Australia

Ovieda (~ Clerodendrum) (1) Hispaniola

- Oxera Labill. (37) New Caledonia, Vanuatu, Indomal/Austral/Polynesia [cf. Barrabe et al. 2015]
- Pseudocaryopteris (3) S China, India, SE Asia
- Rothea (50-60) Afr/Mad/Ind Ocean/S Asia/Indomal
- Rubiteucris (2) E Asia
- Schnabelia Hand.-Mazz. (5) China
- Spartothamnella Briq. (3) Australia
- Tetraclea (2) S. N.Am
- Teucrium Hook.f. (1) New Zealand
- Teucrium L. (~250) worldwide mostly temp
- Trichostema L. (17) N Am/Bahamas
- Tripora (1) E Asia
- Volkameria (~ Clerodendrum) (25-30) coastal pantropical
- Lamiina** () [[√12/6/12](#)]
- Scutellarioideae** Prantl, Text-Book Bot.: 293. 1 Mar-15 Apr 1880. (5/382) [[√12/6/12](#)]
- Harlanlewisia (= Scutellaria) Ecuador
- Holmskioldia Retz. (1) Himal
- Perilomia (= Scutellaria) S Am
- Renschia Vatke (1) Africa (2 sp. in Tropicos)
- Salazaria (= Scutellaria) SW US
- Scutellaria L. (~360) worldwide
- Tinnea Kptschy & Peyr. (19) Africa
- Wenchengia C.Y. Wu & S. Chow (1) China
- Lamioideae** (~64/1194) See Harley et al, 2004, Scheen et al., 2010, Bendiksby et al., 2011 [[√10/9/15](#)]
- Pogostemoneae** (10/132) [[√12/6/12](#)]
- Achyropermum Blume (10) Old World trop
- Anisomeles R. Br. (13) OW trop, Mad, Indom, Aus
- Colebrookea Sm. (1) India
- Comanthosphace S. Moore (5) E Asia
- Craniotome Rechb. (1) Himalaya
- Eurysolen Prain (1) SE Asia and Malaysia
- Holocheila (Kudo) S. Chow (1) China
- Leucoseptum Sm. (3) Himal., China
- Microtoena Prain (25) Himalaya-W China
- Pogostemon Desf. (71) Indomalaysia
- Rostrinucula Kudo (2) E Asia
- Gomphostemmateae** (3/44) [[√12/6/12](#)]
- Bostrychanthera Benth. (1) China
- Chelonopsis Miq. (13) Kashmir/Tibet/E Asia
- Gomphostemma L. (30) SE Asia/Malaysia
- Synandreae** (5/18) [[√12/6/12](#)]
- Brazoria Engelm. & A. Gray (2) S US
- Macbridea Elliott ex Nutt. (2) SE US
- Physostegia Benth. (12) N Am
- Synandra Nutt. (1) E US
- Warnockia 1 S US
- Stachydeae** (13/469) [[√12/6/12](#)]
- Chamaesphacos Schrenk ex Firsh. & C.A. Mey. (1) Iran/Afghanistan
- Haplostachys (A. Gray) W.F. Hillebr. (6) Hawaii
- Hypogomphia (4) C Asia/Afghan
- Melittis L. (1) Eur - Iran
- Paralamium Dunn (1) SW China
- Phlomidosema (Benth.) Vved. (1) Iran-W Himalaya
- Phyllostegia Benth. (25) Tahiti/Hawaii
- Prasium L. (1) Medit
- Sideritis L. (100) N temp Old world/Macarones
- Stachys L. (300) temp World-wide
- Stenogyne Benth. (25) Hawaii
- Suzukia Kudo (2) Ryukyus/Taiwan
- Thuspeinanta T. Durand (2) C Asia/Iran/Afghan
- Paraphlomideae Bendiksby** (3/14) [[√12/6/12](#)]
- Ajugoides Makino (1) Japan
- Matsumurella Makino (5) China, Japan, Taiwan
- Paraphlomis Prain (8) E Asia/Malaysia
- Phlomideae** (4/~100) [[√12/6/12](#)]
- Eremostachys Bunge (~Phlomoideae) (5+) Eur-C.Asia
- Lamiophlomis (=Phlomis) Himal.- Central China
- Notochaete Benth. (2) Himalaya
- Phlomis L. (75-100) Medit - China
- Phlomoideae Moench (= Phlomis)
- Pseuderemostachys Popov (= Phlomis) C Asia
- Pseudomarrubium Popov (1) C Asia ?
- Leonureae** (6/52) [[√12/6/12](#)]
- Chaiturus (~ Leonurus) Ehrh. ex Willd. (1) W Eur to C As
- Lagochilus Bunge (35) C.As - Iran/Afghan.
- Lagopsis Bunge (4) (=Marrubium?) Siberia/Japan
- Leonurus L. (4) temp Eurasia
- Loxocalyx Hemsl. (2) China
- Panzerina Sojak (6) Siberia/Mongol
- Marrubieae** (4/69) [[√11/2/15](#)]
- Ballota L. (35) Europe/Medit/W.Asia
- Marrubium L. (30) Eur/Medit
- Moluccella L. (3) Medit - NW India
- Sulaimania Hedge & Rech.f. (1) Pakistan
- Lamieae** (4/48) [[√12/6/12](#)]
- Alajja Ikonn. (3) C Asia/Afghan/W Himalaya
- Eriophyton Benth. (1) Himalaya
- Galeobdolon (= Lamium) W Eur/Iran
- Lamiastrum (= Lamium)
- Lamium L. (41) N.Af/Eurasian
- Stachyopsis Popov & Vved. (3) C Asia
- Wiedemannia Fisch. & C.A. Mey. (= Lamium)
- Leucadeae** (6/215) [[√12/6/12](#)] [cf. Scheen & Albert, 2007\]
- Acrotome Benth. ex Endl. (8) trop and S. Africa
- ["African Leucas" (48) Africa & Arabia]
- Harmsiella (= Otostegia)
- Isoleucas O. Schwartz (2) Arabia
- Lasiocorys (= Leucas) trop S Af/Socotra/Arab
- Leonotis (Pers.) R. Br. (40) trop, S Af; 1 pantrop

[Leucas R. Br. = Leucas s.s. (38) Indomal.]
 Otostegia Benth. (11) SE trop Af - C Asia
 Physoleucas (= Leucas) Arabia
 Rydingia Scheen & V.A. Albert (4) NE Afr – C Asia

Lamioideae – genera unassigned or of uncertain placement (6/32) [**√12/6/12**]

Betonica (15) W Eurasia
 Colquhounia Wall. (3) Himalaya/SW China
 Galeopsis L. (11) temp Eurasia
 Epimeredi (= Anisomeles)
 Eusteralis (= Pogostemon) 96 temp Asia/Aus
 Metastachydium Airy Shaw ex C.Y. Wu & H.W. Li (1) C. Asia
 Roylea Wall. ex Benth. (1) Himalaya

Cymarioideae Li et al., in prep. (2/3-4)

[provisional name] [**√10/9/15**]

Acrymia Prain (1) Malaysia
 Cymaria Benth. (2-3) SE Asia, Indomal.

Nepetoideae Kostel., Allg. Med.-Pharm. Fl. 3: 752. Apr-Dec 1834. (/)

Menthae Dumort., Fl. Belg.: 48. 1827. (/)

Acanthomintha A. Gray (3) W. US
 Acinos (10) Eur, Med, C Asia
 Agastache Gronov. (22) N. Amer.
 Blephilia Raph. (3) E N Am
 Bystropogon L'Her. (10) Macaronesia
 Calamintha (= Clinopodium)
 Cedronella Moench (1) Macaronesia
 Chaunostoma Donn.Sm. (= Lepechinia)
 Cleonia L. (2) W Medit.
 Clinopodium L. (90) N World temp Eurasia
 (European and N World not a clade. Trusty et al., 2004; Edwards et al, 2008)
 Conradina (6) SE US
 Coridothymus (= Thymbra) Rchb.f. (unknown) Uncertain
 Cuminia Colla (1) Juan Fernandez Isl.
 Cunila Royen ex L. (15) N/S Am
 Cyclotrichium (Boiss.) Manden. & Scheng. (6) SW Asia to Iran
 Dicerandra Benth. (8-9) SE US
 Diodeilis (= Clinopodium)
 Dorystaechas Boiss. & Heldr. ex Benth. (1) W Asia
 Dracocephalum L. (46) Eurasia, N. Amer.
 Drepanocaryum Pojark. (1) C Asia
 Eriothymus (Benth.) Rchb. (1) Brazil
 Euhesperida Brullo & Furnari (1) Libya & Cyrenaica
 Gardoquia (= Clinopodium)
 Glechoma L. (10) temp. Eurasia
 Glechon Spreng. (6) Brazil, Paraguay
 Gontscharovia Boriss. (1) C Asia
 Hedeoma Pers. (38) SW N. Amer. & S. Amer.
 Hesperozygis Epling (8) Mex. to Brazil
 Hoehnea Epling (4) S Brazil to N Argentina
 Horminum L. (1) S Europe
 Hymenocrater Fisch. & C.A. Mey. (12) SW Asia

Hyssopus L. (5) S Europe & Medit. to C Asia
 Killickia Brauchler, Heubl, & Doroszenko (4) S Afr

Kudrjaschevia Pojark. (4) C Asia
 Kurzamra Kuntze (1) temp. S. Amer.
 Lallelantia Fisch. & C.A. Mey. (5) Turkey to C Asia & Himal.
 Lepechinia Willd. (55) warm N. Amer. & S. Amer., Hawaii
 Lophanthus Adans. (2) unknown
 Lycopus L. (14) N temp
 Marmoritis Benth. (5) Pakistan to China
 Meehania Britton (2) E Asia, E US
 Melissa L. (3) Europe to Iran & C Asia
 Mentha L. (25) temp. OW
 Meriandra Benth. (2) Ethiopia, Himal.
 Micromeria Benth. (90) temp. Europe, Canary Isl., W.I.

Minthostachys (Benth.) Spach (12) W S. Amer.

Monarda L. (20) N Am, Mex
 Monardella Benth. (20) W N. Amer.
 Neoeplingia Ramam., Hiriart & Medrano Mex. (= Lepechinia)

Nepeta L. (250) Eurasia & N Africa

Obtegomeria (1) N S Am
 Origanum L. (36) Eurasia
 Pentapleura Hand.-Mazz. (1) Kurdistan

Perovskia Kar. (7) NE Iran to NW India

Piloblephis Raf. (1) SE US

Pitardia Batt. ex Pit. (2) NW Africa

Pogogyne Benth. (6) W N. Amer.

Poliomintha A. Gray (7) SW N. Amer.

Prunella L. (4) N temp. Eurasia & NW Africa

Pycnanthemum Michx. (17-21) E N Am

Rhabdocaulon (Benth.) Epling (7) trop. S. Amer.

Rhododon Epling (1) SC US

Rosmarinus L. (2) Medit.

Saccocalyx Coss. & Durieu (1) NW Africa

Salvia L. (900) OW & NW temp regions

Satureja L. (30) OW & NW temp. & warm regions

Schizonepeta (Benth.) Briq. (3) temp. Asia

Stachydeoma Small (1) SE US

Thymbra L. (4) Medit. & S Europe to SW Asia

Thymus L. (350) temp. Eurasia

Xenopoma (= Clinopodium)

Zataria Boiss. (1) Iran, Afghanistan

Zhumeria Rech.f. & Wendelbo (1) Iran

Ziziphora L. (25) Medit. to C Asia

Ocimeae Dumort., Anal. Fam. Pl.: 22. 1829 (52/1458)

Hyptidinae Endl., Gen. Pl.: 610. 1838.

Asterohyptis Epling (3-4) Mex.

Cantinoa Harley & JFB Pastore (23) SE US, Carib, S Am

Condea Adanson (26) w N Am, C Am, Carib, S Am

Cyanocephalus Harley & JFB Pastore (25)
 Carib, Brazil, Paraguay, Bolivia
 Eplingiella Harley & JFB Pastore (2) Brazil
 Eriope Humb.&Bonbl. ex Benth. (30) Brazil
 mostly
 Eriopidion (= Eriope) Harley (1) Venezuela,
 Brazil
 Gymnea (Benth.) Harley & JFB Pastore (6)
 Brazil
 Hypenia (Mart. ex Benth.) Harley (23) Brazil,
 Venezuela, Paraguay, Bolivia
 Hyptidendron Harley (18) Andes, Brazil,
 Guayana, Paraguay, Bolivia
 Hyptis Jacq. (144) N Am, Carib, C&S Am
 Leptohyptis Harley & JFB Pastore (5) Brazil
 Marsypianthes Mart. ex Benth. (5) Mexico to
 Argentina, Carib
 Martyranthus Harley & JFB Pastore (4) Brazil,
 Peru
 Medusantha Harley & JFB Pastore (8) Brazil
 Mesosphaerum Browne (25) Andes, mts of
 Mex/C Am, Brazil
 Ocephalus (Benth.) Harley & JFB Pastore
 (14) Brazil
 Peltodon Pohl (= Hyptis)
 Physominthe Harley & JFB Pastore (2) Brazil
 Rhaphiodon Schauer (1) Brazil
Sections of Hyptis unplaced to genus
within Hyptidinae (Harley&Pastore 2012)
 Hyptis sect. Rhytidea (2) Mexico, C Am
 Hyptis sect. Hilaria(1) Brazil
Ociminae J.A. Schmidt in C.F.P von Martium
 Fl. Bras. 8(1): 67, 69. 1858.
 Acrocephalus Benth. (= Platostoma)
 Basilicum Moench (~Platostoma)(7) OW trop.
 to Australia
 Becium Lindl. (= Ocimum)
 Benguella G. Taylor (1) Angola
 Catoferia (Benth.) Benth. (4) C. Amer.
 Ceratanthus F. Muell. ex G. Taylor (= Platostoma)
 Endostemon N.E. Br. (20) trop. & S Africa to
 India
 Erythrochlamys Gurke (= Ocimum)
 Fuerstia T.C.E. Fr. (~Orthosiphon)(6) trop.
 Africa
 Geniosporum Wall. ex Benth. (= Platostoma)
 Haumaniastrum P.A.Duvign. & Plancke
 (~Platystoma)(23) trop. Africa
 Hemizygia (Benth.) Briq. (= Syncolostemon)
 Hoslundia Vahl (~Orthosiphon)(2) trop. Africa
 Mesona Blume (=Platystoma)
 Nosema Prain (= Platystoma)
 Ocimum L. (150) temp. & trop. OW
 Octomeron Robyns (= Platystoma)
 Orthosiphon Benth. (40) OW trop.
 Platostoma P. Beauv. (5) OW trop.
 Puntia Hedge (=Endostemon)
 Syncolostemon E. Mey. (44) trop Af, SE Africa

Plectranthinae Endl., Gen. Pl.: 609. 1838.
 Aeollanthus Mart. ex Spreng. (43) trop. &
 warm Amer.
 Alvesia Welw. (3) trop. Africa
 Anisochilus Wall. Ex Benth. (18) OW trop,
 Indomal.
 Bovonia Chiov. (= Aeollanthus)
 Capitanopsis S. Moore (2) Madag.
 Capitanya Schweinf. ex Gurke (= Plectranthus)
 Coleus Lour. (=Plectranthus)
 Dauphinea Hedge (1) Madag.
 Englerastrum Briq. (= Plectranthus)
 Holostylon Robyns & Lebrun (3) trop. Africa
 Isodictyophorus Briq. (= Plectranthus)
 Leocus A. Chev. (5-6) trop Africa
 Madlabium Hedge (1) Madagascar
 Neohyptis J.K. Morton (= Plectranthus)
 Perrierastrum Guillaumin (= Plectranthus)
 Plectranthus L'Her. (200) warm & trop. OW
 Pycnostachys Hook. (37) trop & S Africa,
 Madag.
 Solenostemon Schumach. (= Plectranthus).
 Radosiella Codd (= Plectranthus)
 Symphostemon Hiern (= Plectranthus)
 Tetradenia Benth. (9) trop. Africa, Madag.
 Thornecroftia N.E. Br. (3) Transvaal
Lavandulinae Endl., Gen. Pl.: 611. 1838
 (1/30)
 Lavandula L. (30) Atlantic isl., Medit. to
 Somalia & India
 Sabaudia (= Lavandula)
Genera w/in Ocimeae unplaced to
subtribe.
 Isodon (Schrad. ex Benth.) Spach (96) warm &
 trop. Asia & Africa
 Hanceola Kudo (3) China
 Siphocranion Kudo (2) China
 Skapanthus C.Y Wu & Li (= Isodon)
Elsholtzieae Burnett, Outl. Bot.: 971. Jun 1835
 (6/57)
 Collinsonia L. (4) E N Am
 Elsholtzia Willd.(35) OW trop.
 Keiskea Miq. (5) Asia
 Mosla (Benth.) Buch.-Ham. ex Maxim. (10) E
 Asia, Malaysia
 Ombrocharis Hand.-Mazz. (1) China
 Perilla L. (6) India to Japan
 Perillula Maxim. (1) Japan
Nepetoideae genera of uncertain
placement (1/1)
 Heterolamium C.Y. Wu (1) China
Viticoideae (8/282) [$\sqrt{12/6/12}$]
 Neorapinia Moldenke (= Vitex) New
 Caledonia
 Paravitex H.R. Fletcher (= Vitex) SE Asia
 Petitia Jacq. (2) W.I.
 Pseudocarpidium Millsp. (9) West Indies

Teijsmanniodendron Koord. (23) SE Asia,
Malaysia
Tsoongia Merr. (= Vitex) SE Asia
Vitex L. (250) temp. & trop. NW & OW
Viticipremna Lam. (= Vitex) Indomal., Australia

Premnoideae Li et al., in prep. (3/247)

[provisional name] [**√12/6/12**]

Cornutia L. (12) trop. Am
Gmelina L. (35) SE Asia, Indomal., Africa,
Mascarenes
Pygmaeopremna (= Premna?)
Premna (200) trop/subtrop Af/Asia/Aust

Peronematoideae Li et al., in prep. (4/16)

[provisional name] [**√10/9/15**]

Garrettia H.R. Fletcher (1) SE Asia, Indomal.
Hymenopyramis Wall. ex Griff. (6) India, SE
Asia
Petraeovitex Olive (8) Indomal /Pac.Is/Phillipines
Peronema Jack (1) SE Asia/Indomal.

Uncertain affinity within family (2/~144)

[**√10/9/15**]

Callicarpa L. (~140) warm & trop. NW & OW
Geunsia (= Callicarpa; see Bramley, 2009 BJLS)
Tectona L.f. (4) trop. Asia

Lentibulariaceae (4/310) Rich. in Poit. & Turpin, Fl. Paris 1: ed. fol. 23, ed. qu. 26. 1808, nom. cons. See Müller et al. 2004.

Genlisea A. St.-Hil. (21) trop Am, trop & S Af,
Mad
Pinguicula L. (74) Am, Medit, circumbor
Utricularia L. (215) cosmop, esp trop

Sometimes assigned here, but excluded in most
recent phylogenetic studies:
Byblis (2) Aus, New Guinea

Linderniaceae (Rchb.) Borsch, K. Müller, & Eb. Fisch. (18/~220) Rahmanzadeh et al., 2005)

Artanema D. Don (4) trop Afr, Asia
Bampsia Lisowskia & Mielcarek (2) Congo
Chamaegigas Dinter (1) Namibia
Craterostigma Hochst. (9) Yemen, trop & S Af,
Ind
Crepidorhopalon Eb. Fisch. (28) trop & S Af,
Mad (prob. = Lindernia, Torenia)
Cubitanthus Barringer (1), Brazil; Excluded
from Gesneriaceae (J. Smith, V. Savolainen
pers.comm.), sister to Stemodiopsis (Perret et
al., BJLS, 2013))
Curanga (= Picria)
Hartliella Eb. Fisch. (4) C Af (Congo, Katanga)
Hemianthus (3-4) (~Micranthemum) C Am
Hemiarrhena Benth. (1) Q'land (= Lindernia?)

Hemisiphonia (=Micranthemum)
Legazpia Blanco (1) SE As, Micrones, N Guin
(= Torenia?)
Lindernia All. (~100) Eur, trop Af, Mad, SE As,
N, C, & C. Am.
Micranthemum (17) Am, WI
Picria Lour. (1) Indomal.
Pierranthus Bonati (1) SE As
Schizotorenia T. Yamaz. (2) SE As (=
Lindernia?)
Scolophyllum T. Yamaz. (2) SE As (=
Lindernia?)
Stemodiopsis (3) Africa
Torenia L. (40) SE As, Af, Mad

Martyniaceae Horan., Char. Ess. Fam.: 130. 1847, nom. cons. (4/13) (sensu H.-D. Ihlenfeldt, pers. comm.)

Craniolaria L. (2) S. Am., Greater Antilles
Holoregmia (1) Brazil (Bahia)
Ibicella Van Eselt. (2) Argent, S Brazil, Boliv

Martynia L. (1) Mex to Costa Rica; Antilles
Proboscidea Schmidel (7) Mex, SW US

Mazaceae Reveal Kew Bull 66:47. 2011. (3/23)

Dodartia (1) S Russia, W As (Mazaceae; Perret et al. BJLS 2013)
Lancea (2) Tibet, China (Mazoideae)
Mazus (20) E & SE As, Indomal, Aust (Mazoideae)

Oleaceae Hofmanns. & Link Fl. Portug. 1:62. 1809. (25/600+) provided by Eva Wallander (updated here: <http://www.oleaceae.info/oleaceae.html>). Comments: Note that *Dimetra* and *Nyctanthes* now, without doubt, belong to Oleaceae (not Verbenaceae). The subfamilies Jasminoideae and Oleoideae have been abandoned because Jasminoideae is paraphyletic. The Oleoideae is monophyletic but now recognised as tribe Oleae, with its former tribes as subtribes.

Fontanesieae

Fontanesia (1-2) SW Asia (and Sicily) and China

Forsythieae

Abeliophyllum Nakai (1) Korea
Forsythia (11) E Asia and SE Europe (1 sp.)

Myxopyreae

Dimetra (1) Thailand
Myxopyrum (4) Tropical SE Asia
Nyctanthes (2) Tropical and subtropical S & SE Asia

Jasmineae

Jasminum (200+) Tropical and subtropical parts of Africa, Asia, Australia
Menodora (24) Subtropical North America, central and S South America, and S Africa

Oleeae

Ligustrinae

Ligustrum (45) Temperate to tropical parts of Eurasia, N Af, Australia
Syringa (20) Mainly temperate Eurasia

Schreberinae

Comoranthus (2) Madagascar and the Comores
Schrebera (4) Tropical parts of Africa and India

Fraxininae

Fraxinus (48) Mainly temperate and subtropical regions of the Northern Hemisphere

Oleinae

Cartrema (7) SE Asia (5) N America (2)
Chionanthus (80-100) Tropical and subtropical Africa, America, Asia, and Australia
Forestiera (17) Subtropical North America, West Indies, and N South America
Haenianthus (3) West Indies
Hesperelaea (1, extinct) Mexico
Nestegis (5) New Zealand and Hawaii (1 sp.)
Noronhia (40) Madagascar & Comores
Notelaea (13) Australia and Tasmania
Olea (33) Tropical and subtropical parts of the Old World
Osmanthus (30) Subtropical parts of E Asia and North America (1-2 spp.)
Phillyrea (2) Mediterranean region to W Asia
Picconia (1) Macaronesia
Priogymnanthus (2) South America

Orobanchaceae Vent., *Tabl. Règne Vég.* 2:292. 1799, *nom. cons.* (102/1840-2125) Synoptical classification following Young et al. 1999, Olmstead et al. 2001, Fischer, 2004; Wolfe et al. 2005, Bennett & Mathews 2006, Tank et al. 2009, Morawetz et al., 2010, McNeal et al., 2013, and D. Nickrent, pers. comm.

Orobancheae Lam. & DC. (McNeal et al, 2013) (8/~174)

Boschniakia (4) Himal, N Asia, NW N Am
Cistanche (10) Med, Ethiopia, India, to W China
Conopholis (2) E US to Panama
Epifagus (1) E N Am
Kopsiopsis (2) W N Am (~ Boschniakia)
Mannagettaea (3) W China to E Siberia
Mysorrhiza (= Orobanche)
Necranthus (= Orobanche)
Orobanche (~150) temp & warm N Hemisphere
Xylanche (2) Himal to Taiwan (= Boschniakia)

Pedicularideae Duby (McNeal et al, 2013) (20/~844-944)

Gerardieae (13/122)

Agalinis (40) trop & warm Am
Anisantherina (1) trop Am
Aureolaria (11) E US, Mex
Brachystigma (1) SW US
Dasistoma (1) E N Am
Esterhazyia (5) Bolivia, Brazil
Gerardia (= Agalinis)
Lamourouxia (28) Mex to Peru
Macranthera (1) SE US
Phtheirospermum (4) E As
Seymeria (25) S N Am
Seymeriopsis (1) Cuba (~Seymeria)
Silviella (2) Mex
Tomanthera (2) N Am
Castillejinae G. Don (6/~222)

Adenostegia (= Cordylanthus)

Castilleja Mutis ex L. f. (~190) most W N Am, also E N Am, Euras, C Am, Andes

Chloropyron Behr (4) W N Am (formerly Cordylanthus)

Clevelandia Greene (= Castilleja)

Cordylanthus Nutt. ex Benth. in DC. (13) W N Am

Dicranostegia (A. Gray) Pennell (1) W N Am (form. Cordylanthus)

Gentrya Breedlove & Heckard (= Castilleja)

Ophiocephalus Wiggins (= Castilleja)

Orthocarpus Nutt. (9) W Am

Triphysaria Fisch. & C.A. Mey. (5) W N Am

Castilleja-Pedicularis clade, unassign (1/500-600)

Pedicularis (500-600) N hemi, 1 sp in Andes

Alectra-Cyclocheilon clade (McNeal et al, 2013) (48/~422)

Buchnereae Benth. (unnamed in McNeal et al., 2013) (46/~418)

Aeginetia L. (3) Indomal, E As

Alectra (40) Africa/Asia

Baumia (1) Angola

Buchnera (~100) warm O&NW (16 NW)

Buttonia (2) trop & S Af

Centranthera (5-6) China to Australia

Christisonia (17) SW China, SE As

Cycniopsis (2) trop Africa

Cycnium (15) warm AF (~Escobediae)

- Diphelypaea (= Phelypaea)
 Escobedia (15) trop Am
 Gerardiina (2) trop & S. Af
 Ghikaea (1) trop Africa
 Gleadovia (6) W Himal, W. China
 Graderia (5) Af & Socotra
 Harveya (40) trop & S. Af, Mascarenes
 Hiernia (1) Angola, Namibia
 Hyobanche (7) S Af
 Leptorhabdos (1) Cauc, Iran, C As, Himal
 Leucosalpa (3) Madagascar
 Madgalenaea (1) SE Brazil
 Melasma (20) trop Af, Am
 Micrargeria (4) trop Af, India
 Micrargeriella (1) trop E Africa
 Nesogenes A. DC. (8) E Afr, Mad, India, Pac Is
 (formerly Nesogenaceae)
 Nothochilus (1) Brazil
 Paraharveya (1) C & E Africa
 Parasopubia (2) SE Asia
 Parastriga (1) trop Africa
 Petitmenginia (2) S China, SE Asia
 Phacellanthus (1) E As
 Phelypaea (4) Medit
 Physocalyx (2) Brazil
 Platypholis (1) Japan
 Pseudomelasma (1) Madagascar
 Pseudosopubia (5) trop Africa
 Pseudostriga (1) SE Asia
 Radamaea (5) Madagascar
 Rhamphicarpa (6) trop & S Af, India, Austral
 Rhaphispermum (1) Madag
 Sieversandreas (1) Madagascar
 Sopubia (~40) trop OW to S Af
 Stellularia (= Buchnera)
 Striga (33) OW trop to S Af
 Tetraspidium (1) Madagascar
 Thunbergianthus (2) Africa
 Tienmuia (=Phacellanthus)
 Vellosiella (2) Brazil
 Xylocalyx (5) Somalia, Socotra
 Cyclocheilaceae (2/4)
- Asepalum (1) NE & E Af
 Cyclocheilon (3) NE Af
 Rhinanthae Lam. & DC. (McNeal et al, 2013)
 (18/~365-545)
 Bartsia (54) Eur, Af mt, Andes (not mono-
 Bennett&Mathews)
 Bartsiella (1) N Afr Atlas Mts
 Bellardia (1) Med
 Bornmuellerantha (1) Turkey to Iran
 Euphrasia (~170-350) N temp, Malaysia, NZ, S
 Am (only Eurasia? Nickrent)
 Fistularia (= Rhinanthus)
 Hedbergia (1) trop Africa
 Lathraea (7) Eurasia
 Macrocyringion (2) Medit (~Odontites)
 Melampyrum (35) N temp
 Nothobartsia (2) Medit
 Odontitella (1) Spain, Port
 Odontites (32) W & S Eur to W As
 Omphalotrix (1) NE As
 Orthantha (= Odontites)
 Parentucellia (2) Med & SW As
 Pseudobartsia (= Parentucellia)
 Pterygiella (4) China
 Rhynchocorys (6) S Eur to Iran
 Rhinanthus (45) N hemisphere, esp Eur
 Siphonidium (= Euphrasia)
 Tozzia (1) Alps, Carpathanians
 Cymbarieae D. Don (McNeal et al, 2013)
 (Schwalbinae Hogg Veg. Kingd.: 562. 1858) (6/12)
 Bungea (2) SW As to China
 Cymbaria (4) Eurasia
 Lesquereuxia (1) E Medit (= Siphonostegia?)
 Monochasma (2) E As
 Schwalbea (1) E US
 Siphonostegia (2) Med & E As
 Orobanchaceae placed in tree, but unassigned to
 above clades (2/25)
 Brandisia (13) Burma China
 Lindenbergia (12) Himal to trop Afr/Asia

Paulowniaceae Nakai J. Jap. Bot. 24:13, 1949. (1/7)

Paulownia Siebold & Zucc. (7) E Asia

Pedaliaceae R.Br. Prodr. 519. 1819. *nom.cons.* (14/79) (sensu H.-D. Ihlenfeldt, 2010; D. Bedigian, pers. comm.)

- Pedalioidae (of Pedaliaceae s.l.) 13/74
 Ceratotheca (5) trop and S. Af.
 Dewinteria (1) (~Rogeria) Namibia, Angola
 Dicerocaryum (3) S. trop. Af.
 Harpagophytum (2) S. Af. Madagascar
 Holubia (1) S. Af.
 Josephinia (4) Kenya to Somalia; Australia
 Linariopsis (3) W and SW trop Af.
- Pedalioidiscus (1) E Af
 Pedalium (1) OW trop – P. murex edible
 Pterodiscus (14) trop and S. Af.
 Rogeria (4) trop and S. Af.
 Sesamothamnus (6) trop Af.
 Sesamum (20) OW trop. and S. Af.
 Uncarina (14) Madagascar

Phrymaceae Shcauer in DC. Prodr. 11:520. 1847. *nom. cons.* (13/188) (Beardsley & Olmstead 2002; Beardsley & Barker 2005; treatment based on Barker et al., 2012, Phytoneuron)

Berendtiella (= Hemichaena)	Mimetanthe (1) W NAM
Diplacus (46) W NAM	Mimulus (7) E NAM, Asia, Austral, S Af
Elacholoma (2) C Aus	Peplidium (4) Aus, Ind, Af
Erythranthe (111) W NAM	Phryma (1) E Asia, E N Am
Glossostigma (5) Aus, NZ, Af, Ind	Thyridia (1) Austral, NZ
Hemichaena (5) C Am	Uvedalia (2) Austral
Leucocarpus (1) trop Am	
Microcarpaea (2) (~Peplideum) SE Asia	

Plocospermataceae Hutch. Fam. Fl. Pl. ed. 3 469. 1973. (1/1)

Lithophytum (= Plocosperma) Mexico
Plocospermum (1) Mex, Guatemala

Rehmanniaceae Reveal Kew Bull 66:47. 2011. (2/11)

Rehmannia (9) E As (sister to Triaenophora)
Triaenophora (2) China (sister to Rehmannia)

Schlegeliaceae (A.H. Gentry) Reveal Phytologia 79:74. 1996. (4/36) formerly of Bignoniaceae and may still be close

Exarata (1) Ecuador & Colombia	Synapsis (1) Cuba
Gibsoniothamnus (12) Mexico to C Am	
Schlegelia (22) tropical Am	

Scrophulariaceae Durande Notions Elém. Bot.: 265. 1782. (61/1776) Synoptical classification by tribe. Following Wettstein (1891), Barringer (1993), Olmstead et al. 2001, Kornhall et al., 2001, 2004, Oxelman et al. 2005.

Aptosimeae (3/41)	Cromidon (12) S Af
Anticharis (14) Af to Mal	Dischisma (11) SW Cape to Namibia
Aptosimum (20) Africa	Glekia (1) S Af
Peliostomum (7) trop & S Af	Globulariopsis (7) S. Af
Buddlejaceae (2/~116)	Glumicalyx (6) S&SE Af
Buddleja (101) Neotrop (67) S Af (13) As (21)	Gosela (1) S Af
Chilianthus (=Buddleja) (3 S Af)	Hebenstretia (25) trop & S Af
Emorya (=Buddleja) (2 Tex., Mex.)	Jamesbrittenia (82) S Af
Gomphostigma (2) S. Af.	Limosella (11) cosmop
Nicodemia (=Buddleja) (8 S Af, Mad)	Lyperia (6) S Af
Hemimerideae (6/134)	Manulea (73) S Af
Alonsoa Ruiz & Pav. (16) trop Am, S Af	Manuleopsis (1) SW Af
Colpasia (1) S Africa	Melanospermum (6) S Af
Diascia (38) S Af	Microdon (7) SW Cape
Diclis (10) trop & S Af, Mad	Phyllopodium (26) SW Cape
Hemimeris (4) S Af	Polycarena (17) SW Cape
Nemesia (65) trop & S Af	Pseudoselago (28) west S Af
Schistanthe (?) ?	Reyemia (2) S Af
Leucophyleae (3/17)	Selago (190) trop & S Af
Capraria (4) warm Am	Sphenandra? (= Sutura)
Eremogeton (1) Mex, Guat	Strobilopsis (1) S Af
Leucophyllum (12) SW N Am	Sutura (3) S Af
Limoselleae (27/634) (Hilliard 1994)	Tetraselago (4) S Af
Agathelpis Choisy (= Microdon) SW Cape	Trienia (9) SW Cape
Barthlottia (1) Madag	Walafrida (= Selago) Madag, S Af
Chaenostoma (46) S. Af	Zaluzianskya (55) W S Af
Chenopodiopsis (3) S Af	Myoporeae (8/253) sensu Chinnock, 2007

Androya (1) Madagascar (Oxelman et al. 1999)	Staurophragma (= Verbascum)
Bontia L. (1) W. Ind., trop S. Am.	Verbascum (360) Euras, E Af
Calamphoreus Chinnock (1) sw Austral	Teedieae (6/12) (G. Don; Barringer 1993, incl. Freylinieae Barringer 1993)
Diocirea Chinnock (4) Austral	Dermatobotrys (1) S. Af
Eremophila R. Br. (214) Austral. (1 NZ)	Freylinia (4) trop & S Af
Glycocystis Chinnock (1) Austral	Manuleopsis (1) SW Afr
Myoporum Sol. Ex Forster (30) Austral., NZ, Pac. Is., E. Asia	Oftia (3) S Af
Pentacoelium Zucc. (1) Austral	Ranopisoa (1) Madag (~ Oftia)
Scrophularieae (4/564)	Teedia (2) S Af
Antherothamnus (1) C&S Af	Unassigned (2/5)
Celsia (= Verbascum)	Camptoloma (3) Canaries Ethiopia Arabia, Angola, Namibia
Oreosolen (3) Himalaya	Phygelius (2) S Africa
Scrophularia (200) N temp to trop Am	

Stilbaceae (11/39) Synoptical Classification by tribe. (Bremer et al. 1994; Rourke, 2000; Olmstead et al. 2001; Kornhall unpublished thesis, 2004 [not followed; needs confirmation/publication]; Oxelman et al, 2005)

Stilbeae 7/28	Anastrabe (1) S Africa
Campylostachys (1) SW Cape	Bowkeria (5) S Africa
Eurylobium (= Stilbe) SW Cape	Ixianthes (1) S Africa
Euthystachys (1) S Af	Hallerieae 1/4
Kogelbergia (2) S Af	Charadrophila (1) S Af
Nuxia (15) S Arabia to trop Af, Masc, S Af.	Halleria (4) trop & S Africa, Madag
Retzia (1) Cape	Unassigned to tribe 1/1
Stilbe (10) SW and S Cape	Thesmophora (1) S Af
Xeroplana (= Stilbe) SW and S Cape	
Bowkerieae (Barringer 1993) 3/7	

Tetrachondraceae 2/3 (Oxelman et al. 1999)

Polypremum (1) warm Am.	Tetrachondra (2) Patagonia, N.Z.
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Thomandersiaceae Sreem. (Phytologia 37: 413-416. 1977) 1/6 (Wortley et al. 2007)

Thomandersia (6) trop Afr.	
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Verbenaceae J. Sainte-Hilaire 1805 (31/831) –Classification follows (O’Leary et al. 2009; Marx et al., 2010; Thode et al., 2013; Lu-Irving et al., 2014)

Petreeae Briquet 1895 (2/12)	Priveae Briquet 1895 (2/21)
Petrea (11) (Rueda ’94 only 11) trop Am	Castelia (=Pitraea)
Xolocotzia (1) Mexico	Pitraea (~Priva) (1) temp Peru & Bolivia to Argentina/Chile
Duranteae Bentham 1839 (5/189)	Priva (20) trop/subtrop Af/Am/As
Bouchea (10) trop-subtr Am	Neospartoneae Olmstead & O’Leary 2010 (3/7)
Chascanum (27) Af/Mad./Arab./Ind.	Diostea (1) Argentina/Chile
Duranta (~20) trop-subtr Am	Lampaya (2) Argent/Chile/Bolivia
Recordia (2) Bolivia & Brazil	Neosparton (4) temp. Argentina
Stachytarpheta (130) trop-subtr Am (weeds in tropics elsewhere)	Verbeneae Dumortier 1829 (5/177)
Svensonia (= Chascanum; 4 E.Af/India)	Glandularia (84) S subtr-temp New World
Ubochea (=Stachytarpheta; 1 C Verde Is)	Hierobotana (1) Colombia/Ecuador/Peru (~Verbena)
Verbenoxylum (= Recordia; 1 Brazil)	Junellia (37) Peru to Patagonia
Casselieae (Schauer) Troncoso 1974 (3/14)	Stylodon (= Verbena)
Casselia (6) trop Brazil, Bolivia, Paraguay	Mulguraea (11) Argentina (ex Junellia)
Ghinia (= Tamonea)	Urbana (= Junellia)
Parodianthus (2) Argentina	Verbena (44) mostly New World, few Eur/As
Tamonea (6) trop Am	Lantaneae Endler 1838 (5/269) (generic boundaries and species no. poorly defined)
Citharexyleae Briquet 1895 (3/134)	Acantholippia (= Aloysia; 5 arid Argent/Chile ‘Acantholippia seriphoides’ (unassigned to genus)
Baillonia (1) (~Citharexylum) Brazil & Paraguay	
Citharexylum (~130) trop-subtr Am	
Rehdera (3) C.Am	

Aloysia (~36) trop-subtr New World
 Burroughsia (=Lippia; 2 SW N Am)
 Lantana (~100) (Rotman, 2009) trop Am/trop-subtr; Africa
 Lippia (~125) (Salimena & Mulgura, unpubl) trop Af/Am (incl. 3 Mex spp. of Aloysia)
 Nashia (~Lippia) (7) Bahamas/Cuba
 Phyla (~Lippia) (5) trop Am
 Xeroaloyisia (=Aloysia; 1 NW Argentina)

Genera unassigned to more inclusive clades, or of uncertain position (3/8)
 Coelocarpum (5) Socotra/Madagascar
 Dipyrena (1) temp Argentina (tentatively placed in Verbenaceae based on cpDNA, but not based on PPR)
 Rhaphithamnus (2) Chile/Juan Fern./W Argentina

Veronicaceae (= Plantaginaceae in APGIII) (120/1916) Synoptical classification by Tribe. Following Wettstein (1891), Barringer (1993), Olmstead et al. 2001, Oxelman et al. 1999, Wolfe et al., 2002; Oxelman et al. 2005; Albach et al. 2005; Fischer et al. (2004); Scatigna et al. (2015 – Philcoxia).

Angelonieae (5/39)
 Angelonia (25) trop Am
 Basistemom (8) trop Am
 Hassleropsis (=Basistemom; 1 Paraguay)
 Melosperma (1) Chile, Argentina
 Monopera (2) S. Am
 Monttea (3) Chile, Argentina
 Saccanthus (=Basistemom; 1-2 Bolivia)
 Antirrhineae 28/297 (Sutton 1988)
 Acanthorrhinum (1) N Af
 Albraunia (3) SW Asia
 Anarrhinum (8) Medit. SW Asia
 Antirrhinum (20 Sutton - Medit; 36 Thompson – Medit, W N Am)
 Asarina (1) SW Europe
 Chaenorrhinum (21) Medit., W Asia
 Cymbalaria (9) W Europe to Iran
 Epixiphium (1) SW N Am (~Maurandya)
 Galvezia (4) coast Peru, Ecuador, Galap.
 Gambelia (4) SW N Am (~Antirrhinum)
 Holmgrenanthe (1) SW N Am
 Holzneria (2) SW Asia
 Howelliella (1) SW N Am (~Antirrhinum)
 Kickxia (9) Med to SC&SW Asia
 Linaria (150) Euras, Medit
 Lophospermum (6) Mex, Guatemala
 Mabrya (5) SW N Am
 Maurandella (1) SW N Am (~Maurandya)
 Maurandya (2) Mex C Am
 Misopates (7) Medit, Cape Verde, Is Ethiop India
 Mohavea (2) SW US
 Nenorrhinum (10) (~Kickxia) Med, SC-SW Asia
 Neogaerrhinum (2) SW N Am (~Antirrhinum)
 Nuttalanthus (4) N Am temp S Am (~Linaria)
 Pseudorontium (1) SW N Am (~Antirrhinum)
 Rhodochiton (3) Mex (~Lophospermum)
 Sairocarpus (13) SW US (~Antirrhinum)
 Schweinfurthia (6) NE Af to India
 Callitricheae 2/~45
 Callitriche (40-50) Cosmop
 Hippuris (1) Cosmop
 Cheloneae 9/290
 Chelone (4) E N Am
 Chionophila (2) W N Am

Collinsia (20) N Am
 Keckiella (7) N Am
 Nothochelone (1) W N Am
 Pennellianthus (1) NE As
 Penstemon (~250) N Am
 Tonella (2) W US
 Uroskinnera (3) Mex C Am
 Digitalideae 2/25
 Digitalis (23) Med, Eur, C As, Macaronesia
 Erinus (2) N Af, Pyrren, Alps
 Isoplexis (=Digitalis) Macaronesia
 Globulariaceae (Globularieae) 2/25
 Globularia (22) Cape Verde Eur W As
 Poskea (3) Somolia Socotra
 Gratiolieae 37/~321
 Achetaria Cham. & Schltdl. (5) Brazil, Carib
 Adenosma R. Br. (15) China, Indomal, Aus
 Allocalyx? (=Bacopa)
 Amphianthus (=Gratiola; Estes&Small, 2008)
 Ancistrostylis (=Bacopa) Laos
 Bacopa (~60) pantropical
 Benjaminia (1) trop Am
 Boelckia (1) Bolivia
 Braunblanquetia (1) Arg Patagonia
 Bryodes (3) Med & Mascaren
 Bythophyton? (1) Indomal
 Cheilophyllon (8) Carib
 Conobea (7) Am trop
 Darcya (3) Costa Rica - Columbia
 Deinostema (2) E Asia
 Dintera (1) trop Af
 Dizygostemon (2) Brazil
 Dopatrium (12) trop Afr – SE Asia
 Encopella (1) Cuba
 Geochorda (=Bacopa)
 Gratiola (20) temp, trop mts
 Herpestis (=Bacopa)
 Hydrotriche? (4) Mad
 Ildefonsia (=Bacopa)
 Leucospora (1) (~Stemodia?) E N Am
 Limnophila (36) OW trop
 Maeviella (1) S. Am
 Mecardonia (15) warm Am (~Bacopa)
 Monocardia (=Bacopa?)
 Morgania (4) (~Stemodia) Australia

- Otacanthus (6) Brazil
Philcoxia (5) Brazil
Psammertes (1) trop W Af, Med
Schistophragma? (2) (~Leucocarpus) W N Am, C Am
Schizosepala (1) Brazil
Scoparia (20) trop Am
Sophronanthe (1) SE US
Stemodia (56) OW & NW trop
Tetraulacium (1) Brazil
Trapella (1-2) E. As.
Zenkerina? ()
- Hemiphragmieae 1/1
Hemiphragma (1) Himal
- Plantaginaceae (Plantagineae) (3/296)
Aragoa (19) Andes
Bougueria (= Plantago) Andes
Littorella (3) 1 each in N Am, S Am, Eur
Plantago (274) cosmop
- Russelieae 2/60
Russelia (52) Cuba, Mex to Columbia
Tetranema (8) Mex, Guatem, Nicaragua, Costa Rica
- Sibthorpieae 2/6
Ellisiophyllum (1) India to Japan, New Guinea
Sibthorpia (5) trop & S Am, Macaron, Eur, Afr mts
- Veroniceae 21/~450 (see Albach et al. 2004)
Besseyia (7) N Am (= Veronica)
Botryopleuron (=Veronicastrum)
Calorhabdos (=Veronicastrum)
Chionohebe (7) Tasmania, NZ (~Veronica)
Cochlidiosperma (= Veronica)
- Derwentia (8) SE Aus (= Veronica)
Detzneria (1) New Guin (= Veronica)
Falconeria (=Kashmiria)
Hebe (~70) NZ, Fr Polynes, S Am (= Veronica)
Heliohebe (5) NZ (= Veronica)
Kashmiria (1) Himal
Lagotis (20) Eur to W China
Neopicrorhiza (1) E Himal (~Picrorhiza)
Odicardis (2) Cauc, E Afr (~Veronica)
Oligospermum (= Veronica)
Paederota (2) S Eur
Paederotella (3) As Minor, Cauc (~Veronica)
Parahebe (30) N Guinea NZ (~Veronica)
Picrorhiza (1) W Himal
Pseudolysimachion (~15) temp/subtemp Euras (= Veronica)
Scrofella (1) China
Synthyris (~15) W N Am (= Veronica)
Veronica (s.s. ~250; s.l. ~450) N temp or cosmop temp
Veronicastrum (5-6) NE As, NE Am
Wulfenia (4) SE Eur, Turk
Wulfeniopsis (2) Afghan – Nepal
- Veronicaceae unassigned to tribe 7/65
Ameroglossum (1) Brazil
Anamaria (= Stemodia)
Brookea (Stilbaceae in Fischer, 2004) (4) Borneo
Cheilophyllum (8) W Indies
Philcoxia (Veronicaceae?) (3) Brazil
Campylanthus (12) Macaron NE Af Arabia
Lafuentea (1) Spain
Ourisia (36) Andes (20), NZ (15), Tasm (1)

Genera of Lamiales unassigned to family (7/52):

- Peltanthera (1) Costa Rica to Bolivia (either sister to Gesneriaceae, including Sanango, or sister to Calceolariaceae + Gesneriaceae)
Wightia Wall. (2) SE Asia epiphytes becoming trees (similarities to Brandisia noted by Fischer, 2004, may belong to Orobanchaceae; S. Mathews says she has data that reject this

placement 7/11/12; Mabberley 3rd ed. says Paulowniaceae; DNA placement by Zhou et al., 2014 either sister to Paulownia or Phrymaceae)

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J. Smith (Gesneriaceae)
R. Harley (Lamiaceae)
P. Goldblatt (Scrophulariaceae s.l.; esp. S. Africa)
D. Albach (Veroniceae and Veronicaceae/Plantaginaceae)
Eva Wallander (eva.wallander@systbot.gu.se) (Oleaceae)
R. Scotland (Acanthaceae)
B. Bremer (scroph tribe Manuleeae, including former Selagineae)
H.-D. Ihlenfeldt (Pedaliaceae, Martyniaceae, Trapellaceae)

D. Mabberley (Lamiaceae)
L. Lohmann (Bignoniaceae)
D. Nickrent (Orobanchaceae)
D. Albach (Veronicaceae)
N. O'Leary (Verbena, Glandularia, Mulguraea)
Shirley Joan Smithies (South African groups)
John L. Clark (Gesneriaceae)

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