Table S1. Comparison of classifications of lycophyte and fern families of Vietnam in IFV and CPSV. (Scientific names in boldface were newly circumscribed for Vietnam).

IFV (1999)		**CPSV (2001)**		**Phan (2010)**	
Families	Genera	Families	Genera	Families	Genera
		Psilotophyta		**Psilotopsida**	
				1. Ophioglossaceae	*Botrychium* *Ophioglossum*
1. Psilotaceae	*Psilotum*	1. Psilotaceae	*Psilotum*	2. Psilotaceae	*Psilotum*
		Lycopodiophyta			
2. Lycopodiaceae	*Huperzia* *Lycopodium*	1. Lycopodiaceae	*Huperzia* *Lycopodiella* *Lycopodium*		
3. Isoetaceae	*Isoetes*	2. Isoetaceae	*Isoetes*		
4. Selaginellaceae	*Selaginella*	3. Selaginellaceae	*Selaginella*		
		Equisetophyta		**Equisetopsida**	
5. Equisetaceae	*Equisetum*	1. Equisetaceae	*Equisetum*	3. Equisetaceae	*Equisetum*
				Marattiopsida	
				4. Marattiaceae	*Angiopteris* ***Christensenia*** *Marattia*
		Polypodiophyta		**Polypodiopsida**	
6. Adiantaceae	*Adiantum* *Cheilanthes* *Coniogramme* *Dryopteris* *Hemionitis* *Onychium* *Pellaea* *Pityrogramma* *Syngramma* *Taenitis* *Notholaena*	1. Adiantaceae	*Adiantum* *Cheilanthes* *Coniogramme* *Dryopteris* *Hemionitis* *Mildella* *Monachosorum* *Onychium* *Pellaea* *Pityrogramma* *Syngramma* *Taenitis*		
7. Aspleniaceae	*Asplenium* *Athyrium* *Cystopteris* *Diplazium*	2. Aspleniaceae	*Asplenium*	19. Aspleniaceae	*Asplenium* ***Hymenoasplenium***
8. Azollaceae	*Azolla*	3. Azollaceae	*Azolla*		
9. Blechnaceae	*Blechnum* *Brainea* *Woodwardia*	4. Blechnaceae	*Blechnum* *Brainea* *Stenochlaena* *Woodwardia*	22. Blechnaceae	*Blechnum* *Brainea* *Stenochlaena* *Woodwardia*
10. Cheiropleuriaceae	*Cheiropleuria*	5. Cheiropleuriaceae	*Cheiropleuria*		
11. Cyathaceae	*Cyathea*	6. Cyathaceae	*Cyathea*	15. Cyatheaceae	*Cyathea* *Alsophila* *Sphaeropteris*

IFV (1999)		**CPSV (2001)**		**Phan (2010)**	
Families	Genera	Families	Genera	Families	Genera
12. Davalliaceae	*Araiostegia*	7. Davalliaceae	*Araiostegia*	27. Davalliaceae	*Araiostegia*
	Arthropteris				
	Davallia		*Davallia*		*Davallia*
	Davallodes		*Davallodes*		*Davallodes*
	Humata				
	Gymnogrammitis		*Gymnogrammitis*		
	Nephrolepis				
	Leucostegia		*Leucostegia*		
	Rhumohra		*Rhumohra*		
	Oleandra				
13. Dennstaedtiaceae	*Dennstaedtia*	8. Dennstaedtiaceae	*Dennstaedtia*	17. Dennstaedtiaceae	*Dennstaedtia*
	Histiopteris		*Histiopteris*		*Histiopteris*
	Hypolepis		*Hypolepis*		*Hypolepis*
	Microlepia		*Microlepia*		*Microlepia*
	Monachosorium				*Monachosorium*
	Pteridium		*Pteridium*		*Pteridium*
	Lindsaea		*Lindsaea*	16. **Lindsaeaceae**	*Lindsaea*
	Sphenomeris		*Sphenomeris*		*Sphenomeris*
	Tapeinidium		*Tapeinidium*		*Tapeinidium*
14. Thyrsopteridaceae	*Cibotium*	9. Dicksoniaceae	*Cibotium*	14. **Cibotiaceae**	*Cibotium*
15. Dipteridaceae		10. Dipteridaceae		8. Dipteridaceae	*Cheiropleuria*
	Dipteris		*Dipteris*		*Dipteris*
16. Dryopteridaceae		11. Dryopteridaceae	*Acrophorus*	23. Dryopteridaceae	*Acrophorus*
					Acrorumohra
	Arachniodes		*Arachniodes*		*Arachniodes*
	Ctenitis		*Ctenitis*		*Ctenitis*
	Ctenitopsis				
	Cyrtomium		*Cyrtomium*		*Cyrtomium*
	Cyrtogonellum				*Cyrtogonellum*
	Diacalpe		*Diacalpe*		
	Didymochlaena		*Didymochlaena*		*Didymochlaena*
	Dryopteris		*Dryopteris*		*Dryopteris*
					Elaphoglossum
					Hypodematium
					Leucostegia
					Lomagramma
					Peranema
	Hemigramma				
	Quercifilix				
			Polystichopsis		
	Polystichum		*Polystichum*		*Polystichum*
	Cyclopeltis		*Cyclopeltis*	24. Lomariopsidaceae	*Cyclopeltis*
			Heterogonium	25. Tectariaceae	*Heterogonium*
			Pleocnemia		*Pleocnemia*
	Pteridrys		*Pteridrys*		*Pteridrys*
	Tectaria		*Tectaria*		*Tectaria*
17. Gleicheniaceae	*Dicranopteris*	12. Gleicheniaceae	*Dicranopteris*	7. Gleicheniaceae	*Dicranopteris*

IFV (1999)		**CPSV (2001)**		**Phan (2010)**	
Families	Genera	Families	Genera	Families	Genera
	Diplopterygium		*Diplopterygium*		*Diplopterygium*
	Gleichenia		*Gleichenia*		*Gleichenia*
18. Grammitidaceae	*Acrosorus*	13. Grammitidaceae	*Acrosorus*		
	Calymmodon		*Calymmodon*		
	Ctenopteris		*Ctenopteris*		
	Grammitis		*Grammitis*		
	Prosaptia		*Prosaptia*		
	Scleroglossum		*Scleroglossum*		
	Xiphopteris		*Xiphopteris*		
	Loxogramme				
19. Hymenophyllaceae	*Cephalomanes*	14. Hymenophyllaceae	*Cephalomanes*	6. Hymenophyllaceae	*Cephalomanes*
					Abrodictyum
	Crepidomanes		*Crepidomanes*		*Crepidomanes*
					Didymoglossum
	Gnocormus				
	Hymenophyllum		*Hymenophyllum*		*Hymenophyllum*
	Mecodium				
	Meringium				
	Microgonium				
	Sphaerocionium		*Sphaerocionium*		
	Trichomanes		*Trichomanes*		*Trichomanes*
	Vandenboschia				*Vandenboschia*
20. Lomariopsidaceae	*Bolbitis*	15. Lomariopsidaceae	*Bolbitis*		
	Egenolfia				
	Elaphoglossum		*Elaphoglossum*		
			Lomagramma		
			Teratophyllum		
	Lomariopsis		*Lomariopsis*	24. Lomariopsidaceae	*Lomariopsis*
21. Marattiaceae	*Marattia*	16. Marattiaceae	*Marattia*		
22. Angiopteridaceae	*Angiopteris*		*Angiopteris*		
	Archangiopteris				
23. Marsileaceae	*Marsilea*	17. Marsileaceae	*Marsilea*	11. Marsileaceae	*Marsilea*
		18. Oleandraceae	*Arthropteris*	25. Tectariaceae	*Arthropteris*
			Nephrolepis	24. Lomariopsidaceae	*Nephrolepis*
			Oleandra	26. Oleandraceae	*Oleandra*
24. Ophioglossaceae	*Botrychium*	19. Ophioglossaceae	*Botrychium*		
	Helminthostachys		*Helminthostachys*		
	Ophioglossum		*Ophioglossum*		
25. Osmundaceae	*Osmunda*	20. Osmundaceae	*Osmunda*	5. Osmundaceae	*Osmunda*
26. Parkeriaceae	*Ceratopteris*	21. Parkeriaceae	*Ceratopteris*		
27. Plagiogyriaceae	*Plagiogyria*	22. Plagiogyriaceae	*Plagiogyria*	13. Plagiogyriaceae	*Plagiogyria*
28. Polypodiaceae	*Aglaomorpha*	23. Polypodiaceae	*Aglaomorpha*	28. Polypodiaceae	*Aglaomorpha*
	Arthromeris		*Arthromeris*		*Arthromeris*
	Belvisia		*Belvisia*		*Belvisia*

IFV (1999)		**CPSV (2001)**		**Phan (2010)**	
Families	Genera	Families	Genera	Families	Genera
					Caobangia
	Christiopteris		*Christiopteris*		*Christiopteris*
	Colysis		*Colysis*		
	Crypsinus		*Crypsinus*		
	Drynaria		*Drynaria*		*Drynaria*
	Goniophlebium		*Goniophlebium*		*Goniophlebium*
					Gymnogrammitis
					Kontumia
			Lecanopteris		*Lecanopteris*
	Lemmaphyllum		*Lemmaphyllum*		*Lemmaphyllum*
	Lepisorus		*Lepisorus*		*Lepisorus*
	Leptochilus		*Leptochilus*		*Leptochilus*
			Loxogramme		*Loxogramme*
					Micropolypodium
	Microsorum		*Microsorum*		*Microsorum*
	Myrmecopteris				
	Neocheiropteris		*Neocheiropteris*		*Neocheiropteris*
	Paragramma		*Paragramma*		
	Phymatosorus		*Phymatosorus*		
	Photinopteris				
	Platycerium		*Platycerium*		*Platycerium*
					Polypodioides
	Polypodium		*Polypodium*		*Polypodium*
	Pyrrosia		*Pyrrosia*		*Pyrrosia*
	Selliguea		*Selliguea*		*Selliguea*
29. Pteridaceae	*Acrostichum*	24. Pteridaceae	*Acrostichum*	18. Pteridaceae	*Acrostichum*
					Adiantum
					Aleuritopteris
					Anogramma
					Antrophyum
					Ceratopteris
					Cheilanthus
					Coniogramme
					Dryopteris
					Hemionitis
					Mildella
					Notholaena
					Onychium
					Pellaea
					Pityrogramma
	Pteris		*Pteris*		*Pteris*
					Syngramma
					Taenitis
					Vittaria
30. Salviniaceae	*Salvinia*	25. Salviniaceae	*Salvinia*	12. Salviniaceae	*Salvinia*
					Azolla
31. Schizaeaceae	*Schizaea*	26. Schizaeaceae	*Schizaea*	10. Schizaeaceae	*Schizaea*
	Lygodium		*Lygodium*	9. **Lygodiaceae**	*Lygodium*
32. Thelypteridaceae	*Ampelopteris*	27. Thelypteridaceae	*Ampelopteris*	20. Thelypteridaceae	

IFV (1999)		**CPSV (2001)**		**Phan (2010)**	
Families	Genera	Families	Genera	Families	Genera
			Amphineuron		
	Christella		*Christella*		
	Coryphopteris		*Coryphopteris*		
	Cyclogramma		*Cyclogramma*		
	Cyclosorus		*Cyclosorus*		*Cyclosorus*
			Glaphyropteridop-sis		
			Macrothelypteris		*Macrothelypteris*
	Metathelypteris		*Metathelypteris*		
			Parathelypteris		
			Phegopteris		*Phegopteris*
	Pneumatopteris		*Pneumatopteris*		
	Pronephrium		*Pronephrium*		
	Pseudocyclosorus		*Pseudocyclosorus*		
	Pseudophegop-teris		*Pseudophegopteris*		*Pseudophegop-teris*
	Sphaerostephanos		*Sphaerostephanos*		
	Stegnogramma		*Stegnogramma*		
	Thelypteris		*Thelypteris*		*Thelypteris*
	Trigonospora		*Trigonospora*		
33. Vittariaceae	*Antrophyum*	28. Vittariaceae	*Antrophyum*		
	Vittaria		*Vittaria*		
		29. Woodsiaceae	*Athyrium*	21. Woodsiaceae	*Athyrium*
					Acystopteris
			Cornopteris		*Cornopteris*
			Cystopteris		
			Lunathyrium		*Deparia*
			Diplaziopsis		*Diplaziopsis*
			Diplazium		*Diplazium*
			Hypodematium		
					Rhachidosorus

Table S2. Comparison of classifications of gymnosperm families of Vietnam in IFV and CPSV. (Generic names in boldface were newly recorded for Vietnam).

IFV (1999)		**CPSV (2001)**		**Nguyen and Thomas (2005)**	
Families	Genera	Families	Genera	Families	Genera
1. Cycadaceae	*Cycas*	4. Cycadaceae	as IFV	not recognized	not recognized
2. Gnetaceae	*Gnetum*	5. Gnetaceae	as IFV	not recognized	not recognized
3. Gingkoaceae	*Gingko*	not recognized	not recognized	not recognized	not recognized
4. Pinaceae	*Abies*	6. Pinaceae	as IFV	3. Pinaceae	as IFV
	Keteleeria		as IFV		as IFV
	Pinus		as IFV		as IFV
	not recognized		not recognized		***Pseudotsuga***
	Tsuga		as IFV		as IFV
	Araucaria	1. Araucariaceae	*Araucaria*	not recognized	
5. Taxodiaceae	*Cunninghamia*	9. Taxodiaceae	as IFV	not recognized	*Cunninghamia* (in Cupressaceae)
	Glyptostrobus		as IFV		*Glyptostrobus* (in Cupressaceae)
	Taxodium		as IFV		not recognized
	Cryptomeria		not recognized		not recognized
6. Cupressaceae	*Calocedrus*	3. Cupressaceae	as IFV	2. Cupressaceae	as IFV
	Chamaecyparis		not recognized		not recognized
	Cupressus		as IFV		as IFV
	Fokienia		as IFV		as IFV
	Sabina		not recognized		not recognized
	not recognized		*Juniperus*		not recognized
	Thuja		as IFV		not recognized
	not recognized		not recognized		***Taiwania***
	not recognized		not recognized		***Xanthocyparis***
7. Podocarpaceae	not recognized	7. Podocarpaceae	*Dacrycarpus*	4. Podocarpaceae	as CPSV
	Dacrydium		as IFV		as IFV
	Nageia		as IFV		as IFV
	Decussocarpus		not recognized		not recognized
	Podocarpus		as IFV		as IFV
8. Taxaceae	*Taxus*	8. Taxaceae	as IFV	6. Taxaceae	as IFV
9. Cephalotaxaceae	*Cephalotaxus*	2. Cephalotaxaceae	as IFV	1. Cephalotaxaceae	as IFV
10. Amentotaxaceae	*Amentotaxus*	9. Taxaceae	as IFV	5. Taxaceae	as IFV

Table S3. Comparison of classifications of angiosperm families of Vietnam in IFV and CPSV. (IFV families in boldface were newly circumscribed in CPSV).

IFV (1999–2003)	CPSV (2001–2005)
	MAGNOLIOPSIDA
1. Magnoliaceae	1. Magnoliaceae
2. Annonaceae	2. Annonaceae
3. Myristicaceae	3. Myristicaceae
4. Chloranthaceae	6. Chloranthaceae
5. Saururaceae	9. Saururaceae
6. Piperaceae	10. Piperaceae
7. Aristolochiaceae	11. Aristolochiaceae
8. Illiciaceae	17. Illiciaceae
9. Schisandraceae	18. Schisandraceae
10. Nelumbonaceae	19. Nelumbonaceae
11. Nymphaeaceae	14. Nymphaeaceae
12. Barclayaceae	15. Barclayaceae
13. Cabombaceae	13. Cabombaceae
14. Ceratophyllaceae	16. Ceratophyllaceae
15. Ranunculaceae	23. Ranunculaceae
16. Berberidaceae	24. Berberidaceae
17. Sargentodoxaceae	21. Sargentodoxaceae
18. Lardizabalaceae	20. Lardizabalaceae
19. Menispermaceae	22. Menispermaceae
20. Papaveraceae	25. Papaveraceae
21. Fumariaceae	26. Fumariaceae
22. Lauraceae	8. Lauraceae
23. Monimiaceae	4. Monimiaceae
24. Hernandiaceae	5. Hernandiaceae
25. Dilleniaceae	54. Dilleniaceae
26. Actinidiaceae	81. Actinidiaceae
27. Paeoniaceae	55. Paeoniaceae
28. Ochnaceae	56. Ochnaceae
29. Theaceae	59. Theaceae
30. Dipterocarpaceae	57. Dipterocarpaceae
31. Ancistrocladaceae	58. Ancistrocladaceae
32. Stachyuraceae	66. Stachyuraceaev
33. Pentaphylaceae	60. Pentaphylaceae
34. Elatinaceae	64. Elatinaceae
35. Guttiferae	62. Clusiaceae
36. Elaeocarpaceae	93. Elaeocarpaceae
37. Tiliaceae	94. Tiliaceae
38. Sterculiaceae	95. Sterculiaceae
39. Bombacaceae	96. Bombacaceae
40. Malvaceae	97. Malvaceae
41. Nepenthaceae	118. Nepenthaceae
42. Droseraceae	117. Droseraceae
43. Flacourtiaceae	65. Flacourtiaceae
44. Bixaceae	68. Bixaceae
45. Cochlospermaceae	69. Cochlospermaceae
46. Violaceae	67. Violaceae

47. Tamaricaceae	79. Tamaricaceae
48. Turneraceae	71. Turneraceae
49. Passifloraceae	70. Passifloraceae
50. Caricaceae	72. Caricaceae
51. Cucurbitaceae	73. Cucurbitaceae
52. Datiscaeae	74. Datiscaeae
53. Begoniaceae	75. Begoniaceae
54. Capparaceae	76. Capparaceae
55. Brassicaceae	78. Brassicaceae
56. Moringaceae	77. Moringaceae
57. Clethraceae	82. Clethraceae
58. Epacridaceae	84. Epacridaceae
59. Ericaceae	83. Ericaceae
60. Sapotaceae	90. Sapotaceae
61. Ebenaceae	89. Ebenaceae
62. Styracaceae	87. Styracaceae
63. Symplocaceae	88. Symplocaceae
64. Myrsinaceae	91. Myrsinaceae
65. Primulaceae	92. Primulaceae
66. Phytolaccaceae	41. Phytolaccaceae
67. Nyctaginaceae	42. Nyctaginaceae
68. Aizoaceae	44. Aizoaceae
69. Cactaceae	46. Cactaceae
70. Chenopodiaceae	51. Chenopodiaceae
71. Amaranthaceae	50. Amaranthaceae
72. Portulacaceae	47. Portulacaceae
73. Basellaceae	48. Basellaceae
74. Caryophyllaceae	49. Caryophyllaceae
75. Polygonaceae	52. Polygonaceae
76. Plumbaginaceae	53. Plumbaginaceae
77. Connaraceae	116. Connaraceae
78. Pittosporaceae	107. Pittosporaceae
79. Anisophylleaceae	124. Anisophylleaceae
80. Crassulaceae	109. Crassulaceae
81. Rosaceae	111. Rosaceae
82. Suriannaceae	not recognized
83. Saxifragaceae	110. Saxifragaceae
84. Fabaceae	115. Fabaceae
85. Elaeagnaceae	182. Elaeagnaceae
86. Proteaceae	183. Proteaceae
87. Podostemaceae	119. Podostemaceae
88. Tritischaceae	not recognized
89. Haloragaceae	131. Haloragaceae
90. Lecythidaceae	130. Lecythidaceae
91. Sonneratiaceae	121. Sonneratiaceae
92. Lythraceae	120. Lythraceae
93. Crypteroniaceae	103. Crypteroniaceae
94. Thymelaeaceae	102.Thymelaeaceae
95. Trapaceae	129. Trapaceae
96. Myrtaceae	126. Myrtaceae
97. Punicaceae	122. Punicaceae

98. Onagnaceae	128. Onagnaceae
99. Melastomataceae	127. Melastomataceae
100. Combretaceae	125. Combretaceae
101. Rhizophoraceae	123. Rhizophoraceae
102. Alangiaceae	157. Alangiaceae
103. Nyssaceae	154. Nyssaceae
104. Cornaceae	155. Cornaceae
105. Olacaceae	172. Olacaceae
106. Opiliaceae	174. Opiliaceae
107. Santalaceae	177. Santalaceae
108. Loranthaceae	179. Loranthaceae
109. Balanophoraceae	181. Balanophoraceae
110. Celastraceae	166. Celastraceae
111. Salvadoraceae	165. Salvadoraceae
112. Aquifoliaceae	163. Aquifoliaceae
113. Icacinaceae	164. Icacinaceae
114. Cardiopteridaceae	176. Cardiopteridaceae
115. Dichapetalaceae	101. Dichapetalaceae
116. Pandaceae	100A. Pandaceae
117. Buxaceae	98. Buxaceae
118. Euphorbiaceae	100. Euphorbiaceae
119. Oxalidaceae	148. Oxalidaceae
120. Geraniaceae	149. Geraniaceae
121. Tropaealaceae	150. Tropaealaceae
122. Balsaminaceae	151. Balsaminaceae
123. Erythroxylaceae	145. Erythroxylaceae
124. Ixonanthaceae	144. Ixonanthaceae
125. Linaceae	143. Linaceae
126. Bretschneideraceae	140. Bretschneideraceae
127. Sapindaceae	138. Sapindaceae
128. Staphyleaceae	136. Staphyleaceae
129. Hippocastanaceae	139. Hippocastanaceae
130. Aceraceae	137. Aceraceae
131. Sabiaceae	141. Sabiaceae
132. Malpighiaceae	146. Malpighiaceae
133. Polygalaceae	152. Polygalaceae
134. Xanthophyllaceae	not recognized
135. Burseraceae	132A. Burseraceae
136. Anacardiaceae	132. Anacardiaceae
137. Simaroubaceae	133. Simaroubaceae
138. Meliaceae	135. Meliaceae
139. Rutaceae	134. Rutaceae
140. Zygophyllaceae	147. Zygophyllaceae
141. Rhamnaceae	168. Rhamnaceae
142. Leeaceae	170. Leeaceae
143. Vitaceae	169. Vitaceae
144. Apiaceae	162. Apiaceae
145. Araliaceae	161. Araliaceae
146. Aralidaceae	161A. Aralidaceae
147. Platanaceae	29. Platanaceae
148. Eucomiaceae	30. Eucomiaceae

149. Hamamelidaceae	27. Hamamelidaceae
150. Daphniphyllaceae	99. Daphniphyllaceae
151. Ulmaceae	31. Ulmaceae
152. Cannabaceae	33. Cannabaceae
153. Salicaceae	80. Salicaceae
154. Moraceae	32. Moraceae
155. Urticaceae	34. Urticaceae
156. Rhoipteleaceae	39. Rhoipteleaceae
157. Juglandaceae	40. Juglandaceae
158. Myricaceae	38. Myricaceae
159. Fagaceae	36. Fagaceae
160. Betulaceae	37. Betulaceae
161. Casuarinaceae	35. Casuarinaceae
162. Loganiaceae	187. Loganiaceae
163. Gentianaceae	191. Gentianaceae
164. Apocynaceae	189. Apocynaceae
165. Asclepiadaceae	190. Asclepiadaceae
166. Solanaceae	199. Solanaceae
167. Convolvulaceae	195. Convolvulaceae
168. Cuscutaceae	196. Cuscutaceae
169. Menyanthaceae	192. Menyanthaceae
170. Polemoniaceae	194. Polemoniaceae
171. Hydrophyllaceae	197. Hydrophyllaceae
172. Boraginaceae	198. Boraginaceae
173. Verbenaceae	211. Verbenaceae
174. Lamiaceae	212. Lamiaceae
175. Callitrichiaceae	213. Callitrichiaceae
176. Plantaginaceae	210. Plantaginaceae
177. Buddlejaceae	200. Buddlejaceae
178. Oleaceae	171. Oleaceae
179. Scrophulariaceae	201. Scrophulariaceae
180. Myoporaceae	208. Myoporaceae
181. Gesneriaceae	205. Gesneriaceae
182. Acanthaceae	209. Acanthaceae
183. Pedaliaceae	203. Pedaliaceae
184. Bignoniaceae	202. Bignoniaceae
185. Lentibalariaceae	207. Lentibalariaceae
186. Pentaphragmaceae	not recognized
187. Campanulaceae	214. Campanulaceae
188. Stylidiaceae	217. Stylidiaceae
189. Goodeniaceae	218. Goodeniaceae
190. Rubiaceae	193. Rubiaceae
191. Carlemanniaceae	not recognized
192. Caprifoliaceae	184. Caprifoliaceae
193. Valerianaceae	185. Valerianaceae
194. Dipsacaceae	186. Dipsacaceae
195. Asteraceae	219. Asteraceae
not recognized	**7. Calycanthaceae**
not recognized	12. Rafflesiaceae
not recognized	**28. Altingiaceae**
not recognized	**43. Molluginaceae**

not recognized	**45. Tetragoniaceae**
not recognized	**61. Bonnetiaceae**
not recognized	**63. Hypericaceae**
not recognized	**85. Pyrolaceae**
not recognized	**86. Diapensiaceae**
not recognized	91A. Theophrastaceae
not recognized	**104. Escalloniaceae**
not recognized	**105. Iteaceae**
not recognized	**106. Hydrangeaceae**
not recognized	**108. Penthoraceae**
not recognized	**112. Chrysobalanaceae**
not recognized	**113. Mimosaceae**
not recognized	**114. Ceasalpiniaceae**
not recognized	**142. Hugoniaceae**
not recognized	**153. Davidiaceae**
not recognized	**156. Aucubaceae**
not recognized	**158. Mastixiaceae**
not recognized	**159. Toricelliaceae**
not recognized	**160. Helwingiaceae**
not recognized	**167. Siphonodontataceae**
not recognized	**173. Schoepfiaceae**
not recognized	**175. Erythropalaceae**
not recognized	**178. Dipentodontaceae**
not recognized	**180. Viscaceae**
not recognized	**188. Potaliaceae**
not recognized	**204. Martyniaceae**
not recognized	**206. Orobanchaceae**
not recognized	**215. Lobeliaceae**
not recognized	**216. Sphenocleaceae**
	LILIOPSIDA
196. Limnocharitaceae	220. Limnocharitaceae
197. Alismataceae	221. Alismataceae
198. Hydrocharitaceae	222. Hydrocharitaceae
199. Aponogetonaceae	223. Aponogetonaceae
200. Potamogetonaceae	224. Potamogetonaceae
201. Najadaceae	227. Najadaceae
not recognized	**227A. Zosteraceae**
202. Cymodoaceae	226. Cymodoaceae
203. Triuridaceae	228. Triuridaceae
204. Pandanaceae	263. Pandanaceae
not recognized	**263A. Freycinetiaceae**
205. Araceae	261. Araceae
not recognized	**261A. Acoraceae**
206. Lemnaceae	262. Lemnaceae
207. Xyridaceae	253. Xyridaceae
208. Commelinaceae	252. Commelinaceae
209. Eriocaulaceae	254. Eriocaulaceae
210. Flagellariaceae	257. Flagellariaceae
211. Restionaceae	255. Restionaceae
212. Centrolepidaceae	256. Centrolepidaceae
213. Juncaceae	249. Juncaceae

214. Typhaceae	265. Typhaceae
215. Sparganiaceae	264. Sparganiaceae
216. Arecaceae	260. Arecaceae
217. Bromeliaceae	251. Bromeliaceae
218. Musaceae	241. Musaceae
219. Strelitziaceae	240. Strelitziaceae
220. Heliconiaceae	242. Heliconiaceae
221. Lowiaceae	243. Lowiaceae
222. Zingiberaceae	245. Zingiberaceae
223. Cannaceae	246. Cannaceae
224. Marantaceae	247. Marantaceae
225. Philydraceae	237. Philydraceae
226. Pontederiaceae	236. Pontederiaceae
227. Hemodoraceae	not recognized
228. Liliaceae	229. Liliaceae
229. Smilaceae	232. Smilaceae
230. Amaryllidaceae	229.3. Amaryllidaceae
231. Iridaceae	238. Iridaceae
232. Cyperaceae	250. Cyperaceae
233. Poaceae	259. Poaceae
234. Agavaceae	229.1. Agavaceae
235. Hanguanaceae	258. Hanguanaceae
236. Taccaceae	235. Taccaceae
237. Stemonaceae	233. Stemonaceae
238. Dioscoreaceae	234. Dioscoreaceae
239. Burmanniaceae	239. Burmanniaceae
240. Thismiaceae	not recognized
241. Orchidaceae	248. Orchidaceae
not recognized	**225. Ruppiaceae**
not recognized	**229.2. Alliaceae**
not recognized	**229.4. Asphodelaceae**
not recognized	**229.5. Asteliaceae**
not recognized	**229.6. Convallariaceae**
not recognized	**229.7. Dracaenaceae**
not recognized	**229.8. Hemerocallidaceae**
not recognized	**229.9. Hyacinthaceae**
not recognized	**229.10. Liliaceae s.s**
not recognized	**229.11. Melanthiaceae**
not recognized	**229.12. Nolinaceae**
not recognized	**229.13. Phormiaceae**
not recognized	**229.14.Trilliaceae**
not recognized	**230. Hypoxidaceae**
not recognized	**231. Asparagaceae**
not recognized	**244. Costaceae**

Table S4. Classification of lycophytes and ferns of Vietnam according to PPG 1 classification system. (Families in boldface were newly circumscribed for Vietnam).

PPG I	Lycophytes and Ferns of Vietnam According to PPG 1	Previous Treatments		
		IFV (1999)	CPSV (2001)	Phan (2010)
LYCOPODIOPSIDA				
A. Lycopodiales				
1. Lycopodiaceae				
Lycopodielloideae	*Lycopodiella*	not recognized	*Lycopodiella*	Not included
Lycopodioideae	*Lycopodium*	*Lycopodium*	as IFV	Not included
Huperzioideae	*Huperzia*	*Huperzia*	as IFV	Not included
B. Isoetales				
2. Isoetaceae	*Isoetes*	*Isoetes*	as IFV	Not included
C. Selaginellales				
3. Selaginellaceae	*Selaginella*	*Selaginella*	as IFV	Not included
POLYPODIOPSIDA				
Equisetidae				
D. Equisetales				
4. Equisetaceae	*Equisetum*	*Equisetum*	as IFV	as IFV
Ophioglossidae				
E. Psilotales				
5. Psilotaceae	*Psilotum*	*Psilotum*	as IFV	as IFV
F. Ophioglossales				
6. Ophioglossaceae				
Helminthostachyoideae	*Helminthostachys*	*Helminthostachys*	as IFV	as IFV
Ophioglossoideaa	*Ophioglossum*	*Ophioglossum*	as IFV	as IFV
Botrychioideae	*Botrychium*	*Botrychium*	as IFV	as IFV
Marattidae				
G. Marattiales				
7. Marattiaceae	*Angiopteris* (incl. *Archangiopteris*)	*Angiopteris* (incl. *Archangiopteris*)	as IFV	as IFV
	Christensenia			*Christensenia*
	Marattia	*Marattia*	as IFV	as IFV
Polypodiidae				
H. Osmundales				
8. Osmundaceae	*Osmunda*	*Osmunda*	as IFV	as IFV
I. Hymenophyllales				
9. Hymenophyllaceae				
Trichomanoideae	*Abrodictyum*			*Abrodictyum*
	Cephalomanes	*Cephalomanes*	as IFV	as IFV
	Crepidomanes	*Crepidomanes*	as IFV	as IFV
	Didymoglossum			*Didymoglossum*
	Trichomanes	*Trichomanes*	as IFV	as IFV
	Vandenboschia	*Vandenboschia*	not recognized	as IFV
Hymenophylloideae	*Hymenophyllum*	*Hymenophyllum*	as IFV	as IFV
J. Gleicheniales				
10. Dipteridaceae	*Cheiropleuria*	*Cheiropleuria* (in Cheiropleuriaceae)	as IFV	*Cheiropleuria*

PPG I	Lycophytes and Ferns of Vietnam According to PPG 1	Previous Treatments		
		IFV (1999)	CPSV (2001)	Phan (2010)
	Dipteris	*Dipteris*	as IFV	as IFV
11. Gleicheniaceae	*Dicranopteris*	*Dicranopteris*	as IFV	as IFV
	Diplopterygium	*Diplopterygium*	as IFV	as IFV
	Gleichenia	*Gleichenia*	as IFV	as IFV
K. Schizaeles				
12. Lygodiaceae	*Lygodium*	*Lygodium* (in Schizaeaceae)	as IFV	*Lygodium*
13. Schizaeaceae	*Schizaea*	*Schizaea*	as IFV	as IFV
M. Salviniales				
14. Salviniaceae	*Azolla*	*Azolla* (in Azollaceae)	as IFV	*Azolla*
	Salvinia	*Salvinia*	as IFV	*Salvinia*
15. Marsileaceae	*Marsilea*	*Marsilea*	as IFV	*Marsilea*
N. Cyatheales				
16. Plagiogyriaceae	*Plagiogyria*	*Plagiogyria*	as IFV	as IFV
17. Cibotiaceae	*Cibotium*	*Cibotium* (in Thyrsopteridaceae)	*Cibotium* (in Dicksoniaceae)	*Cibotium*
18. Cyatheaceae	*Alsophila*	not included	as IFV	*Alsophila*
	Cyathea	*Cyathea*	*Cyathea*	*Cyathea*
	Sphaeropteris	not recognized	not recognized	*Sphaeropteris*
O. Polypodiales				
Lindsaeineae				
19. Lindsaeaceae	*Lindsaea*	*Lindsaea* (in Dennstaedtiaceae)	as IFV	*Lindsaea*
	Sphenomeris	*Sphenomeris* (in Dennstaedtiaceae)	as IFV	*Sphenomeris*
	Tapeinidium	*Tapeinidium* (in Dennstaedtiaceae)	as IFV	*Tapeinidium*
Pteridineae				
20. Pteridaceae				
Parkerioideae	*Acrostichum*	*Acrostichum*	as IFV	as IFV
	Ceratopteris	*Ceratopteris* (in Parkeriaceae)	as IFV	*Ceratopteris*
Cryptogrammoideae	*Coniogramme*	*Coniogramme* (in Adiantaceae)	as IFV	*Coniogramme*
Pteridoideae	*Anogramma*	not recognized	not recognized	*Anogramma*
	Onychium	*Onychium* (in Adiantaceae)	as IFV	*Onychium*
	Pityrogramma	*Pityrogramma* (in Adiantaceae)	as IFV	*Pityrogramma*
	Pteris	*Pteris*	as IFV	as IFV
	Syngramma	*Syngramma* (in Adiantaceae)	as IFV	*Syngramma*

PPG I	Lycophytes and Ferns of Vietnam According to PPG 1	Previous Treatments		
		IFV (1999)	**CPSV (2001)**	**Phan (2010)**
Vittarioideae	*Taenitis*	*Taenitis* (in Adiantaceae)	as IFV	*Taenitis*
	Adiantum	*Adiantum* (in Adiantaceae)	as IFV	*Adiantum*
	Antrophyum	*Antrophyum* (in Vittariaceae)	as IFV	*Antrophyum*
	Vittaria	*Vittaria* (in Vittariaceae)	as IFV	*Vittaria*
Cheilanthoideae	*Aleuritopteris*	not recognized	not recognized	*Aleuritopteris*
	Hemionitis	*Hemionitis* (in Adiantaceae)	as IFV	*Hemionitis*
	Mildella	*Mildella* (in Adiantaceae)	as IFV	*Mildella*
	Notholaena	*Notholaena* (in Adiantaceae)	as IFV	*Notholaena*
21. Dennstaedtiaceae	*Dennstaedtia*	*Dennstaedtia*	as IFV	as IFV
	Histiopteris	*Histiopteris*	as IFV	as IFV
	Hypolepis	*Hypolepis*	as IFV	as IFV
	Microlepia	*Microlepia*	as IFV	as IFV
	Monachosorium	*Monachosorium*	as IFV	as IFV
	Pteridium	*Pteridium*	as IFV	as IFV
Aspleniineae				
22. **Cystopteridaceae**	*Acystopteris*	not recognized	not recognized	*Acystopteris* (incl. *Cystopteris*)
	Cystopteris	*Cystopteris* (in Aspleniaceae)	*Cystopteris* (in Woodsiaceae)	not recognized
23. **Rhachidosoraceae**	*Rhachidosorus*	not recognized	not recognized	*Rhachidosorus* (in Woodsiaceae)
24. **Diplaziopsidaceae**	*Diplaziopsis*	not recognized	*Diplaziopsis* (in Woodsiaceae)	as CPSV
25. Aspleniaceae	*Asplenium*	*Asplenium*	as IFV	as IFV
	Hymenoasplenium	not recognized	not recognized	*Hymenoasplenium*
26. Blechnaceae				
Stenochlaeoideae	*Stenochlaena*	not recognized	*Stenochlaena*	as CPSV
Woodwardioideae	*Woodwardi*	not recognized	*Woodwardi*	as CPSV
Blechnoideae	*Blechnum*	*Blechnum*	as IFV	as IFV
	Brainea	*Brainea*	as IFV	as IFV
27. Athyriaceae	*Athyrium*	*Athyrium* (in Aspleniaceae)	*Athyrium* (in Woodsiaceae)	as CPSV
	Deparia	*Deparia* (incl. *Lunathyrium*)	not recognized	*Deparia* (in Woodsiaceae)
	Diplazium	*Diplazium* (in Aspleniaceae)	*Diplazium* (in Woodsiaceae)	as CPSV
28. Thelypteridaceae				
Phegopteridoideae	*Macrothelypteris*	not recognized	*Macrothelypteris*	as CPSV
	Phegopteris	not recognized	*Phegopteris*	as CPSV

PPG I	Lycophytes and Ferns of Vietnam According to PPG 1	Previous Treatments		
		IFV (1999)	CPSV (2001)	Phan (2010)
	Pseudophegopteris	*Pseudophegopteris*	as IFV	as IFV
Thelypteridoideae	*Ampelopteris*	*Ampelopteris*	as IFV	not recognized
	Christella	*Christella*	as IFV	not recognized
	Coryphopteris	*Coryphopteris*	as IFV	not recognized
	Cyclogramma	*Cyclogramma*	as IFV	not recognized
	Cyclosorus	*Cyclosorus*	as IFV	*Cyclosorus* (incl. *Ampelopteris, Christella, Cyclogramma, Glaphyropteridopsis, Pneumatopteris, Pronephrium, Pseudocyclosorus, Stegnogramma, Trigonospora*)
	Glaphyropteridopsis	not recognized	*Glaphyropteridopsis*	not recognized
	Metathelypteris	*Metathelypteris*	as IFV	not recognized
	Parathelypteris	not recognized	*Parathelypteris*	not recognized
	Pneumatopteris	*Pneumatopteris*	as IFV	not recognized
	Pronephrium	*Pronephrium*	as IFV	not recognized
	Pseudocyclosorus	*Pseudocyclosorus*	as IFV	not recognized
	Stegnogramma	*Stegnogramma*	as IFV	not recognized
	Thelypteris	*Thelypteris*	as IFV	*Thelypteris* (incl. *Thelypteris*, *Metathelypteris*, *Parathelypteris*)
	Trigonospora	*Trigonospora*	as IFV	not recognized
29. **Didymochlaenaceae**	*Didymochlaena*	*Didymochlaena* (in Dryopteridaceae)	as IFV	as IFV
30. **Hypodematiaceae**	*Hypodematium*	not recognized	*Hypodematium* (in Woodsiaceae)	*Hypodematium* (in Dryopteridaceae)
	Leucostegia	*Leucostegia* (in Davalliaceae)	as IFV	*Leucostegia* (Dryopteridaceae)
31. Dryopteridaceae				
Polybotryoideae	*Polystichopsis*	not recognized	*Polystichopsis*	not recognized
Elaphoglosoideae	*Bolbitis*	*Bolbitis* (in Lomariopsidaceae)	as IFV	*Bolbitis*
	Elaphoglossum	*Elaphoglossum* (in Lomariopsidaceae)	as IFV	*Elaphoglossum*
	Lomagramma	not recognized	*Lomagramma* (in Lomariopsidaceae)	*Lomagramma*
	Pleocnemia	not recognized	*Pleocnemia*	*Pleocnemia*
	Rumohra	*Rumohra* (in Davalliaceae)	as IFV	*Rumohra*
	Teratophyllum	*Teratophyllum*	as IFV	*Teratophyllum*

PPG I	Lycophytes and Ferns of Vietnam According to PPG 1	Previous Treatments		
		IFV (1999)	CPSV (2001)	Phan (2010)
		(in Lomariopsida-ceae)		
Dryopteridoideae	*Arachniodes*	*Arachniodes*	as IFV	*Arachniodes* (incl. *Polystichopsis*)
	Ctenitis	*Ctenitis*	as IFV	as IFV
	Cyrtomium	*Cyrtomium*	as IFV	as IFV
	not recognized	not recognized	not recognized	*Acrophorus*
	not recognized	not recognized	not recognized	*Acrorumohra*
	Dryopteris (incl. *Acrophorus, Acrorumohra, Dryopsis*)	*Dryopteris*	*Dryopteris*	*Dryopteris*
	Polystichum	*Polystichum*	as IFV	as IFV
32. **Nephrolepidaceae**	*Nephrolepis*	*Nephrolepis* (in Davalliaceae)	*Nephrolepis* (in Oleandraceae)	*Nephrolepis* (in Lomariopsidaceae)
33. Lomariopsidaceae	*Cyclopeltis*	*Cyclopeltis* (in Dryopteridaceae)	as IFV	*Cyclopeltis*
	Lomariopsis	*Lomariopsis*	as IFV	as IFV
34. Tectariaceae	*Arthropteris*	*Arthropteris* (in Davalliaceae)	as IFV	*Arthropteris*
	Pteridrys	*Pteridrys* (in Dryopteridaceae)	as IFV	*Pteridrys*
	Tectaria	*Tectaria* (in Dryopteridaceae)	as IFV	*Tectaria*
35. Oleandraceae	*Oleandra*	*Oleandra* (in Davalliaceae)	*Oleandra*	as CPSV
36. Davalliaceae	*Davallia*	*Davallia* (incl. *Araiostegia, Davallodes*)	as IFV	as IFV
37. Polypodiaceae				
Loxogrammoideae	*Loxogramme*	*Loxogramme* (in Grammitidaceae)	*Loxogramme*	as CPSV
Platycerioideae	*Platycerium*	*Platycerium*	as IFV	as IFV
	Pyrrosia	*Pyrrosia*	as IFV	as IFV
Drynarioideae	*Aglaomorpha*	*Aglaomorpha* (incl. *Photinopteris*)	*Aglaomorpha*	as CPSV
	Arthromeris	*Arthromeris*	as IFV	as IFV
	Gymnogrammitis	*Gymnogrammitis* (in Davalliaceae)	as IFV	*Gymnogrammitis*
	Selliguea	*Selliguea*	as IFV	as IFV
Microsoroideae	*Goniophlebium*	*Goniophlebium*	as IFV	as IFV
	Lecanopteris	not recognized	*Lecanopteris*	*Lecanopteris*
	not recognized	not recognized	not recognized	*Caobangia*
	Lemmaphyllum (incl. *Caobangia*)	*Lemmaphyllum*	as IFV	as IFV
	Lepisorus	*Lepisorus*	as IFV	as IFV
	not recognized	not recognized	not recognized	*Kontumia*

PPG I	Lycophytes and Ferns of Vietnam According to PPG 1	Previous Treatments		
		IFV (1999)	**CPSV (2001)**	**Phan (2010)**
	Leptochilus (incl. *Kontumia*)	*Leptochilus*	as IFV	as IFV
	Microsorum	*Microsorum*	as IFV	as IFV
	Neocheiropteris	*Neocheiropteris*	as IFV	as IFV
	Paragramma	*Paragramma*	as IFV	as IFV
Polypodioideae	*Polypodium*	*Polypodium*	as IFV	as IFV
Grammitidoideae	*Acrosorus*	*Acrosorus* (in Grammitidaceae)	as IFV	*Acrosorus*
	Calymmodon	*Calymmodon* (in Grammitidaceae)	as IFV	*Calymmodon*
	Cochlidium	*Cochlidium* (incl. *Xiphopteris*)	as IFV	*Cochlidium*
	Grammitis	*Grammitis* (in Grammitidaceae)	as IFV	*Grammitis*
	Prosaptia	*Prosaptia* (in Grammitidaceae)	as IFV	*Prosaptia*
	Scleroglossum	*Scleroglossum* (in Grammitidaceae)	as IFV	*Scleroglossum*

Table S5. Classification of gymnosperms of Vietnam according to the GPG classification system.

GPG	Gymnosperms of Vietnam According to "GPG"	IFV (1999)	CPSV (2001)	Nguyen and Thomas (2005)
SUBCLASS I. Cycadidae Pax **Order A. Cycadales** Pers. ex Bercht. & J.Presl				
1. Cycadaceae	*Cycas*	as GPG	as GPG	not recognized
SUBCLASS II. Ginkgoidae Engl. **Order B. Ginkgoales** Gorozh.				
2. Ginkgoaceae Engl.	*Ginkgo*	as GPG	not recognized	not recognized
SUBCLASS III. Gnetidae Pax				
Order C. Gnetales Blume				
3. Gnetaceae Blume	*Gnetum*	as GPG	as GPG	not recognized
SUBCLASS IV. Pinidae Cronquist				
Order D. Pinales Gorozh				
4. Pinaceae Spreng. ex F.Rudolphi,	*Abies*	as GPG	as GPG	as GPG
	Keteleeria	as GPG	as GPG	as GPG
	Pinus	as GPG	as GPG	as GPG
	Pseudotsuga	not recognized	not recognized	as GPG
	Tsuga	as GPG	as GPG	as GPG
Order E. Araucariales Gorozh.				
5. Araucariaceae Henkel & W.Hochst.	*Araucaria*	not recognized	as GPG	not recognized
6. Podocarpaceae Endl.	*Dacrycarpus*	not recognized	as GPG	as CPSV
	Dacrydium	as GPG	as GPG	as GPG
	Nageia	as GPG	as GPG	as GPG
	not recognized	*Decussocarpus*	not recognized	not recognized
	Podocarpus	as GPG	*Podocarpus* (incl. *Decussocarpus*)	as GPG
Order F. Cupressales Link				
7. Cupressaceae Gray	*Cunninghamia*	*Cunninghamia* (in Taxodiaceae)	as IFV	as GPG
	Cryptomeria	*Cryptomeria* (in Taxodiaceae)	not recognized	not recognized
	Glyptostrobus	*Glyptostrobus* (in Taxodiaceae)	as IFV	as GPG
	Cupressus (incl. *Xanthocyparis*)	as GPG	as GPG	as GPG
	Fokienia	as GPG	as GPG	as GPG
	Calocedrus	as GPG	as GPG	as GPG
	Taiwania	not recognized	not recognized	as GPG
8. Taxaceae Gray	*Taxus*	*Taxus*	as IFV	as IFV
	Cephalotaxus	*Cephalotaxus* (in Cephalotaxaceae)	as IFV	as IFV

	Amentotaxus	*Amentotaxus* (in Amentotaxaceae)	as GPG	as GPG

Table S6. Comparison of angiosperm families of Vietnam following IFV, CPSV, and APG IV. (Families in **boldface** in IFV and CPSV have the same delimitation; Families in **boldface** in APG IV have the same delimitation as IFV and CPSV).

APG IV families	IFV (1999-2003)	CPSV (2001-2005)
Acanthaceae Juss.	**Acanthaceae**	
	Verbenaceae: *Avincennia*	
Achariaceae Harms	Flacourtiaceae: *Hydnocarpus*	Flacourtiaceae: *Gynocardia, Hydnocarpus*
Acoraceae Martinov	**Araceae**: *Acorus*	
Actinidiaceae Gilg & Werderm.	**Actinidiaceae**	
Adoxaceae E. Mey. (=Viburnacee Raf.)	**Caprifoliaceae**: *Sambucus, Viburnum*	
Aizoaceae Martinov	**Aizoaceae**	
	not recognized	Tetragoniaceae
Akaniaceae Stapf	**Bretschneideraceae**	
Alismataceae Vent.	**Alismataceae**	
	Butomaceae: *Tenagocharis, Limnocharis*	Limonocharitaceae: *Tenagocharis, Limnocharis*
Altingiaceae Lindl.	**Altingiaceae**	
Amaranthaceae Juss.	**Amaranthaceae**	
	Chenopodiaceae	
Amaryllidaceae J. St.-Hil.	Amaryllidaceae: *Agapanthus, Crinum, Lycoris, Narcissus, Pancratium, Zephyranthes*	Amaryllidaceae: *Crinum, Lycoris, Narcissus, Pancratium, Zephyranthes*
	Liliaceae: *Allium*	Alliaceae
Anacardiaceae R. Br.	**Anacardiaceae**	
Ancistrocladaceae Planch. ex Walp.	**Ancistrocladaceae**	
Anisophylleaceae Ridl.	**Anisophylleaceae**	
Annonaceae Juss.	**Annonaceae**	
Apiaceae Lindl.	**Apiaceae**: excl. *Hydrocotyle*	
Apocynaceae Juss.	**Apocynaceae**	
	Asclepiadaceae	
Aponogetonaceae Planch.	**Aponogetonaceae**	
Aquifoliaceae Bercht. & J. Presl	**Aquifoliaceae**	
Araceae Juss.	**Araceae**: excl. *Acorus*	
	not recognized	Lemnaceae
Araliaceae Juss.	**Araliaceae**	
	Apiaceae: *Hydrocotyle*	
Arecaceae Bercht. & J. Presl	**Arecaceae**	
Aristolochiaceae Juss.	**Aristolochiaceae**	
Asparagaceae Juss.	**Agavaceae**: *Agave*	
	Liliaceae: *Asparagus*	Asparagaceae
	Liliaceae: *Aspidistra, Disporopsis, Disporum, Polygonatum, Tupistra*	Convallariaceae
	Agavaceae: *Dracaena, Sansevieria*	Dracaenaceae
	Agavaceae: *Urginea*	Hyacinthaceae

	Agavaceae: *Nolina*	Nolinaceae: *Nolina*
Asphodelaceae Juss.	Liliaceae: *Aloe*	Asphodelaceae
	Liliaceae: *Dianella*	Phormiaceae
	Liliaceae: *Hemerocallis*	Hemerocallidaceae
Asteliaceae Dumort.	not recognized	Asteliaceae
Asteraceae Bercht. & J. Presl	**Asteraceae**	
Balanophoraceae Rich.	**Balanophoraceae**	
Balsaminaceae A. Rich.	**Balsaminaceae**	
Basellaceae Raf.	**Basellaceae**	
Begoniaceae C. Agardh	**Begoniaceae**	
Berberidaceae Juss.	**Berberidaceae**	
Betulaceae Gray	**Betulaceae**	
Bignoniaceae Juss.	**Bignoniaceae**	
Bixaceae Kunth	**Bixaceae**	
	Cochlospermaceae	
Bonnetiaceae L. Beauvis. ex Nakai	not recognized	Bonnetiaceae
Boraginaceae Juss.	**Boraginaceae**	
Brassicaceae Burnett (=Cruciferae Juss.)	**Brassicaceae**	
Bromeliaceae Juss.	not recognized	Bromeliaceae
Burmanniaceae Blume	**Burmanniaceae**	
Burseraceae Kunth	Burseraceae	Annacardiaceae: *Bursera, Canarium, Dacryodes, Garuga, Protium*
Buxaceae Dumort.	**Buxaceae**	
Cabombaceae Rich ex A. Rich.	**Cabombaceae**	
Cactaceae Juss.	**Cactaceae**	
Calophyllaceae J. Agardh	**Clusiaceae**: *Calophyllym, Mesua*	
Calycanthaceae Lindl.	not recognized	Calycanthaceae
Campanulaceae Juss.	**Campanulaceae**: excl. *Pentaphragma*	
	Lobeliaceae	
Cannabaceae Martinov	**Cannabaceae**	
	Ulmaceae: excl. *Ulmus*	
Cannaceae Juss.	**Cannaceae**	
Capparaceae Juss.	**Capparaceae**: excl. *Cleome*	
Caprifoliaceae Juss.	Caprifoliaceae: *Lonicera*	Caprifoliaceae: *Abelia, Lonicera*
	Dipsacaceae	
	Valerianaceae	
Cardiopteridaceae Blume	**Cardiopteridaceae**	
	Icacinaceae: *Gonocaryum*	
Caricaceae Dumort.	**Caricaceae**	
	Rubiaceae: *Carlemannia*	

Carlemanniaceae Airy Shaw	**Caprifoliaceae**: *Silvianthus*	
Caryophyllaceae Juss.	**Caryophyllaceae**	
Casuarinaceae R. Br.	**Casuarinaceae**	
Celastraceae R. Br.	**Celastraceae**	
	not recognized	Siphonodontataceae
Ceratophyllaceae Gray	**Ceratophyllaceae**	
Chloranthaceae R. Br. ex Sims	**Chloranthaceae**	
Chrysobalanaceae R. Br.	Rosaceae: *Chrysobalanus, Parinari*	Chrysobalanaceae
Cleomaceae Bercht. & J. Presl	**Capparaceae**: *Cleome*	
Clethraceae Klotzsch	**Clethraceae**	
Clusiaceae Lindl.	**Clusiaceae**: *Garcinia*	
Colchicaceae DC.	**Liliaceae**: *Gloriosa, Iphigenia*	
	Liliaceae: *Disporum*	
Combretaceae R. Br.	**Combretaceae**	
Commelinaceae Mirb.	**Commelinaceae**	
Connaraceae R. Br.	**Connaraceae**	
Convolvulaceae Juss.	**Convolvulaceae**	
	not recognized	Cuscutaceae
Cornaceae Bercht. & J. Presl	Cornaceae: *Cornus*	Cornaceae
	Alangiaceae	
Costaceae Nakai	Zingiberaceae: *Costus*	Costaceae: *Costus*
Crassulaceae J.St.-Hil.	**Crassulaceae**	
Crypteroniaceae A. DC.	**Crypteroniaceae**	
Cucurbitaceae Juss.	**Cucurbitaceae**	
Cymodoceaceae Vines	Zannichelliaceae	Cymodoceaceae
Cyperaceae Juss.	**Cyperaceae**	
Daphniphyllaceae Mull. Arg.	**Daphniphyllaceae**	
Datiscaceae Dumort.	**Datiscaceae**	
Diapensiaceae Lindl.	not recognized	Diapensiaceae
Dichapetalaceae Baill.	**Dichapetalaceae**	
Dilleniaceae Salisb.	**Dilleniaceae**	
Dioscoreaceae R. Br.	**Dioscoreaceae**	
	Taccaceae	
Dipentodontaceae Merr.	not recognized	Dipentodontaceae
Dipterocarpaceae Blume	**Dipterocarpaceae**	
Droseraceae Salisb.	**Droseraceae**	

Ebenaceae Gurke	**Ebenaceae**	
Elaeagnaceae Juss.	**Elaeagnaceae**	
Elaeocarpaceae Juss.	**Elaeocarpaceae**	
Elatinaceae Dumort.	**Elatinaceae**	
Ericaceae Juss.	**Ericaceae**	
	Epacridaceae	
	not recognized	Pyrolaceae
Eriocaulaceae Martinov	**Eriocaulaceae**	
Erythroxylaceae Kunth	**Erythroxylaceae**	
Escallonoiaceae R. Br. ex Dumort.	Saxifragaceae: *Polyosma*	Escallonoiaceae: *Polyosma*
Eucommiaceae Engl.	**Eucommiaceae**	
Euphorbiaceae Juss.	Euphorbiaceae: *Acalypha, Alchornea, Aleurites, Baliospermum, Blachia, Chaetocarpus, Cladogynos, Claoxylon, Cleidiocarpon, Cleidion, Cnesmone, Codiaeum, Croton, Dalechampia, Duetzianthus, Dimorphocalyx, Endospermum, Epiperinus, Erismanthus, Euphorbia, Excoecaria, Hevea, Homonoia, Hura, Jatropha, Lasiococca, Macaranga, Mallotus, Manihot, Melanolepis, Ostodes, Pachystylidium, Pedilanthus, Ricinus, Strophioblachia, Sumbaviopsis, Suregada, Trevia, Trigonostemon, Vernicia*.	Euphorbiaceae: *Acalypha, Alchornea, Aleurites, Baliospermum, Blachia, Chaetocarpus, Cladogynos, Claoxylon, Cleidiocarpon, Cleidion, Cnesmone, Codiaeum, Croton, Dalechampia, Duetzianthus, Dimorphocalyx, Endospermum, Epiperinus, Erismanthus, Euphorbia, Excoecaria, Hevea, Homonoia, Hura, Jatropha, Koilodepas, Lasiococca, Macaranga, Mallotus, Manihot, Melanolepis, Mercurialis, Ostodes, Pachystylidium, Pedilanthus, Ricinus, Strophioblachia, Sumbaviopsis, Suregada, Trevia, Trigonostemon, Vernicia*.
Fabaceae Lindl.	**Ceasalpiniaceae**	
	Fabaceae	
	Ceasalpiniaceae	
Fagaceae Dumort.	**Fagaceae**	
Flagellariaceae Dumort.	**Flagellariaceae**	
Garryaceae Lindl.	Cornaceae: *Aucuba*	Aucubaceae
Gentianaceae Juss.	**Gentianaceae**	
	Potaliaceae	
Geraniaceae Juss.	**Geraniaceae**	
Gesneriaceae Rich. & Juss.	**Gesneriaceae**	
Gisekiaceae Nakai	Aizoaceae: *Gisekia*	Molluginaceae: *Gisekia*
Goodeniaceae R. Br. ex Rich.	**Goodeniaceae**	
Haloragaceae R. Br.	**Haloragaceae**	
Hamamelidaceae R. Br.	**Hamamelidaceae**	
Hanguanaceae Airy Shaw	**Hanguanaceae**	
Heliconiaceae Vines	**Heliconiaceae**	
Helwingiaceae Decne.	Cornaceae: *Helwingia*	Helwingiaceae

Hernandiaceae Blume	**Hernandiaceae**	
Hydrangeaceae Dumort.	**Hydrangeaceae**	
Hydrocharitaceae Juss.	**Hydrocharitaceae**	
	Najadaceae	
Hydroleaceae R. Br.	**Hydroleaceae**	
Hypericaceae Juss.	Clusiaceae: *Cratoxylum, Hypericum*	Hypericaceae
Hypoxidaceae R. Br.	Amaryllidaceae: *Curculigo, Hypoxis*	Hypoxidaceae
Icacinaceae Miers	**Icacinaceae**: excl. *Gomphandra, Gonocaryum*	
Iridaceae Juss.	**Iridaceae**	
Iteaceae J. Agardh	Saxifragaceae: *Itea*	Iteaceae
Ixonanthaceae Planch. ex Miq.	**Ixonanthaceae**	
Juglandaceae DC. Ex Perleb	**Juglandaceae**	
	Rhoipteleaceae	
Juncaceae Juss.	**Juncaceae**	
Lamiaceae Martinov	**Lamiaceae**	
	Verbenaceae: *Callicarpa, Caryopteris, Clerodendron, Congea, Garrettia, Gmelina, Hymenopyramis, Karomia, Prema, Schnabelia, Sphenodesme, Tectona, Teijsmanniodendron, Tsoongia, Vitex*	
Lardizabalaceae R. Br.	**Lardizabalaceae**	
	Sargentodoxaceae	
Lauraceae Juss.	**Lauraceae**	
Lecythidaceae A. Rich.	**Lecythidaceae**	
Lentibulariaceae Rich.	**Lentibulariaceae**	
Liliaceae Juss.	Liliaceae: *Lilium*	Liliaceae s.s.
Linaceae DC. ex Perleb.	**Linaceae**	
	Sabiaceae: *Hugonia, Indoroucheria*	Hugoniaceae
Linderniaceae Borsch et al.	**Scrophulariaceae**: *Legazpia, Linderna, Picria, Pierranthus, Torenia*	
Loganiaceae R. Br. ex Mart.	**Loganiaceae**: *Mitrasacme, Mitreola, Strychnos*	
Loranthaceae Juss.	**Loranthaceae**	
	Saxifragaceae: *Pilostigma*	
Lowiaceae Ridl.	**Lowiaceae**	
Lythraceae J. St.-Hil.	**Lythraceae**	
	Punicaceae	
	Sonneratiaceae	
	Trapaceae	
Magnoliaceae Juss.	**Magnoliaceae**	
Malpighiaceae Juss.	**Malpighiaceae**	
Malvaceae Juss.	**Bombacaceae**	
	Malvaceae	
	Sterculiaceae	
	Tiliaceae	

Marantaceae R. Br.	**Marantaceae**	
Martyniaceae Horan.	**Martyniaceae**	
Mazaceae Reveal	**Scrophulariaceae**: *Mazus*	
Melanthiaceae Batsch ex Borkh.	Liliaceae: *Paris*	Trilliaceae
Melastomataceae Juss.	**Melastomataceae**	
Meliaceae Juss.	**Meliaceae**	
Menispermaceae Juss.	**Menispermaceae**	
Menyanthaceae Dumort.	**Menyanthaceae**	
Mitrastemonaceae Makino	**Rafflesiaceae**: *Mitrastemon*	
Molluginaceae Bartl.	**Molluginaceae**: *Glinus, Mollugo*	
Monimiaceae Juss.	**Monimiaceae**	
Moraceae Gaudich.	**Moraceae**	
Moringaceae Martinov	**Moringaceae**	
Musaceae Juss.	**Musaceae**	
Myricaceae Rich. ex Kunth	**Myricaceae**	
Myristicaceae R. Br.	**Myristicaceae**	
Myrtaceae Juss.	**Myrtaceae**	
Nelumbonaceae A. Rich.	**Nelumbonaceae**	
Nepenthaceae Dumort	**Nepenthaceae**	
Nyctaginaceae Juss.	**Nyctaginaceae**	
Nymphaeaceae Salisb.	**Nymphaeaceae**	
	Barclayaceae	
Nyssaceae Juss. ex Dumort.	Cornaceae: *Mastixia*	Mastixiaceae
	Nyssaceae	
	not recognized	Davidiaceae
Ochnaceae DC.	**Ochnaceae**	
Olacaceae R. Br.	**Olacaceae**	
	Oleaceae: *Erythropalum*	Erythropalaceae
Oleaceae Hoffmanns. & Link	Oleaceae: excl. *Erythropalum*	Oleaceae
Opiliaceae Veleton	**Opiliaceae**	
Orchidaceae Juss.	**Orchidaceae**	
Orobanchaceae Vent.	**Orobanchaceae**	
	Scrophulariaceae: *Alectra, Brandisia, Centranthera, Lindendergia, Pedicularis, Rehmannia, Sopubia, Wightia*	Scrophulariaceae: *Alectra, Brandisia, Buchnera, Centranthera, Lindendergia, Pedicularis, Rehmannia, Sopubia, Striga, Wightia*
Oxalidaceae R. Br.	**Oxalidaceae**	
Paeoniaceae Raf.	**Paeoniaceae**	
Pandanaceae R. Br.,	**Pandanaceae**	
Papaveraceae Juss.	**Papaveraceae**	
	Fumariaceae	

Passifloraceae Juss. ex Roussel	**Passifloraceae**	
	Turneraceae	
Paulowniaceae Nakai	**Scrophulariaceae**: *Paulownia*	
Pedaliaceae R. Br.	**Pedaliaceae**	
Pentaphragmataceae J. Agardh	**Campanulaceae**: *Pentaphragma*	
Pentaphylacaceae Engl.	**Pentaphylacaceae**	
	Theaceae: *Adinandra, Anneslea, Eurya, Ternstroemia*	Theaceae: *Adinandra, Anneslea, Eurya*
Penthoraceae Rydb. ex Britton	Pittosporaceae: *Penthorum*	Penthoraceae
Petrosaviaceae Hutch.	Liliaceae: *Petrosavia*	Melanthiaceae: *Petrosavia*
Philydraceae Link	**Philydraceae**	
Phrymaceae Schauer	Scrophulariaceae: *Mimulus, Mazus, Microcarpaea*	Scrophulariaceae: *Mimulus, Microcarpaea, Glossotigma*
Phyllanthaceae Martinov	**Euphorbiaceae**: *Aporosa, Actephila, Antidesma, Aporosa, Baccaurea, Bischofia, Breynia, Bridelia, Cleistanthus, Flueggea, Glochidion, Hymenocardia, Leptopus, Margaritaria, Phyllanthus, Sauropus*	
Phytolaccaceae R. Br.	**Phytolaccaceae**	
Piperaceae Giseke	Piperaceae	Piperaceae: excl. *Circaeocarpus*
Pittosporaceae R. Br.	Pittosporaceae: excl. *Penthorum*	Pittosporaceae
Plantaginaceae Juss.	**Plantaginaceae**	
	Scrophulariaceae: *Angelonia*	Scrophulariaceae: *Adenosma, Angelonia, Antirrhinum, Bacopa, Digitalis, Limnophila, Russelia, Scoparia, Stemodia, Veronica*
	Callitrichiaceae	
Platanaceae T. Lestib.	**Platanaceae**	
Plumbaginaceae Juss.	**Plumbaginaceae**	
Poaceae Barnhart	**Poaceae**	
Podostemaceae Rich. ex Kunth	**Podostemaceae**	
Polemoniaceae Juss.	**Polemoniaceae**	
Polygalaceae Hoffmanns. & Link	**Polygalaceae**	
Polygonaceae Juss.	**Polygonaceae**	
Pontederidaceae Kunth.	**Pontederidaceae**	
Portulacaceae Juss.	**Portulacaceae:** excl. *Talinum*	
Potamogetonaceae Bercht. & J. Presl.	**Potamogetonaceae**	
Primulaceae Batsch ex Borkh.	**Myrsinaceae**	
	Primulaceae	
Proteaceae Juss.	**Proteaceae**	
Putranjivaceae Meisn.	**Euphorbiaceae**: *Drypetes*	
Rafflesiaceae Dumort.	**Rafflesiaceae**: *Sapria*	

Ranunculaceae Juss.	**Ranunculaceae**	
Resedaceae Martinov	Capparaceae: *Neothorelia, Stixis, Tirania*	Capparaceae: *Stixis, Tirania*
Restionaceae R. Br.	**Restionaceae**	
	Centrolepidaceae	
Rhamnaceae Juss.	**Rhamnaceae**	
Rhizophoraceae Pers.	**Rhizophoraceae**	
Rosaceae Juss.	Rosaceae: excl. *Chrysobalanus, Parinari*	Rosaceae
Rubiaceae Juss.	Rubiaceae: excl. *Carlemannia*	
Ruppiaceae Horan.	**Ruppiaceae**	
Rutaceae Juss.	**Rutaceae**	
	Simaroubaceae: *Harrisonia*	
Sabiaceae Blume	Sabiaceae: excl. *Hugonia, Indoroucheria*	Sabiaceae
Salicaceae Mirb.	Flacourtiaceae: excl. *Hydnocarpus*	Flacourtiaceae: excl. *Gynocardia, Hydnocarpus*
	Salicaceae	
Salvadoraceae Lindl	**Salvadoraceae**	
Santalaceae R. Br.	**Santalaceae**	
	Loranthaceae: *Ginalloa, Korthalsella, Viscum*	Viscaceae
Sapindaceae Juss.	**Aceraceae**	
	Hippocastanaceae	
	Sapindaceae	
Sapotaceae Juss.	**Sapotaceae**	
Saururaceae Rich. ex T. Lestib.	**Saururaceae**	
Saxifragaceae Juss.	Saxifragaceae: excl. *Pilostigma*	Saxifragaceae
Schisandraceae Blume	**Schisandraceae**	
	Illiciaceae	
Schoepfiaceae Blume	Olacaceae: *Schoepfia*	Schoepfiaceae
Scrophulariaceae Juss.	**Buddlejaceae**	
	Myoporaceae	
	Scrophulariaceae: *Scrophularia*	
Simaroubaceae DC.	**Simaroubaceae**: excl. *Irvingia*	
Smilacaceae Vent.	**Smilacaceae**	
Solanaceae Juss.	**Solanaceae**	
Sphenocleaceae T. Baskerv.	**Sphenocleaceae**	
Stachyuraceae J. Agardh	**Stachyuraceae**	
Staphyleaceae Martinov.	**Staphyleaceae**: excl. *Tapiscia*	
Stemonaceae Caruel	**Stemonaceae**	
Stemonuraceae Karehed	**Icacinaceae**: *Gomphandra*	
Strelitziaceae Hutch.	**Strelitziaceae**	
Stylidiaceae R. Br.	**Stylidiaceae**	
Styracaceae DC. & Spreng.	**Styracaceae**	
Surianaceae Arn.	not recognized	Simaroubaceae: *Suriana*
Symplocaceae Desf.	**Symplocaceae**	
Talinaceae Doweld	**Portulacaceae**: *Talinum*	

Tamaricaceae Link	**Tamaricaceae**	
Tapisciaceae Takht.	**Staphyleaceae**: *Tapiscia*	
Theaceae Mirb.	Theaceae: excl. *Adinandra, Anneslea, Eurya, Temstroemia*	Theaceae: excl. *Adinandra, Anneslea, Eurya*
Thymelaeaceae Juss.	**Thymelaeaceae**	
Torricelliaceae Hu	Cornaceae: *Toricellia*	Toricelliaceae
Triuridaceae Gardner	**Triuridaceae**	
Tropaeolaceae Juss. ex DC.	**Tropaeolaceae**	
Typhaceae Juss.	**Sparganiaceae**	
	Typhaceae	
Ulmaceae Mirb.	**Ulmaceae**: *Ulmus*	
Urticaceae Juss.	**Urticaceae**	
Verbenaceae J. St. Hil.	**Verbenaceae**: *Duranta, Lantana, Phyla, Stachtarpheta, Verbena*	
Violaceae Batsch	**Violaceae**	
Vitaceae Juss.	**Vitaceae**	
	Leeaceae	
Xyridaceae C. Agardh	**Xyridaceae**	
Costaceae Nakai	Zingiberaceae: *Costus*	Costaceae: *Costus*
Zingiberaceae Martinov	Zingiberaceae: excl. *Costus*	Zingiberaceae
Zosteraceae Dumort.	not recognized	Zosteraceae
Zygophyllaceae R. Br.	**Zygophyllaceae**	

Table S7. Classification of angiosperm families in Vietnam according to the APG IV classifications. (Families in **boldface** in IFV and CPSV have the same delimitation; Families in **boldface** in APG IV have the same delimitation as IFV and CPSV).

APG IV families	IFV (1999-2003)	CPSV (2001-2005)
BASAL ANGIOSPERMS		
Nymphaeales Salisb. ex Bercht. & J. Presl		
1 [3]. **Cabombaceae** Rich ex A. Rich.	as APG IV	as APG IV
2 [4]. Nymphaeaceae Salisb.	**Nymphaeaceae**	as IFV
	Barclayaceae	as IFV
Austrobaileyales Takht. ex Reveal		
3 [7]. Schisandraceae Blume	**Schisandraceae**	as IFV
	Illiciaceae	as IFV
MAGNOLIIDS		
Piperales Bercht. & J. Presel		
4 [10]. **Saururaceae** Rich. ex T. Lestib.	as APG IV	as APG IV
5 [12]. Piperaceae Giseke	Piperaceae	Piperaceae: excl. *Circaeocarpus*
6 [12]. **Aristolochiaceae** Juss.	as APG IV	as APG IV
Magnoliales Juss. ex Bercht. & J. Presl		
7 [113]. **Myristicaceae** R. Br.	as APG IV	as APG IV
8 [14]. **Magnoliaceae** Juss.	as APG IV	as APG IV
9 [18]. **Annonaceae** Juss.	as APG IV	as APG IV
Laurales Juss. ex Bercht. & J. Presl		
10 [19]. Calycanthaceae Lindl.	not recognized	Calycanthaceae
11 [23]. **Hernandiaceae** Blume	as APG IV	as APG IV
12 [24]. **Monimiaceae** Juss.	as APG IV	as APG IV
13 [25]. **Lauraceae** Juss.	as APG IV	as APG IV
INDEPENDENT LINEAGE: UNPLACED TO MORE INCLUSIVE CLADE		
Chloranthales Mart.		
14 [26]. **Chloranthaceae** R. Br. ex Sims	as APG IV	as APG IV
MONOCOTS		
Acorales Mart.		
15 [27]. Acoraceae Martinov	**Araceae**: *Acorus*	as APG IV
Alismatales R. Br. ex Bercht. & J. Presl		
16 [28]. Araceae Juss.	**Araceae**: excl. *Acorus*	as APG IV
17 [30]. Alismataceae Vent.	**Alismataceae**	as IFV
	Butomaceae: *Tenagocharis, Limnocharis*	
18 [32]. Hydrocharitaceae Juss.	**Hydrocharitaceae**	as IFV
	Najadaceae	as IFV
19 [34]. **Aponogetonaceae** Planch.	as APG IV	as APG IV
20 [37]. Zosteraceae Dumort.	not recognized	as APG IV
21 [38]. **Potamogetonaceae** Bercht. & J. Presl.	as APG IV	as APG IV
22 [40]. **Ruppiaceae** Horan.	as APG IV	as APG IV
23 [41]. Cymodoceaceae Vines	Zannichelliaceae	Cymodoceaceae
Petrosaviales Hutch.		
24 [42]. Petrosaviaceae Hutch.	Liliaceae: *Petrosavia*	Melanthiaceae: *Petrosavia*
Dioscoreales Mart.		
25 [44]. **Burmanniaceae** Blume	as APG IV	as APG IV
26 [45]. Dioscoreaceae R. Br.	**Dioscoreaceae**	as APG IV

	Taccaceae	as APG IV
Pandanales R. Br. ex Bercht. & J. Presl		
27 [46]. **Triuridaceae** Gardner	as APG IV	as APG IV
28 [48]. **Stemonaceae** Caruel	as APG IV	as APG IV
29 [50]. **Pandanaceae** R. Br.	as APG IV	as APG IV
Liliales Perleb		
30 [53]. Melanthiaceae Batsch ex Borkh.	Liliaceae: *Paris*	Trilliaceae
31 [56]. Colchicaceae DC.	Liliaceae: *Gloriosa, Iphigenia* Liliaceae: *Disporum*	Melanthiaceae: *Gloriosa, Iphigenia* Convallariaceae: *Disporum*
32 [59]. **Smilacaceae** Vent.	as APG IV	as APG IV
34 [60]. Liliaceae Juss.	Liliaceae: *Lilium*	Liliaceae
Asparagales Link		
35 [61]. **Orchidaceae** Juss.	as APG IV	as APG IV
36 [64]. Asteliaceae Dumort.	not recognized	Asteliaceae
37 [66]. Hypoxidaceae R. Br.	Amaryllidaceae: *Curculigo, Hypoxis*	Hypoxidaceae
38 [70]. **Iridaceae** Juss.	as APG IV	as APG IV
39 [72]. Asphodelaceae Juss.	Liliaceae: *Aloe* Liliaceae: *Dianella* Liliaceae: *Hemerocallis*	Asphodelaceae Phormiaceae Hemerocallidaceae
40 [73]. Amaryllidaceae J. St.-Hil.	Amaryllidaceae: *Agapanthus, Crinum, Lycoris, Narcissus, Pancratium, Zephyranthes* Liliaceae: *Allium*	Amaryllidaceae: *Crinum, Lycoris, Narcissus, Pancratium, Zephyranthes* Alliaceae
41. [74]. Asparagaceae Juss.	**Agavaceae**: *Agave* Liliaceae: *Asparagus* Liliaceae: *Aspidistra, Disporopsis, Disporum, Polygonatum, Tupistra* Agavaceae: *Dracaena, Sansevieria* Agavaceae: *Urginea* Agavaceae: *Nolina*	Asparagaceae Convallariaceae: excl. *Disporum* Dracaenaceae Hyacinthaceae Nolinaceae: *Nolina*
Arecales Bromhead		
42 [76]. **Arecaceae** Bercht. & J. Presl	as APG IV	as APG IV
Commelinales Mirb. ex Bercht. J. Presl		
43 [77]. **Hanguanaceae** Airy Shaw	as APG IV	as APG IV
44 [78]. **Commelinaceae** Mirb.	as APG IV	as APG IV
45 [79]. **Philydraceae** Link	as APG IV	as APG IV
46 [80]. **Pontederidaceae** Kunth.	as APG IV	as APG IV
Zingiberales Griseb.		
47 [82]. **Strelitziaceae** Hutch.	as APG IV	as APG IV
48 [83]. **Lowiaceae** Ridl.	as APG IV	as APG IV
49 [84]. **Heliconiaceae** Vines	as APG IV	as APG IV
50 [85]. **Musaceae** Juss.	as APG IV	as APG IV
51 [86]. **Cannaceae** Juss.	as APG IV	as APG IV
52 [87]. **Marantaceae** R. Br.	as APG IV	as APG IV
53 [88]. Costaceae Nakai	Zingiberaceae: *Costus*	Costaceae: *Costus*

54 [89]. Zingiberaceae Martinov	Zingiberaceae: excl. *Costus*	Zingiberaceae
Poales Small		
55 [90]. Typhaceae Juss.	**Sparganiaceae** **Typhaceae**	as IFV as IFV
56 [91]. **Bromeliaceae** Juss.	as APG IV	as APG IV
57 [93]. **Xyridaceae** C. Agardh	as APG IV	as APG IV
58 [94]. **Eriocaulaceae** Martinov	as APG IV	as APG IV
59 [97]. **Juncaceae** Juss.	as APG IV	as APG IV
60 [98]. **Cyperaceae** Juss.	as APG IV	as APG IV
61 [99]. Restionaceae R. Br.	**Restionaceae** **Centrolepidaceae**	as IFV as IFV
62 [100]. **Flagellariaceae** Dumort.	as APG IV	as APG IV
63 [103]. **Poaceae** Barnhart	as APG IV	as APG IV
PROBABLE SISTER OF EUDICOTS		
Ceratophyllales Link		
64 [104]. **Ceratophyllaceae** Gray	as APG IV	as APG IV
EUDICOTS		
Ranunculales Juss. ex Bercht. & J. Presl		
65 [106]. Papaveraceae Juss.	**Papaveraceae** **Fumariaceae**	as IFV as IFV
66 [108]. Lardizabalaceae R. Br.	**Lardizabalaceae** **Sargentodoxaceae**	as IFV as IFV
67 [109]. **Menispermaceae** Juss.	as APG IV	as APG IV
68 [110]. **Berberidaceae** Juss.	as APG IV	as APG IV
69 [111]. **Ranunculaceae** Juss.	as APG IV	as APG IV
Proteales Juss. ex Bercht. & J. Presl		
70 [112]. Sabiaceae Blume	Sabiaceae: excl. *Hugonia, Indoroucheria*	as APG IV
71 [113]. **Nelumbonaceae** A. Rich.	as APG IV	as APG IV
72 [114]. **Platanaceae** T. Lestib.	as APG IV	as APG IV
73 [115]. **Proteaceae** Juss.	as APG IV	as APG IV
Buxales Takht. ex Reveal		
74 [117]. **Buxaceae** Dumort.	as APG IV	as APG IV
CORE EUDICOTS		
#**Dilleniales** DC. ex Bercht. & J. Presl		
75 [120]. **Dilleniaceae** Salisb.	as APG IV	as APG IV
SUPERROSIDS		
Saxifragales Bercht. & J. Presl.		
76 [122]. **Paeoniaceae** Raf.	as APG IV	as APG IV
77 [123]. **Altingiaceae** Lindl.	as APG IV	as APG IV
78 [124]. **Hamamelidaceae** R. Br.	as APG IV	as APG IV
79 [127]. Iteaceae J. Agardh	Saxifragaceae: *Itea*	Iteaceae
80 [129]. Saxifragaceae Juss.	Saxifragaceae: excl. *Pilostigma*	Saxifragaceae
81 [130]. **Crassulaceae** J.St.-Hil.	as APG IV	as APG IV
82 [133]. Penthoraceae Rydb. ex Britton	Pittosporaceae: *Penthorum*	Penthoraceae
83 [134]. **Haloragaceae** R. Br.	as APG IV	as APG IV

ROSIDS		
Vitales Juss. ex Bercht. & J. Presl		
84 [136]. Vitaceae Juss.	**Vitaceae** **Leeaceae**	as IFV as IFV
Zygophyllales Link		
85 [138]. **Zygophyllaceae** R. Br.	as APG IV	as APG IV
Fabales Bromhead		
86 [140]. Fabaceae Lindl.	**Ceasalpiniaceae** **Mimosaceae**	as APG IV
87 [141]. Surianaceae Arn.	not recognized	Simaroubaceae: *Suriana*
88 [142]. **Polygalaceae** Hoffmanns. & Link	as APG IV	as APG IV
Rosales Bercht. & J. Presl		
89 [143]. Rosaceae Juss.	Rosaceae: excl. *Chrysobalanus, Parinari*	as APG IV
90 [146]. **Elaeagnaceae** Juss.	as APG IV	as APG IV
91 [147]. **Rhamnaceae** Juss.	as APG IV	as APG IV
92 [148]. Ulmaceae Mirb.	**Ulmaceae**: *Ulmus*	as APG IV
93 [149]. **Cannabaceae** Martinov.	as APG IV	as APG IV
94 [150]. **Moraceae** Gaudich.	as APG IV	as APG IV
95 [151]. **Urticaceae** Juss.	as APG IV	as APG IV
Fagales Engl.		
96 [153]. **Fagaceae** Dumort.	as APG IV	as APG IV
97 [154]. **Myricaceae** Rich. ex Kunth	as APG IV	as APG IV
98 [155]. Juglandaceae DC. Ex Perleb	**Juglandaceae** **Rhoipteleaceae**	as IFV as IFV
99 [156]. **Casuarinaceae** R. Br.	as APG IV	as APG IV
100 [158]. **Betulaceae** Gray	as APG IV	as APG IV
Cucurbitales Juss. ex Bercht. & J. Presl		
101 [160]. **Anisophylleaceae** Ridl.	as APG IV	as APG IV
102 [163]. **Cucurbitaceae** Juss.	as APG IV	as APG IV
103 [165]. **Datiscaceae** Dumort.	as APG IV	as APG IV
104 [166]. **Begoniaceae** C. Agardh	as APG IV	as APG IV
[COM-clade; placement uncertain]		
Celastrales Link		
105 [168]. Celastraceae R. Br.	**Celastraceae** not recognized	as IFV Siphonodontataceae
Oxalidales Bercht. & J. Presl		
106 [170]. **Connaraceae** R. Br.	as APG IV	as APG IV
107 [171]. **Oxalidaceae** R. Br.	as APG IV	as APG IV
108 [173]. **Elaeocarpaceae** Juss.	as APG IV	as APG IV
Malpighiales Juss. ex Bercht. & J. Presl		
109 [179]. **Rhizophoraceae** Pers.	as APG IV	as APG IV
110 [180]. **Erythroxylaceae** Kunth	as APG IV	as APG IV
111 [181]. **Ochnaceae** DC.	as APG IV	as APG IV
112 [182]. Bonnetiaceae L. Beauvis. ex Nakai	not recognized	as APG IV
113 [183]. Clusiaceae Lindl.	**Clusiaceae**: *Garcinia*	as APG IV
114 [184]. Calophyllaceae J. Agardh	Clusiaceae: *Calophyllym, Mesua*	Clusiaceae: *Calophyllym, Mesua, Kayea*

115 [185]. **Podostemaceae** Rich. ex Kunth	as APG IV	as APG IV
116 [186]. Hypericaceae Juss.	Clusiaceae: *Cratoxylum, Hypericum*	as APG IV
117 [189]. Putranjivaceae Meisn.	**Euphorbiaceae**: *Drypetes*	as APG IV
118 [191]. **Elatinaceae** Dumort.	as APG IV	as APG IV
119 [192]. **Malpighiaceae** Juss.	as APG IV	as APG IV
120 [195]. **Dichapetalaceae** Baill.	as APG IV	as APG IV
121 [197]. Chrysobalanaceae R. Br.	Rosaceae: *Chrysobalanus, Parinari*	as APG IV
122 [199]. Achariaceae Harms	Flacourtiaceae: *Hydnocarpus*	Flacourtiaceae: *Gynocardia, Hydnocarpus*
123 [200]. **Violaceae** Batsch	as APG IV	as APG IV
124 [202]. Passifloraceae Juss. ex Roussel	**Passifloraceae** **Turneraceae**	as IFV as IFV
125 [204]. Salicaceae Mirb.	Flacourtiaceae: excl. *Hydnocarpus* **Salicaceae**	Flacourtiaceae: excl. *Gynocardia, Hydnocarpus* as IFV
126 [206]. Rafflesiaceae Dumort.	**Rafflesiaceae**: *Sapria*	as APG IV
127 [207]. Euphorbiaceae Juss.	Euphorbiaceae: *Acalypha, Alchornea, Aleurites, Baliospermum, Blachia, Chaetocarpus, Cladogynos, Claoxylon, Cleidiocarpon, Cleidion, Cnesmone, Codiaeum, Croton, Dalechampia, Duetzianthus, Dimorphocalyx, Endospermum, Epiperinus, Erismanthus, Euphorbia, Excoecaria, Hevea, Homonoia, Hura, Jatropha, Lasiococca, Macaranga, Mallotus, Manihot, Melanolepis, Ostodes, Pachystylidium, Pedilanthus, Ricinus, Strophioblachia, Sumbaviopsis, Suregada, Trevia, Trigonostemon, Vernicia*.	Euphorbiaceae: *Acalypha, Alchornea, Aleurites, Baliospermum, Blachia, Chaetocarpus, Cladogynos, Claoxylon, Cleidiocarpon, Cleidion, Cnesmone, Codiaeum, Croton, Dalechampia, Duetzianthus, Dimorphocalyx, Endospermum, Epiperinus, Erismanthus, Euphorbia, Excoecaria, Hevea, Homonoia, Hura, Jatropha, Koilodepas, Lasiococca, Macaranga, Mallotus, Manihot, Melanolepis, Mercurialis, Ostodes, Pachystylidium, Pedilanthus, Ricinus, Strophioblachia, Sumbaviopsis, Suregada, Trevia, Trigonostemon, Vernicia*.
128 [208]. Linaceae DC. ex Perleb.	**Linaceae** Sabiaceae: *Hugonia, Indoroucheria*	as IFV Hugoniaceae
129 [209]. **Ixonanthaceae** Planch. ex Miq.	as APG IV	as APG IV
130 [211]. Phyllanthaceae Martinov	**Euphorbiaceae**: *Aporosa, Actephila, Antidesma, Aporosa, Baccaurea, Bischofia, Breynia, Bridelia, Cleistanthus, Flueggea, Glochidion,*	as IFV

	Hymenocardia, Leptopus, Margaritaria, Phyllanthus, Sauropus	
Geraniales Juss. ex Bercht. & J. Presl		
131 [212]. **Geraniaceae** Juss.	as APG IV	as APG IV
Myrtales Juss. ex Bercht. & J. Presl		
132 [214]. **Combretaceae** R. Br.	as APG IV	as APG IV
133 [215]. Lythraceae J. St.-Hil.	**Lythraceae**	as IFV
	Punicaceae	as IFV
	Sonneratiaceae	as IFV
	Trapaceae	as IFV
134 [218]. **Myrtaceae** Juss.	as APG IV	as APG IV
135 [219]. **Melastomataceae** Juss.	as APG IV	as APG IV
136 [220]. **Crypteroniaceae** A. DC.	as APG IV	as APG IV
Crossosomatales Takht. ex Reveal		
137 [226]. Staphyleaceae Martinov.	**Staphyleaceae**: excl. *Tapiscia*	as IFV
138 [228]. **Stachyuraceae** J. Agardh	as APG IV	as APG IV
Huerteales Doweld		
139 [233]. Tapisciaceae Takht.	**Staphyleaceae**: *Tapiscia*	as IFV
140 [234]. Dipentodontaceae Merr.	not recognized	Dipentodontaceae
Sapindales Juss. ex Bercht. & J. Presl		
141 [238]. Burseraceae Kunth	Burseraceae	Annacardiaceae: *Bursera, Canarium,*
142 [239]. Anacardiaceae R. Br.	Anacardiaceae	*Dacryodes, Garuga, Protium*
143 [240]. Sapindaceae Juss.	**Aceraceae**	as IFV
	Hippocastanaceae	as IFV
	Sapindaceae	as IFV
144 [241]. Rutaceae Juss.	**Rutaceae**	as IFV
	Simaroubaceae: *Harrisonia*	as IFV
145 [242]. Simaroubaceae DC.	Simaroubaceae: excl. *Irvingia*	Simaroubaceae: excl. *Suriana*
146 [243]. **Meliaceae** Juss.	as APG IV	as APG IV
Malvales Juss. ex Bercht. & J. Presl		
147 [247]. Malvaceae Juss.	**Bombacaceae**	as APG IV
	Malvaceae	as APG IV
	Sterculiaceae	as APG IV
	Tiliaceae	as APG IV
148 [249]. **Thymelaeaceae** Juss.	as APG IV	as APG IV
149 [250]. Bixaceae Kunth	**Bixaceae**	as APG IV
	Cochlospermaceae	as APG IV
150 [253]. **Dipterocarpaceae** Blume	as APG IV	as APG IV
Brassicales Bromhead		
151 [254]. Akaniaceae Stapf.	**Bretschneideraceae**	as IFV
152 [255]. **Tropaeolaceae** Juss. ex DC.	as APG IV	as APG IV
153 [256]. **Moringaceae** Martinov	as APG IV	as APG IV
154 [257]. **Caricaceae** Dumort.	as APG IV	as APG IV
155 [262]. **Salvadoraceae** Lindl	as APG IV	as APG IV
156 [267]. Resedaceae Martinov	Capparaceae: *Neothorelia, Stixis, Tirania*	Capparaceae: *Stixis, Tirania*

157 [268]. Capparaceae Juss.	**Capparaceae**: excl. *Cleome*	as IFV
158 [269]. Cleomaceae Bercht. & J. Presl	**Capparaceae**: *Cleome*	as IFV
159 [270]. **Brassicaceae** Burnett	as APG IV	as APG IV
SUPERASTERIDS		
Santalales R. Br. ex Bercht. & J. Presl		
160 [273]. 'Olacaceae' R. Br.	**Olacaceae** not recognized	as IFV Erythropalaceae
161 [274]. **Opiliaceae** Veleton	as APG IV	as APG IV
162 [275]. **Balanophoraceae** Rich.	as APG IV	as APG IV
163 [276]. 'Santalaceae' R. Br.	**Santalaceae** Loranthaceae: *Ginalloa, Korthalsella, Viscum*	as IFV Viscaceae
164 [278]. Schoepfiaceae Blume	Olacaceae: *Schoepfia*	as APG IV
165 [279]. Loranthaceae Juss.	**Loranthaceae**	as IFV Saxifragaceae: *Pilostigma*
Caryophyllales Juss. ex Bercht. & J. Presl		
166 [281]. **Tamaricaceae** Link	as APG IV	as APG IV
167 [282]. **Plumbaginaceae** Juss.	as APG IV	as APG IV
168 [283]. **Polygonaceae** Juss.	as APG IV	as APG IV
169 [284]. **Droseraceae** Salisb.	as APG IV	as APG IV
170 [285]. **Nepenthaceae** Dumort.	as APG IV	as APG IV
171 [288]. **Ancistrocladaceae** Planch. ex Walp.	as APG IV	as APG IV
172 [295]. **Caryophyllaceae** Juss.	as APG IV	as APG IV
173 [297]. Amaranthaceae Juss.	**Amaranthaceae** **Chenopodiaceae**	as IFV as IFV
174 [303]. Gisekiaceae Nakai	Aizoaceae: *Gisekia*	Molluginaceae: *Gisekia*
175 [304]. Aizoaceae Martinov	**Aizoaceae** not recognized	as IFV Tetragoniaceae
176 [305]. **Phytolaccaceae** R. Br.	as APG IV	as APG IV
177 [308]. **Nyctaginaceae** Juss.	as APG IV	as APG IV
178 [309]. Molluginaceae Bartl.	**Molluginaceae**: *Glinus, Mollugo*	as IFV
179 [312]. **Basellaceae** Raf.	as APG IV	as APG IV
180 [314]. Talinaceae Doweld	**Portulacaceae**: *Talinum*	as IFV
181 [315]. **Portulacaceae** Juss.	as APG IV	as APG IV
182 [317]. **Cactaceae** Juss.	as APG IV	as APG IV
ASTERIDS		
Cornales Link		
183 [318]. Nyssaceae Juss. ex Dumort.	**Nyssaceae** Cornaceae: *Mastixia* not recognized	as IFV Mastixiaceae Davidiaceae
184 [320]. **Hydrangeaceae** Dumort.	Hydrangeaceae: *Dichroa, Hydrangea , Pliostegia, Schizophragma*	Saxifragaceae: *Dichroa, Hydrangea*
185 [324]. Cornaceae Bercht. & J. Presl	**Alangiaceae** Cornaceae: *Cornus*	as IFV Cornaceae
Ericales Bercht. & J. Presl		
186 [325]. **Balsaminaceae** A. Rich.	as APG IV	as APG IV
187 [329]. **Polemoniaceae** Juss.	as APG IV	as APG IV

188 [330]. **Lecythidaceae** A. Rich.	as APG IV	as APG IV
189 [332]. Pentaphylacaceae Engl.	**Pentaphylacaceae** Theaceae: *Adinandra, Anneslea, Eurya, Ternstroemia*	as IFV Theaceae: *Adinandra, Anneslea, Eurya*
190 [333]. **Sapotaceae** Juss.	as APG IV	as APG IV
191 [334]. **Ebenaceae** Gurke	as APG IV	as APG IV
192 [335]. Primulaceae Batsch ex Borkh.	**Myrsinaceae** **Primulaceae**	as IFV as IFV
193 [336]. Theaceae Mirb.	Theaceae: excl. *Adinandra, Anneslea, Eurya, Temstroemia*	Theaceae: excl. *Adinandra, Anneslea, Eurya*
194 [337]. **Symplocaceae** Desf.	as APG IV	as APG IV
195 [338]. Diapensiaceae Lindl.	not recognized	as APG IV
196 [339]. **Styracaceae** DC. & Spreng.	as APG IV	as APG IV
197 [342]. **Actinidiaceae** Gilg & Werderm.	as APG IV	as APG IV
198 [343]. **Clethraceae** Klotzsch	as APG IV	as APG IV
199 [345]. Ericaceae Juss.	**Ericaceae** **Epacridaceae** not recognized	as IFV as IFV Pyrolaceae
200 [346]. Mitrastemonaceae Makino [placement in order unclear]	**Rafflesiaceae**: *Mitrastemon*	as IFV
# **Icacinales** Tiegh.		
201 [348]. Icacinaceae Miers	**Icacinaceae**: excl. *Gomphandra, Gonocaryum*	as IFV
Garryales Mart.		
202 [350]. **Eucommiaceae** Engl.	as APG IV	as APG IV
203 [351]. Garryaceae Lindl.	Cornaceae: *Aucuba*	Aucubaceae
Gentianales Juss. ex Bercht. & J. Presl		
204 [352]. Rubiaceae Juss.	**Rubiaceae**: excl. *Carlemannia*	as IFV
205 [353]. Gentianaceae Juss.	**Gentianaceae** **Potaliaceae**	as IFV as IFV
206 [354]. Loganiaceae R. Br. ex Mart.	**Loganiaceae**: *Mitrasacme, Mitreola, Strychnos*	as IFV
207 [356]. Apocynaceae Juss.	**Apocynaceae** **Asclepiadaceae**	as IFV as IFV
Boraginales Juss. ex Bercht. & J. Presl		
208 [357]. **Boraginaceae** Juss.	as APG IV	as APG IV
Solanales Juss. ex Bercht. & J. Presl		
209 [359]. Convolvulaceae Juss.	**Convolvulaceae** not recognized	as IFV Cuscutaceae
210 [360]. **Solanaceae** Juss.	as APG IV	as APG IV
211 [362]. **Sphenocleaceae** T. Baskerv.	as APG IV	as APG IV
212 [363]. **Hydroleaceae** R. Br.	as APG IV	as APG IV
Lamiales Romhead		
213 [365]. Carlemanniaceae Airy Shaw	**Rubiaceae**: *Carlemannia* **Caprifoliaceae**: *Silvianthus*	as IFV as IFV

214 [366]. **Oleaceae** Hoffmanns. & Link	as APG IV	as APG IV
215 [369]. **Gesneriaceae** Rich. & Juss.	as APG IV	as APG IV
216 [370]. Plantaginaceae Juss.	**Plantaginaceae**	as IFV
	Scrophulariaceae: *Angelonia*	Scrophulariaceae: *Adenosma, Angelonia, Antirrhinum, Bacopa, Digitalis, Limnophila, Russelia, Scoparia, Stemodia, Veronica*
	Callitrichiaceae	as IFV
217 [371]. Scrophulariaceae Juss.	**Buddlejaceae**	as IFV
	Myoporaceae	as IFV
	Scrophulariaceae: *Scrophularia*	as IFV
218 [373]. Linderniaceae Borsch et al.	**Scrophulariaceae**: *Legazpia, Linderna, Picria, Pierranthus, Torenia*	as IFV
219 [375]. **Martyniaceae** Horan.	as APG IV	as APG IV
220 [376]. **Pedaliaceae** R. Br.	as APG IV	as APG IV
221 [377]. Acanthaceae Juss.	**Acanthaceae**	as IFV
	Verbenaceae: *Avicennia*	as IFV
222 [378]. **Bignoniaceae** Juss.	as APG IV	as APG IV
223 [379]. **Lentibulariaceae** Rich.	as APG IV	as APG IV
224 [382]. Verbenaceae J. St. Hil.	**Verbenaceae**: *Duranta, Lantana, Phyla, Stachtarpheta, Verbena*	as IFV
225 [383]. Lamiaceae Martinov	**Lamiaceae**	as IFV
	Verbenaceae: *Callicarpa, Caryopteris, Clerodendron, Congea, Garrettia, Gmelina, Hymenopyramis, Karomia, Prema, Schnabelia, Sphenodesme, Tectona, Teijsmanniodendron, Tsoongia, Vitex*	as IFV
226 [384]. Mazaceae Reveal	**Scrophulariaceae**: *Mazus*	as IFV
227 [385]. Phrymaceae Schauer	**Scrophulariaceae**: *Mimulus, Mazus, Microcarpaea*	as IFV
228 [386]. Paulowniaceae Nakai	**Scrophulariaceae**: *Paulownia*	as IFV
229 [387]. Orobanchaceae Vent.	**Orobanchaceae**	as IFV
	Scrophulariaceae: *Alectra, Brandisia, Centranthera, Lindendergia, Pedicularis, Rehmannia, Sopubia, Wightia*	as IFV
Aquifoliales Senft		

230 [388]. Stemonuraceae Karehed	**Icacinaceae**: *Gomphandra*	as IFV
231 [389]. Cardiopteridaceae Blume	**Cardiopteridaceae** **Icacinaceae**: *Gonocaryum*	as IFV as IFV
232 [391]. Helwingiaceae Decne.	Cornaceae: *Helwingia*	as APG IV
233 [392]. **Aquifoliaceae** Bercht. & J. Presl	as APG IV	as APG IV
Asterales Link		
234 [394]. Campanulaceae Juss.	**Campanulaceae**: excl. *Pentaphragma* **Lobeliaceae**	as IFV as IFV
235 [395]. Pentaphragmataceae J. Agardh	**Campanulaceae**: *Pentaphragma*	as IFV
236 [396]. **Stylidiaceae** R. Br.	as APG IV	as APG IV
237 [400]. **Menyanthaceae** Dumort.	as APG IV	as APG IV
238 [401]. **Goodeniaceae** R. Br. ex Rich.	as APG IV	as APG IV
239 [403]. **Asteraceae** Bercht. & J. Presl	as APG IV	as APG IV
Escalloniales Link		
240 [404]. Escallonoiaceae R. Br. ex Dumort.	Saxifragaceae: *Polyosma*	Escallonoiaceae: *Polyosma*
Dipsacales Juss. ex Bercht. & J. Presl		
241 [408]. Adoxaceae E. Mey.	**Caprifoliaceae**: *Sambucus, Viburnum*	as IFV
242 [409]. Caprifoliaceae Juss.	Caprifoliaceae: *Lonicera* **Dipsacaceae** **Valerianaceae**	Caprifoliaceae: *Abelia, Lonicera* as IFV as IFV
Apiales Nakai		
243 [411]. Torricelliaceae Hu	Cornaceae: *Torricellia*	as APG IV
244 [413]. Pittosporaceae R. Br.	Pittosporaceae: excl. *Penthorum*	as APG IV
245 [414]. Araliaceae Juss.	**Araliaceae** **Apiaceae**: *Hydrocotyle*	as IFV as IFV
246 [416]. Apiaceae Lindl.	**Apiaceae**: excl. *Hydrocotyle*	as IFV

Note: Numbers in square brackets are those of the linear Angiosperm Phylogeny Group of APG IV (2016).