Supplementary Information:

Differences in diterpenoid diversity reveal new evidence for separating the genus *Coleus* from *Plectranthus*

Contents of the Supplementary information

Table S1. Currently valid taxonomic names of species of *Plectranthus*, *Coleus* and *Solenostemon* used in phytochemical literature.

Name used in phytochemical literature	**Currently accepted taxonomic name**
P. africanus (Baker) A.J.Paton	*C. engleri* (Briq.) A.J.Paton
P. ambiguus (Bolus) Codd	*P. ambiguus* (Bolus) Codd
P. amboinicus (Lour.) Spreng.	*C. amboinicus* Lour.
C. aquaticus Gürke	*C. maculosus* (Lam.) A.J.Paton ssp. *edulis* (Vatke) A.J.Paton
P. argentatus S.T.Blake	*C. argentatus* (S.T.Blake) P.I.Forst. & T.C.Wilson
C. barbatus (Andr.) Benth. and *P. barbatus* Andr.	*C. barbatus* (Andr.) Benth. var. *barbatus* or var. *grandis* (L.H.Cramer) A.J.Paton
P. bishopianus	*C. bishopianus* (Gamble) Smitha & A.J.Paton
C. blumei Benth.	*C. scutellarioides* (L.) Benth.
C. caninus (Roth) Vatke	*C. caninus* (Roth) Vatke
P. carnosus (L.f.) Sm.	*Anisochilus carnosus* (L.f.) Wall.
P. coerulescens Gürke	*C. barbatus* (Andr.) Benth. var. *barbatus*
P. coetsa Ham.	*Isodon coetsa* (Buch.-Ham. ex D.Don) Kudô
P. cyaneus Gürke	*C. hadiensis* (Forssk.) A.J.Paton
P. ecklonii Benth.	*P. ecklonii* Benth.
P. edulis (Vatke) Agnew	*C. maculosus* Lam. A.J.Paton ssp. *edulis* (Vatke) A.J.Paton
P. elegans Britten	*P. elegans* Britten
P. ernstii Codd	*P. ernstii* Codd
C. esquirolii (H.Lév.) Dunn	*C. parishii* (Hook.f.) A.J.Paton
C. forskohlii Briq.	*C. barbatus* (Andr.) Benth. var. *grandis* (L.H.Cramer) A.J.Paton
P. forsteri Benth. 'Marginatus'	*C. forsteri* (Benth.) A.J.Paton 'Marginatus'
C. fredericii G.Taylor	*C. fredericii* G.Taylor
P. fruticosus L'Hér.	*P. fruticosus* L'Her.
C. garckeanus Vatke	*C. garckeanus* Vatke
P. glaucocalyx Maxim.	*Isodon japonicus* var. *glaucocalyx* (Maxim.) H.W.Li
P. grandis (L.H.Cramer) R.H.Willemse	*C. barbatus* (Andr.) Benth. var. *grandis* (L.H.Cramer) A.J.Paton
P. grandidentatus Gürke	*C. grandidentatus* (Gürke) A.J.Paton
P. hadiensis (Forssk.) Schweinf. ex Sprenger	*C. hadiensis* (Forssk.) A.J.Paton
P. hereroensis Engl.	*C. hereroensis* (Engl.) A.J.Paton

C. igniarius Schweinf.	*C. igniarius* Schweinf.
C. kilimandschari Gürke	*C. barbatus* (Andr.) Benth var. *grandis* (L.C.Cramer) A.J.Paton
P. lanuginosus (Benth.) Agnew	*C. lanuginosus* Hochst. ex Benth.
P. lucidus (Benth.) van Jaarsv. & T.J.Edwards	*P. lucidus* (Benth.) van Jaarsv. & T.J.Edwards
P. madagascariensis (Pers.) Benth.	*C. madagascariensis* (Pers.) A.Chev.
C. malabaricus Benth.	*C. malabaricus* Benth.
P. mollis Spreng.	*Equilabium molle* (Ait.) Mwany & A.J.Paton
S. monostachyus (P.Beauv.) Briq.	*C. monostachyus* (P.Beauv.) A.J.Paton
P. myrianthus Briq.	*C. hereroensis* (Engl.) A.J.Paton
P. nilgherricus Benth.	*Isodon nilgherricus* (Benth.) H.Hara
P. nummularius Briq.	*P. verticillatus* (L.f.) Druce
P. ornatus Codd	*C. comosus* Hochst. ex Gürke
P. parviflorus Willd.	*P. strigosus* Benth.
P. porcatus van Jaarsv. & P.J.D.Winter	*C. porcatus* (van Jaarsv. & P.J.D.Winter) A.J.Paton
P. puberulentus J.K.Morton	*C. gracilis* Gürke
P. punctatus	*C. maculosus* (Lam.) A.J.Paton
P. purpuratus Harv.	*P. purpuratus* Harv.
P. sanguineus Britten	*C. sanguineus* (Britten) A.J.Paton
P. saccatus Benth.	*P. saccatus* Benth.
P. scutellarioides (L.) R.Br.	*C. scutellarioides* (L.) Benth.
C. somaliensis S. Moore	*C. lanuginosus* Hochst. ex Benth.
C. spicatus Benth.	*C. caninus* (Roth.) Vatke ssp. *caninus*
P. strigosus Benth. ex E.Mey.	*P. strigosus* Benth. ex E.Mey.
S. sylvaticus (Gürke) T.T.Aye	*C. autrani* Briq.
P. tenuiflorus Vatke	*C. aegyptiacus* (Forssk.) A.J.Paton
C. xanthanthus C.Y.Wu et Y.C.Huang	*C. xanthanthus* C.Y.Wu & Y.C.Huang
C. zeylanicus (Benth.) L.H.Cramer	*C. hadiensis* (Forssk.) A.J.Paton var. *tomentosus* (Benth. ex E. Mey.) Codd

Table S2. Abietane diterpenoids with a phenolic or aromatic C-ring lacking C-14 oxygenation reported from species of *Plectranthus* or *Coleus.*

Compound Number	Compound name	Occurrence* (the names of the species are the currently accepted taxonomic names)
1	Dehydroabietane, abietatriene	*C. barbatus* root,[1] *C. barbatus* [2]
2	(+)-Ferruginol	*C. barbatus*[3,4]
3	Hinokiol	*P. strigosus*[5]
4	Sugiol	*C. xanthanthus*[6,7]
5	11-Hydroxysugiol, demethylcryptojaponol	*C. hadiensis*,[8] *C. barbatus* root[9]
6	11,20-Dihydroxysugiol	*C.* hadiensis[8]
7	19-*O*-Senecioylester of 11,19-dihydroxysugiol	*P. purpuratus*[10]
8	19-*O*-Isovalleroyl ester of 11,19-dihydroxysugiol	*P. purpuratus*[10]
9	12-Methoxy-8,11,13-abietatrien-7α,11-diol	*P. elegans*[11]
10	Plectranthol A	*P. nummularius*[12]
11	Plectranthol B	*P. nummularius*[12]
12	Barbatusol	*C. barbatus*[3]
13	9(10→20)-*abeo*-8,11,13-Abietatrien-10β,11,12-triol (10β-hydroxybarbatusol)	*C. barbatus*[13]
14	14-Deoxycoleon U	*C. barbatus* root[9]
15	1,11-Epoxy-6,12-dihydroxy-20-norabieta-1(10),5,8,11,13-pentaen-7-one	*C. hadiensis*[8]
16	20-Deoxocarnosol	*C. barbatus*[2,4]
17	6α-Hydroxy-20-deoxocarnosol	*C. barbatus*[2]
18	6α-Hydroxycarnosol	*C. barbatus*[4]
19	Esquirolin	*C. parishii*[14]
20	Carnosolone	*C. hadiensis*[8]
21	Cariocal	*C. barbatus*,[15] *C. parishii*[14]
22	6,7-Secoabietane diterpene I	*C. barbatus*[16]
23	6,7-Secoabietane diterpene II	*C. barbatus*[16]

* For most species the compounds were isolated from aerial parts, including stems, leaves and leaf glands, unless specified differently (e.g., roots).

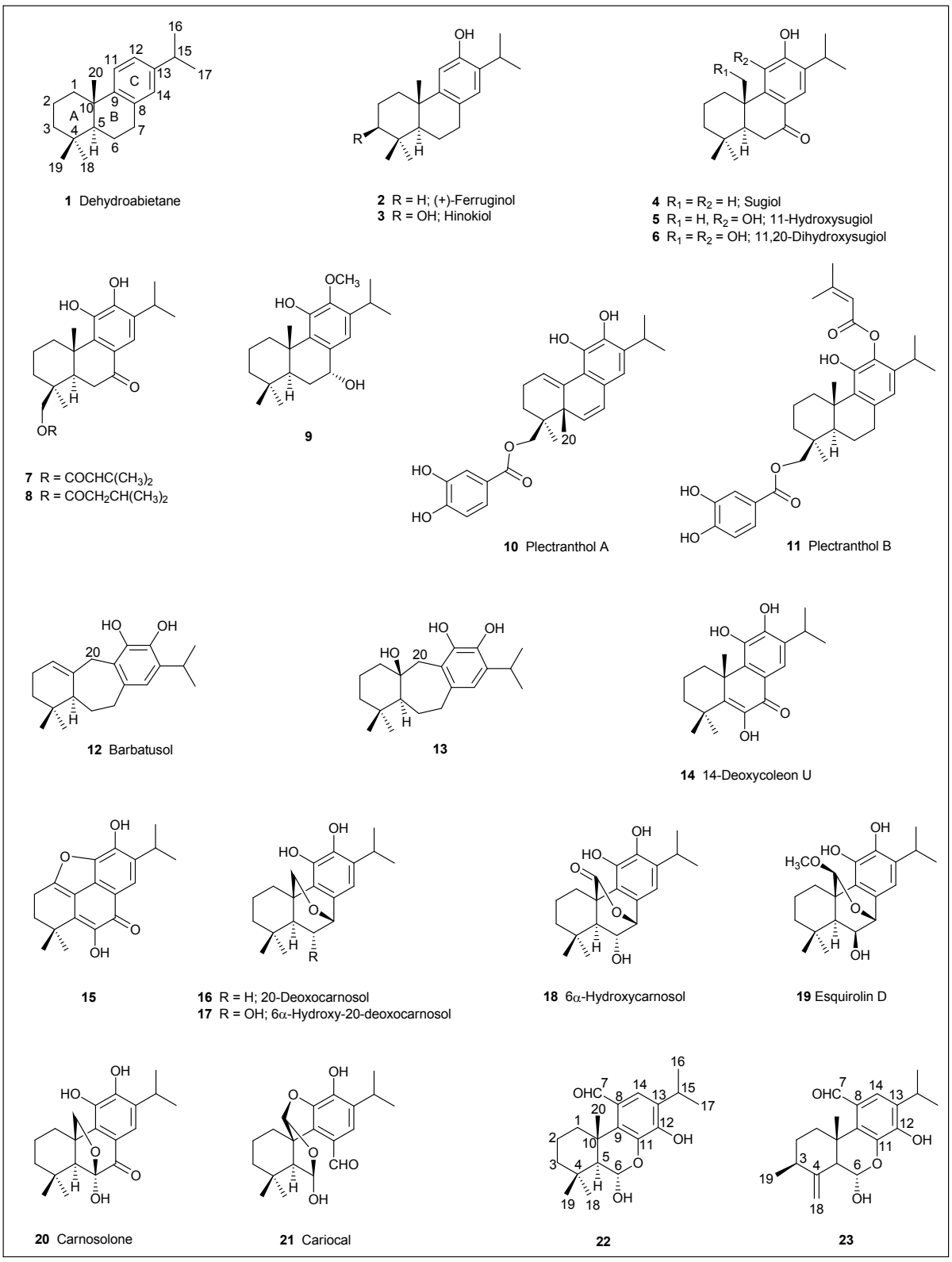


Figure S1. Structures of phenolic abietanes **1 – 23**.

Table S3. Abietane diterpenoids with a phenolic 11,12,14-trioxygenated C-ring ("Acylhydroquinones") reported from species of *Plectranthus s.l.*, *Coleus* and *Solenostemon*, now all transferred to the genus *Coleus.*

Compound number	Compound name	Occurrence* (the names of the species are the currently accepted taxonomic names)
24	Coleon U	*C. hereroensis*,[17] *C. maculosus* ssp. *edulis*,[18] *C. grandidentatus,*[19,20] *C. argentatus*,[21] *C. sanguineus*,[22] *C. xanthanthus*,[14,23] *C. forsteri* 'Marginatus'[24]
25	Coleon V	*C. hereroensis*,[17] *C. grandidentatus*,[19] *C. argentatus*,[21] *C. sanguineus*,[22] *C. barbatus* ssp. *barbatus*[25] *C. maculosus* root[26]
26	Demethyllinuroyleanol, 6-deoxocoleon V	*C. maculosus* root[26]
27	11-*O*-Acetylcoleon U	*C. xanthanthus*[23,27]
28	14-*O*-Acetylcoleon U	*C. grandidentatus*[28]
29	14-*O*-Formylcoleon V	*C. hereroensis*[17]
30	5,6-Dehydrocoleon U	*C. argentatus*,[21] *C. sanguineus*[22]
31a	(15*R*)-Coleon C	*C. maculosus* ssp. *edulis*,[29,30] *C.* (North Madagascar)[§ 31]
31b	(15S)-Coleon C	*C. lanuginosus*,[32] *C. barbatus* ssp. *barbatus*[25,30]
32a	(15*R*)-Coleon D	*C. maculosus* ssp. *edulis*,[29,30] *C.* (North Madagascar)[§ 31]
32b	(15S)-Coleon D	*C. lanuginosus*,[32] *C. barbatus* ssp. *barbatus*[30]
33	16-*O*-Acetylcoleon C	*C. barbatus* ssp. *barbatus*,[30] *C. monostachys*,[30] *C. maculosus* ssp. *edulis*,[18] *C. xanthanthus*[23]
34	16-*O*-Acetylcoleon D	*C. barbatus* ssp. *barbatus*,[30] *C. lanuginosus*,[33] *C. maculosus* ssp. *edulis*[18]
35	11,16-Di-*O*-acetylcoleon C	*C. xanthanthus*[23,27]
36	Lactone derivative of 16-*O*-acetylcoleon C	*C. maculosus* ssp. *edulis*[18]
37	Coleon W (17-hydroxy-16-*O*-acetylcoleon C)	*C. hereroensis*,[17] *C. barbatus* ssp. *barbatus*,[25] *C. autrani*,[34] *C. garckeanus*[34]
38	Coleon X (17-hydroxy-16-*O*-acetylcoleon D)	*C. autrani*,[34] *C. garckeanus*[34]
39	17-*O*-Acetylcoleon W	*C. autrani*,[34] *C. garckeanus*[34]
40	17-*O*-Acetylcoleon X	*C. garckeanus*[34]
41	(15*S*)-2α-Formoxycoleon C	*C. monostachys*[35]
42	(15*S*)-2α-Acetoxycoleon C	*C.* (Rwanda)[§ 36]
43	(15*S*)-2α-Acetoxycoleon D	*C.* (Rwanda)[§ 36]
44	2α-Acetoxycoleon W	*C. scutellarioides*[37,38,39]
45	Scutellarioidone C	*C. scutellarioides*[39]
46	Coleon B	*C. igniarius*[40,41]

47	Coleon S	*C. caninus*[42]
48	Coleon T	*C. caninus*[42]
49	Coleon H	*C. lanuginosus*,[43] *C. monostachys*[35] *C.* (Rwanda)[§ 36]
50	Coleon I	*C. lanuginosus*,[43] *C.* (Rwanda)[§],[36] *C.* (North Madagascar)[§ 31]
51	Coleon I'	*C.* (North Madagascar)[§ 31]
52	Coleon K	*C. lanuginosus*[43,44]
53	Coleon L	*C. lanuginosus*[44]
54	Edulone A	*C. maculosus* ssp. *edulis*[18,45]
55	Deacetyledulone A	*C. maculosus* ssp. *edulis*[18,45]
56	13-Desisopropyl-13-(2-hydroxypropyl)coleon U ("Acylhydroquinone 32")	*C. maculosus* ssp. *edulis*[18,45]
57	13-Desisopropyl-13-(2-hydroxypropyl)coleon V ("Acylhydroquinone 33")	*C. maculosus* ssp. *edulis*[18,45]
58	Lanugone S	*C. lanuginosus*[32]
59	Lanugone R	*C. lanuginosus*[32]
60	Xanthanthusin A	*C. xanthanthus*[6]
61	Xanthanthusin F	*C. xanthanthus*[6]
62	Xanthanthusin G	*C. xanthanthus*[6]
63	(16*R*)-Plectrinone A	*C. barbatus*,[46,47] *C.* (Rwanda)[§] (16*S*-form)[36]
64	Plectrinone B	*C*. (Rwanda)[§ 36]

* For most species the compounds were isolated from aerial parts, including leaves and leaf glands, unless specified differently (e.g., roots)

[§] *C*. (Rwanda) and *C*. (North Madagascar) mean that the compounds were isolated from unknown *Coleus* species from Rwanda and North Madagascar, respectively

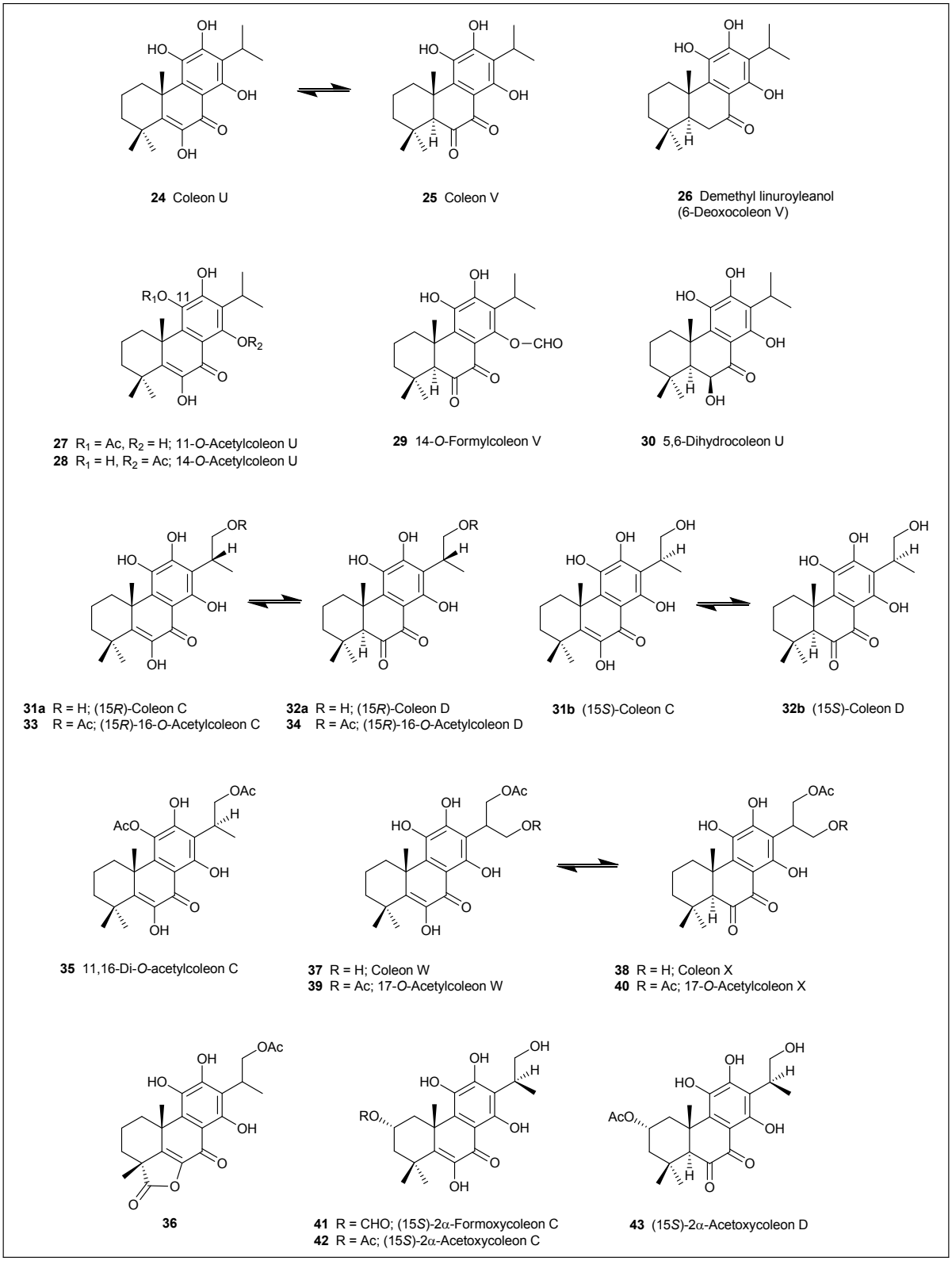


Figure S2. Structures of acylhydroquinones **24** – **43**.

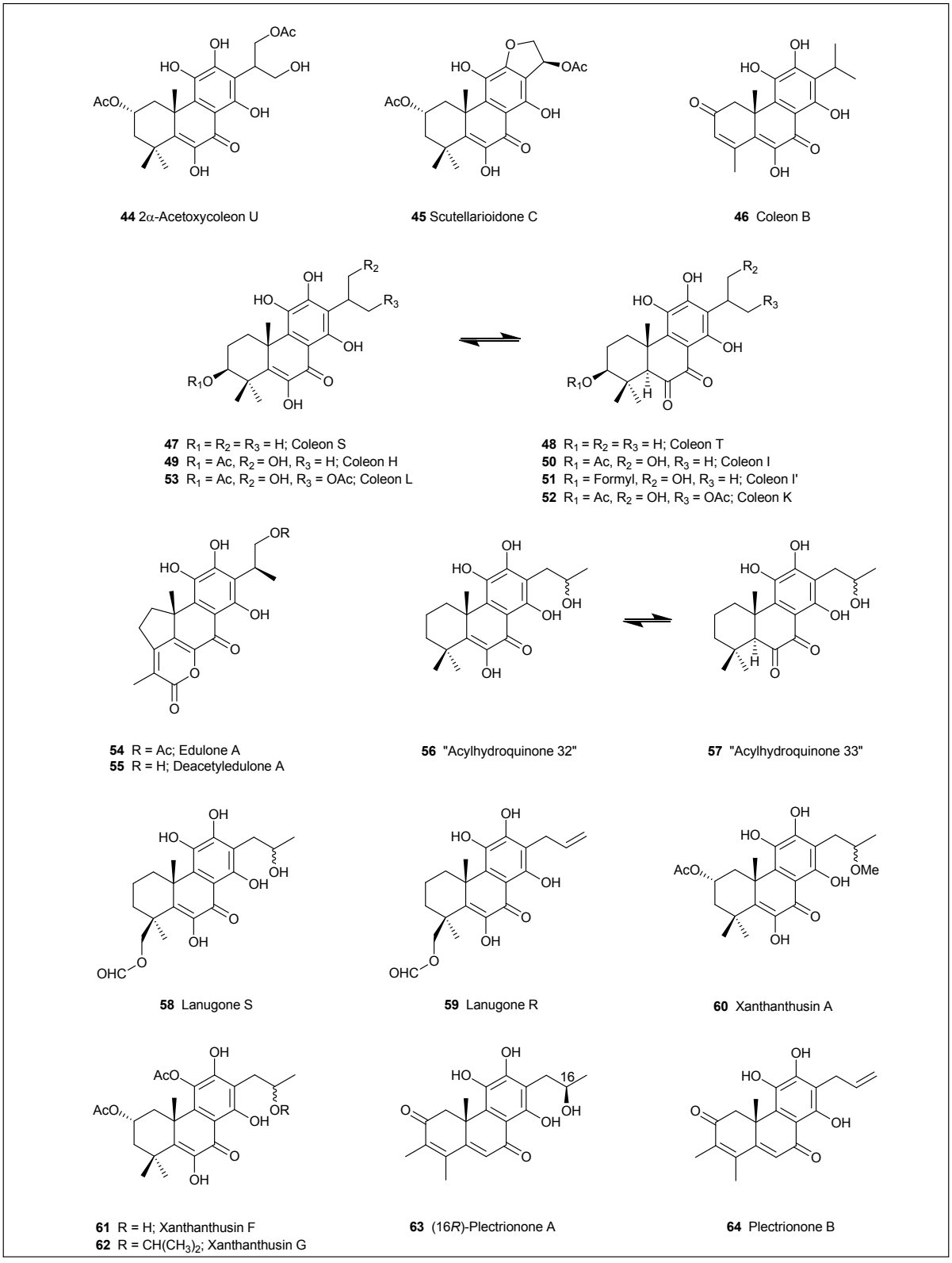


Figure S3. Structures of acylhydroquinones **44** – **64**.

Table S4. Royleanone-type abietane diterpenoids reported from species of *Plectranthus s.l.* and *Coleus*, now all transferred to the genus *Coleus.*

Compound number	Compound name	Occurrence* (the names of the species are the currently accepted taxonomic names)
65	Royleanone	*C.* (Ethiopia)§,[48] *C. grandidentatus*,[49] *C. maculosus* root,[26] *C. madagascariensis*[50]
66	6,7-Dehydroroyleanone	*C.* (Ethiopia)§,[48] *C. grandidentatus*,[49] *C. lanuginosus*,[32] *C. bishopianus*,[51,52] *C. forsteri* 'Marginatus',[53] *C. maculosus* root[26]
67	6*β*-Hydroxyroyleanone	*C. grandidentatus*,[49] *C. sanguineus*,[22] *C. maculosus* root[26]
68	7*α*-Hydroxyroyleanone, horminone	*C.* (Ethiopia)§,[48] *C. sanguineus*,[22] *C. hereroensis* root,[54,55] *C. grandidentatus*[49,55]
69	7*α*-Acetoxyroyleanone	*C.* (Ethiopia)§ [48]
70	7*α*-Formoxyroyleanone, 7-*O*-formylhorminone	*C. sanguineus*[22]
71	16-Acetoxyhorminone	*C. hereroensis* root[57]
72	7*β*-Hydroxyroyleanone, taxoquinone	*C.* (Ethiopia) §,[48] *C. maculosus* root[26]
73	7*β*-Acetoxyroyleanone	*C. maculosus* root[26]
74a	7-Oxoroyleanone (12-hydroxyabieta-8,12-diene-7,11,14-trione)	*C.* (Ethiopia)§ [48]
74b	7,12-Dihydroxyabieta-6,8,12-triene-11,14-dione	*C.* (Ethiopia)§ [48]
74c	14-Hydroxyabieta-8,13-diene-7,11,12-trione	*C.* (Ethiopia)§ [48]
75	8*α*,9*α*-Epoxy-7-oxoroyleanone	*C.* (Ethiopia)§ [48]
76	6*β*,7*α*-Dihydroxyroyleanone	*C.* (Ethiopia)§,[48] *C. hereroensis*,[17] *C. argentatus*,[21] *C.* (Rwanda)§,[36] *C. sanguineus*,[22] *C. maculosus* ssp. *edulis*,[18] *C. grandidentatus*,[20, 56] *C. bishopianus*,[51,52] *C. amboinicus*[58]
77	6*β*-Hydroxy-7*α*-methoxyroyleanone	*C. bishopianus*[51,52]
78	6*β*-Formoxy-7*α*-hydroxyroyleanone	*C. argentatus*[21]
79	7*α*-Acetoxy-6*β*-hydroxyroyeanone	*C.* (Ethiopia)§,[48] *C. argentatus*,[28] *C. sanguineus*,[22] *P. hadiensis* ssp. *tomentosus*,[59] *P. grandidentatus*,[20,49,56,60] *P. hadiensis*[61]
80	7*α*-Formoxy-6*β*-hydroxyroyeanone	*C. hereroensis*,[17] *C. argentatus*,[21] *C.* sanguineus,[22] *C. hadiensis*[61]
81	Mixture of 7*α*-palmitoyloxy-, 7*α*-stearoyloxy-, 7*α*-oleoyloxy, 7*α*-*n*-heptadecanoyloxy-, 7*α*-*n*-pentadecanoyloxy- and 7*α*-myristoyloxy-6*β*-hydroxyroyleanone	*C. grandidentatus*[49]
82	6*β*,7*β*-Dihydroxyroyleanone	*P. hadiensis* ssp. *tomentosus*,[59] *P. forsteri* 'Marginatus',[53] *P.*

		madagascariensis,[62] *P. maculosus* root[26]
83	6*β*,7*β*-Dihydroxy-12-*O*-methylroyleanone	*C. maculosus* root[26]
84	7*β*-Acetoxy-6*β*-hydroxyroyleanone	*P. hadiensis* ssp. *tomentosus*,[59] *P. forsteri* 'Marginatus',[53] *P. madagascariensis*,[62] *P. maculosus* root[26]
85	7*β*-Acetoxy-6*β*-hydroxy-12-*O*-methyl-royleanone	*P. maculosus* root[26]
86	Coleon-U-quinone	*C. argentatus*,[21] *C. sanguineus*,[22] *C. xanthanthus*,[23] *C. forsteri* 'Marginatus',[24] *P. maculosus* root[26]
87	6*β*-Acetoxy-6α-methoxy-7*β*-oxoroyleanone	*P. maculosus* root[26]
88	8*α*,9*α*-Epoxycoleon-U-quinone	*C. argentatus*,[21] *C. sanguineus*,[22] *C. xanthanthus*,[23] *C. madagascariensis*,[62] *P. maculosus* root[26]
89	8*α*,9*α*-Epoxy-6-deoxycoleon-U-quinone	*P. maculosus* root[26]
90	Xanthanthusin H	*C. xanthanthus*[23]
91	Xanthanthusin E	*C. xanthanthus*[23]
92	Sanguinone A	*C. sanguineus*[22]
93	Coleon A	*C. igniarius*,[40] *C. barbatus* var. *grandis*,[63] *C.* aff. *gracilis*[24]
94	Coleon A lactone	*C. maculosus* ssp. *edulis*,[18] *P. gracilis*[24]
95	16-Acetoxycoleon A lactone	*C. maculosus* ssp. *edulis*[18]
96	6,12-Dihydroxy-sapriparaquinone	*P. maculosus* root[26]

* For most species the compounds were isolated from aerial parts, including leaves and leaf glands, unless specified differently (e.g., roots)

§ *C.* (Ethiopia) and *C.* (Rwanda) mean that the compounds were isolated from unknown *Coleus* species from Ethiopia and Rwanda, respectively.

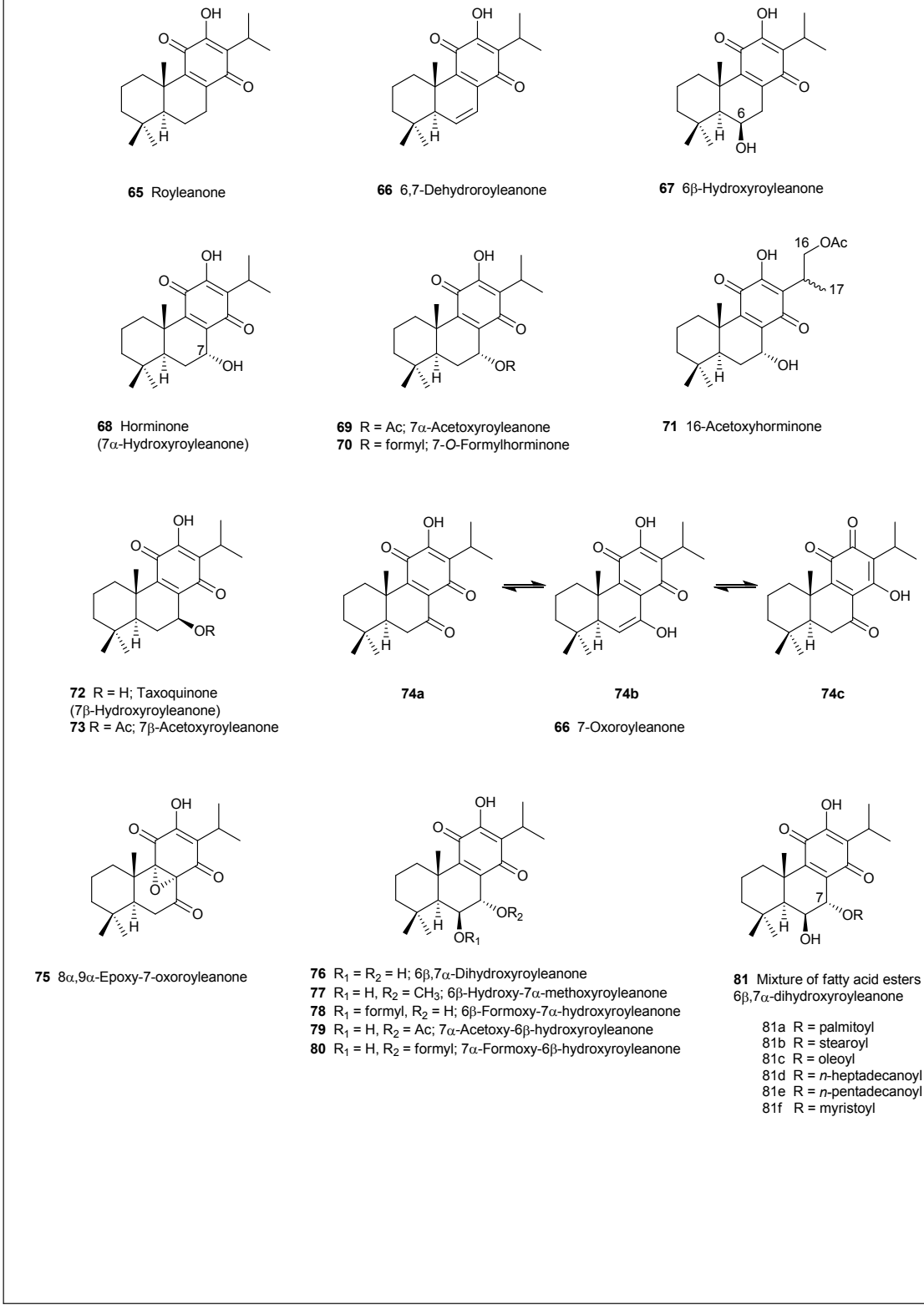
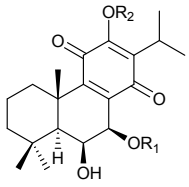
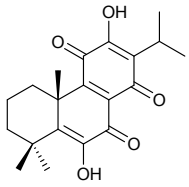


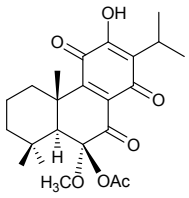
Figure S4. Structures of royleanones **65** – **81**.



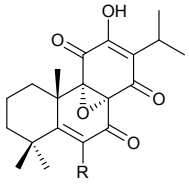
82 $R_1 = R_2 = H$; 6β,7β-Dihydroxyroyleanone
83 $R_1 = H$, $R_2 = CH_3$; 6β,7β-Dihydroxy-12-*O*-methylroyleanone
84 $R_1 = Ac$, $R_2 = H$; 7β-Acetoxy-6β-hydroxyroyleanone
85 $R_1 = Ac$, $R_2 = CH_3$; 7β-Acetoxy-6β-hydroxy-12-*O*-methylroyleanone



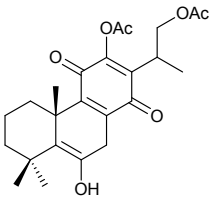
86 Coleon U quinone



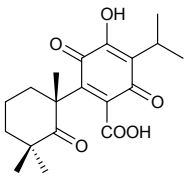
87 6β-Acetoxy-6α-methoxy-7-oxoroyleanone



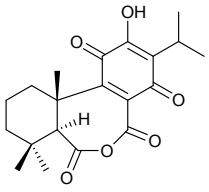
88 R = OH; 8α,9α-Epoxycoleon U quinone
89 R = H; 8α,9α-Epoxy-6-deoxycoleon U quinone



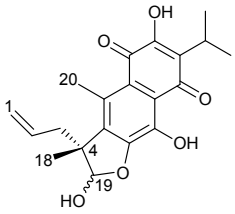
90 Xanthanthusin H



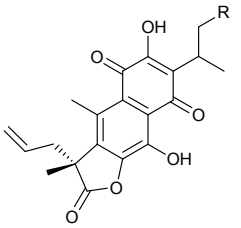
91 Xanthanthusin E



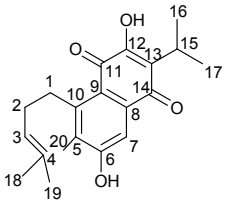
92 Sanguinone A



93 Coleon A



94 R = H; Coleon A lactone
95 R = OAc; 16-Acetoxycoleon A lactone



96 6,12-Dihydroxy-sapriparaquinone

Figure S5. Structures of royleanones **82** – **96**.

Table S5. Allylroyleanone-type abietane diterpenoids reported from species of *Plectranthus s.l.* and *Coleus*, now all transferred to the genus *Coleus.*

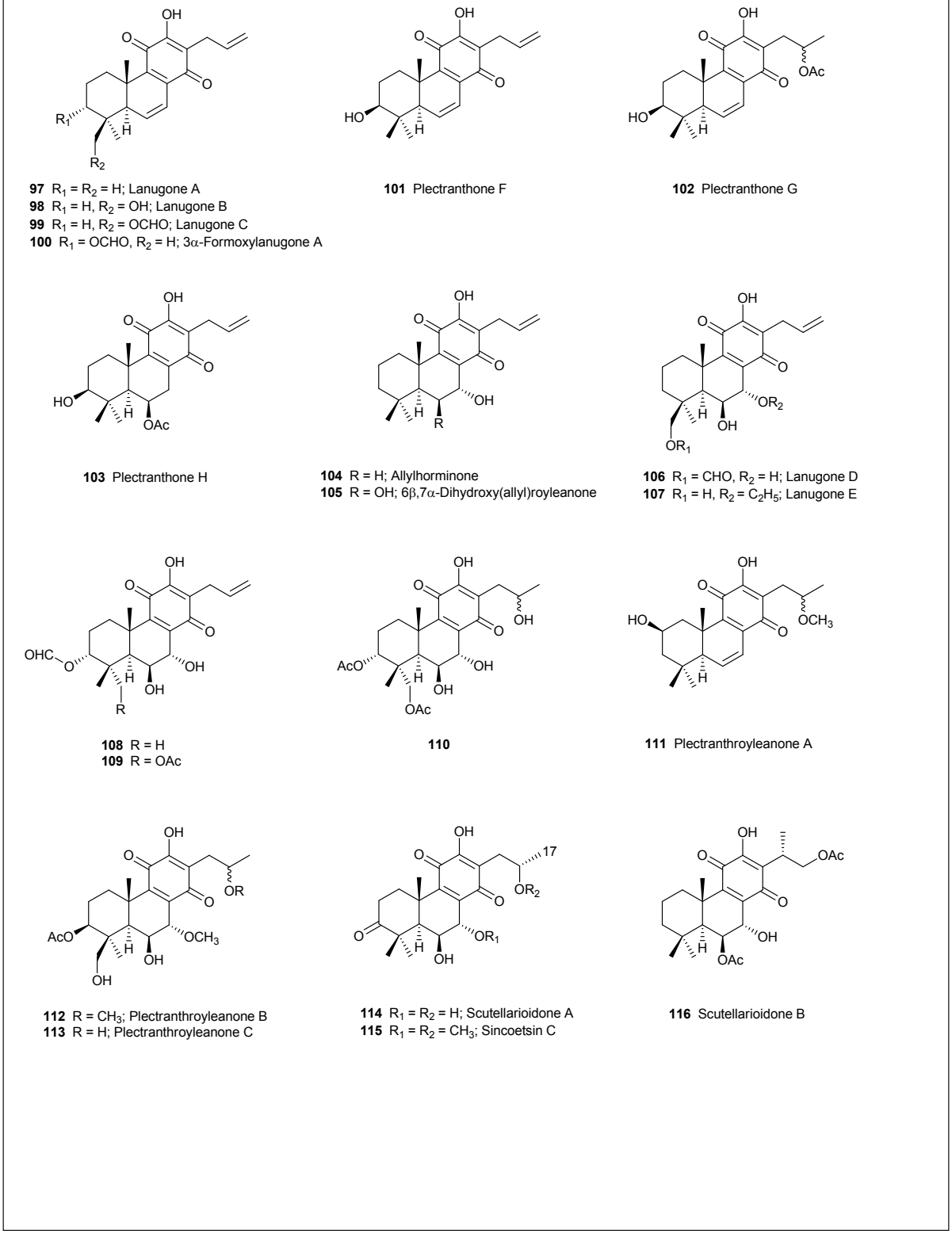
Compound number	Compound name	Occurrence* (the names of the species are the currently accepted taxonomic names)
97	Lanugone A, 6,7-dehydro(allyl)royleanone	*C. lanuginosus,*[32] *C. maculosus* ssp. *edulis*[18]
98	Lanugone B	*C. lanuginosus*[32]
99	Lanugone C	*C. lanuginosus*[32]
100	3*α*-Formoxy-6,7-dehydro(allyl)royleanone, 3*α*-formoxylanugone A	*C. maculosus* ssp. *edulis*[18]
101	Plectranthone F	*C.* (Rwanda)[§ 36]
102	Plectranthone G	*C.* (Rwanda)[§ 36]
103	Plectranthone H	*C.* (Rwanda)[§ 36]
104	7*α*-Hydroxy-(allyl)royleanone, (allyl)horminone	*C. hereroensis* root[54,64]
105	6*β*,7*α*-Dihydroxy(allyl)royleanone	*C. sanguineus*[22]
106	Lanugone D	*C. lanuginosus*[32]
107	Lanugone E	*C. lanuginosus*[32]
108	3*α*-Formoxy-6*β*,7*α*-dihydroxy(allyl)royleanone	*C. maculosus* ssp. *edulis*[18]
109	18-Acetoxy-3*α*-formoxy-6*β*,7*α*-dihydroxy(allyl)royleanone	*C. lanuginosus*[33]
110	3*α*,18-Diacetoxy-6*β*,7*α*-dihydroxy-(2-hydroxypropyl)royleanone	*C. barbatus* ssp. *barbatus*[25]
111	Plectranthroyleanone A	*C. engleri* whole plant[65]
112	Plectranthroyleanone B	*C. engleri* whole plant[65]
113	Plectranthroyleanone C	*C. engleri* whole plant[65]
114	Scutellarioidone A	*C. scutellarioides*[39]
115	Sincoetsin C	*C. scutellarioides*[66]
116	Scutellarioidone B	*C. scutellarioides*[39]
117	Plectranthone I	*C.* (Rwanda)[§ 36]
118	Scutellarioidone D	*C. scutellarioides*[39]
119	6*β*,7*α*,12-Trihydroxy-17(15→16);18(4→3)-*bis*-*abeo*-abieta-4(19),8,12,16-tetraene-11,14-dione	*C. maculosus* ssp. *edulis*[18]
120	6*β*,7*α*,12,16*ζ*-Tetrahydroxy-17(15→16);18(4→3)-*bis*-*abeo*-abieta-4(19),8,12-triene-11,14-dione (3*α*-epimer)	*C. maculosus* ssp. *edulis*,[18] *C. lanuginosus*[33]
121	3*β*-Acetoxy-6*β*,7*α*,12-trihydroxy-17(15→16);18(4→3)-*bis*-*abeo*-abieta-4(19),8,12,16-tetraene-11,14-dione	*C. hereroensis*[64,67]

122	6*ϐ*,7*α*,12,16*ζ*-Tetrahydroxy-17(15→16);18(4→3)-*bis*-*abeo*-abieta-4(19),8,12-triene-11,14-dione (3*ϐ*-epimer)	*C. barbatus* ssp. *barbatus*,[25] *C. lanuginosus*[33]
123	6*ϐ*,12,16*ζ*-Trihydroxy-7*α*-methoxy-17(15→16);18(4→3)-*bis*-*abeo*-abieta-4(19),8,12-triene-11,14-dione (3*ϐ*-epimer)	*C. barbatus* ssp. *barbatus*[25]
124	Fredericone B	*C. fredericii*[68]
125	6-Acetylfredericone B	*C. scutellarioides*[39]
126	Fredericone C	*C. fredericii*[68]
127	16-Ethoxy-6*ϐ*,7*α*,12-trihydroxy-17(15→16);18(4→3)-*bis*-*abeo*-abieta-3,8,12,-triene-11,14-dione ("Coleon S")[#]	*C. barbatus*[69]
128	Plectranthone J	*C.* (Rwanda)[§],[36] *C. barbatus*[46]
129	Plectranthone C	*C.* (Rwanda)[§ 70]
130	Plectranthone E	*C.* (Rwanda)[§ 70]
131	Plectranthone D	*C.* (Rwanda)[§ 70]
132	Plectranthone A	*C.* (Rwanda)[§ 70]
133	Plectranthone B (not chemically identical to the synthesised product with the structure of **133**)	*C.* (Rwanda)[§ 70]
134	Scutequinone	*C. scutellarioides*[71]

* For most species the compounds were isolated from aerial parts, including leaves, unless specified differently

[§] *P*. (Rwanda) means that the compounds were isolated from an unknown *Coleus* species from Rwanda

[#] The spirocoleon Coleon S (**127**) from *C. barbatus*[69] should not be confused with the acylhydroquinone Coleon S (**47**) isolated from *C. caninus* 24 years earlier.[42]



97 $R_1 = R_2 = H$; Lanugone A
98 $R_1 = H$, $R_2 = OH$; Lanugone B
99 $R_1 = H$, $R_2 = OCHO$; Lanugone C
100 $R_1 = OCHO$, $R_2 = H$; 3α-Formoxylanugone A

101 Plectranthone F

102 Plectranthone G

103 Plectranthone H

104 R = H; Allylhorminone
105 R = OH; 6β,7α-Dihydroxy(allyl)royleanone

106 $R_1 = CHO$, $R_2 = H$; Lanugone D
107 $R_1 = H$, $R_2 = C_2H_5$; Lanugone E

108 R = H
109 R = OAc

110

111 Plectranthroyleanone A

112 $R = CH_3$; Plectranthroyleanone B
113 R = H; Plectranthroyleanone C

114 $R_1 = R_2 = H$; Scutellarioidone A
115 $R_1 = R_2 = CH_3$; Sincoetsin C

116 Scutellarioidone B

Figure S6. Structures of allylroyleanones **97** – **116**.

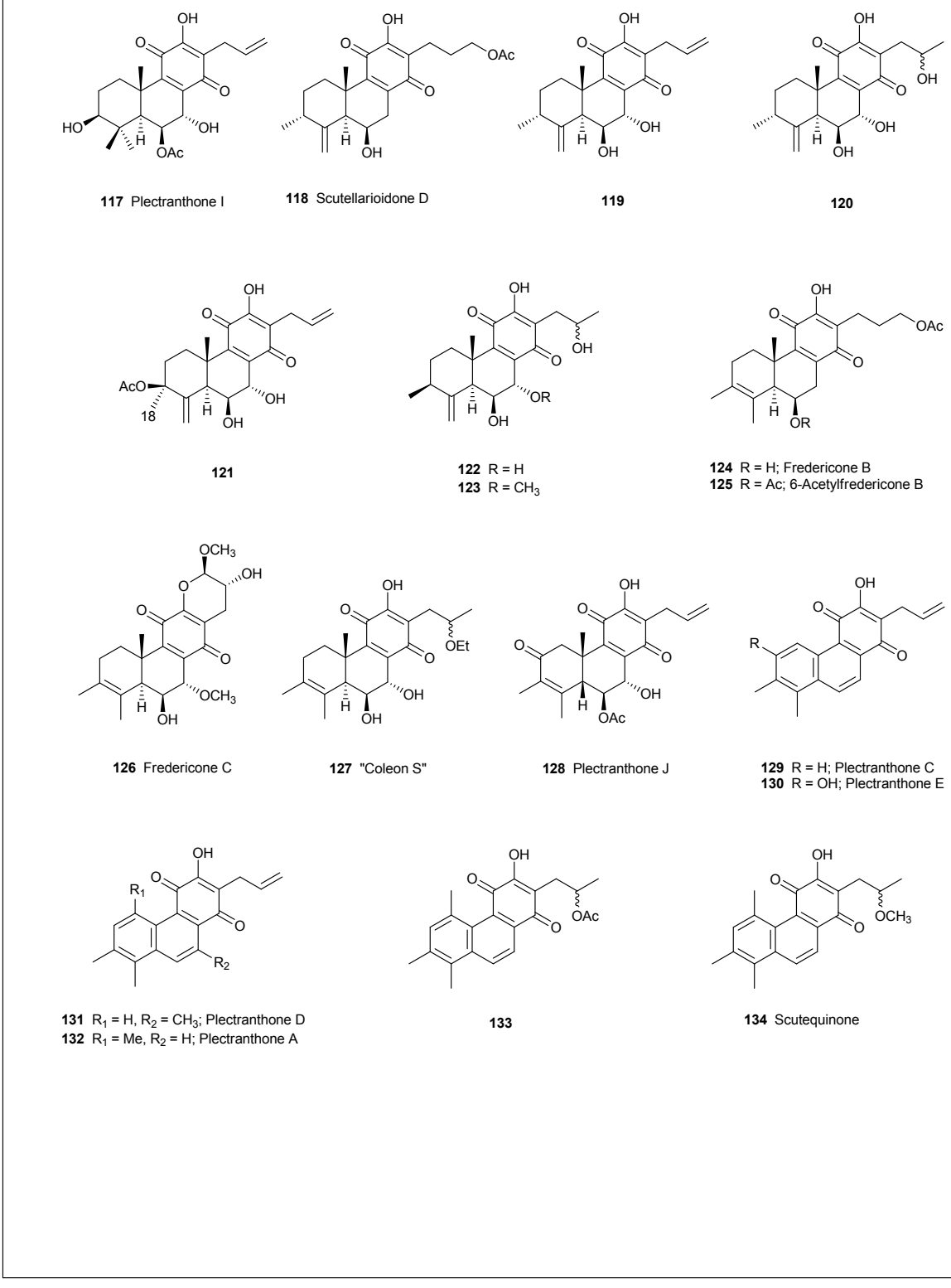


Figure S7. Structures of allylroyleanones **117** – **134**.

Table S6. Spirocoleon-type abietane diterpenoids reported from species of *Plectranthus s.l.*, *Coleus* and *Solenostemon*, now all transferred to the genus *Coleus.*

Compound number	Compound name	Occurrence* (the names of the species are the currently accepted taxonomic names)
135	Lanugone F	*C. lanuginosus*[32]
136	Lanugone G	*C. lanuginosus*[32]
137	Plectranthone K	*C.* (Rwanda)[§ 36]
138	Coleon P	*C. caninus*[72,73]
139	Lanugone H	*C. lanuginosus*[32]
140	Lanugone I	*C. lanuginosus*[32]
141	Lanugone J	*C. lanuginosus*[32]
142	12-*O*-Desacetyl-7-*O*-acetyl-19-acetoxycoleon P	*C. autrani*[34,73]
143	12-*O*-Desacetyl-6-*O*-acetyl-17-acetoxycoleon P	*C. autrani,*[34,73] *C. garckeanus*[34,73]
144	(13*S*,15*R*)-3*α*-Formoxy-6*β*,7*α*,12*α*-trihydroxy-13,16-cycloabiet-8-ene-11,14-dione	*C. maculosus* ssp. *edulis*[18]
145	(13*S*,15*R*)-6*β*-Acetoxy-3*α*-formoxy-7*α*,12*α*-dihydroxy-13,16-cycloabiet-8-ene-11,14-dione	*C. maculosus* ssp. *edulis*[18]
146	(13*S*,15*R*)-3*α*,7*α*-Diformoxy-6*β*,12*α*-dihydroxy-13,16-cycloabiet-8-ene-11,14-dione	*C. maculosus* ssp. *edulis*[18]
147	12-*O*-Desacetylcoleon Q, 15-*epi*lanugone F	*C. lanuginosus*[33]
148	Coleon Q	*C. caninus*[72,73]
149	Lanugone K	*C. lanuginosus,*[32] *C. scutellarioides*[39]
150	Lanugone K'	*C. lanuginosus*[32]
151	Coleon R	*C. caninus*,[72] *C. comosus*[74]
152	6,12-*bis*(*O*-Desacetyl)coleon R	*C. barbatus* ssp. *barbatus*[25]
153	12-*O*-Desacetylcoleon R	*C. barbatus* ssp. *barbatus*[25]
154	(13*S*,15*S*)-3*α*,7*α*-Diformoxy-6*β*,12*α*-dihydroxy-13,16-cycloabiet-8-ene-11,14-dione	*C. maculosus* ssp. *edulis*[18]
155	(13*S*,15*S*)-6*β*,12*α*-Diacetoxy-3*α*-formoxy-7*α*-hydroxy-13,16-cycloabiet-8-ene-11,14-dione	*C. maculosus* ssp. *edulis*[18]
156	3*β*-Hydroxy-3-deoxobarbatusin	*C. barbatus*,[75,76,77] *C. barbatus* ssp. *grandis*,[77,78] *C. amboinicus*[77]
157	Barbatusin	*C. barbatus*,[75,76,77,79,80] *C. barbatus* ssp. *grandis*[77,78]
158	Cyclobutatusin	*C. barbatus*[75,76,80]
159	7*β*-Acetyl-12-desacetoxycyclobutatusin	*C. barbatus*[80]
160	18-Acetoxy-12-*O*-desacetylcoleon Q	*C. lanuginosus*[33]

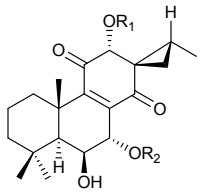
161	Coleon Y	*C. barbatus* ssp. *barbatus*,[25] *C. lanuginosus*[33]
162	3-*O*-Desacetyl-3-*O*-formylcoleon Y	*C. barbatus* ssp. *barbatus*,[25] *C. lanuginosus*[33]
163	3,18-Desacetyl-3,18-di-*O*-formylcoleon Y	*C. lanuginosus*[33]
164	(13*S*,15*S*)-6*β*,7*α*,12*α*,19-tetrahydroxy-13*β*,16-cyclo-8-abietene-11,14-dione	*C. porcatus*[81]
165	7-*O*-Acetyl-12-*O*-desacetyl-19-hydroxycoleon Q	*C. lanuginosus*[33]
166	19-Acetoxy-7-*O*-acetyl-12-*O*-desacetylcoleon Q	*C. autrani*,[34] *C. garckeanus*[34]
167	19-Acetoxy-6-*O*-acetyl-12-*O*-desacetylcoleon Q	*C. autrani*,[34] *C. garckeanus*[34]
168	7-*O*-Acetyl-12-*O*-desacetyl-3*β*,19-diacetoxycoleon Q	*C. autrani*,[34] *C. garckeanus*[34]
169	Xanthanthusin I	*C. xanthanthus*[23]
170	Xanthanthusin J	*C. xanthanthus*[23]
171	Xanthanthusin K	*C. xanthanthus*[23]
172	Spiroscutelone C	*C. scutellarioides*[38]
173	Spiroscutelone B	*C. scutellarioides*[38]
174	Spiroscutelone A	*C. scutellarioides*[38]
175	Coleon J	*C. lanuginosus*[82]
176	Coleon G	*C. lanuginosus,*[82]*C. scutellarioides*[39]
177	15-*epi*-Coleon J	*C. maculosus* ssp. *edulis*[18]
178	7-*O*-Acetyl-15-*epi*-coleon J	*C. maculosus* ssp. *edulis*[18]
179	7-*O*-Formyl-15-*epi*-coleon J	*C. maculosus* ssp. *edulis*[18]
180	12-*O*-Acetyl-15-*epi*-coleon J	*C. maculosus* ssp. *edulis*[18]
181	7,12-di-*O*-Acetyl-15-*epi*-coleon J	*C. maculosus* ssp. *edulis*[18]
182	7-*O*-Formyl-12-*O*-acetyl-15-*epi*-coleon J	*C. maculosus* ssp. *edulis*[18]
183	3-*epi*-Coleon J, 7,12-*bis*(*O*-desacetyl)-coleon N	*C. barbatus* ssp. *barbatus*[25]
184	12-*O*-Desacetylcoleon N	*C. barbatus* ssp. *barbatus*[25]
185	Coleon N	*C. caninus*[72]
186	7-Desoxy-12-*O*-desacetyl-3*α*-desacetoxycoleon N	*C. autrani*[34]
187	19-(4→3)-*abeo*-3*α*,7*α*-Diacetoxy-6*β*,12*α*-dihydroxy-13,16-cycloabieta-4(18),8-diene-11,14-dione, (13*S*, 15*R*) or (13*S*,15*S*)	*C. maculosus* ssp. *edulis*[18]
188	Coleon Z	*C. autrani*,[34] *C. garckeanus,*[34] *C. maculosus* ssp. *edulis*[18]
189	12-*O*-Acetyl-15-*epi*-coleon Z	*C. monostachys*[35,73,83]
190	12-*O*-Acetyl-7-*O*-formyl-7-*O*-desacetyl-15-*epi*-coleon Z	*C. monostachys*[35,73,83]

191	17-Acetoxy-12-*O*-acetyl-15-*epi*-coleon Z	*C. monostachys*[35,73,83]
192	12-*O*-Acetyl-17-formoxy-15-*epi*-coleon Z	*C. monostachys*[35,73,83]
193	Coleon O	*C. caninus*,[72] *C. lanuginosus*,[72] *C. barbatus* ssp. *barbatus,*[25] *C. autrani*,[34] *C. garckeanus*,[34] *C. barbatus*,[84] *C. scutellarioides*[39,85]
194	Coleon M	*C. caninus*[72]
195	19-Acetoxycoleon O	*C. autrani*[34,83]
196	Plectrin	*C. barbatus*[46,84]
197	Plectranthone L	*C.* (Rwanda)[§ 36]
198	19-(4→3)-*abeo*-6*β*,7*α*,12*β*-trihydroxy-13,16-cycloabieta-3,8-diene-11,14-dione ("Coleon T") [#]	*C. barbatus*[69]
199	Fredericone A	*C. fredericii*[68]
200	Spirocoleon 7-*O*-β-D-glucoside	*C. scutellarioides*[86]
201	3-Hydroxyspirocoleon 7-*O*-β-D-glucoside	*C. scutellarioides*[66]

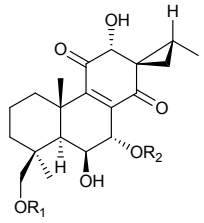
***** The organs used for the isolation of the compounds were aerial parts, including stems, leaves and leaf glands

[§] The compound was isolated from an unknown *Coleus* species from Rwanda

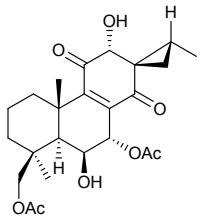
[#] The spirocoleon Coleon T (**198**) from *C. barbatus*[69] should not be confused with the acylhydroquinone Coleon T (**48**) isolated from *C. caninus* 24 years earlier.[42]



135 $R_1 = R_2 = H$; Lanugone F
136 $R_1 = H$, $R_2 = CHO$; Lanugone G
137 $R_1 = H$, $R_2 = Ac$; Plectranthone K
138 $R_1 = Ac$, $R_2 = H$; Coleon P



139 $R_1 = H$, $R_2 = CHO$; Lanugone H
140 $R_1 = CHO$, $R_2 = H$; Lanugone I
141 $R_1 = R_2 = CHO$; Lanugone J



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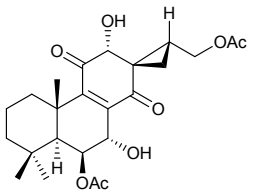

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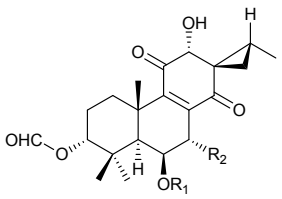
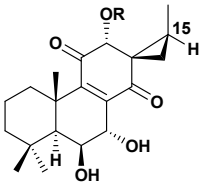
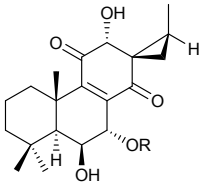


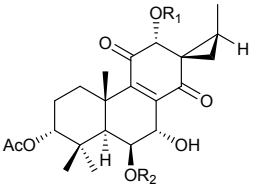
144 $R_1 = R_2 = H$
145 $R_1 = Ac$; $R_2 = OH$
146 $R_1 = H$; $R_2 = OCHO$



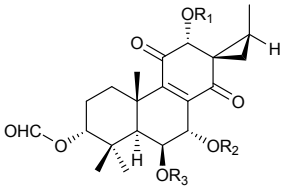
147 R = H; 12-*O*-Desacetylcoleon Q (= 15-*epi*-lanugone F)
148 R = Ac; Coleon Q



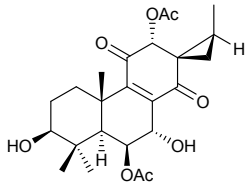
149 R = Ac; Lanugone K
150 R = CHO; Lanugone K'



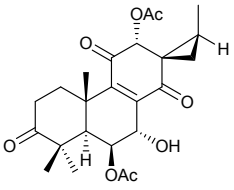
151 $R_1 = R_2 = Ac$; Coleon R
152 $R_1 = R_2 = H$; 6,12-*bis*-(*O*-Desacetyl)-coleon R
153 $R_1 = H$, $R_2 = Ac$; 12-*O*-Desacetylcoleon R



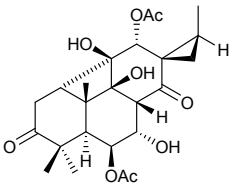
154 $R_1 = R_3 = H$, $R_2 = CHO$
155 $R_1 = R_3 = Ac$, $R_2 = H$



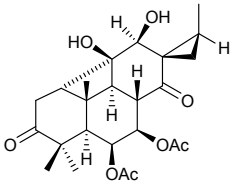
156 3β-Hydroxy-3-deoxobarbatusin



157 Barbatusin



158 Cyclobutatusin



159 7β-Acetyl-12-desacetoxy-cyclobutatusin

Figure S8. Structures of spirocoleons **135** – **159**.

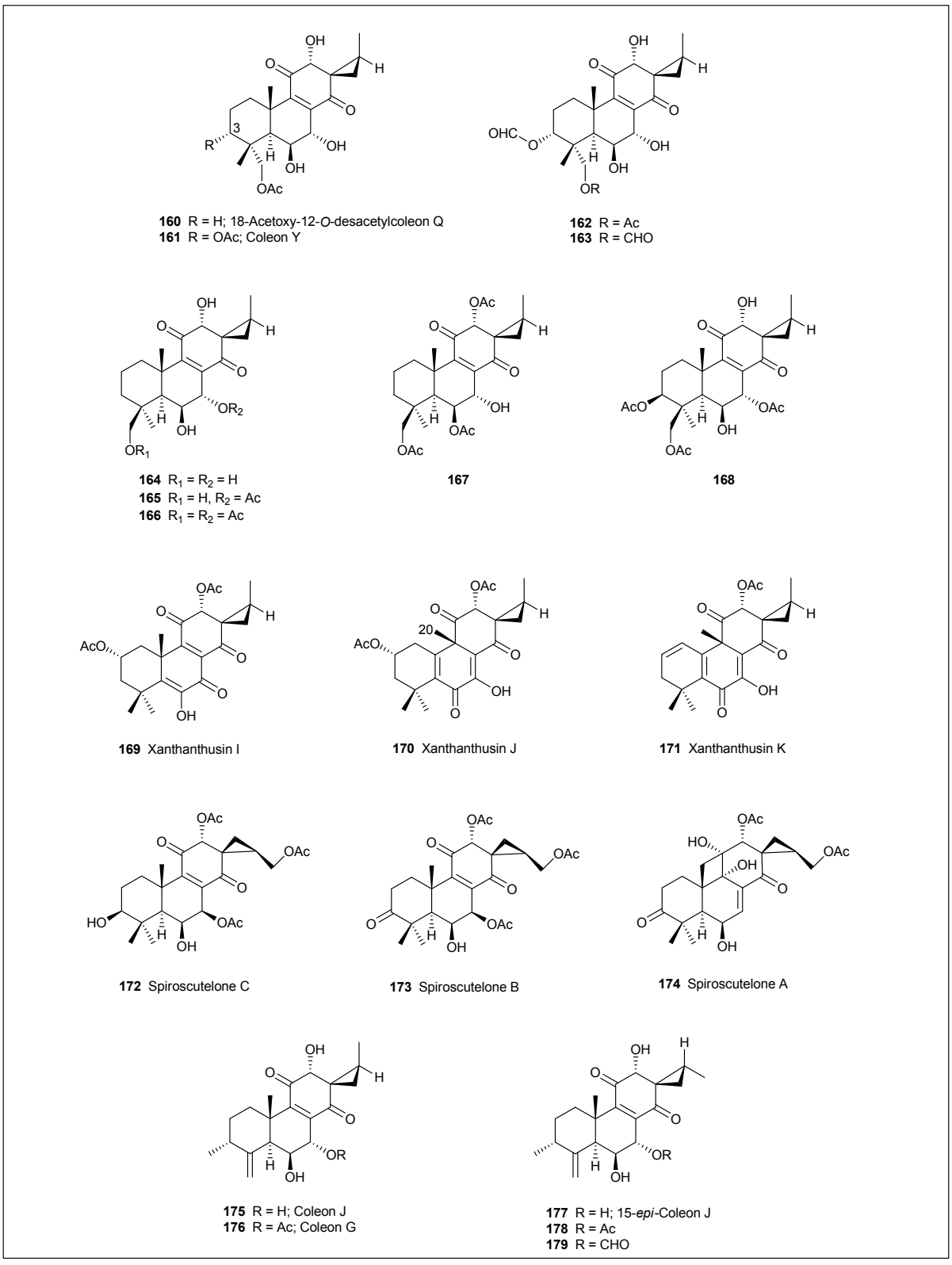
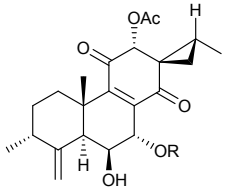
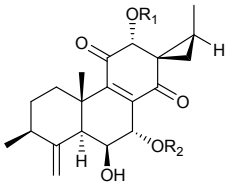


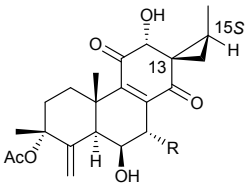
Figure S9. Structures of spirocoleons **160** – **179**.



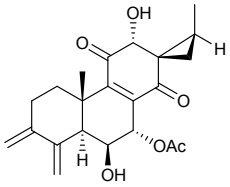
180 R = H
181 R = Ac
182 R = CHO



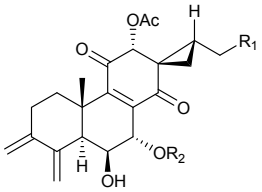
183 $R_1 = R_2 = H$; 3-*epi*-Coleon J
184 $R_1 = H$; $R_2 = Ac$; 12-*O*-Desacetylcoleon N
185 $R_1 = R_2 = Ac$; Coleon N



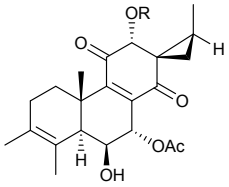
186 (13*S*,15*S*), R = H
187 (13*S*,15*R*), R = OAc



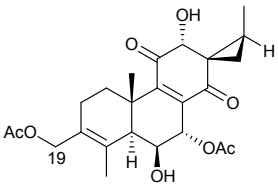
188 Coleon Z



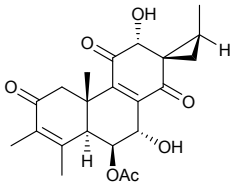
189 $R_1 = H$, $R_2 = Ac$
190 $R_1 = H$, $R_2 = CHO$
191 $R_1 = OAc$, $R_2 = Ac$
192 $R_1 = OCHO$, $R_2 = Ac$



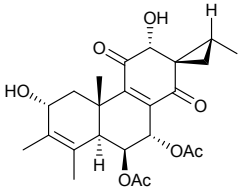
193 R = H; Coleon O
194 R = Ac; Coleon M



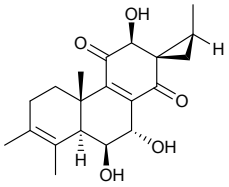
195 19-Acetoxycoleon O



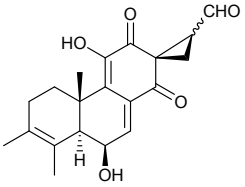
196 Plectrin



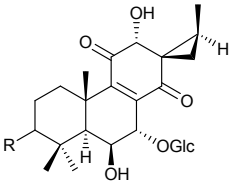
197 Plectranthone L



198 "Coleon T"



199 Fredericone A



200 R = H; Spirocoleon 7-*O*-β-D-glucoside
201 R = OH; 3-Hydroxyspirocoleon 7-*O*-β-D-glucoside

Figure S10. Structures of spirocoleons **180** – **201**.

Table S7. *p*-Quinomethane and extended quinone abietanes reported from species of *Plectranthus* and *Coleus.*

Compound number	Compound name	Occurrence* (the names of the species are the currently accepted taxonomic names)
202	11-Hydroxy-7,9(11),13-abietetraen-12-one	*P. elegans*[11]
203	5,6-Didehydro-7-hydroxytaxodone	*P. barbatus*[2]
204	Parviflorone A	*P. purpuratus*,[10] *P. strigosus*[87,88]
205	11-Hydroxy-19-(3-methylbutanoyloxy)-5,7,9(11),13-abietatetraen-12-one	*P. purpuratus*[10]
206	Parviflorone H	*P. strigosus*[88]
207	Parviflorone C	*P. strigosus*[87] *P. purpuratus* ssp. *tongaensis*[61]
208	Parviflorone E	*P. strigosus*,[87,88] *P. nummularius*,[12] *P. purpuratus* ssp. *tongaensis*[61]
209	Parviflorone B	*P. strigosus*[87,88]
210	Parviflorone D	*P. strigosus*,[5,87,88] *P. lucidus*,[61] *P. ecklonii*,[61,89,90]
211	Parviflorone F	*P. strigosus*,[5,87,88] *P. ecklonii*,[89,91] *P. nummularius*[12]
212	Parviflorone G	*P. strigosus*[88]
213	19-Senecioyloxytaxodone	*P. purpuratus*,[10] *P. purpuratus* ssp. *purpuratus*,[61] *P. lucidus*[61]
214	19-Isovaleroyloxytaxodone	*P. purpuratus*[10]
215	19-Senecioyloxytaxodione	*P. purpuratus*[10]
216	19-Isovaleroyloxytaxodione	*P. purpuratus*[10]
217	Taxodione	*P. barbatus*[2]
218	14-Hydroxytaxodione	*C. grandidentatus*[20]
219	(15*S*)-Lanugone O	*C. lanuginosus*,[32] *C. maculosus* ssp. *edulis*[18]
220	17(15→16)-*abeo*-11,14,16ζ-trihydroxy-7,9(11),13-abieta-triene-6,12-dione	*C. maculosus* ssp. *edulis*[18]
221	17(15→16)-*abeo*-16ζ-acetoxy-11,14-dihydroxy-7,9(11),13-abietatriene-6,12-dione	*C. maculosus* ssp. *edulis*[18]
222	Lanugone P	*C. lanuginosus*[32]
223	Lanugone Q	*C. lanuginosus*[32]
224	Lanugone L	*C. lanuginosus*[32]
225	Lanugone M	*C. lanuginosus*[32]
226	Lanugone N	*C. lanuginosus*[32]
227	Fredericone D	*C. fredericii*[68]

228	Coleon E	*C. barbatus,*[92,93,94] *C.* (Rwanda)[§ 36]
229	Coleon F	*C. barbatus*[92,93]

* For most species the compounds were isolated from aerial parts, including stems, leaves and leaf glands

§ *P.* (Rwanda) means that the compound was isolated from an unknown *Coleus* species from Rwanda

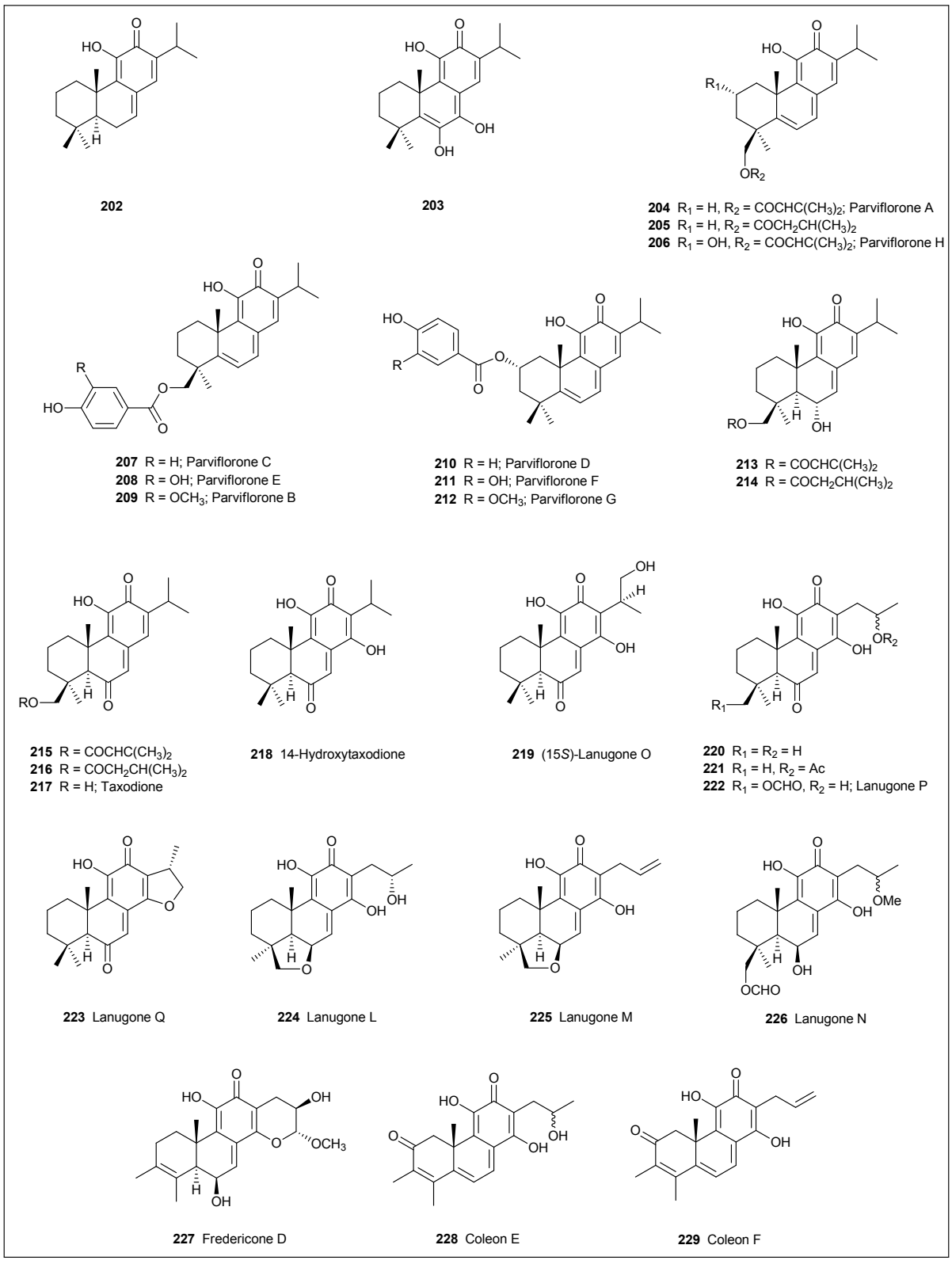


Figure S11. Structures of *P*-quinomethane and extended quinone abietanes **202** – **229**.

Table S8. Abietane dimers reported from species of *Plectranthus s.l.* or *Coleus*, now all transferred to the genus *Coleus*.

Compound number	Compound name	Occurrence* (the names of the species are the currently accepted taxonomic names)
230	Grandidone A	*C. grandidentatus*,[19] *C. sanguineus*,[22] *C. hereroensis*[17,20]
231	7-Epigrandidone A	*C. grandidentatus*,[19] *C. sanguineus*[22]
232	Grandidone B	*C. grandidentatus*,[19] *C. sanguineus*[22]
233	7-Epigrandidone B	*C. grandidentatus*,[19] *C. sanguineus*[22]
234	Grandidone C	*C. grandidentatus*[19]
235	Grandidone D	*C. grandidentatus*[19]
236	7-Epigrandidone D	*C. grandidentatus*[19]
237	Xanthanthusin B	*C. xanthanthus*[95]
238	Xanthanthusin C	*C. xanthanthus*[95]

* For most species the compounds were isolated from aerial parts, including stems, leaves and leaf glands.

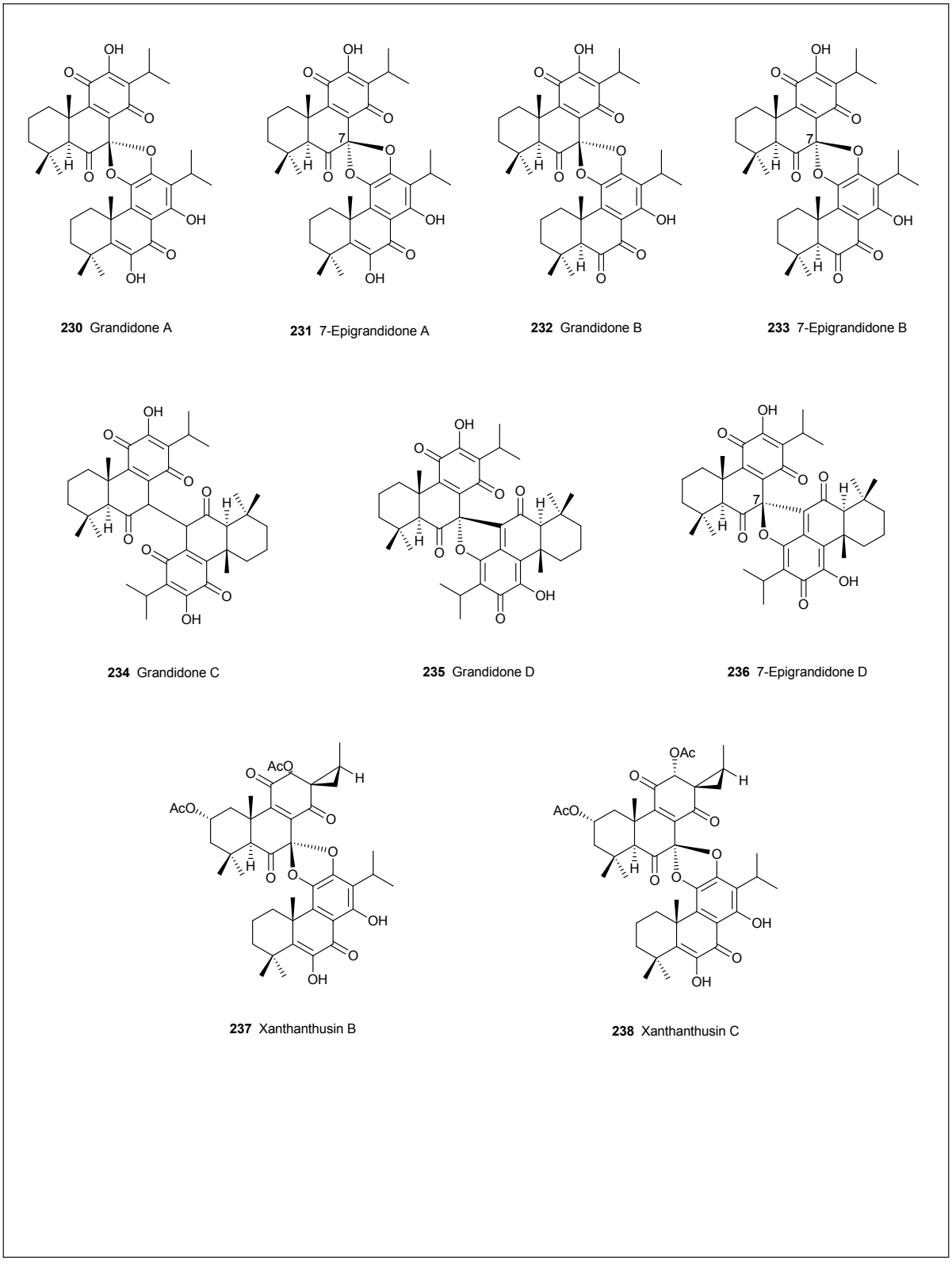


Figure S12. Structures of abietane dimers **230** – **238**.

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