Electronic Supplementary Material (ESI) for Natural Product Reports.

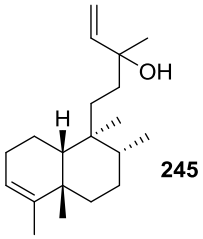
SUPPLEMENTARY MATERIAL for

Clerodane Diterpenes: Sources, Structures, and Biological Activities

Rongtao Li[a,b*], *Susan L. Morris-Natschke*[b], *and Kuo-Hsiung Lee*[b,c*]

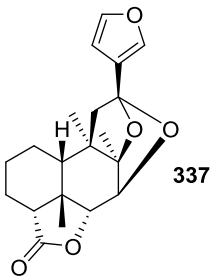
CONTENT:

***ADELANTHUS* Genus**



245

245	13-hydroxy-*cis*-*ent*-cleroda-3,14-diene	*Adelanthus lindenbergianus*	*Phytochemistry*, 2004, **65**, 127–137



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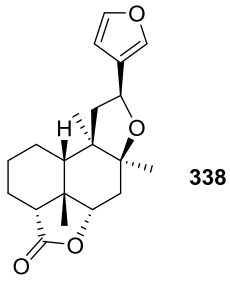
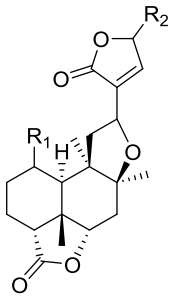


338

337	anastreptin	*Adelanthus lindenbergianus*	*Phytochemistry*, 2004, **65**, 127–137
338	8β,12:15,16-diepoxy-*cis*-*ent*-cleroda-13(16),14-dien-18α,6α-olide		



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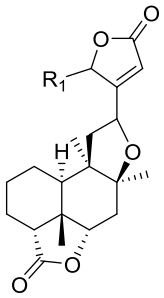

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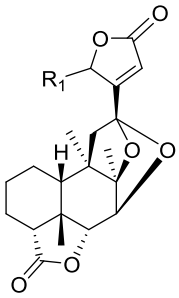

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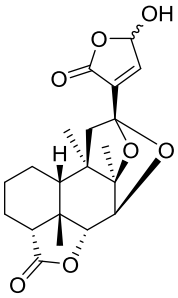

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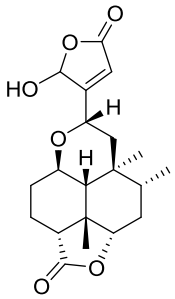
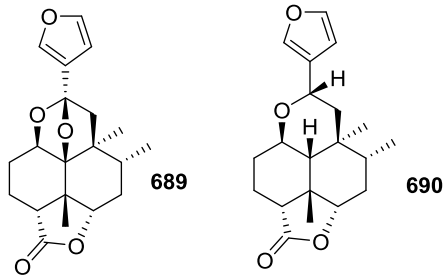


477

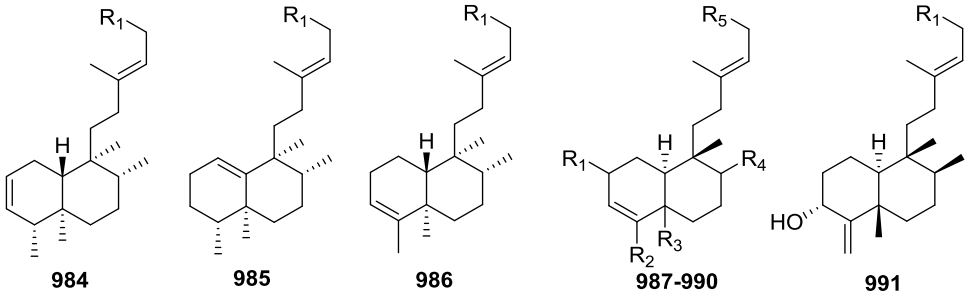
		R1	R2		
469	1α-acetoxy-8β,12-epoxy-15-hydroxy-*cis*-*ent*-cleroda-13-en-16,15:18α,6α-diolide	αOAc	OH	*Adelanthus lindenbergianus*	*Phytochemistry*, 2004, **65**, 127–137
470	8β,12-epoxy-15α-hydroxy-transcleroda-13-en-16,15:18α,6α-diolide	H	αOH		
471	8β,12-epoxy-15β-hydroxy-transcleroda-13-en-16,15:18α,6α-diolide	H	βOH		
472	8β,12-epoxy-16α-hydroxy-transcleroda-13-en-15,16:18α,6α-diolide	αOH	—		
473	8β,12-epoxy-16β-hydroxy-transcleroda-13-en-15,16:18α,6α-diolide	βOH	—		
474	7β,12:8β,12-diepoxy-16α-hydroxy-*cis*-*ent*-cleroda-13-en-15,16:18α,6α-diolide	αOH	—		
475	7β,12:8β,12-diepoxy-16β-hydroxy-*cis*-	βOH	—		

	ent-cleroda-13-en-15,16:18α,6α-diolide				
476	7β,12:8β,12-diepoxy-15-hydroxy-*cis*-*ent*-cleroda-13-en-16,15:18α,6α-diolide	—	—		
477	1β,12-epoxy-16-hydroxy-*cis*-*ent*-cleroda-13-en-15,16:18α,6α-diolide	—	—		



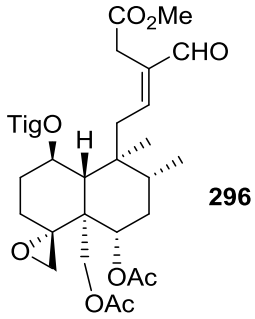
689	orcadensin	*Adelanthus lindenbergianus*	*Phytochemistry*, 2004, **65**, 127–137
690	1β,12:15,16-diepoxy-*cis*-*ent*-cleroda-13(16),14-dien-18α,6α-olide		

***AGELAS* Genus**



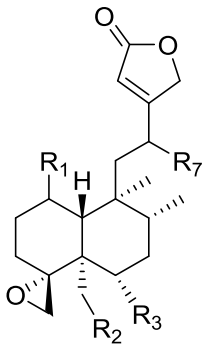
		R1	R2	R3	R4	R5		
984	agelasine K	Z_7	—	—	—	—	*Agelas* cf. *mauritiana*	*J. Nat. Prod.*, 2008, **71**, 1451–1454
985	agelasine L	Z_7	—	—	—	—		
986	axistatin 2	Z_8	—	—	—	—	*Agelas axifera*	*J. Nat. Prod.*, 2013, **76**, 420-424
987	axistatin 1	H	Me	αMe	βMe	Z_8		
988	agelasine P	=O	CH_2OZ_5	αMe	βMe	Z_6	*Agelas* sp. (NSS-19)	*Tetrahedron*, 2012, **68**, 9738-9744
989	agelasine Q	H	CH_2OZ_5	αMe	αMe	Z_6		
990	agelasine R	H	CH_2OZ_5	βMe	βMe	Z_6		
991	agelasine U	Z_6	—	—	—	—		

***AJUGA* Genus**



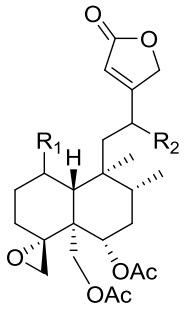
296

296	ajugacumbin J	*Ajuga decumbens*	*Nat. Prod. Res.*, 2014, **28**, 196-200



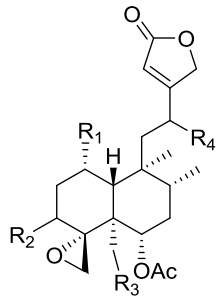
485, 487-495

		R1	R2	R3	R7		
485	(12*S*)-6α-acetoxy-4α,18-epoxy-12-hydroxy-19-tigloyloxy-*neo*-clerod-13-en-15,16-olide	H	OTig	OAc	βOH	*Ajuga ciliate*	*Phytochem. Lett.*, 2012, **5**, 563-566
487	ajugapantin A	βOAc	OAc	OAc	αOAc	*Ajuga pantantha*	*Phytochemistry*, 1993, **34**, 1091-1094
488	ajugamacrin C	βOiBu	OAc	OAc	αOiBu		
489	ajugamacrin D	βOiBu	OAc	OAc	αOY_1		
490	ajugamacrin E	βY_1	OAc	OAc	αOiBu		
491	ajugamacrin A	βOAc	OAc	OAc	βiBu	*Ajuga macrosperma*	*Phytochemistry*, 1993, **33**, 887-889
492	ajugamacrin B	βOAc	OAc	OAc	βY_1		
493	ajugatakasin A	OTig	OAc	OAc	OTig	*Ajuga decumbens*	*Biosci. Biotechnol. Biochem.*, 1997, **61**, 1518-1522
494	ajugatakasin B	Y_1	OAc	OAc	Y_1		
495	ajugamarin L2	H	OTig	OH	H	*Ajuga nipponensis*	*Chin. Chem. Lett.*, 1995, **6**, 581-582



506-508

		R1	R2		
506	ajugalide A	βOH	αOAc	*Ajuga taiwanensis*	*Chem. Pharm. Bull.*, 2005, **53**, 164-167
507	ajugalide B	βOAc	αOH		
508	ajugalide C	H	αOH		



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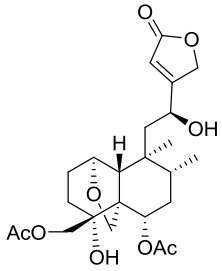
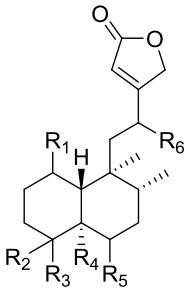
512	ajugacumbin E	OAc	βOAc	X_{12}	H	*Ajuga decumbens*	*Chem. Pharm. Bull.*, 1990, **38**, 3167-3168
513	3α-hydroxyajugamarin F4	H	αOH	OAc	βY_1	*Ajuga reptans*	*Phytochemistry*, 1998, **47**, 1227-1232



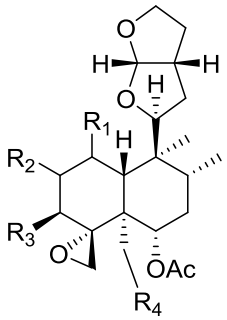
520

520	(12*S*)-1α,19-epoxy-6α,18-diacetoxy-4α,12-dihydroxy-*neo*-clerod-13-en-15,16-olide	*Ajuga decumbens*	*Fitoterapia*, 2012, **83**, 1409-1414

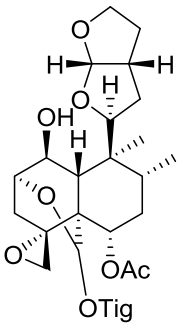


601-608

		R1	R2	R3	R4	R5	R6		
601	(12*S*)-6α,18,19-tri-acetoxy-4α,12-di-hydroxy-1β-tigloyloxy-*neo*-clerod-13-en-15,16-olide	βOTig	βCH_2OAc	αOH	CH_2OAc	βOAc	βOH	*Ajuga ciliate*	*Fitoterapia*, 2011, **82**, 1123-1127
602	ajugaciliatin I	H	βCH_2OAc	αOH	CH_2OTig	βOH	H		*J. Nat. Prod.*, 2011, **74**, 1575–1583
603	ajugaciliatin J	H	βCH_2OTig	αOH	CH_2OH	βOH	H		
604	(12*S*)-18,19-diacetoxy-4α,6α,12-trihydroxy-1β-tigloyloxy-*neo*-clerod-13-en-15,16-olide	βOTig	βCH_2OAc	αOH	CH_2OAc	βOH	βOH	*Ajuga decumbens*	*Planta Med.*, 2012, **78**, 1579-1583
605	4α,6α-dihydroxy-18-(4′-methoxy-4′-oxobutyryloxy)-19-tigloyloxy-*neo*-clerod-13-en-15,16-olide	H	βCH_2X_7	αOH	CH_2OTig	βOH	βH		
606	6α,18-diacetoxy-4α-hydroxy-19-tigloyloxy-*neo*-clerod-13-en-15,16-olide	H	βCH_2OAc	αOH	CH_2OTig	βOAc	H	*Ajuga ciliate*	*Phytochem. Lett.*, 2012, **5**, 563-566
607	ajugalide D	H	H	αCO_2Me	Me	αOH	αOH	*Ajuga taiwanensis*	*Chem. Pharm. Bull.*, 2005, **53**, 164-167
608	ajugacumbin F	H	βCH_2OH	αOH	CH_2OTig	αOH	H	*Ajuga decumbens*	*Chem. Pharm. Bull.*, 1990, **38**, 3167-3168

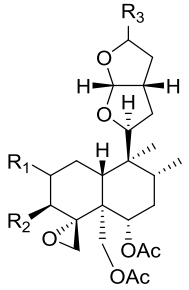


794-803



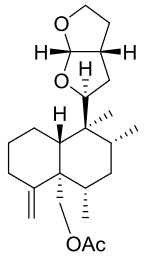
804

No.	Compound Name	R_1	R_2	R_3	R_4	Source	Ref.
794	lupulin F	H	αOH	OPr	OAc	*Ajuga lupulina*	*Indian J. Chem.*, 1999, **38B**, 743-745
795	ajubractin C	H	H	MeBuO	OAc	*Ajuga bracteosa*	*J. Nat. Prod.*, 2011, **74**, 1036-1041
796	ajubractin D	H	αOH	OiBu	OAc		
797	ajubractin E	H	H	OH	OAc		
798	areptin A	βOH	αOAc	Y_1	OAc	*Ajuga reptans*	*Phytochemistry*, 1998, **49**, 2443-2447
799	ajugavensin A	βOY_1	H	H	OAc	*Ajuga genevensis*	*Phytochemistry*, 1991, **30**, 4083-4085
800	ajugavensin B	αOTig	H	H	OAc		
801	ajugavensin C	βOH	H	H	OTig		
802	3β-hydroxy-ajugavensin B	αOTig	H	OH	OAc	*Ajuga reptans*	*Phytochemistry*, 1998, **47**, 1227-1232
803	ajugorientin	βOTig	H	OH	OAc	*Ajuga orientalis*	*Phytochemistry*, 1997, **45**, 121-123
804	ajugapyrin A	--	--	--	--	*Ajuga pyramidalis*	*Phytochemistry*, 1998, **47**, 303-305



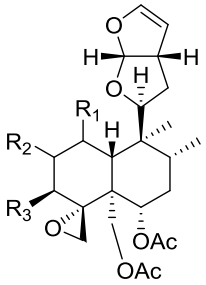
821-829

		R1	R2	R3		
821	15-epi-lupulin B	αOH	MeBuO	αOMe	*Ajuga bracteosa*	*J. Nat. Prod.*, 2011, **74**, 1036-1041
822	lupulin A	αOH	Y1	βOMe	*Ajuga lupulina*	*J. Nat. Prod.*, 1996, **59**, 668-670
823	lupulin B	H	Y1	αOMe		
824	(15*S*)-14,15-dihydro-15-hydroxyajugachin A	αOH	OiBu	βOH	*Ajuga salicifolia*	*Phytochemistry*, 1993, **34**, 1173-1175
825	(15*R*)-14,15-dihydro-15-hydroxyajugachin A	αOH	OiBu	αOH		
826	14,15-dihydro-15-oxoajugachin A	αOH	OiBu	=O		
827	hativene A	αOH	OiBu	βOMe	*Ajuga pseudoiva*	*Fitoterapia*, 2000, **71**, 105-112
828	hativene B	αOH	OiBu	αOMe		
829	hativene C	βOH	OiBu	αOMe		



843

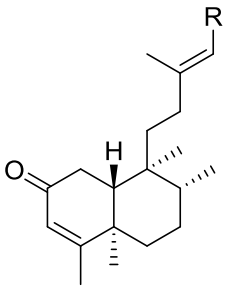
843	lupulin C	*Ajuga lupulina*	*J. Nat. Prod.*, 1996, **59**, 668-670



846-848, 855-859

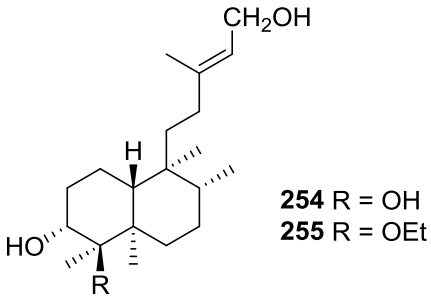
846	lupulin E	H	αOH	OPr	*Ajuga lupulina*	*Indian J. Chem.*, 1999, **38B**,
847	ajugachin A	H	αOH	OiBu	*Ajuga chamaepitys*	*Phytochemistry*, 1990, **29**, 2931-2933
848	ajugachin B	H	αOH	Y_{11}		
855	ajubractin A	H	H	MeBuO	*Ajuga bracteosa*	*J. Nat. Prod.*, 2011, **74**, 1036-1041
856	ajubractin B	H	H	iBuO		
857	ajugapitin	H	αOH	MeBuO		
858	areptin B	βOTig	H	OH	*Ajuga reptans*	*Phytochemistry*, 1998, **49**,
859	14,15-	βY_1	H	OH		*Phytochemistry*, 1998, **47**,

***AMOORA* Genus**

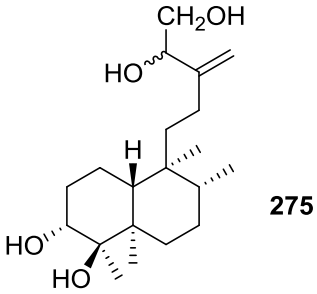


193 R = CO_2Me
194 R = CH_2OH

193	methyl(13*E*)-2-oxo-neocleroda-3,13-dien-15-oate	*Amoora yunnanensis*	*Helv. Chim. Acta*, 2004, **87**, 1279-1286
194	(13*E*)-2-oxoneocleroda-3,13-dien-15-ol		



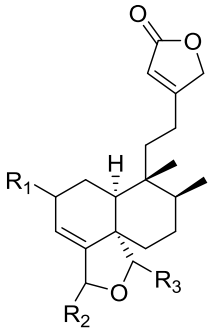
254	3α,4β,13*E*-neoclerod-13-ene-3,4,15-triol	*Amoora stellatosquamosa*	*Helv. Chim. Acta*, 2004, **87**, 1279-1286
255	3α,4β,13*E*-4-ethoxy-neoclerod-13-ene-3,15-diol		



275

275	(3*α*,4β-14RS)-neo-clerod-13(16)-ene-3,4,14,15-tetrol	*Amoora stellatosquamosa*	*Helv. Chim. Acta*, 2004, **87**, 1279-1286

***AMPHIACHYRIS* Genus**



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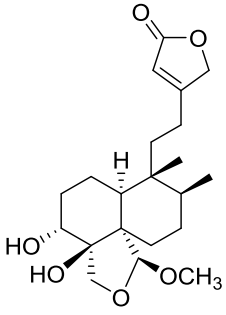

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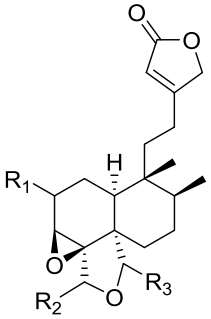
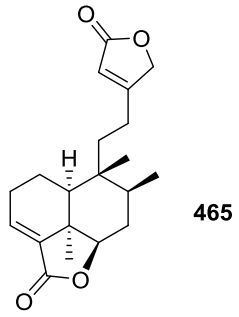


451-454

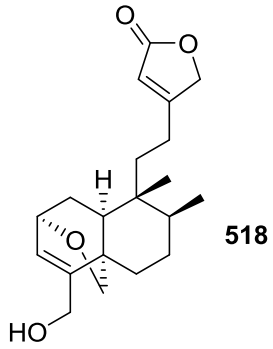
446	amphiacrolide A	H	H	=O	*Amphiachyris dracunculoides*	*J. Nat. Prod.*, 1990, **53**, 1312-1326 *J. Nat. Prod.*, 1996, **59**, 463-468 *J. Nat. Prod.*, 1996, **59**, 5-14
447	amphiacrolide B	H	=O	H		
448	amphiacrolide C	H	H	OH		
449	amphiacrolide L	βOH	=O	H		
450	amphiacrolide J	—	—	—		
451	amphiacrolide D	H	H	OH		
452	amphiacrolide M	βOH	H	βOH		
453	amphiacrolide E	H	αOEt	αOH		

454	amphiacrolide I	H	αOMe	αOH		



465

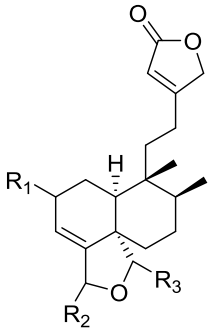
465	amphiacrolide F	*Amphiachyris dracunculoides*	*J. Nat. Prod.*, 1996, **59**, 5-14



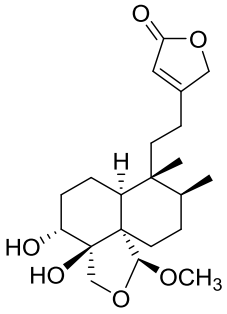
518

518	amphiacrolide K	*Amphiachyris dracunculoides*	*J. Nat. Prod.*, 1996, **59**, 463-468

AMPHIACHYRIS **Genus**



446-449



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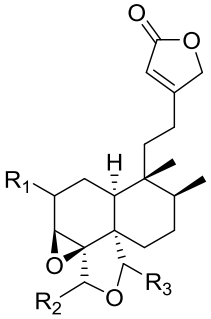
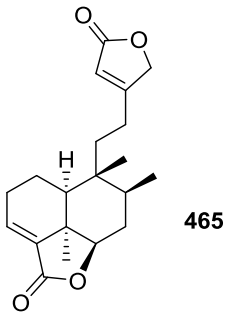


451-454

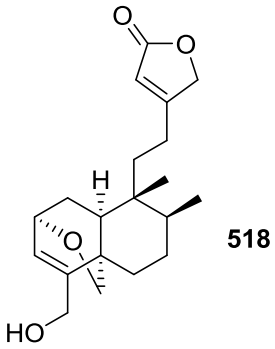
446	amphiacrolide A	H	H	=O	*Amphiachyris dracunculoides*	*J. Nat. Prod.*, 1990, **53**, 1312-1326 *J. Nat. Prod.*, 1996, **59**, 463-468 *J. Nat. Prod.*, 1996, **59**, 5-14
447	amphiacrolide B	H	=O	H		
448	amphiacrolide C	H	H	OH		
449	amphiacrolide L	βOH	=O	H		

450	amphiacrolide J	—	—	—		
451	amphiacrolide D	H	H	OH		
452	amphiacrolide M	βOH	H	βOH		
453	amphiacrolide E	H	αOEt	αOH		
454	amphiacrolide I	H	αOMe	αOH		



465

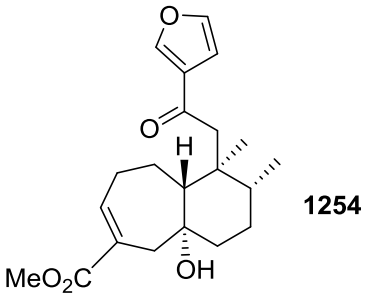
465	amphiacrolide F	*Amphiachyris dracunculoides*	*J. Nat. Prod.*, 1996, **59**, 5-14



518

518	amphiacrolide K	*Amphiachyris dracunculoides*	*J. Nat. Prod.*, 1996, **59**, 463-468

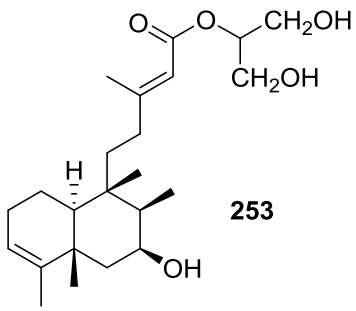
APARISTHMIUM **Genus**



1254

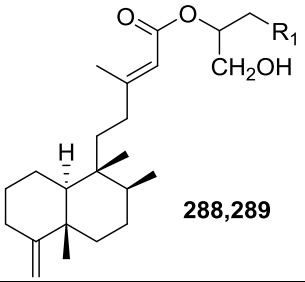
1254	aparisthman	*Aparisthmium cordatum*	*Phytomedicine*, 2001, **8**, 94-100

***AUSTRODORIS* Genus**



253

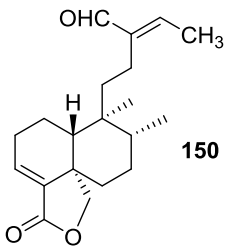
253	palmadorin C	*Austrodoris kerguelenensis*	*J. Nat. Prod.*, 2010, **73**, 416–421



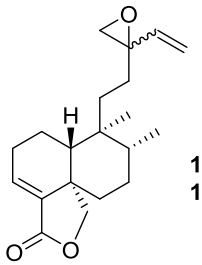
288,289

288	palmadorin A	OH	*Austrodoris kerguelenensis*	*J. Nat. Prod.*, 2010, **73**, 416–421
289	palmadorin B	OAc		

***BACCHARIS* Genus**

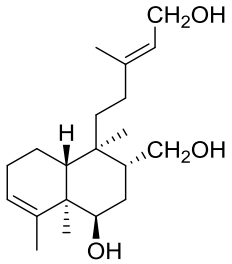


150



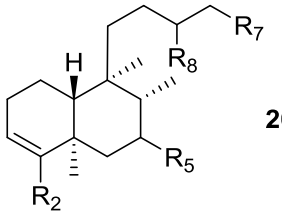
151 13-*epi*
152

150	baclinal	*Baccharis linearis*	*Phytochemistry*, 1996, **41**, 1123-1127
151	13-*epi*-baclinepoxide		
152	baclinepoxide		



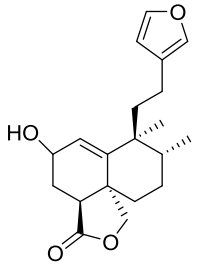
173

173	platypodiol	*Baccharis platypoda*	*Tetrahedron Lett.*, 2014, **55**, 4898-4900



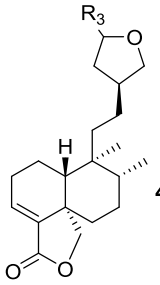
207-214

		R2	R5	R7	R8		
207	trinerdiol	CH_2OH	H	CH_2OH	Me	*Baccharis trinervis*	*Phytochemistry*, 1993, **34**, 1377-1384
208	15-acetyl-trinerdiol	CH_2OH	H	CH_2OAc	Me		
209	18-acetyl-trinerdiol	CH_2OAc	H	CH_2OH	Me		
210	18-methylmalonyl-trinerdiol	CH_2OMe-Mal	H	CH_2OH	Me		
211	15,18-diacetyl-triner-triol	CH_2OAc	H	CH_2OAc	CH_2OH		
212	14,15,18-triacetyl-trinertetrol	CH_2OAc	αOH	CH_2OAc	CH_2OAc		
213	15,16-diacetyl-trinertriol	CH_2OH	H	CH_2OAc	CH_2OAc		
214	15-hydroxy-16-acetoxy-ent-clerod-3-en-18-oic acid	CO_2H	H	CH_2OH	CH_2OAc	*Baccharis gaudichaudiana*	*Chem Pharm Bull*, 2007, **55**, 1532-1534

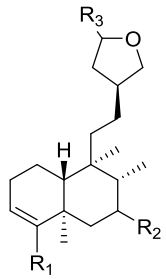


303

303	gaudichaudone	*Baccharis gaudicbaudiana*	*J. Nat. Prod.*, 1994, **57**, 801-807

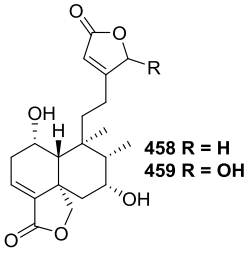


429,430

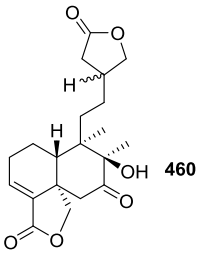


431-436

		R1	R2	R3		
429	trinerolide	—	—	αOMe	*Baccharis trinervis*	*Phytochemistry*, 1993, **34**, 1377-1384
430	15-epitrinerolide	—	—	βOMe		
431	18-acetyl-7*α*-hydroxy-epimethyltrineracetal	CH_2OAc	αOH	βOMe		
432	18-methylmalonyl-7*α*-hydroxy-methyltrineracetal	CH_2OMe-malo	αOH	αOMe		
433	18-methylmalonyl-7*α*-hydroxy-epimethyltrineracetal	CH_2OMe-malo	αOH	βOMe		
434	15,16-epoxy-7α,18-dihydroxy-15-methoxy-*ent*-clerod-3-ene	CH_2OH	αOH	OMe	*Baccharis articulata*	*Phytochemistry*, 1993, **34**, 1087-1090
435	15,16-epoxy-15α-methoxy-*ent*-clerod-3-en-18-oic acid	COOH	H	αOMe	*Baccharis gaudichaudiana*	*J. Nat. Prod.*, 2006, **69**, 274-276
436	13-*epi*-15,16-epoxy-15α-methoxy-*ent*-clerod-3-en-18-oic acid	COOH	H	βOMe		



458 R = H
459 R = OH



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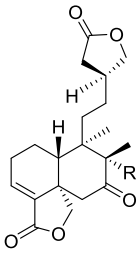
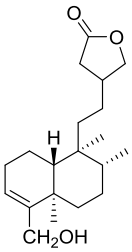


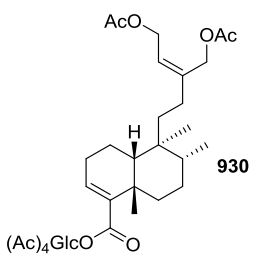
461 R = OH
462 R = H

458	1α,7α-dihydroxyneocleroda-3,13-dien-16,15:18,19-diolide	*Baccharis crispa*	*J. Nat. Prod.*, 1997, **60**, 490-492
459	1α,7α,15-trihydroxyneocleroda-3,13-dien-16,15:18,19-diolide		
460	8β-hydroxy-7-oxo-*ent*-cleroda-3-en-15,18-diacid-16,19-dilactone	*Baccharis articulate*	*Phytochemistry*, 1993, **34**, 1087-1090
461	gaudichanolide A	*Baccharis gaudichaudiana*	*J. Nat. Prod.*, 2005, **68**, 1121-1124
462	gaudichanolide B		

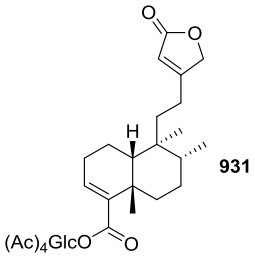


575

575	trinerolactone	*Baccharis trinervis*	*Phytochemistry*, 1993, **34**, 1377-1384

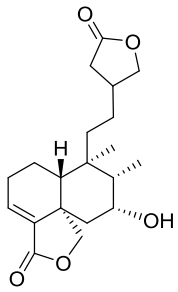


930



931

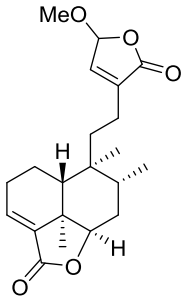
930	*cis*-cleroda-15,16-dihydroxy-3,13(*Z*)-dien-18-*O*-[β-D-galacto-pyranosyl]-peracetylester	*Baccharis sagittalis*	*Phytochemistry*, 2002, **61**, 899-905
931	*cis*-cleroda-3,13(14)-dien-15,16-olide-18-*O*-[β-D-galacto-pyranosyl]-peracetylester		



1312

1312	--	*Baccharis trimeta*	*Phytochemistry*, 2000, **55**, 617-619

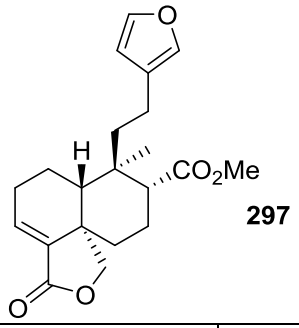
***BALLOTA* Genus**



466

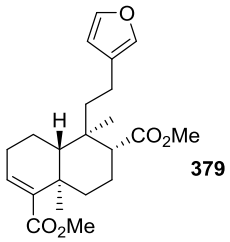
466	ballatenolide A	*Ballota limbata*	*Helv. Chim. Acta*, 2004, **87**, 682-689

***BARRINGTONIA* Genus**



297

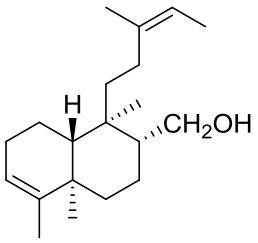
297	nasimalun A	*Barringtonia racemosa*	*J. Nat. Prod.*, 2000, **63**, 410-411



379

379	nasimalun B	*Barringtonia racemosa*	*J. Nat. Prod.*, 2000, **63**, 410-411

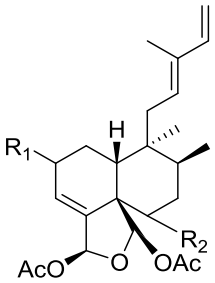
BRAZILIAN PROPOLIS



203

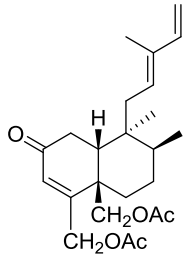
203	PMS-1	*Brazilian propolis*	*Anticancer Res.*, 1996, **16**, 2669-2672

***BUCIDA* Genus**



133-135

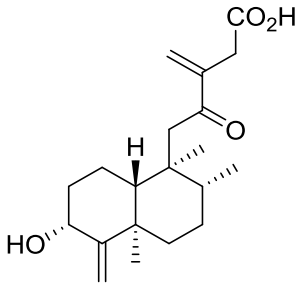
		R1	R2		
133	bucidarasin A	βOiBu	βOH	*Bucida buceras*	*Bioorg. Med. Chem. Lett.*, 2002, **12**, 345-348
134	bucidarasin B	βY_1	βOH		
135	bucidarasin C	βOiBu	H		



170

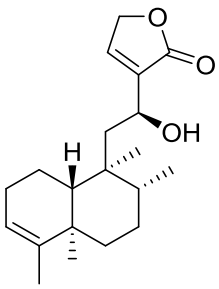
170	bucidarasin D	*Bucida buceras*	*Bioorg. Med. Chem. Lett.*, 2002, **12**, 345-348

CALLICARPA Genus



278

278	pentandranoic acid C	*Callicarpa pentandra*	*J. Nat. Prod.*, 2000, **63**, 1062-1065



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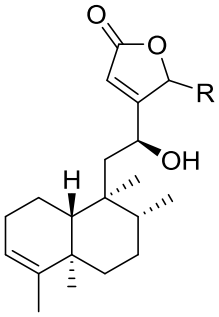
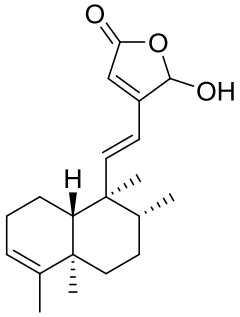


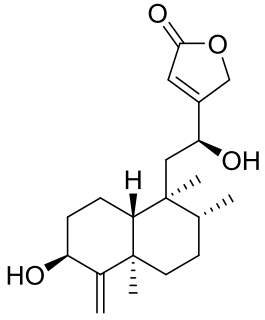
536-538

535	12(*S*)-hydroxycleroda-3,13-dien-16,15-olide	H	*Callicarpa americana*	*J. Nat. Prod.*, 2007, **70**, 372-377
536	12(*S*),16ζ-dihydroxycleroda-3,13-dien-15,16-olide	OH		
537	12(*S*)-hydroxy-16ζ-methoxycleroda-3,13-dien-15,16-olide	OMe		
538	12(*S*)-hydroxycleroda-3,13-dien-15,16-olide	H		



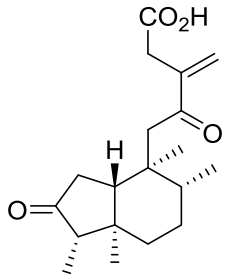
576

576	16ζ-hydroxycleroda-3,11(*E*),13-trien-15,16-olide	*Callicarpa americana*	*J. Nat. Prod.*, 2007, **70**, 372-377



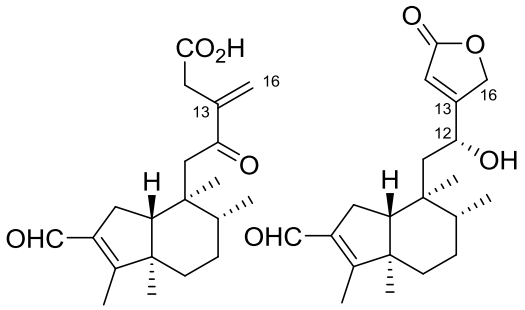
596

595	3α,12(*S*)-dihydroxy-cleroda-4(18),13-dien-15,16-olide	*Callicarpa americana*	*J. Nat. Prod.*, 2007, **70**, 372-377



1055

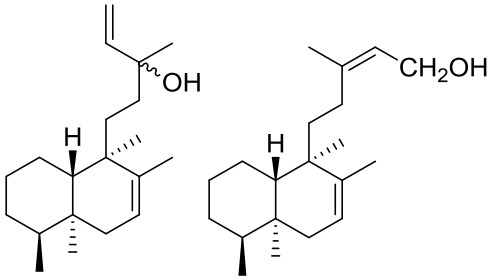
1055	pentandranoic acid B	*Callicarpa pentandra*	*J. Nat. Prod.*, 2000, **63**, 1062-1065



1153 **1154**

1153	pentandranoic acid A	*Callicarpa pentandra*	*J. Nat. Prod.*, 2000, **63**, 1062-1065
1154	pentandralactone		

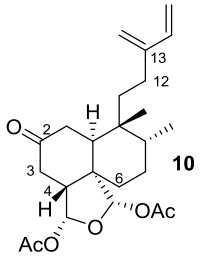
CAREX **Genus**



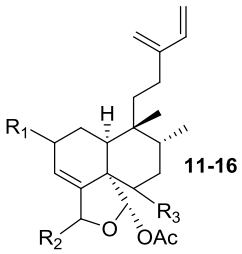
270 **271**

270	13-hydroxycleroda-7,14-diene	*Carex distachya*	*Nat. Prod. Commun.*, 2010, **5**, 1539-1542
271	15-hydroxycleroda-7,13-diene		

***CASEARIA* Genus**

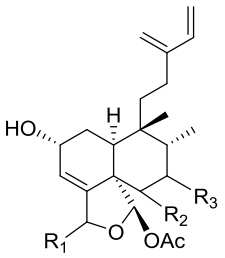


10



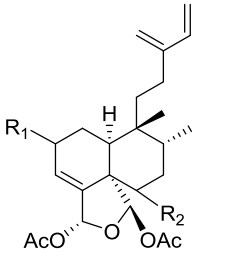
11-16

		R1	R2	R3		
10	balanspene A	—	—	—	*Casearia balansae*	*J. Nat. Prod.*, 2014, **77**, 2182−2189
11	balanspene B	=O	αOBu	H		
12	balanspene C	αY_1	αOBu	H		
13	balanspene D	αOBu	αOBu	αOMe		
14	balanspene E	αY_1	αOBu	αOMe		
15	balanspene F	αY_1	αOMe	αOMe		
16	balanspene G	βOAc	αOMe	αOMe		



12-24

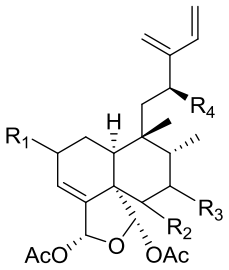
		R1	R2	R3		
21	casearupestrin A	αOAc	αX_1	βOH	*Casearia rupestris*	*J. Nat. Prod.*, 2011, **74** 776–781
22	casearupestrin B	αOAc	αOH	βX_1		
23	casearupestrin C	αOMe	αOH	βX_1		
24	casearupestrin D	αOAc	αOAc	βX_1		



28-34

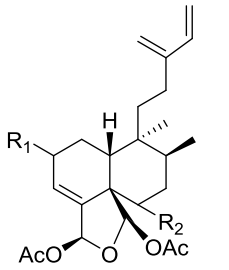
		R1	R2		
28	*ent*-6*β*-hydroxy-isozuelanin-2*β*-(2-methyl)butanoate	αY_1	αOH	*Casearia corymbosa*	*Phytochemistry*, 1990, **29**, 3591-3595
29	*ent*-6*β*-methoxy-isozuelanin-2*β*-(2-methyl)butanoate	αY_1	αOMe		
30	*ent*-2*β*-(2-methyl)butoxy-3,4-dihydro-4*α*-isozuelanin	αY_1	H		

31	*ent*-6*β*-hydroxy-isozuelanin-2*β*-(2-methyl)propanoate	αOiBu	αOH		
32	*ent*-6*β*-methoxy-isozuelanin-2*β*-(2-methyl)propanoate	αOiBu	αOMe		
33	*ent*-2*β*-hydroxy-3,4-dihydro-4*α*-isozuelanin	αOH	H		
34	*ent*-2*β*-acetoxy-3,4-dihydro-4*α*-isozuelanin	αOAc	H		



37-43

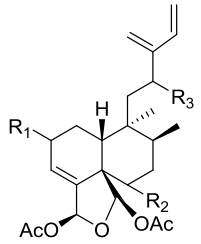
		R1	R2	R3	R4		
37	caseanigrescen A	αOBu	αOH	βOAc	H	*Casearia nigrescens*	*J. Nat. Prod.*, 2007, **70**, 206-209
38	caseanigrescen B	αOBu	αOH	βOH	H		
39	caseanigrescen C	αOBu	αOAc	βOH	H		
40	caseanigrescen D	αOBu	αOH	H	H		
41	argutin F	αX_1	OH	βH	OOH	*Casearia arguta*	*J. Nat. Prod.*, 2010, **73**, 2013-2018
42	argutin G	αX_1	OH	βOH	OOH		
43	argutin H	αOH	X_1	βOH	OOH		



46-52

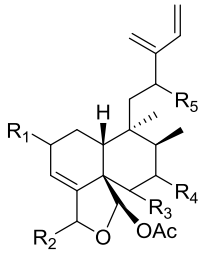
		R1	R2		
46	*rel*-18(*S*),19(*R*)-diacetoxy-18,19-epoxy-6(*R*)-methoxy-2(*S*)-(2*ξ*-methylbutanoyloxy)-5(*R*),8(*S*),9(*S*),10(*R*)-cleroda-3,13(16),14-triene	βY_1	βOMe	*Casearia tremula*	*Phytochemistry*, 1996, **41**, 565-570
47	*rel*-18(*S*),19(*R*)-diacetoxy-18,19-epoxy-2(*S*)-(2*ξ*-methylbutanoyloxy)-5(*R*),8(*S*),9(*S*),10(*R*)-cleroda-3,13(16),14-triene	βY_1	βH		
48	*rel*-18(*S*),19(*R*)-diacetoxy-18,19-epoxy-6(*R*)-hydroxy-2(*S*)-(2*ξ*-methylbutanoyloxy)-5(*R*),8(*S*),9(*S*),10(*R*)-cleroda-3,13(16),14-triene	βY_1	βOH		
49	*rel*-18(*S*),19(*R*)-diacetoxy-18,19-epoxy-6(*R*)-hydroxy-2(*S*)-undecanoyloxy-5(*R*),8(*S*),9(*S*),10(*R*)-cleroda-3,13(16),14-triene	βX_2	βOH		
50	*rel*-18(*S*),19(*R*)-diacetoxy-18,19-epoxy-6(*R*)-hydroxy-2(*S*)-octanoyloxy-5(*R*),8(*S*),9(*S*),10(*R*)-cleroda-	βOOct	βOH		

	3,13(16),14-triene				
51	*rel*-18(*S*),19(*R*)-diacetoxy-18,19-epoxy-6(*R*)-hydroxy-2(*S*)-(3ξ-hydroxyoctanoyloxy)-5(*R*),8(*S*),9(*S*),10(*R*)-cleroda-3,13(16),14-triene	βX_3	βOH		
52	*rel*-18(*S*),19(*R*)-diacetoxy-18,19-epoxy-2(*R*)-hexanoyloxy-5(*R*),8(S),9(*S*),10(*R*)-cleroda-3,13(16),14-triene	αX_4	H		



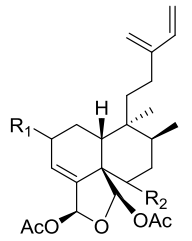
53-59

		R1	R2	R3		
53	casearlucin B	αOAc	βOMe	H	*Casearia lucida*	*J. Nat. Prod.*, 2002, **65**, 100-107
54	casearlucin D	βY_1	βOAc	H		
55	casearlucin H	βY_1	βOH	αOH		
56	casearlucin I	βY_1	βOH	βOH		
57	casearlucin M	βY_1	βOMe	H		
58	casearlucin J	αY_1	βOH	αOH		
59	casearlucin K	αY_1	βOH	βOH		



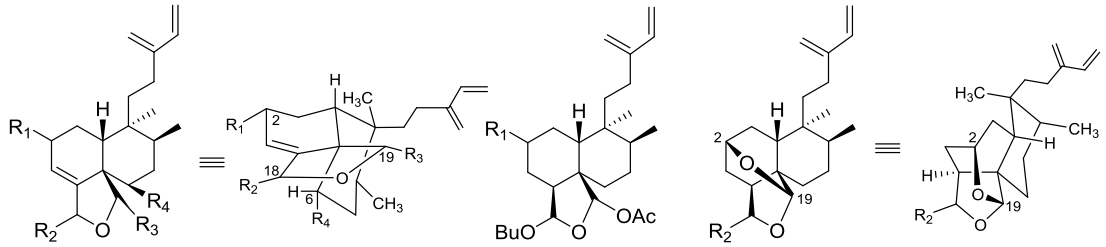
60-68

		R1	R2	R3	R4	R5		
60	caseamembrin A	βY_1	βOBu	βOH	H	H	*Casearia membranacea*	*J. Nat. Prod.*, 2004, **67**, 316-321
61	caseamembrin B	βY_1	βOMe	βOH	H	H		
62	caseamembrin C	βY_1	βOBu	βOH	βOH	H		
63	caseamembrin D	βY_1	βOBu	βOH	βOAc	H		
64	caseamembrin E	αY_1	βOAc	βOH	H	H		
65	caseamembrin M	βY_1	βOAc	βOBu	H	H		*J. Nat. Prod.*, 2005, **68**, 1665-1668
66	caseamembrin N	βY_1	βOAc	βOH	βOAc	H		
67	caseamembrin O	βY_2	βOAc	βOH	βOAc	H		
68	caseamembrol B	αY_1	βOAc	βOH	H	βOH		*Chem. Pharm. Bull.*, 2004, **52**, 108-110



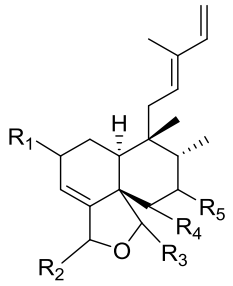
69-74

		R1	R2		
69	*rel*-2(*R*),18(*S*),19(*R*)-tri-acetoxy-18,19-epoxy-4(*S*),5(*S*),9(*S*),10(*R*)-clerodan-13(16),14-dien-6-one	αOAc	=O	*Casearia grayi*	*Nat. Prod. Commun.*, 2006, **1**, 441-448
70	*rel*-2(*R*),18(*S*),19(*R*)-triacetoxy-18,19-epoxy-4(*S*),5(*R*),8(*S*),9(*S*),10(R)-clerodan-13(16),14-diene	αOAc	H		
71	*rel*-18(*S*),19(*R*)-diacetoxy-18,19-epoxy-2(*R*)-(2ξ-methylbutanoyl)-4(*S*),-5(*S*),9(*S*),10(*R*)-clerodan-13(16),14-dien-6-one	αY_1	=O		*Biochem. Syst. Ecol.*, 2007, **35**, 631-633
72	*rel*-18(*S*),19(*R*)-diacetoxy-18,19-epoxy-2(*R*)-isobutanoyl-4(*S*),5(*R*),9(*S*),-10(*R*)-clerodan-13(16),14-diene	αOiBu	H		
73	*rel*-18(*S*),19(*R*)-diacetoxy-18,19-epoxy-2(*R*)-(2ξ-methylbutanoyl)-4(*S*),5(*R*),9(*S*),10(*R*)-clerodan-13(16),14-diene	αY_1	H		
74	caseargrewiin A	βY_2	βOMe	*Casearia grewiifolia*	*J. Nat. Prod.*, 2005, **68**, 183-188
76	esculentin A	=O	H	*Casearia esculenta*	*Indian J. Chem.*, 2002, **41B**, 2706-2708



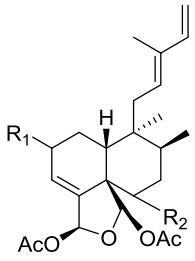
77-82 **83,84** **85,86**

77	caseabalansin C	αOAc	OEt	OAc	OMe	*Casearia balansae*	*J. Nat. Prod.*, 2013, **76**, 1573-1579
78	2-epicaseabalansin C	βOAc	OEt	OAc	OMe		
79	caseabalansin D	βY_1	OEt	OAc	OH		
80	caseabalansin E	βY_1	OMe	OH	OMe		
81	caseabalansin F	=O	OAc	OAc	OMe		
82	caseabalansin G	=O	OBu	OAc	OMe		
83	caseabalansin B	αOH	—	—	—		
84	2-epicaseabalansin B	βOH	—	—	—		
85	caseabalansin A	—	βOH	—	—		
86	18-epicaseabalansin A	—	αOH	—	—		



87-111

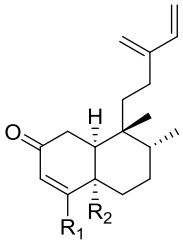
		R1	R2	R3	R4	R5		
87	casearvestrin A	βOiBu	αOAc	αOAc	αOH	H	*Casearia sylvestris*	*J. Nat. Prod.*, 2002, **65**, 95-99
88	casearvestrin B	βY_1	αOAc	αOAc	αOH	H		
89	casearvestrin C	βX_4	αOAc	αOAc	αOH	H		
90	argutin A	αX_1	αOAc	αOAc	OH	H	*Casearia arguta*	*J. Nat. Prod.*, 2010, **73**, 2013-2018
91	argutin B	αOH	αOAc	αOAc	X_1	H		
92	argutin C	αX_1	αOAc	αOAc	OH	OH		
93	argutin D	αOH	αOAc	αOAc	X_1	OH		
94	argutin E	αX_1	αOAc	αOAc	H	OH		
95	esculentin B	αY_2	βOAc	βOAc	βOH	αOH	*Casearia esculenta*	*Indian J. Chem.*, 2002, **41B**, 2706-2708
96	casearborin A	αZ_1	αOAc	αOAc	αH	H	*Casearia arborea*	*J. Nat. Prod.*, 2000, **63**, 657-661
97	casearborin B	αZ_2	αOAc	αOAc	αH	H		
98	casearborin C	αOH	αOAc	αOAc	αZ_1	H		
99	casearborin D	αZ_1	αOAc	αOAc	αOH	H		
100	casearborin E	αOAc	αOAc	αOAc	αZ_1	H		
104	caseargrewiin E	αOBu	αOAc	αOAc	H	H	*Casearia grewiifolia*	*J. Nat. Prod.*, 2007, **70**, 1122-1126
105	caseargrewiin F	αOBu	αOAc	αOAc	αOH	H		
106	caseargrewiin G	αOBu	αOMe	αOAc	αOH	H		
107	caseargrewiin H	αX_4	αOAc	αOAc	H	H		
108	caseargrewiin I	αX_4	αOAc	αOAc	αOH	H		
109	caseargrewiin J	αX_4	αOMe	αOAc	αOH	H		
110	caseargrewiin K	αX_4	αOMe	αOAc	αOH	βOH		
111	caseargrewiin L	αY_2	αOAc	αOAc	αOH	H		



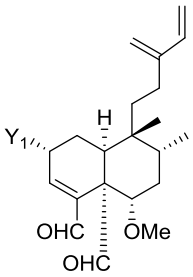
115-119, 127-128

		R1	R2		
115	casearlucin A	βY_1	βOH	*Casearia lucida*	*J. Nat. Prod.*, 2002, **65**, 100-107

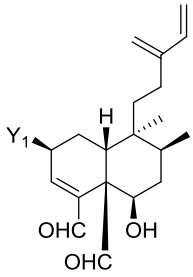
116	casearlucin C	βY_1	βOAc		
117	casearlucin F	βY_1	H		
118	casearlucin G	αY_1	H		
119	caseamembrol A	αY_1	βOH	*Casearia membranacea*	*Chem. Pharm. Bull.*, 2004, **52**, 108-110
127	caseobliquin A	αOAc	βZ_1	*Casearia obliqua*	*J. Nat. Prod.*, 2009, **72**, 1847-1850
128	caseobliquin B	βOAc	βOCin		



156-157

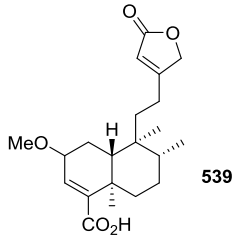


158



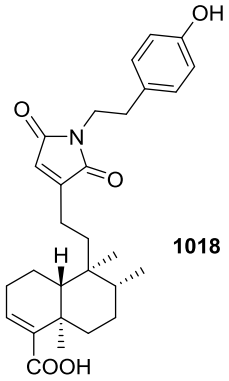
163

		R1	R2		
156	2-oxo-18-hydroxy-10*α*,17*α*,19*α*,20*β*-(-)-cleroda-3,13(16),14-triene	CH_2OH	αMe	*Casearia corymbosa*	*Phytochemistry*, 1990, **29**, 3591-3595
157	2-oxo-18,19-diacetoxy-l0*α*,l7*α*,19*α*,20*β*-(-)-cleroda-3,13(16),14-triene	CH_2OAc	αCH_2OAc		
158	balanspene H	—	—	*Casearia balansae*	*J. Nat. Prod.*, 2014, **77**, 2182−2189
163	caseamembrin F	—	—	*Casearia membranacea*	*J. Nat. Prod.*, 2004, **67**, 316-321



539

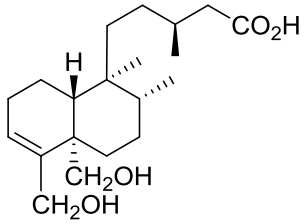
539	2β-methoxy-cleroda-3,13-dien-18-carboxy-15,16-olide	*Casearia sylvestris*	*Fitoterapia*, 2009, **80**, 404–407



1018

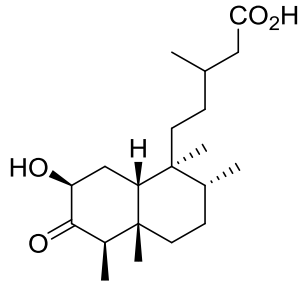
1018	15-oxo-echinophyllin A	*Casearia sylvestris*	*Fitoterapia*, 2009, **80**, 404–407

***CHRYSOCOMA* Genus**



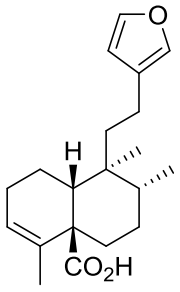
220

220	18,19-dihydroxyclerod-3-en-l5-oic acid	*Chrysocoma comaaurea*	*Phytochemistry*, 1991, **30**, 607-609



261

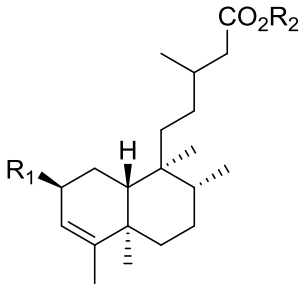
261	2β-hydroxy-3-oxo-*cis*-clerodan-15-oic acid	*Chrysocoma comaaurea*	*Phytochemistry*, 1991, **30**, 607-609



413

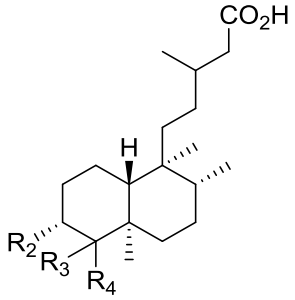
413	15,16-epoxy-*cis*-cleroda-3,13(16),14-trien-19-oic acid	*Chrysocoma comaaurea*	*Phytochemistry*, 1991, **30**, 607-609

***CLAUSENA* Genus**



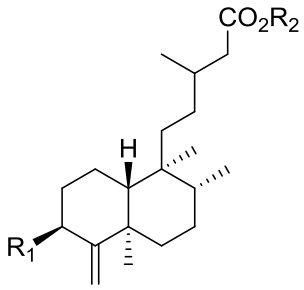
231 R1 = OCHO, R2 = H
232 R1 = OAc, R2 = H
233 R1 = H, R2 = Et

231	2β-(formyloxy)clerod-3-en-15-oic acid	*Clausena dunniana*	*Helv. Chim. Acta.*, 2003, **86**, 3187-3193
232	2β-(acetyloxy)clerod-3-en-15-oic acid		
233	ethyl clerod-3-en-15-oate		



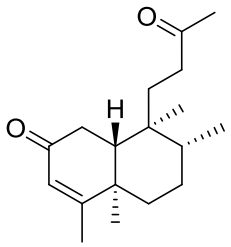
263 R2 = H, R3 = α-OH, R4 = β-CH_2OH
264 R2 = H, R3 = β-OH, R4 = α-CH_3
265 R2 = H, R3 = α-OH, R4 = β-CH_3

263	4*α*,18-dihydroxyclerodan-15-oic acid	*Clausena dunniana*	*Helv. Chim. Acta.*, 2003, **86**, 3187-3193
264	4β-hydroxyclerodan-15-oic acid		
265	3*α*,4*α*-dihydroxy clerodan-15-oic acid		



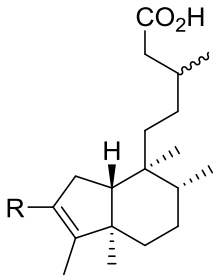
279 R1 = OH, R2 = H
280 R1 = H, R2 = Et

279	3β-hydroxy-clerod4(18)-en-15-oic acid	*Clausena dunniana*	*Helv. Chim. Acta.*, 2003, **86**, 3187-3193
280	ethyl-clerod-4(18)-en-15-oate		



1088

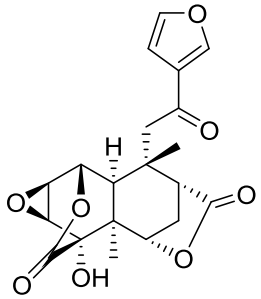
1088	14,15-dinorclerod-3-ene-2,13-didione	*Clausena dunniana*	*Helv. Chim. Acta.*, 2003, **86**, 3187-3193



1150 R = CO_2H
1151 R = CHO

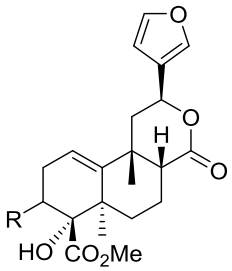
1150	dunniana acid A	*Clausena dunniana*	*J. Nat. Prod.*, 2002, **65**, 392-394
1151	dunniana acid B		

CLEIDION **Genus**

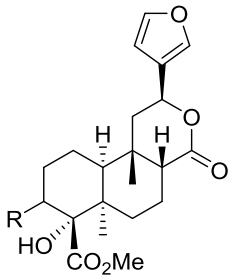


342

342	apiciflorin	*Cleidion spiciflorum*	*Phytochemistry*, 2006, **67**, 1029-1033



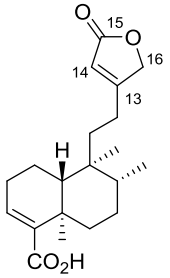
1022,1023



1024

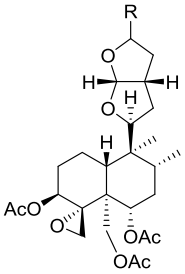
1022	cleidbrevoid A	βT	*Cleidion brevipetiolatum*	*Fitoterapia*, 2012, **83**, 1100-1104
1023	cleidbrevoid B	αT		
1024	cleidbrevoid C	βT		

***CLERODENDRUM* Genus**



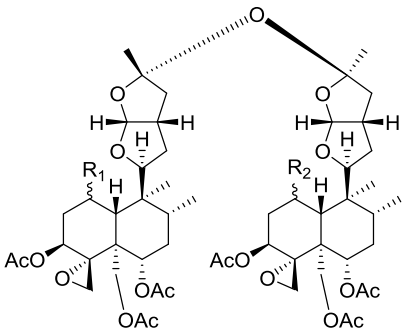
548

548	clerodermic acid	*Clerodendrum inerme*	*Phytochemistry*, 1990, **29**, 3671-3673



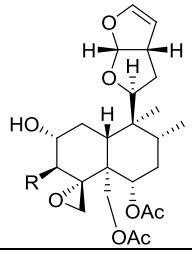
830-831

		R		
830	15-methoxy-14,15-dihydro-3-epicaryoptin	βOMe	*Clerodendrum inerme*	*Phytochemistry*, 1992, **31**, 338-340
831	14,15-dihydro-15β-methoxy-3-epicaryoptin	OH		*Phytochemistry*, 2005, **66**, 643-648



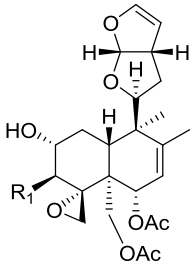
844,845

		R1	R2		
844	inerme A	H	H	*Clerodendrum inerme*	*Phytochemistry*, 2005, **66**, 643-648
845	inerme B	OMe/H	H/OMe		



849-851

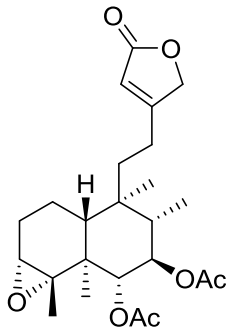
		R1		
849	clerodendrin B	Y_3	*Clerodendrum inerme*	*Phytochemistry*, 1993, **34**, 572-574
850	clerodendrin C	Y_{10}		
851	clerodendrin H	Y_7	*Clerodendrum trichotomum*	*Phytochemistry*, 1998, **49**, 1975-1980



868-871

		R1		
868	clerodendrin I	Y_6	*Clerodendrum trichotomum*	*Biosci. Biotechnol. Biochem.*, 1999, **63**, 1795-1797
869	clerodendrin E	Y_{10}		*Phytochemistry*, 1998, **49**, 1975-1980
870	clerodendrin F	Y_7		
871	clerodendrin G	Y_1		

***COLQUHOUNIA* Genus**



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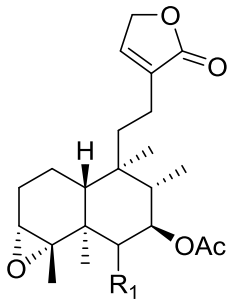
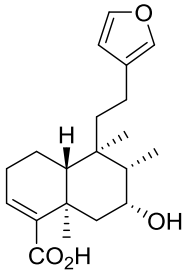


516,517

515	seguiniilactone A	—	*Colquhounia seguinii*	*J. Integr. Plant Biol.*, 2014, **56**, 928-940
516	seguiniilactone B	αOAc		
517	seguiniilactone C	H		

CONYZA Genus



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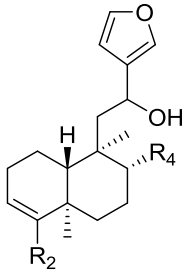
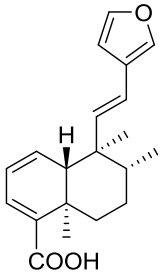


411 $R_2 = CO_2H$, $R_4 = Me$
412 $R_2 = CO_2Me$, $R_4 = CH_2OH$



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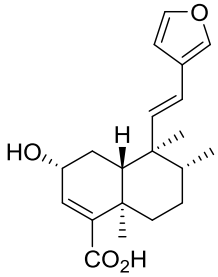

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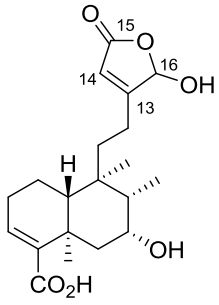
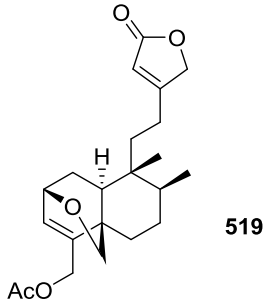


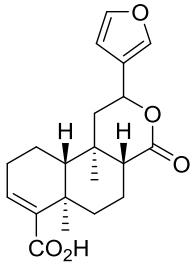
550

388	7α-hydroxyhardwickiic acid	*Conyza hypoleuca*	*Phytochemistry* 1991, **30**, 575-581
411	12-hydroxyhardwickiic acid		
412	12,17-dihydroxyhardwickiic acid methyl ester		
415	1,2,11,12E-tetradehydrohardwickiic acid		
416	2α-hydroxy-11,12E-dehydrohardwickiic acid		
550	conyhypolide A		



519

519	conyzalactone	*Conyza blinii*	*Heterocycles*, 1999, **51**, 605-609



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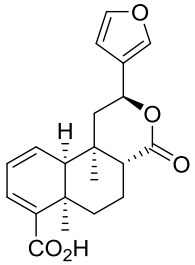
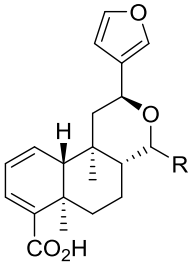
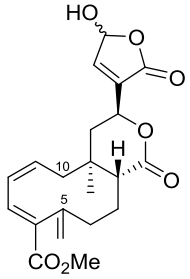


677

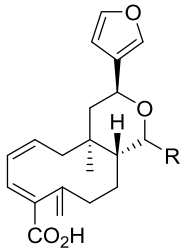


678 R = =O
679 R = α-OH
680 R = β-OH

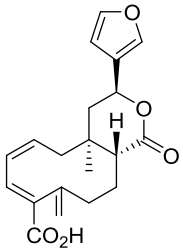
658	17-oxo-1,2-dihydrowelwitschic acid	*Conyza welwitschii*	*Phytochemistry*, 1990, **29**, 2247-2252
677	17-oxo-10-epi-welwitschic acid		
678	17-oxo-welwitschic acid		
679	17α-hydroxywelwitschic acid		
680	17β-hydroxywelwitschic acid		



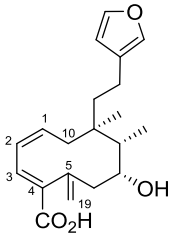
1124



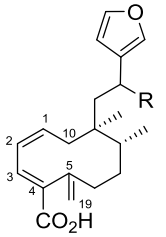
1125 R = α-OH
1126 R = β-OH
1127 R = α-OMe
1128 R = β=OMe



1129



1131

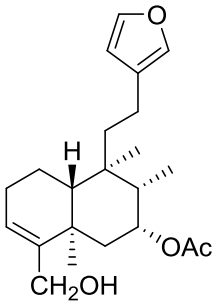


1132 R = H
1133 R = β-OH

1124	*seco*-hypoleucolide	*Conyza hypoleuca*	*Phytochemistry* 1991, **30**, 575-581
1125	17α-hydroxy-12β,17-epoxystrictic acid	*Conyza welwitschii*	*Phytochemistry*, 1990, **29**, 2247-2252
1126	17β-hydroxy-12β,17-epoxystrictic acid		
1127	17α-*O*-methyl ether of **1125**		
1128	17β-*O*-methyl ether of **1126**		
1129	strictic acid 12β,17-olide		

1131	7α-hydroxystrictic acid	*Conyza hypoleuca*	*Phytochemistry* 1991, **30**, 575-581
1132	11,12*E*-dehydrostrictic acid		
1133	12-hydroxystrictic acid	*Conyza welwitschii*	*Phytochemistry*, 1990, **29**, 2247-2252

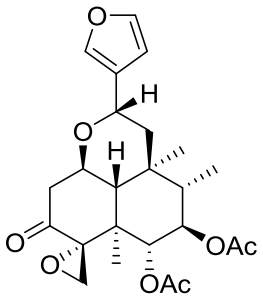
COPAIFERA **Genus**



384

384	7*α*-acetoxybacchotricuneatin D	*Copaifera sp.*	*Phytochemistry*, 1996, **42**, 1653-1656

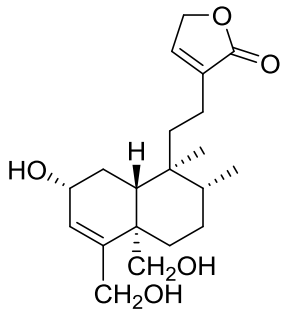
CORNUTIA **Genus**



688

688	cornutin A	*Cornutia grandifolia*	*J. Org. Chem.*, 1992, **57**, 862-866

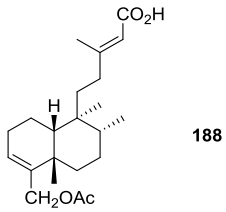
***CRASSOCEPHALUM* Genus**



530

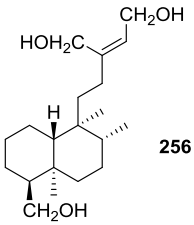
530	*ent*-2β,18,19-trihydroxycleroda-3,13-dien-16,15-olide	*Crassocephalum bauchiense*	*Nat. Prod. Res.*, 2015, **29**, 1990-1994

***CROTON* Genus**



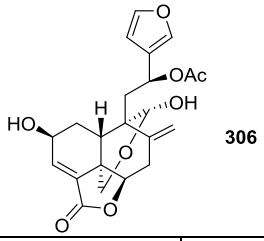
188

188	crotonic acid	*Croton chilensis*	*Bol. Soc. Chil. Quim.*, 1995, **40**, 157-162



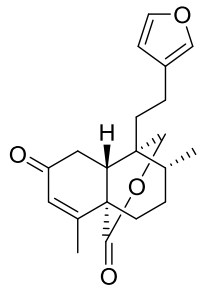
256

256	crolechinol	*Croton lechleri*	*Phytochemistry*, 1993, **32**, 755-760



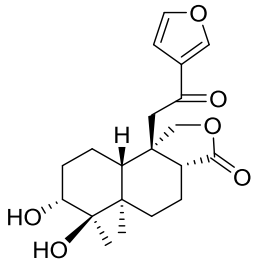
306

306	plaunol E	*Croton stellatopilosus*	*J. Nat. Med.*, 2013, **67**, 174-181



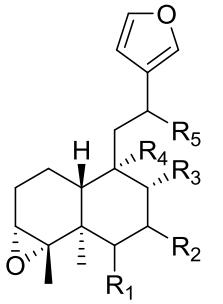
318

318	sacacarin	*Croton cajucara*	*Phytochemistry*, 1998, **49**, 823-828



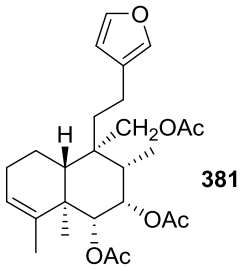
333

333	furocrotinsulolide B	*Croton insularis*	*Helv. Chim. Acta*., 2005, **88**, 2654-2660



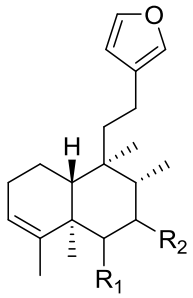
358-363

		R1	R2	R3	R4	R5		
358	epoxychiromodine	H	H	CO_2Me	Me	=O	*Croton megalocarpus*	*Phytochemistry*, 1992, **31**, 2055-2058
359	eluterin C	H	αOAc	Me	CH_2OH	H	*Croton eluteria*	*J. Agric. Food Chem.*, 2002, **50**, 5131-5138
360	eluterin D	H	αOH	Me	CH_2OAc	H		
361	eluterin E	H	αOAc	Me	CH_2OH	βOH		
362	eluterin F	αOAc	αOAc	Me	CH_2OAc	H		
363	eluterin G	αOAc	αOAc	Me	CHO	H		



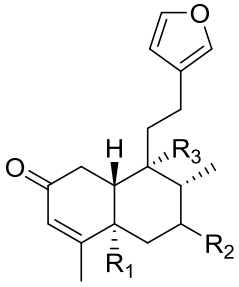
381

381	eluterin K	*Croton eluteria*	*J. Agric. Food Chem.*, 2003, **51**, 6970-6974

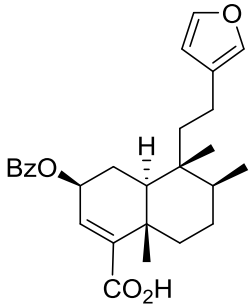


385-387

		R1	R2		
385	6α-hydroxyannonene	αOH	H	*Croton sonderianus*	*Phytochemistry*, 1994, **36**, 1457-1463
386	6α,7β-dihydroxyannonene	αOH	βOH		
387	6α,7β-diacetoxyannonene	αOAc	βOAc		

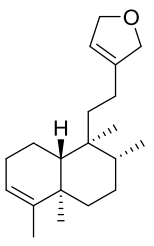


393-396



398

		R1	R2	R3		
393	15,16-epoxy-3,13(16)-clerodatriene-2-one	αMe	H	Me	*Croton ururucana*	*Phytochemistry*, 1998, **49**, 171-174
394	cajucarin A	CHO	H	CO_2Me	*Croton cajucara*	*Chem. Pharm. Bull.*, 1990, **38**, 701-705
395	cromiargyne	Me	H	CO_2Me	*Croton hemiargyreus*	*Nat. Prod. Lett.*, 1998, **12**, 41-46
396	7-acetoxycromiargyne	Me	OAc	CO_2Me		
398	laevigatbenzoate	--	--	--	*Croton laevigatus*	*J. Nat. Med.*, 2011, **65**, 391–394



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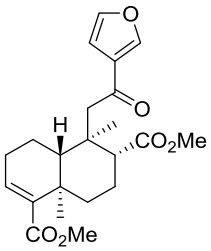

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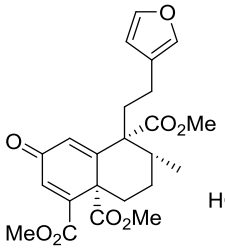

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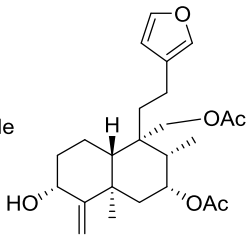
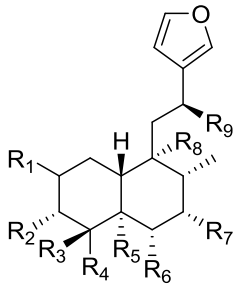


419

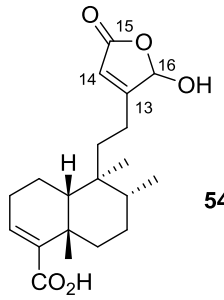
404	crotonolide G	*Croton laui*	*J. Nat. Prod.*, 2014, **77**, 1013-1020
414	crotomembranafuran	*Croton membranaceus*	*Nat. Prod. Commun.*, 2008, **3**, 1875-1878
418	crotonoligaketone	*Croton oligandrum*	*Z. Naturforsch. C*, 2014, **69**, 181-185
419	eluterin B	*Croton eluteria*	*J. Agric. Food Chem.*, 2002, **50**, 5131-5138



420-427

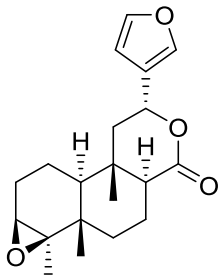
		R1	R2	R3	R4	R5	R6	R7	R8	R9		
420	crotonolide H	H	OH	OH	Me	Me	H	H	Me	OH	*Croton laui*	*J. Nat. Prod.*, 2014, **77**, 1013-1020
421	12-deoxycrotonolide H	H	OH	OH	Me	Me	H	H	Me	H		
422	crolechinic acid	H	H	H	βCO_2H	Me	H	H	Me	H	*Croton lechleri*	*Phytochem.*, 1993, **32**, 755-760
424	cascarilladione	=O	H	H	αMe	Me	H	H	Me	=O	*Croton eluteria*	*J. Agric. Food Chem.*, 2003, **51**, 6970-6974
425	eluterin A	H	=O	H	βMe	Me	H	OAc	CH_2OAc	H		*J. Agric. Food Chem.*, 2002, **50**, 5131-5138
426	3,12-dioxo-15,16-epoxy-cleroda-13(16),14-dien-9-al	H	=O	H	βMe	Me	H	H	CHO	=O	*Croton hovarum*	*Phytochem.*, 1997, **45**, 379-381
427	3α,4β-dihydroxy-15,16-epoxy-12-	H	OH	OH	αMe	Me	H	H	CHO	=O		*Phytochem.*, 1996, **41**, 561-563

	oxo-cleroda-13(16),14-dien-9-al											



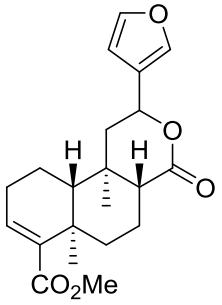
549

549	(-)-12,16-dihydroxy-*cis*-cleroda-3,13-dien-15-oic acid-15,16-olide	*Croton schiedeanus*	*Phytochemistry*, 1999, **51**, 643-649



654

654	3,4,15,16-diepoxy-cleroda-13(16),14-diene-12,17-olide	*Croton oblongifolius*	*Phytochem. Lett.*, 2011, **4**, 147-150



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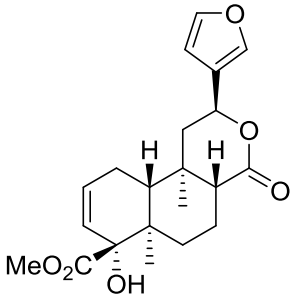
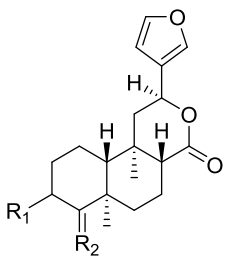


667

657	12-epi-methyl-barbascoate	*Croton urucurana*	*Phytochemistry*, 1998, **49**, 171-174
667	8-epicordatin	*Croton palanostigma*	*J. Braz. Chem. Soc.*, 2010, **21**, 731-739



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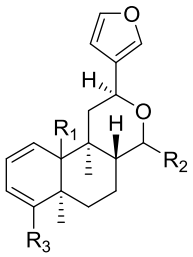
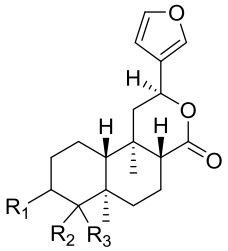
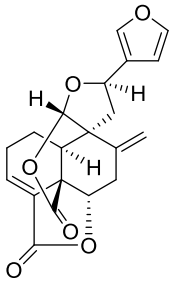


675-680



682,683

		R1	R2	R3		
673	crotonolide E	=O	αMe	—	*Croton laui*	*J. Nat. Prod.*, 2014, **77**, 1013-1020
674	crotonolide F	αOH	CH_2	—		
675	—	αH	=O	CO_2Me	*Croton jimenezii*	*Ingenieria Y Ciencia Quimica*, 2000, **19**, 68-73
676	—	βH	=O	CO_2Me		
682	methyl 3-oxo-12-epibarbascoate	=O	H	CO_2Me	*Croton urucurana*	*J. Braz. Chem. Soc.*, 2013, **24**, 609-614.
683	furocrotinsulolide A	αOH	βOH	αMe	*Croton insularis*	*Helv. Chim. Acta.*, 2005, **88**, 2654-2660



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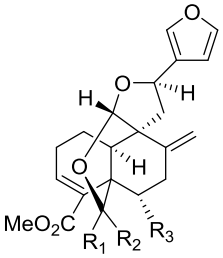
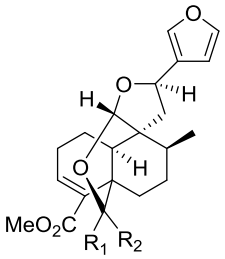
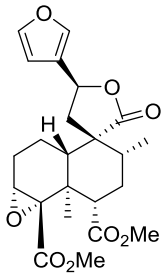


714-717



718,719

713	crotonolide A	—	—	—	—	*Croton laui*	*J. Nat. Prod.*, 2014, **77**, 1013-1020
714	crotonolide B	H	OH	H	—		
715	isocrotonolide B	OH	H	H			
716	crotonolide C	H	OH	OAc	—		
717	isocrotonolide C	OH	H	OAc			
718	crotonolide D	OH	OAc	—	—		
719	isocrotonolide D	H	OH	—	—		



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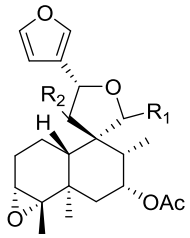
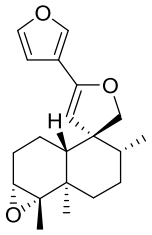


756-757

		R1	R2		
754	korberin A	—	—	*Croton lechleri*	*Phytochemistry*, 1993, **34**, 265-268
756	eluterin J	H	=O	*Croton eluteria*	*J. Agric. Food Chem.*, 2002, **50**, 5131-5138
757	eluterin I	βOAc	H		



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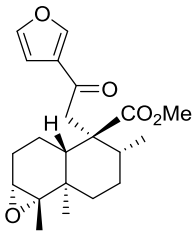
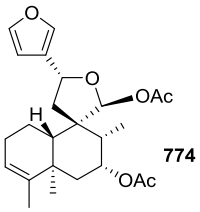


765

764	crotonpene A	*Croton yanhuii*	*Fitoterapia*, 2014, **95**, 229-233
765	crotonpene B		



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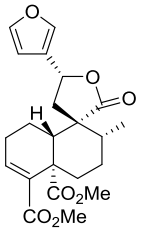

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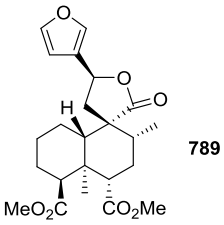
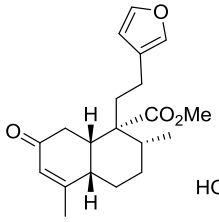


789

774	eluterin H	*Croton eluteria*	*J. Agric. Food Chem.*, 2002, **50**, 5131-5138
775	crotocorylifuran	*Croton haumanianus*	*Tetrahedron*, 1990, **46**, 5199-5202
779	korberin B	*Croton lechleri*	*Phytochemistry*, 1993, **34**, 265-268



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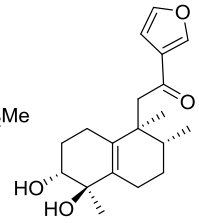

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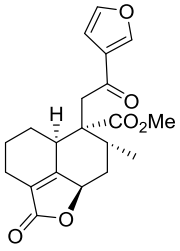

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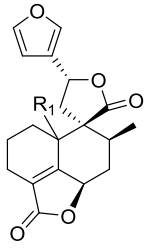
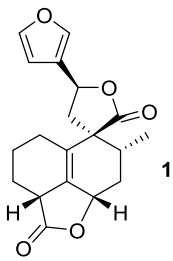


1066-1068

1062	cajucarin B	—	*Croton cajucara*	*Chem. Pharm. Bull.*, 1990, **38**, 701-705
1063	3α,4β-dihydroxy-15,16-epoxy-19-*nor*-12-oxo-cleroda-5(10),13(16),14-triene	—	*Croton hovarum*	*Phytochemistry*, 1997, **45**, 379-381
1064	crotoeurin C	---	*Croton euryphyllus*	*Bioorg. Med. Chem. Lett.*, 2015, **25**, 1329-1332
1066	jatrophoidin	αCO_2Me	*Croton jatrophoides*	*Planta Med.*, 2009, **75**, 262-267
1067	isoteucvin	βH		
1068	crassifolin G	αOH	*Croton crassifolius*	*J. Nat. Prod.*, 2012, **75**, 2188-2192



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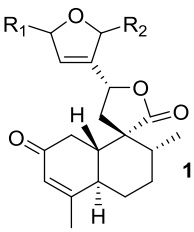
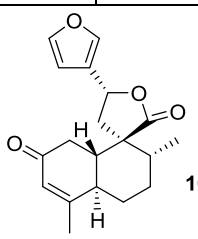
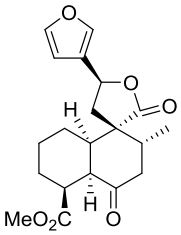


1074,1075



1076

1073	crassifolin H	—	—	*Croton crassifolius*	*Heterocycles*, 2014, **89**, 1585-1593
1074	cajucarinolide	OH	=O	*Croton cajucara*	*Planta Med.*, 1992, **58**, 549-551
1075	isocajucarinolide	=O	OH		
1076	*trans*-dehydrocrotonin	—	—	*Croton cajucara*	*J. Braz. Chem. Soc.*, 2014, **25**, 629-638



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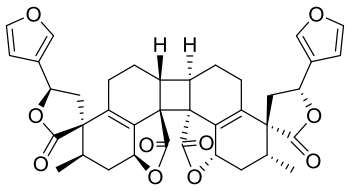
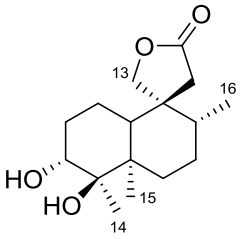


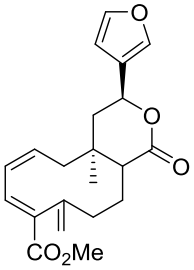
1084

1083	crotoeurin B	*Croton euryphyllus*	*Bioorg. Med. Chem. Lett.*, 2015, **25**, 1329-1332
1084	crotoeurin A		



1093

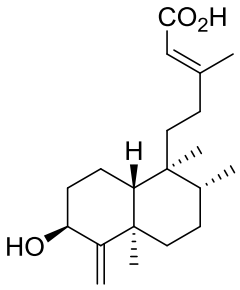
1093	crotinsulactone	*Croton insularis*	*Helv. Chim. Acta.*, 2005, **88**, 2654-2660



1130

1130	—	*Croton jimenezii*	*Ingenieria Y Ciencia Quimica*, 2000, **19**, 68-73

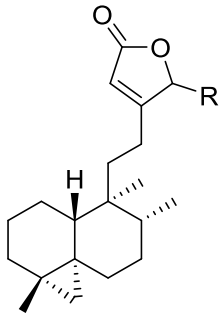
***CYATHOCALYX* Genus**



286

286	3-hydroxy-cleroda-4(18),13*Z*-dien-15-oic acid	*Cyathocalyx zeylanica*	*Phytochemistry*, 1995, **39**, 443-445

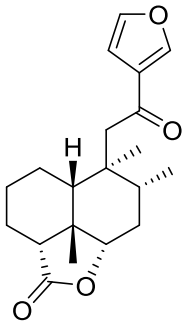
***CYSTODYTES* Genus**



612-613

612	dytesinin A	OH	*Cystodytes* sp	*Tetrahedron* 2000, **56**, 7923-7926
613	dytesinin B	H		

***DEMOTARISIA* Genus**



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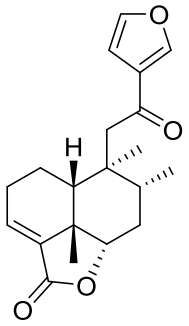
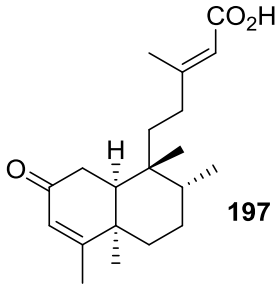


310

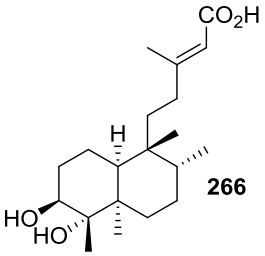
309	dihydrolinguifolide	*Demotarisia linguifolia*	*Phytochemistry*, 1990, **29**, 3229-3231
310	linguifolide		

***DETARIUM* Genus**

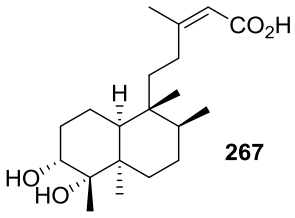


197

197	5α,8α-2-oxokolavenic acid	*Detarium microcarpum*	*J. Nat. Prod.*, 2006, **69**, 768-773

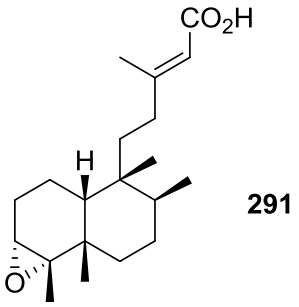


266



267

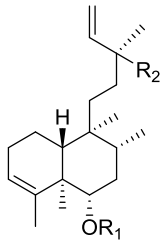
266	3,4-dihydroxyclerodan-13*E*-en-15-oic acid	*Detarium microcarpum*	*J. Nat. Prod.*, 2006, **69**, 768-773
267	3,4-dihydroxyclerodan-13*Z*-en-15-oic acid		



291

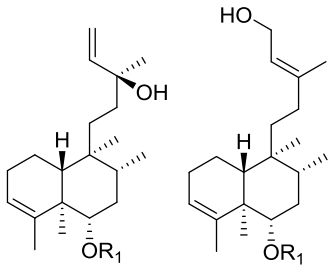
291	3,4-epoxyclerodan-13*E*-en-15-oic acid	*Detarium microcarpum*	*J. Nat. Prod.*, 2006, **69**, 768-773

***DICRANOPTERIS* Genus**



903-906

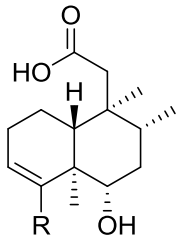
905	(6*S*,13*S*)-6-O-[*β*-D-glucopyrano-syl-(1→4)-*α*-L-rhamnopyranosyl]-l3-O-[*α*-L-rhamnopyranosyl-(1→4)-*β*-D-fucopyranosyl]-cleroda-3,14-diene	α-L-Rha-(4→1)-β-D-Glc	β-{β-D-Fuc-(4→1)-α-L-Rha}	*Dicranopteris pedata*	*Phytochemistry*, 1997, **46**, 839-844
906	(6*S*,13*S*)-cleroda-3,14-diene-6,13-diol-6-*O*-β-glucopyranosyl-13-*O*-β-fucopyranosyl-(1→2)-α-rhamnopyranoside	β-Glc	β-{α-Rha-(2→1)-β-Fuc}		



910,911 **912,913**

910	(6*S*,13*S*)-6-*O*-[6-*O*-acetyl-β-D-glucopyranosyl-(1→4)-α-L-rhamnopyranosyl]cleroda-3,14-dien-13-ol	6-*O*-acetyl-β-D-Glc-(1→4)-α-L-Rha	*Dicranopteris dichotoma*	*J. Nat. Prod.*, 2007, **70**, 265-268
911	(6*S*,13*S*)-6-*O*-[4-*O*-acetyl-β-D-glucopyranosyl-(1→4)-α-L-rhamnopyranosyl]cleroda-3,14-dien-13-ol	4-*O*-acetyl-β-D-Glc-(1→4)-α-L-		

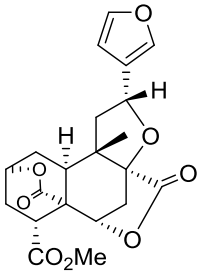
		Rha		
912	6-*O*-[6-*O*-acetyl-β-D-glucopyranosyl-(1-4)-α-L-rhamnopyranosyl]-(13*E*)-cleroda-3,13-dien-15-ol	6-*O*-acetyl-β-D-Glc-(1→4)-α-L-Rha		
913	6-*O*-[β-D-glucopyranosyl]-(1→4)-α-L-rhamnopyranosyl-(13*E*)-cleroda-3,13-dien-15-ol	β-Glc-(1→4)-α-L-Rha		



1091-1092

1091	18-hydroxyaylthonic acid	CH_2OH	*Dicranopteris dichotoma*	*J. Nat. Prod.*, 2007, **70**, 265-268
1092	18-oxo-aylthonic acid	CHO		

***DIOSCOREA* Genus**



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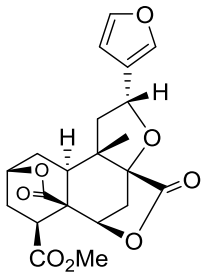

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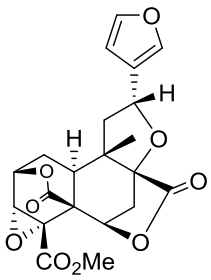
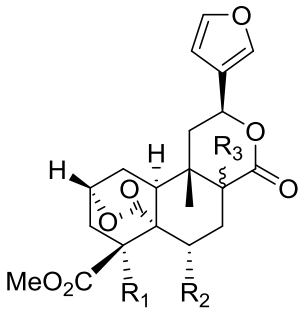


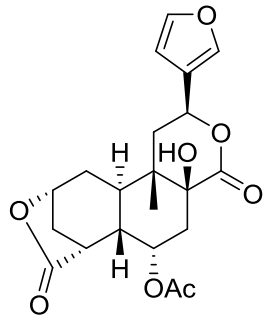
341

339	bafoudiosbulbin A	*Dioscorea bulbifera*	*Phytochemistry*, 2006, **67**, 1957-1963
340	bafoudiosbulbin D		*Helv. Chim. Acta*, 2007, **90**, 1599-1605
341	bafoudiosbulbin E		



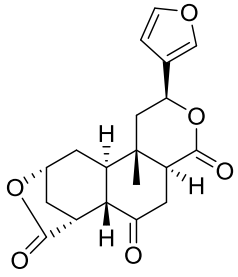
650-653

		R1	R2	R3		
650	antadiosbulbin A	OH	H	αH	*Dioscorea antaly*	*Phytochemistry*, 2010, **71**, 1007-1013
651	antadiosbulbin B	OH	H	βH		
652	bafoudiosbulbin F	H	H	βOH	*Dioscorea bulbifera*	*Phytochemistry*, 2008, **69**, 2374-2379
653	bafoudiosbulbin G	H	αOAc	βOH		



1065

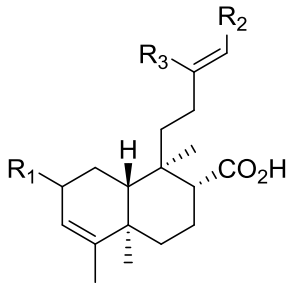
1065	15,16-epoxy-6a-*O*-acetyl-8β-hydroxy-19-nor-clero-13(16),14-diene-17,12;18,2-diolide	*Dioscorea bulbifera*	*Nat. Prod. Commun.*, 2011, **6**, 1069-1072



1313

1313	disobulbin D (DBD)	*Dioscorea bulbifera*	*Chem. Pharm. Bull.*, 1968, **16**, 2430-2435, *Phytochemistry*, 1984, **23**, 623-625

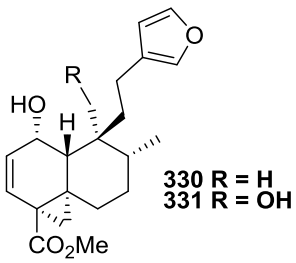
***DIPLOSTEPHIUM* Genus**



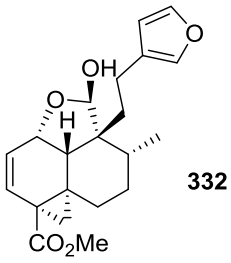
183-185

		R1	R2	R3		
183	16-oxo-*ent*-cleroda-3,13*Z*-diene-15,17-dioic acid	H	CO_2H	CHO	*Diplostephium floribundum*	*Phytochemistry*, 1992, **31**, 213-216
184	15-oxo-*ent*-cleroda-3,13*Z*-diene-16,17-dioic acid	H	CHO	CO_2H		
185	2*α*-acetoxy-l5-oxo-*ent*-cleroda-3,13*Z*-diene-16,17- dioic acid	αOAc	CHO	CO_2H		

***DODONAEA* Genus**

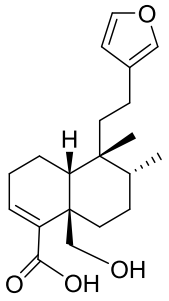


330 R = H
331 R = OH



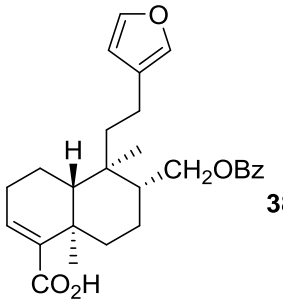
332

330	methyl dodonate A	*Dodonaea viscosa*	*Tetrahedron*, 2001, **57**, 2981-2989
331	methyl dodonate B		
332	methyl dodonate C		

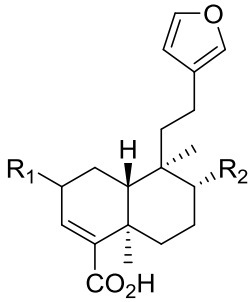


377

377	vishautriwaic acid	*Dodonaea viscosa*	*Z. Naturforsch. B*, 2010, **65**, 83-86

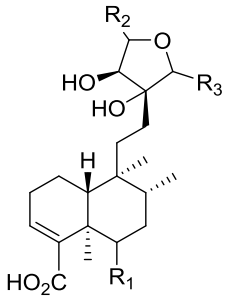


389



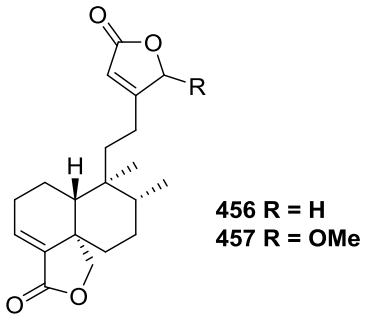
390-392

		R1	R2		
389	15,16-epoxy-8*R*-(benzoyloxy)methyl-cleroda-3,13(16),14-trien-18-oic acid	CO_2H	CH_2OBz	*Dodonaea polyandra*	*J. Nat. Prod.*, 2011, **74**, 650-657
390	15,16-epoxy-8*R*-(benzoyloxy)methyl-2*R*-hydroxycleroda-3,13(16),14-trien-18-oic acid	αOH	CH_2OBz		
391	15,16-epoxy-2*R*-benzoyloxycleroda-3,13(16),14-trien-18-oic acid	αOBz	Me		
392	15,16-epoxy-8*R*-(benzoyloxy)methyl-2-oxocleroda-3,13(16),14-trien-18-oic acid	=O	CH_2OBz		

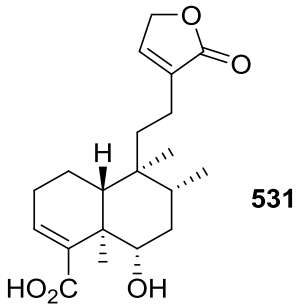


437-438

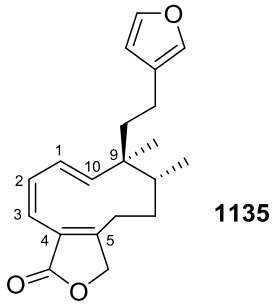
		R1	R2	R3		
437	visclerodol acid	H	βOAc	βOAc	*Dodonaea viscosa*	*Z. Naturforsch. B*, 2010, **65**, 83-86, *Phytochem. Lett.*, 2014, **8**, 10-15
438	13,14-dihydroxy-15,16-dimethoxy-(-)-6*α*-hydroxy-5*α*,8*α*,9*α*,10*α*-cleroda-3-en-18-oic acid	αOH	βOMe	βOMe		



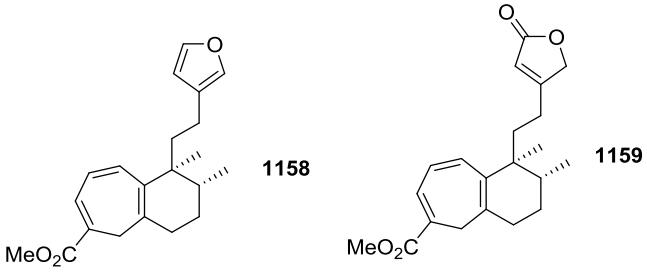
456	mkapwanin	*Dodonaea angustifolia*	*Phytochem. Lett.*, 2010, **3**, 217–220
457	15-methoxymkapwanin		



531	(-)-6α-hydroxy-5α,8α,9α,10α-cleroda-3,13-dien-16,15-olid-18-oic acid	*Dodonaea viscosa*	*Phytochem. Lett.*, 2014, **8**, 10-15

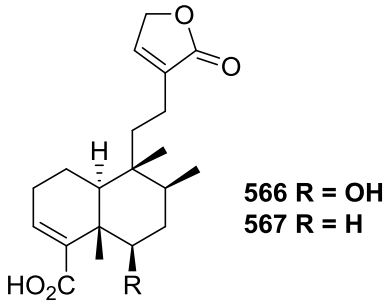


1135	dodonolide	*Dodonaea viscosa.*	*Tetrahedron*, 2001, **57**, 2981-2989



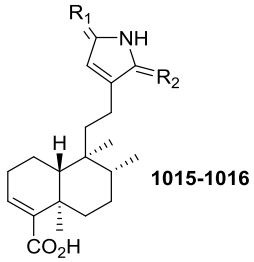
1158	methyl dodovisate A	*Dodonaea viscosa*	*J. Asian. Nat. Prod. Res.*, 2010, **12**, 7-14
1159	methyl dodovisate B		

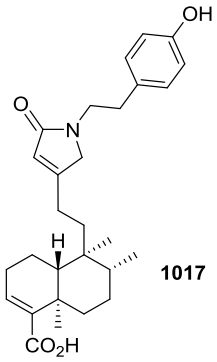
***DURANTA* Genus**



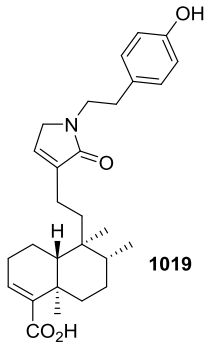
566	(-)-6β-hydroxy-5β,8β,9β,10α-cleroda-3,13-dien-16,15-olid-18-oic acid	*Duranta repens*	*Chem. Pharm. Bull.*, 2004, **52**, 785-789
567	(+)-3,13-clerodadien-16,15-olid-18-oic acid		

***ECHINODORUS* Genus**

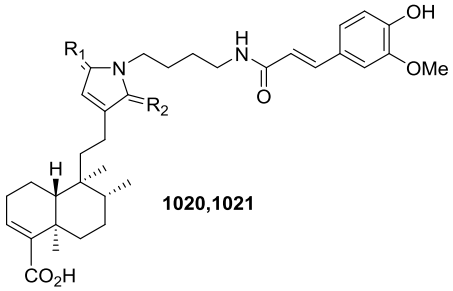




		R1	R2		
1015	echinophyllin C	H_2	O	*Echinodorus macrophyllus*	*J. Nat. Prod.*, 2000, **63**, 1576-1579
1016	echinophyllin F	O	H_2		
1017	echinophyllin D	—	—		



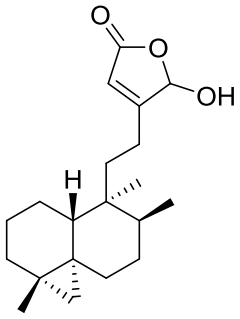
1019



1020,1021

		R1	R2		
1019	echinophyllin A	—	—	*Echinodorus macrophyllus*	*Tetrahedron Lett.*, 2000, **41**, 2939-2943
1020	echinophyllin B	H_2	O		
1021	echinophyllin E	O	H_2		*J. Nat. Prod.*, 2000, **63**, 1576-1579

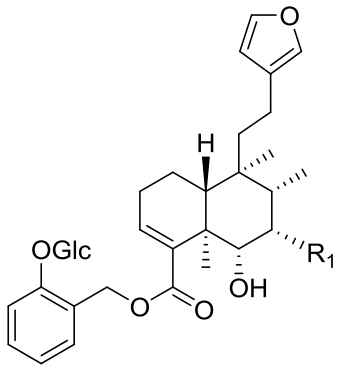
***ECHINOMURICEA* Genus**



614

614	echinoclerodane A	*Echinomuricea* sp	*Molecules*, 2012, **17**, 9443-9450

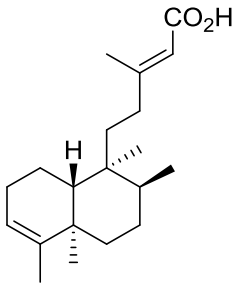
***ELSHOLTZIA* Genus**



924,925

924	6-hydroxy-(-)-hardwickiic acid 2'-β-D-glucopyranosyl benzyl ester	H	*Elsholtzia bodinieri*	*Indian J. Chem.*, 2008, **47B**, 166-170
925	6,7-dihydroxy-(-)-hardwickiic acid 2'-β-D-glucopyranosyl benzyl ester	OH		

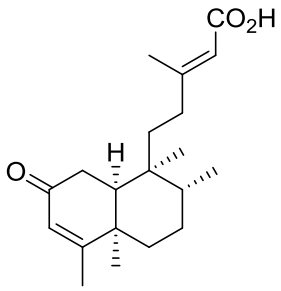
***ENTADA* Genus**



182

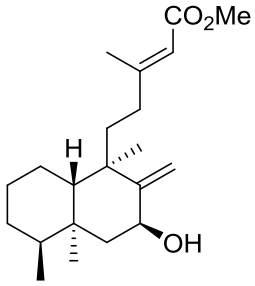
182	diastereoisomer of kolavenol	*Entada abyssinica*	*J. Ethnopharmacol.*, 1998, **61**, 179-183

***EPERUA* Genus**



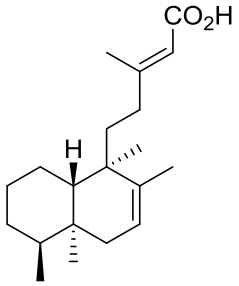
198

198	(13*E*)-2-oxo-5*α*-*cis*-17*α*,20*α*-cleroda-3,13-diene-15-oic acid	*Eperua purpurea*	*Phytochemistry*, 1991, **30**, 3474-3475



258

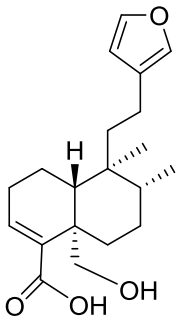
258	(-)-7*β*-hydroxycleroda-8(17),13*E*-dien-15-oic acid	*Eperua leucantha*	*J. Nat. Prod.*, 1992, **55**, 845-850



272

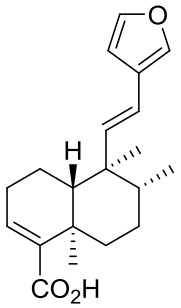
272	(-)-cleroda-7,13*E*-dien-l5-oic acid	*Eperua purpurea*	*J. Nat. Prod.*, 1993, **56**, 1586-1589

***EREMOCARPUS* Genus**



378

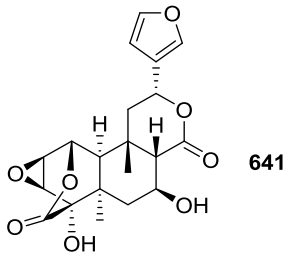
378	hautriwaic acid	*Eremocarpus setigerus*	*Indian J. Chem. B*, 1991, **30**, 1054-1055



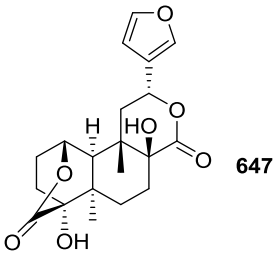
417

417	dehydrohardwickiic acid	*Eremocarpus setigerus*	*Indian J. Chem. B*, 1991, **30**, 1054-1055

***FIBRAUREA* Genus**

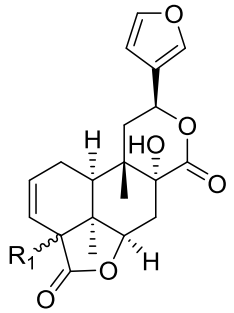


641



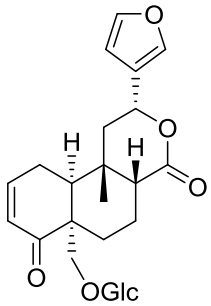
647

641	fibrauretin A	*Fibraurea tinctoria*	*J. Nat. Prod.*, 2007, **70**, 1930-1933
647	epi-8-hydroxycolumbin	*Fibraurea tinctoria*	*Bioorg. Med. Chem.*, 2008, **16**, 9603-9609



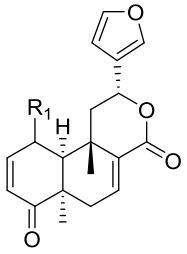
945-946

945	fibrauretinoside A	αOGlc	*Fibraurea tinctoria*	*J. Nat. Prod.*, 2007, **70**, 1930-1933
946	*epi*-fibrauretinoside A	βOGlc		



973

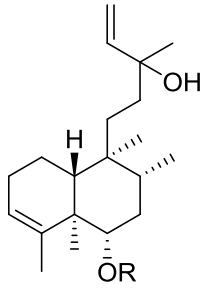
973	*epi*-12-palmatoside G	*Fibraurea tinctoria*	*J. Nat. Prod.*, 2007, **70**, 1930-1933



1057-1059

1057	fibaruretin D	H	*Fibraurea tinctoria*	*Bioorg. Med. Chem.*, 2008, **16**, 9603-9609
1058	fibaruretin E	αOH		
1059	fibaruretin F	=O		

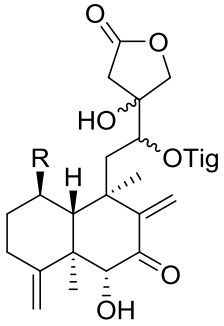
***GLEICHENIA* Genus**



903-904

903	α-vinyl-1,2,3,4,4a,7,8,8a-octahydro-α,1,2,4a,5-pentamethyl-1-naphthalenepropanol-4-*O*-β-glucopyranoside	β-Glc	*Gleichenia japonica*	*Chem. Lett.*, 1991, **4**, 701-704
904	α-vinyl-1,2,3,4,4a,7,8,8a-octahydro-α,1,2,4a,5-pentamethyl-1-naphthalenepropanol-4-*O*-α-rhamnopyranosyl-(1→2)-β-glucopyranoside	β-Glc-(2→1)-α-L-Rha		

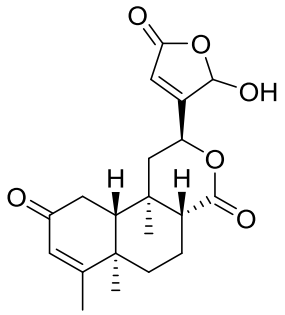
***GLOSSOCARYA* Genus**



598-600

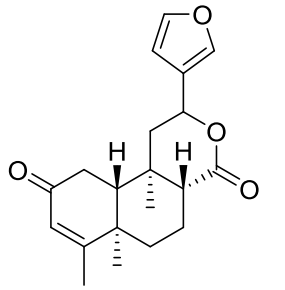
598	calcicolin A	OiBu	*Glossocarya calcicola*	*Phytochemistry*, 2005, **66**, 2844-2850
599	calcicolin B	OTig		
600	calcicolin C	Y1		

***GOMPHOSTEMMA* Genus**



527

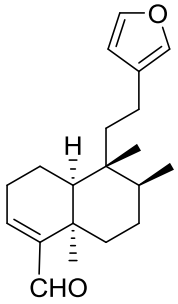
527	microdon B	*Gomphostemma microdon*	*Z. Naturforsch., B: J. Chem. Sci.*, 2009, **64**, 443-446



656

656	microdon A	*Gomphostemma microdon*	*Z. Naturforsch., B: J. Chem. Sci.*, 2009, **64**, 443-446

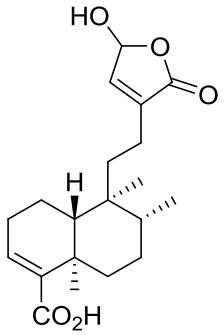
***GOTTSCHELIA* Genus**



401

401	(5*R*,8*S*,9*R*,10*S*)-15,16-epoxy-*cis*-cleroda-3,13(16),14-trien-18-al	*Gottschelia schizopleura*	*Planta Med.*, 2009, **75**, 1597-1601

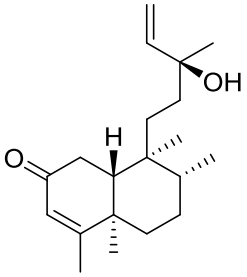
***GRANGEA* Genus**



532

532	15-hydroxy-16-oxo-15,16H-hardwickiic acid	*Grangea maderaspatana*	*Phytochemistry*, 1999, **52**, 1341-1343

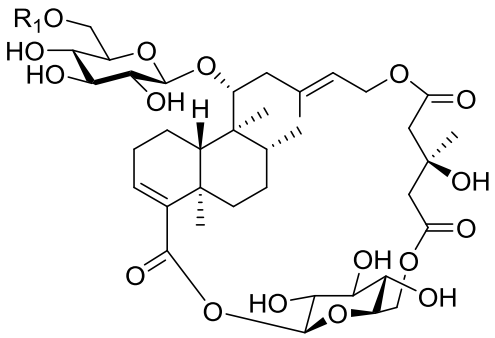
***GUAREA* Genus**



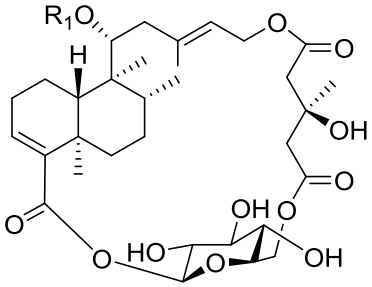
246

246	(-)-2-oxo-13-hydroxy-3,14-clerodandiene	*Guarea trichilioides*	*Phytochemistry*, 1996, **41**, 1159-1161

***HALOPHILA-SYPHONOTA* Genus**



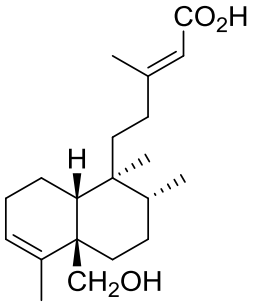
978,979



980,981

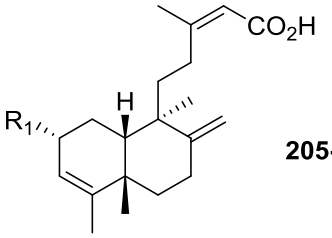
978	syphonoside	H	*Syphonota geographica*, *Halophila stipulacea*	*J. Org. Chem.*, 2007, **72**, 5625-5630
979	6‴-acetyl syphonoside	Ac		*Tetrahedron*, 2008, **64**, 191-196
980	syphonosideol	H		
981	mixture of syphonoside esters	palmitic & stearic acids		

***HAPLOPAPPUS* Genus**



177

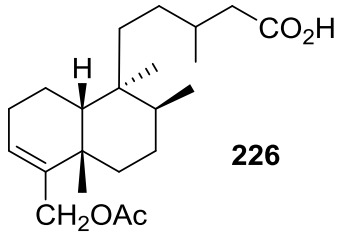
177	deserticolic acid	*Haplopappus deserticola*	*Phytochemistry*, 1999, **52**, 1531-1533



205-206

205	2α-hydroxy-*cis*-cleroda-3,13(*Z*),8,17-	OH	*Haplopappus*	*Planta Med.*, 2003,

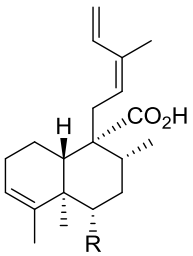
	trien-15-oic acid		*foliosus*	**69**, 675-677
206	2α-acetoxy-*cis*-cleroda-3,13(*Z*),8,17-trien-15-oic acid	OAc		



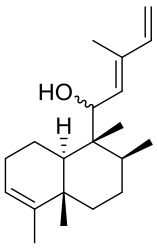
226

226	18-acetoxy-*cis*-cleroda-3-en-15-oic acid	*Haplopappus uncinatus*	*J. Ethnopharmacol.*, 2006, **103**, 297-301

***HETEROSCYPHUS* Genus**



165 R = H
166 R = OAc



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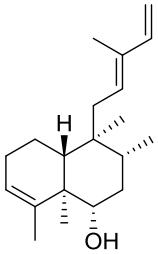
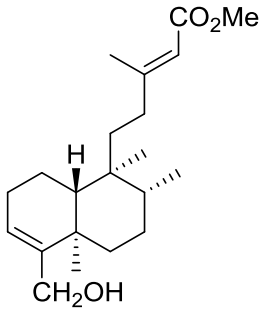


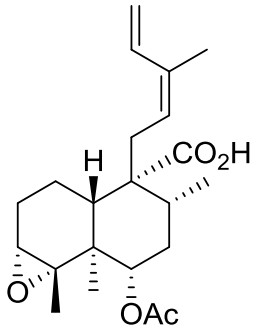
168

165	heteroscyphic acid A	*Heteroscyphus planus*	*Phytochemistry*, 1994, **37**, 1263-1268
166	heteroscyphic acid B		
167	heteroscyphol		*Phytochemistry*, 1995, **38**, 119-127
168	6*α*-hydroxy-3,12*E*,14-clerodatriene	*Heteroscyphus billardierii*	*Chem. Pharm. Bull.*, 2004, **52**, 556-560



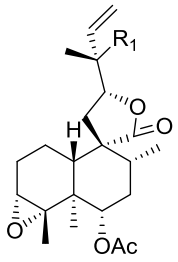
190

190	18-hydroxy-5,10-*trans*-cleroda-3,13*E*-dien-15-oic acid methyl ester	*Heteroscyphus planus*	*Phytochemistry*, 1996, **41**, 581-587

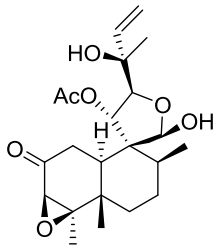


292

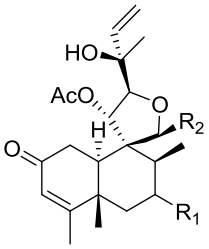
292	heteroscyphic acid C	*Heteroscyphus planus*	*Phytochemistry*, 1994, **37**, 1263-1268



768-769



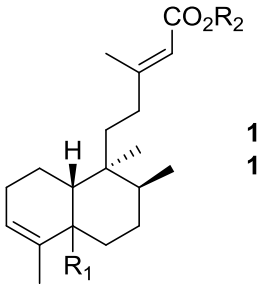
770



771-773

768	heteroscypholide A	βOAc	—	*Heteroscyphus planus*	*Phytochemistry*, 1996, **41**, 581-587
769	heteroscypholide B	βOH	—		
770	heteroscyphone A	—	—		*Phytochemistry*, 1995, **38**, 119-127
771	heteroscyphone B	H	βOH		
772	heteroscyphone C	H	H		
773	heteroscyphone D	βOH	βOH		

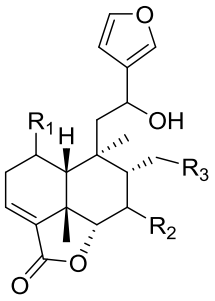
***HYMENAEA* Genus**



195 R1 = α-Me, R2 = H
196 R = β-Me, R2 = Me

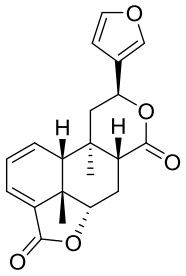
195	(-)-(5R,8S,9S,10R)-cleroda-3,13*E*-dien-15-oic acid	*Hymenaea courbaril*	*Phytochemistry*, 2001, **58**, 1153-1157
196	methyl (5*S*,8*S*,9*S*,10*R*)-cleroda-3,13*E*-dien-15-oate		

***JAMESONIELLA* Genus**

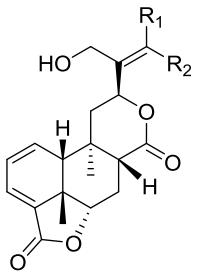


310-313

		R1	R2	R3		
311	1β-acetoxy-12-hydroxy-15,16-epoxy-*cis*-cleroda-3,13(16),14-triene-18,16-olide	βOAc	H	H	*Jamesoniella autumnalis*	*Phytochemistry*, 1995, **39**, 859-868, *Phytochemistry*, 1998, **48**, 681-685, *J. Nat. Prod.*, 1992, **55**, 111-121
312	1β-acetoxy-7,12-dihydroxy-15,16-epoxy-*cis*-cleroda-3,13(16),14-triene-18,6-olide	βOAc	βOH	H		
313	17-acetoxy-1β,12-dihydroxy-15,16-epoxy-*cis*-*ent*-cleroda-3,13(16),14-triene-6α,18-olide	βOH	H	OAc		

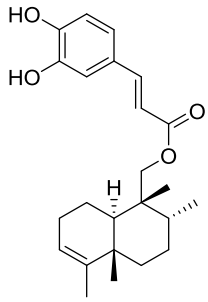


638



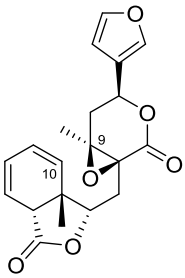
639 R1 = CO_2H, R2 = H
640 R1 = H, R2 = CO_2H

638	15,16-epoxy,1,3,13(16),14-clerodatetraene-17,12:18,6-diolide	*Jamesoniella autumnalis*	*Phytochemistry*, 1998, **48**, 681-685
639	15-carboxy-8β,16-dihydroxy-1,3,13*E*-clerodatriene-17,12:18,6-diolide		
640	15-carboxy-8β,16-dihydroxy-1,3,13*Z*-clerodatriene-17,12:18,6-diolide		

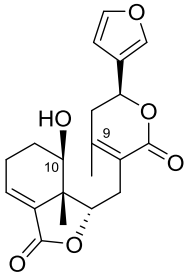


1097

1097	—	*Jamesoniella colorata*	*Nat. Prod. Commun.*, 2010, **5**, 999-1003



1098



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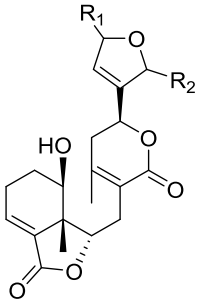
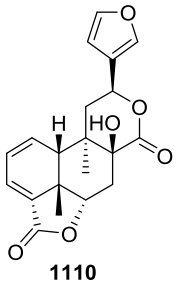


1100,1101

1098	jamesoniellide F	—	—	*Jamesoniella autumnalis*	*Phytochemistry*, 1995, **39**, 859-868, *Phytochemistry*, 1999, **51**, 743-750
1099	jamesoniellide I	—	—		
1100	jamesoniellide K	OH	=O	*Jamesoniella colorata*	*Phytochemistry*, 2003, **63**, 227-233
1101	jamesoniellide L	=O	OH		



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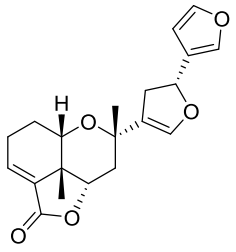

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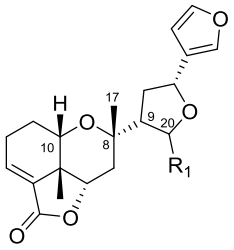
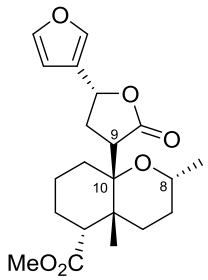
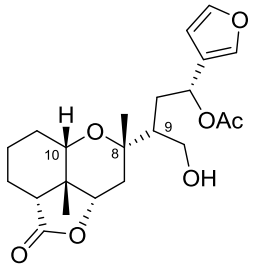


1113,1114

1110	15,16-epoxy-8-hydroxy-l,3,13(16),14-clerodatetraene-17,12:18,6-diolide	—	*Jamesoniella autumnalis*	*Phytochemistry*, 1995, **39**, 859-868
1112	jamesoniellide D	—		*Phytochemistry*, 1995, **39**, 859-868, *Phytochemistry*, 1999, **51**, 743-750
1113	jamesoniellide E	=O		
1114	jamesoniellide H	αOH		

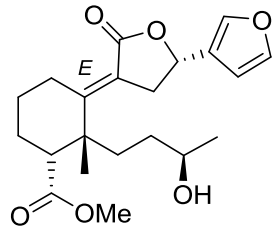


1120



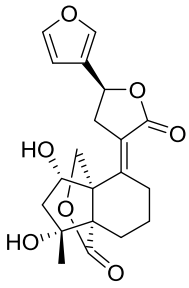
1121

1120	jamesoniellide A	*Jamesoniella autumnalis*	*J. Nat. Prod.*, 1992, **55**, 111-121
1121	jamesoniellide B		



1142

1142	jamesoniellide J	*Jamesoniella autumnalis*	*Phytochemistry*, 1999, **51**, 743-750



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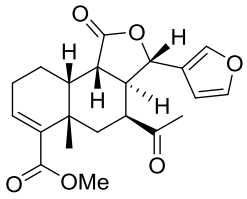
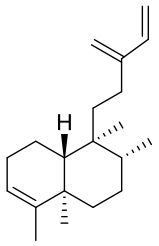


1211

1200	jamesoniellide C	*Jamesoniella autumnalis*	*Phytochemistry*, 1994, **37**, 491-494
1211	cephaloziellin Q	*Jamesoniella colorata*	*Nat. Prod. Commun.*, 2010, **5**, 999-1003

***JUNGERMANNIA* Genus**



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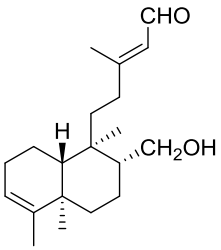

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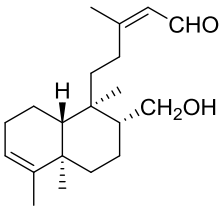

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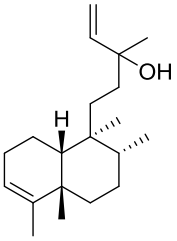
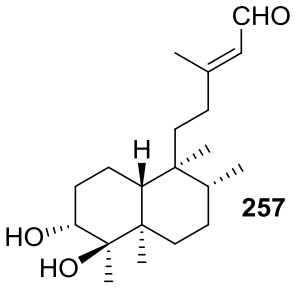


247

161	*ent*-clerod-3,13(16),14-triene	*Jungermannia infusca*	*Phytochemistry*, 1998, **49**, 601-608
174	17-hydroxy-3,13*E*-clerodadien-15-al		*Chem. Pharm. Bull.*, 2000, **48**, 1818-1821
202	17-hydroxy-3,13*Z*- clerodadien-15-al		
247	*cis*-3,14-clerodadien-13-ol		*J. Nat. Prod.*, 2001, **64**, 1309-1317



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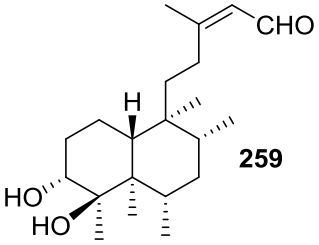
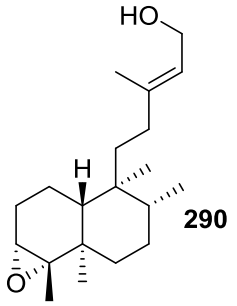


259

257	3*R*,4*R*-dihydroxyclerod-13*E*-en-15-al	*Jungermannia hyalina*	*Phytochemistry*, 1995, **40**, 209-212
259	3*R*,4*R*-dihydroxyclerod-13*Z*-en-15-al		



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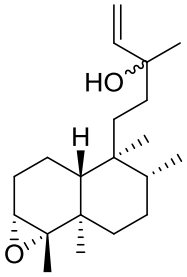
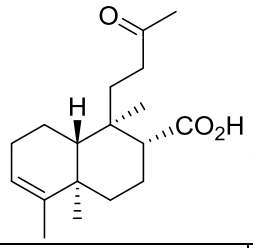


293

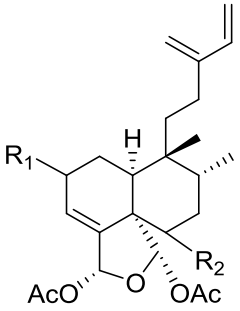
290	*ent*-3β,4β-epoxyclerod-13*E*-en-15-ol	*Jungermannia hyalina*	*Phytochemistry*, 1995, **40**, 209-212
293	*ent*-3β,4β-epoxy-clerod-14-en-13ζ-ol	*Jungermannia paroica*	*Phytochemistry*, 1992, **31**, 1420-1421



1089

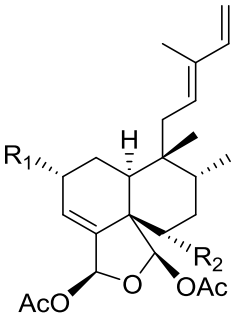
1089	bis-norinfuscaic acid	*Jungermannia infusca*	*Phytochemistry*, 1998, **49**, 601-608

LAETIA Genus



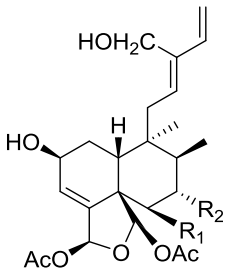
25 R1 = X1, R2 = OH
26 R1 = OH, R2 = ODc
27 R1 = OH, R2 = ODc

25	corymbulosin A	*Laetia corymbulosa*	*Phytochemistry*, 2000, **55**, 233-236
26	corymbulosin B		
27	corymbulosin C		



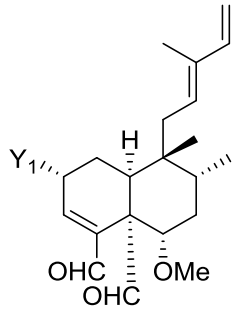
101 $R_1 = Y_1$, R_2 = OH
102 R_1 = OiBu, R_2 = OBz
103 $R_1 = Y_1$, R_2 = OBz

101	laetiaprocerine A	*Laetia procera*	*Bioorg. Med. Chem. Lett.*, 2005, **15**, 5065–5070
102	laetiaprocerine B		
103	laetiaprocerine C		



129 R_1 = OMyr, R_2 = OH
130 R_1 = OPal, R_2 = OH
131 R_1 = OH, R_2 = OMyr
132 R_1 = OH, R_2 = OPal

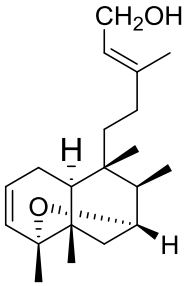
129	*rel*-18(*S*),19(*R*)-diacetoxy-18,19-epoxy-2(*R*),7(*S*),16-trihydroxy-6(*S*)-myristoyloxy-5(*R*),8(*R*),9(*S*),10(*R*)-cleroda-3,12,14-triene	*Laetia procera*	*Phytochemistry*, 1996, **43**, 635-638
130	*rel*-18(*S*),19(*R*)-diacetoxy-18,19-epoxy-2(*R*),7(*S*),16-trihydroxy-6(*S*)-palmitoyloxy-5(*R*),8 (*R*),9(*S*),10(*R*)-cleroda-3,12,14-triene		
131	*rel*-18(*S*),19(*R*)-diacetoxy-18,19-epoxy-2(*R*),6(*S*),16-trihydroxy-7(*S*)-myristoyloxy-5(*R*),8(*R*),9(*S*),10(*R*)-cleroda-3,12,14-triene		
132	*rel*-18(*S*),19(*R*)-diacetoxy-18,19-epoxy-2(*R*),7(*S*),16-trihydroxy-6(*S*)-palmitoyloxy-5(*R*),8(*R*),9(*S*),10(*R*)-cleroda-3,12,14-triene		



274

274	laetiaprocerine D	*Laetia procera*	*Bioorg. Med. Chem. Lett.*, 2005, **15**, 5065–5070

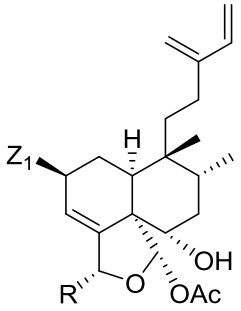
***LEONURUS* Genus**



276

276	leojaponin A	*Leonurus japonicus*	*Chin. Chem. Lett.*, 2014, **25**, 677-679

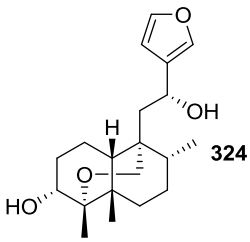
***LICANIA* Genus**



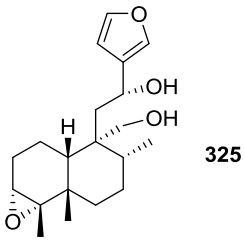
35 R = OMe
36 R = OAc

35	intrapetacin A	*Licania intrapetiolaris*	*J. Nat. Prod.*, 2001, **64**, 497-501
36	intrapetacin B		

***MICROGLOSSA* Genus**

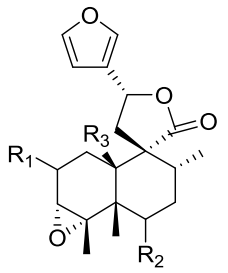


324

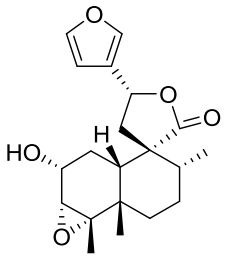


325

324	3*α*,12-dihydroxy-4*α*,20,15,16-bisepoxy-8*β*,10*β*H-*ent*-cleroda-13(16),14-diene	*Microglossa pyrrhopappa*	*Phytochemistry*, 1990, **29**, 3233-3241
325	12,20-dihydroxy-3*α*,4*α*,15,16-bisepoxy-8*β*,10*β*H-*ent*-cleroda-13(16),14-diene		

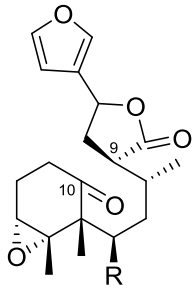


760-763



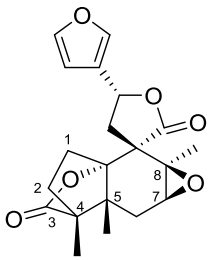
767

		R1	R2	R3		
760	2α-hydroxy-3α,4α,15,16-bis-epoxy-8β,10βH-*ent*-cleroda-13(16),14-diene-20,12-olide	αOH	H	H	*Microglossa pyrrhopappa*	*Phytochemistry*, 1990, **29**, 3233-3241
761	6β,10β-dihydroxy-3α,4α,15,16-bis-epoxy-8βH-cleroda-13(16),14-diene-20,12-olide	H	βOH	OH		
762	6β-angeloyloxy-10β-hydroxy-3α,4α,15,16-bis-epoxy-8βH-cleroda-13(16),14-diene-20,12-olide	H	βOAng	OH		
763	6β-[2-methylbutyryloxy]-10β-hydroxy-3α,4α,15,16-bis-epoxy-8βH-cleroda-13(16),14-diene-20,12-olide	H	βMeBu	OH		
767	2α-hydroxy-3α,4α,15,16-bis-epoxy-8βH-*ent*-cleroda-1(10),13(16),14-diene-20,12-olide	—	—	—		

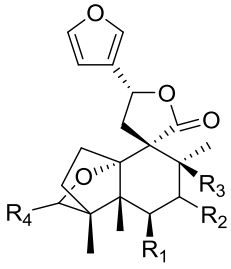


1104-1109

		R		
1104	pyrrhopappolide	H	*Microglossa pyrrhopappa*	*Phytochemistry*, 1990, **29**, 3233-3241
1105	6β-hydroxypyrrhopappolide	OH		
1106	6β-angeloyloxypyrrhopappolide	OAng		
1107	6β-senecioyloxypyrrhopappolide	OSen		
1108	6β-tigloyloxypyrrhopappolide	OTig		
1109	6β-[2-methylbutyryloxy]-pyrrhopappolide	OMeBu		

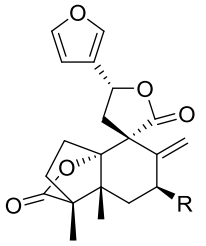


1182

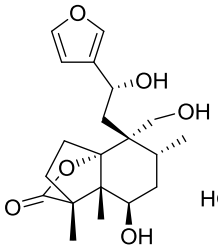


1183-1187

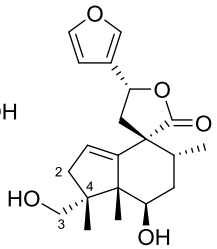
		R1	R2	R3	R4		
1182	7β,8β-epoxyisochiliolide lactone	—	—	—	—	*Microglossa pyrrhopappa*	*Phytochemistry*, 1990, **29**, 3233-3241
1183	6β-angeloyloxyisochiliolide lactone	OAng	H	H	=O		
1184	6β-[2-methylbutyryloxy]-isochiliolide lactone	OMeBu	H	H	=O		
1185	8β-hydroxyisochiliolide lactone	H	H	OH	=O		
1186	isochiliolide lactone	H	H	H	=O		
1187	7β-angeloxyisochiliolide lactone	H	βOAng	βH	=O		



1191 R = H
1192 R = OAc



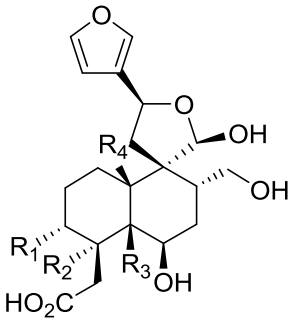
1193



1194

1191	8(17)-dehydroisochiliolide lactone	*Microglossa pyrrhopappa*	*Phytochemistry*, 1990, **29**, 3233-3241
1192	7β-acetoxy-8(17)-dehydroisochiliolide lactone		
1193	6β-hydroxyisochiliolide		
1194	6β-hydroxy-incana-pteroniolide		

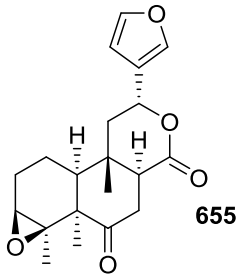
***MUSA* Genus**



791-793

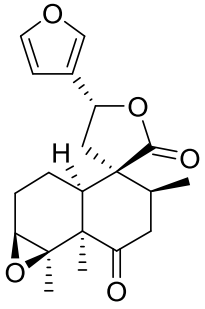
791	musabalbisiane A	OH	CO_2H	CHO	CHO	*Musa balbisiana*	*Phytochemistry*, 1992, **31**, 2173-2175
792	musabalbisiane B	OH	CHO	CO_2H	CH_2OH		
793	musabalbisiane C	OAng	CH_2OH	CH_2OH	CH_2OH		

***NANNOGLOTTIS* Genus**



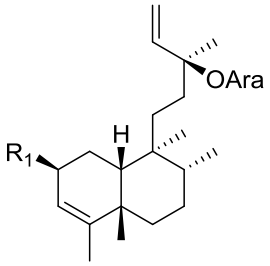
655

655	ravidin A	*Nannoglottis ravida*	*Phytochemistry*, 2004, **65**, 2533-2537



766

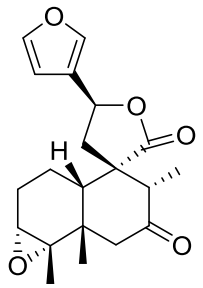
766	ravidin B	*Nannoglottis ravida*	*Phytochemistry*, 2004, **65**, 2533-2537



907-909

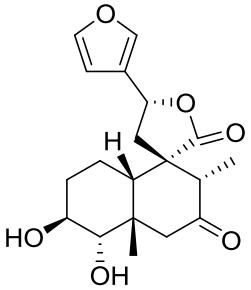
907	(5*S*,8*R*,9*S*,10*R*,13*S*)-10βH-13-*O*-α-L-arabinopyranosyl-2-oxo-17α,19β,20α-trimethyl-3,14-clerodadiene	=O	*Nannoglottis carpesioides*	*Fitoterapia*, 2014, **93**, 39-46
908	(5*S*,8*R*,9*S*,10*R*,13*S*)-10βH-13-*O*-α-L-arabinopyranosyl-17α,19β,20α-trimethyl-3,14-clerodadiene	H		
909	(5*S*,8*R*,9*S*,10*R*,13*S*)-10βH-13-*O*-α-L-arabinopyranosyl-2β-hydroperoxyl-17α,19β,20α-trimethyl-3,14-clerodadiene	OOH		

***NARDOPHYLLUM* Genus**



755

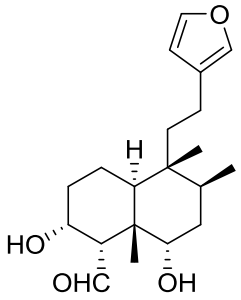
755	—	*Nardophyllum lanantum*	*Phytochemistry*, 1990, **29**, 1227-1230



1061

1061	—	*Nardophyllum lanatum*	*Phytochemistry*, 1990, **29**, 1227-1230

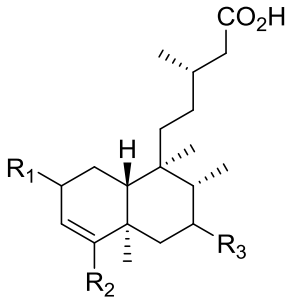
***NEPETA* Genus**



428

428	nepetanal	*Nepeta juncea*	*Magn. Reson. Chem.*, 2009, **47**, 625-627

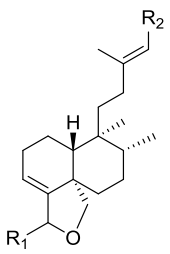
***NUXIA* Genus**



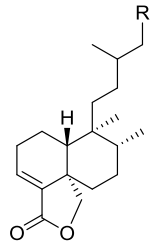
227-230

		R1	R2	R3		
227	(13*S*)-*ent*-7*β*-hydroxy-3-cleroden-15-oic acid	H	Me	αOH	*Nuxia sphaerocephala*	*Phytochemistry*, 2006, **67**, 444-451
228	*ent*-7*β*-hydroxy-2-oxo-3-cleroden-15-oic acid	=O	Me	αOH		
229	*ent*-2,7-dioxo-3-clero-den-15-oic acid	=O	Me	=O		
230	*ent*-18-(*E*)-caffeoyloxy-7β-hydroxy-3-cleroden-15-oic acid	H	CH_2Z_4	αOH		

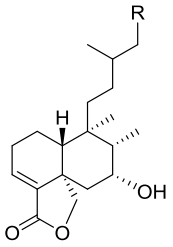
***OLEARIA* Genus**



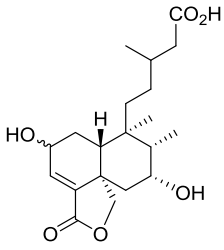
136 R_1 = =O, R_2 = CH_2OMal
137 R_1 = β-OMe, R_2 = CO_2H
138 R_1 = α-OMe, R_2 = CO_2H



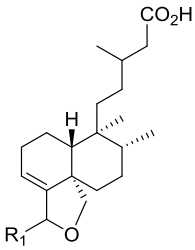
139 R = CO_2H
140 R = CH_2OMal
145 R = CH_2OH



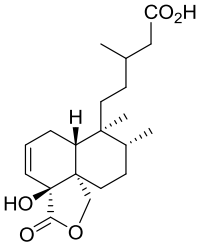
141 R = CO_2H
142 R = CH_2OMal
146 R = CH_2OH



143 C-2α
144 C-2β

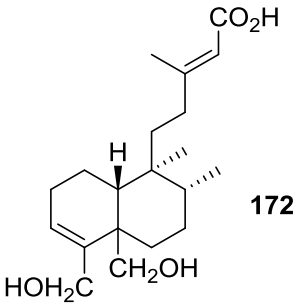


147 R = β-OMe
148 R = α-OMe



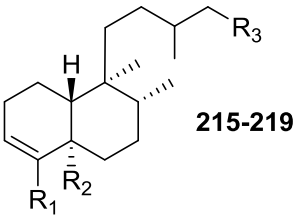
149

136	15-malonyloxy-*ent*-cleroda-3,13*E*-dien-18,19-oIide	*Olearia teretifolia*	*Phytochemistry*, 1992, **31**, 1703-1711
137	18,19-epoxy-18β-methoxy-*ent*-cleroda-3,13*E*-dien-l5-oic acid		
138	18,19-epoxy-18α-methoxy-*ent*-cleroda-3,13*E*-dien-l5-oic acid		
139	*ent*-clerod-3-en-15-oic acid-18,19-olide		
140	15-malonyloxy-*ent*-clerod-3-en-18,19-olide		
141	15-malonyloxy-7*α*-hydroxy-*ent*-clerod-3-en-l8,l9-olide		
142	7*α*-hydroxy-*ent*-clerod-3-en-15-oic acid-18,19-olide		
143	2*α*-hydroxy-*ent*-cleroda-3-en-15-oic acid-18,19-olide		
144	2*β*-hydroxy-*ent*-clerod-3-en-15-oic acid-18,19-olide		
145	15-hydroxy-*ent*-clerod-3-en-18,19-olide		
146	7*α*,l5-dihydroxy-*ent*-clerod-3-en-18,19-olide		
147	18,19-epoxy-l8*β*-methoxy-*ent*-clerod-3-en-15-oic acid		
148	18,19-epoxy-18*α*-methoxy-*ent*-clerod-3-en-l5-oic acid		
149	4*β*-hydroxy-*ent*-clerod-2-en-15-oic acid-18,19-olide		



172

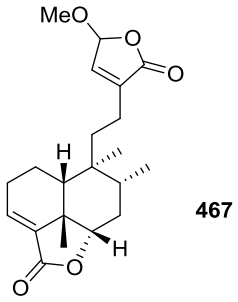
172	18,19-dihydroxy-*ent*-cleroda-3,13*E*-dien-15-oic acid	*Olearia teretifolia*	*Phytochemistry*, 1992, **31**, 1703-1711



215-219

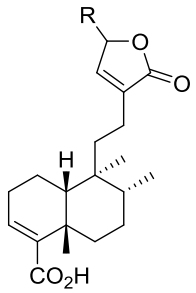
		R1	R2	R3		
215	19-hydroxykovalic acid	CO_2H	CH_2OH	CO_2H	*Olearia teretifolia*	*Phytochemistry*, 1992, **31**, 1703-1711
216	18-oxo-19-senecioyl-oxy-*ent*-clerod-3-en-15-oic acid	CHO	CH_2OSen	CO_2H		
217	18-oxo-*ent*-clerod-3-en-15,19-dioic acid	CHO	CO_2H	CO_2H		
218	15,19-dihydroxy-*ent*-clerod-3-en-18-oic acid	CO_2H	CH_2OH	CH_2OH		
219	15,18,19-trihydroxy-*ent*-clerod-3-ene	CH_2OH	CH_2OH	CH_2OH		

***OTOSTEGIA* Genus**



467

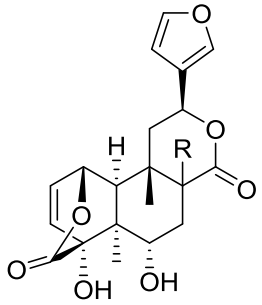
467	limbatolide A	*Otostegia limbata*	*Chem. Pharm. Bull.*, 2005, **53**, 378-381



533-534

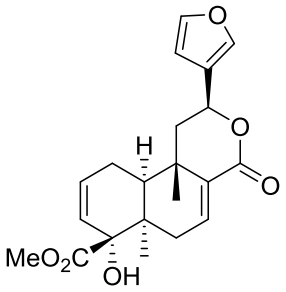
533	limbatolide B	OMe	*Otostegia limbata*	*Chem. Pharm. Bull.*, 2005, **53**, 378-381
534	limbatolide C	H		

***PENIANTHUS* Genus**



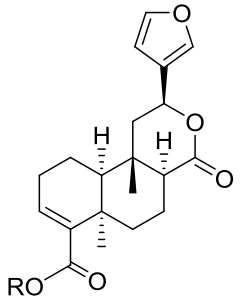
644-645

645	6-hydroxycolumbin	βH	*Penianthus zenkeri*	*Phytochemistry*, 1991, **30**, 1957-1962
646	6-hydroxyisocolumbin	αH		



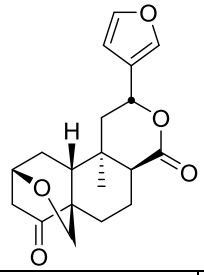
666

666	penianthic acid methyl ester	*Penianthus zenkeri*	*Phytochemistry*, 1991, **30**, 1957-1962



958-959

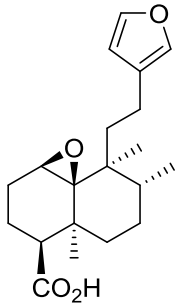
958	floribundic acid glucoside	Glc	*Penianthus zenkeri*	*Phytochemistry*, 1991, **30**, 1957-1962
959	zenkerin	-Xyl-(1→6)-Glc		



1060

1060	peniankerine	*Penianthus zenkeri*	*Phytochemistry*, 1997, **46**, 165-167

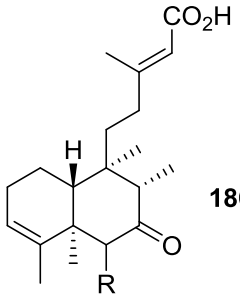
***PHLOMIS* Genus**



376

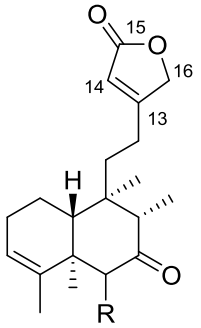
376	phlomeoic acid	*Phlomis bracteosa*	*Nat. Prod. Commun.*, 2011, **6**, 171-173

***PLATYCHAETE* Genus**



186-187

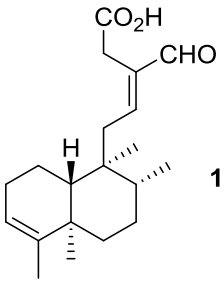
186	7-oxo-*ent*-clerodan-3,13*E*-dien-15-oic acid	H	*Platychaete aucheri*	*Phytochemistry*, 1990, **29**, 985-987
187	6*α*-hydroxy-7-oxo-*ent*-clerodan-3,13*E*- dien-l5-oic acid	αOH		



553-554

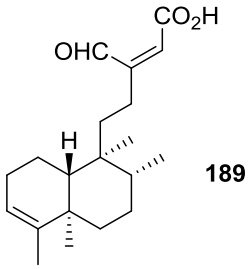
553	7-oxo-*ent*-clerodan-3,13-dien-15,16-olide	H	*Platychaete aucheri*	*Phytochemistry*, 1990, **29**, 985-987
554	6-hydroxy-7-oxo-*ent*-clerodane-3,13-dien-l5,16-olide	αOH		

***POLYALTHIA* Genus**



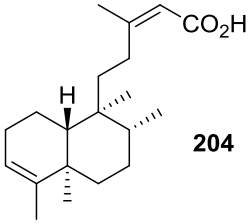
171

171	3,12*E*-kolavadien-15-oic acid-16-al	*Polyalthia viridis*	*Phytochemistry*, 1993, **34**, 457-460



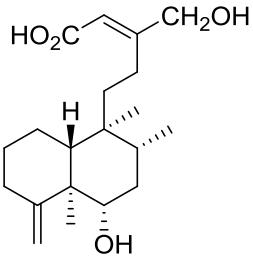
189

189	polyalthialdoic acid	*Polyalthia longifolia*	*Planta Med.*, 1991, **57**, 380-383



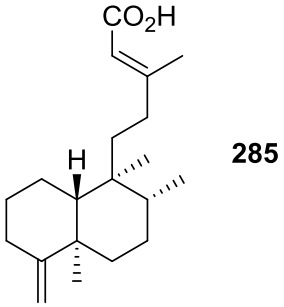
204

204	16-oxo-cleroda-3,13(14)*E*-diene-15-oic acid	*Polyalthia longifolia*	*Fitoterapia*, 2005, **76**, 336-339



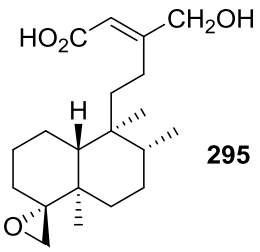
281

281	6α,16-dihydroxycleroda-4(18),13-dien-15-oic acid	*Polyalthia longifolia*	*J. Nat. Prod.*, 2009, **72**, 1960-1963



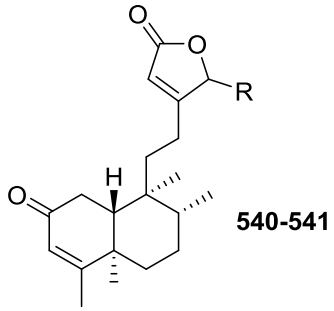
285

285	cleroda-4(18),13(14)*E*-dien-15-oic acid	*Polyalthia cheliensis*	*Phytochemistry*, 1995, **39**, 447-448



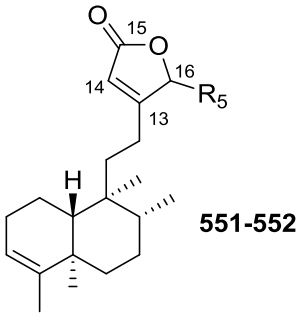
295

295	4α,18*β*-epoxy-16-hydroxyclerod-13-en-15-oic acid	*Polyalthia longifolia*	*J. Nat. Prod.*, 2009, **72**, 1960-1963



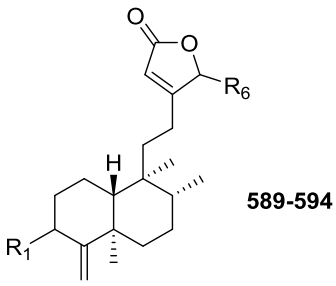
540-541

540	16(*R*)-3,13*Z*-kolavadien-16,15-olide-2-one	αOH	*Polyalthia viridis*	*Phytochemistry*, 1990, **29**, 653-655
541	16(*S*)-3,13*Z*-kolavadien-16,15-olide-2-one	βOH		



551-552

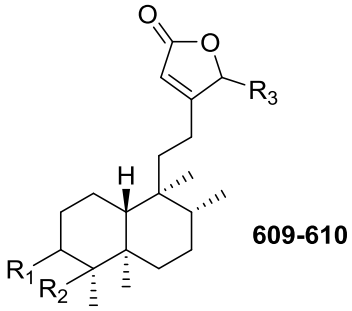
551	16α-hydroxy-cleroda-3,13*Z*-diene-15,16-olide	αOH	*Polyalthia longifolia*	*Fitoterapia*, 2005, **76**, 336-339
552	16α-methoxycleroda-3,13*Z*-dien-16,15-olide	αOMe		*J. Nat. Prod.*, 1992, **55**, 256-258



589-594

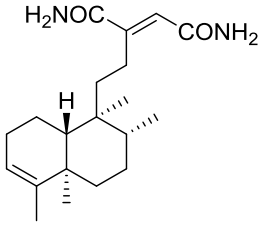
		R1	R2		
589	(-)-3α,16α-dihydroxycleroda-4(18),13(14)*Z*-dien-15,16-olide	αOH	αOH	*Polyalthia longifolia*	*Nat. Prod. Res.*, 2010, **24**, 1687-1694

590	3β,16α-dihydroxycleroda-4(18),13(14)*Z*-dien-15,16-olide	βOH	αOH	*Polyalthia barnesii*	*Phytochemistry* 1994, **37**, 1659-1662
591	cleroda-4(18),13-dien-16,15-olide	H	H	*Polyalthia longifolia*	*Phytochemistry* 1995, **38**, 189-194
592	16-hydroxycleroda-4(18),13-dien-16,15-olide	H	OH (α/β 1:1)		
593	—	H	βOH		*Pharmazie*, 1995, **50**, 227-228
594	16(*R*&*S*)-methoxycleroda-4(18),13-dien-15,16-olide	H	OMe	*Polyalthia longifolia* var. *pendula*	*Molecules*, 2014, **19**, 2049-2060

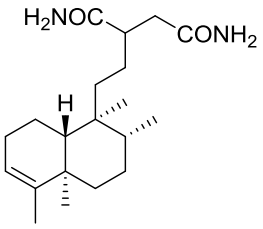


609-610

		R1	R2	R3		
609	4β,16α-dihydroxycleroda-13(14)*Z*-en-15,16-olide	H	βOH	αOH	*Polyalthia barnesii*	*Phytochemistry* 1994, **37**, 1659-1662
610	16-hydroxycleroda-13-ene-15,16-olide-3-one	=O	H	OH	*Polyalthia longifolia* var. *pendula*	*Planta Med.*, 2006, **72**, 1344-1347

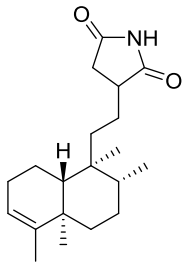


982

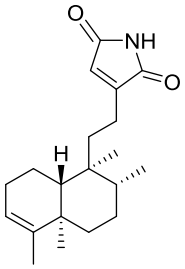


983

982	cleroda-3,13(14)*E*-diene-15,16-diamide	*Polyalthia longifolia*	*Phytochem. Lett.*, 2015, **11**, 28-31
983	cleroda-3-ene-15,16-diamide		

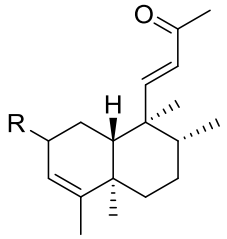


1013



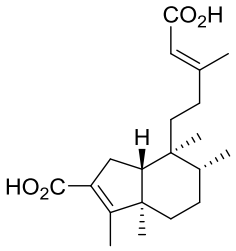
1014

1013	cleroda-3-ene yrrolidine-15,16-dione	*Polyalthia longifolia*	*Phytochem. Lett.*, 2015, **11**, 28-31
1014	cleroda-3-ene yrrole-15,16-dione		

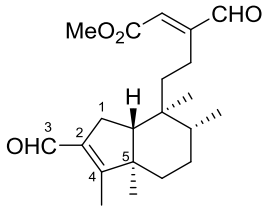


1086,1087

1086	2-oxo-14,15-bisnor-3,11*E*-kolavadien-13-one	=O	*Polyalthia simiarum*	*Nat. Prod. Commun.*, 2010, **5**, 1543-1546
1087	14,15-bisnor-3,11*E*-kolavadien-13-one	H	*Polyalthia viridis*	*Phytochemistry*, 1990, **29**, 653-655

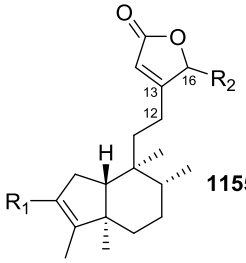


1148



1149

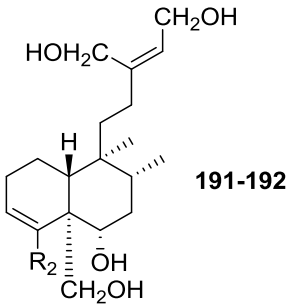
1148	(4→2)-*abeo*-cleroda-2,13*E*-dien-2,14-dioic acid	*Polyalthia longifolia var. pendula*	*Molecules*, 2014, **19**, 2049-2060
1149	(4→2)-*abeo*-2,13-diformyl-cleroda-2,13*E*-dien-14-oic acid		



1155-1156

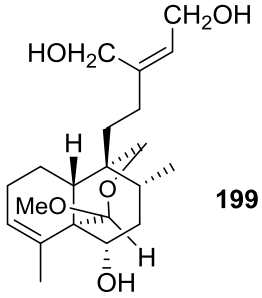
		R1	R2		
1155	(4→2)-*abeo*-16(R&S)-2,13*Z*-kolavadien-16,15-olide-3-al	CHO	βOH	*Polyalthia viridis*	*Phytochemistry*, 1990, **29**, 653-655
1156	polylongifoliaic A	CO_2H	OH	*Polyalthia longifolia* var. *pendula*	*RSC Advances*, 2014, **4**, 23707-23712

***PORTULACA* Genus**



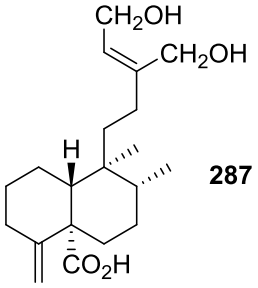
191-192

191	pilosanol A	Me	*Portulaca pilosa*	*Phytochemistry*, 1991, **30**, 4075-4077
192	pilosanol B	CH_2OH		



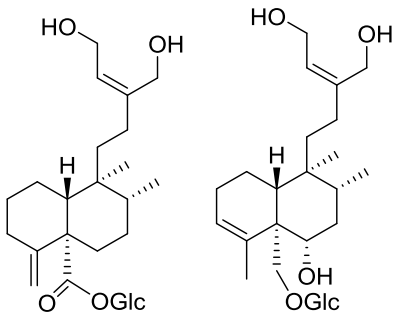
199

199	portulene acetal	*Portulaca grandiflora*	*J. Nat. Prod.*, 1997, **60**, 912-914



287

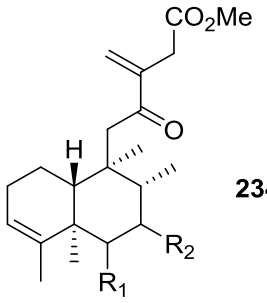
287	porwenin A	*Portulaca okinawensis*	*J. Nat. Prod.*, 2001, **64**, 804-805



918 **919**

918	porwenin B	*Portulaca okinawensis*	*J. Nat. Prod.*, 2001, **64**, 804-805
919	pilosanol C	*Portulaca pilosa*	*Phytochemistry*, 1991, **30**, 4075-4077

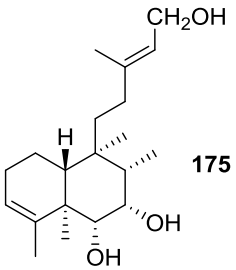
***PREMNA* Genus**



234-236

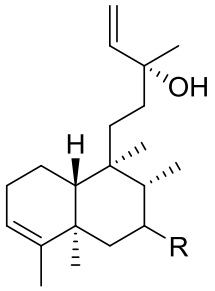
		R1	R2		
234	premnone A	αOCin (*trans*)	βOH	*Premna tomentosa*	*Phytochemistry*, 2006, **67**, 1243–1248
235	premnone B	αOCin (*cis*)	βOH		
236	premnone C	αOH	βOCin (*trans*)		

***PTYCHOPETALUM* Genus**



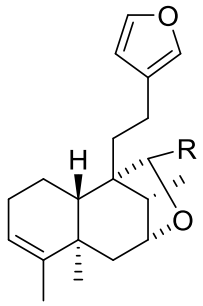
175

175	6*α*,7*α*-dihydroxykolavenol	*Ptychopetalum olacoides*	*Nat. Prod. Commun.*, 2011, **6**, 327-332



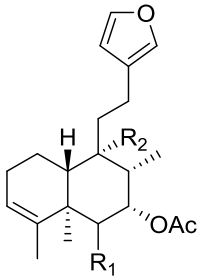
237-238

237	7-oxo-kolavelool	=O	*Ptychopetalum olacoides*	*Nat. Prod. Commun.*, 2011, **6**, 327-332
238	7*α*-hydroxykolavelool	αOH		



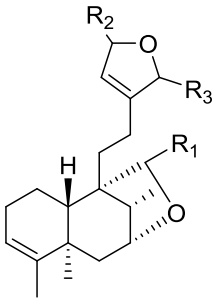
327-329

327	ptychonolide	=O	*Ptychopetalum olacoides*	*J. Nat. Prod.*, 2008, **71**, 1760-1763
328	20-*O*-methylptychonal acetal	βOMe		
329	ptychonal hemiacetal	βOH		



380, 382-383

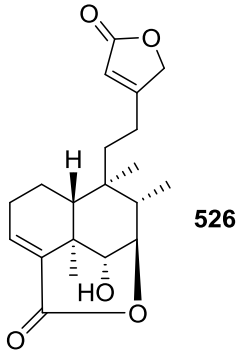
		R1	R2		
380	ptychonal	H	CHO	*Ptychopetalum olacoides*	*J. Nat. Prod.*, 2008, **71**, 1760-1763
382	6*α*,7*α*-dihydroxyannonene	αOH	Me	*Ptychopetalum olacoides*	*Bioorg. Med. Chem. Lett.*, 2009, **19**, 882–886
383	7*α*,20-dihydroxyannonene	H	CH_2OH		



521-524

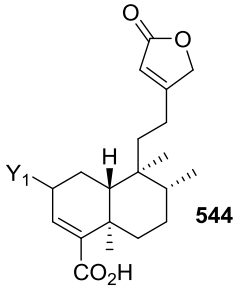
		R1	R2	R3		
521	ptycholide I	=O	OMe	=O	*Ptychopetalum olacoides*	*Nat. Prod. Commun.*, 2011, **6**, 327-332
522	ptycholide II	OMe	OMe	=O		
523	ptycholide III	OMe	H	=O		
524	ptycholide IV	OMe	=O	OH		

***PULICARIA* Genus**

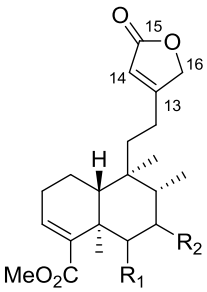


526

526	6α-hydroxycleroda-3,13-dien-15(16),4(7)-diolide	*Pulicaria wightiana*	*Helv. Chim. Acta.*, 2008, **91**, 2081-2088



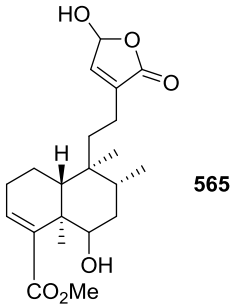
544



545-547

		R1	R2		
544	2β-(2-methylbutanoyl)cleroda-3,13-dien-15,16-olid-18-oic acid	—	—	*Pulicaria wightiana*	*Helv. Chim. Acta.*, 2008, **91**, 2081-2088
545	methyl 6-oxocleroda-3,13-dien-15,16-olid-18-	=O	H		

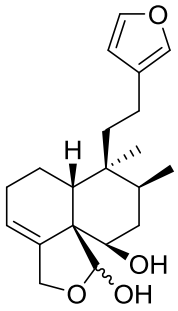
	oate				
546	methyl 6α-hydroxycleroda-3,13-dien-15,16-olid-18-oate	αOH	H		
547	methyl 6α,7α-dihydroxycleroda-3,13-dien-15,16-olid-18-oate	αOH	αOH		



565

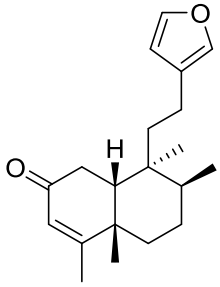
565	methyl 6,15-dihydroxycleroda-3,13-dien-16,15-olid-18-oate	*Pulicaria wightiana*	*Helv. Chim. Acta.*, 2008, **91**, 2081-2088

***RASPAILIA* Genus**



301

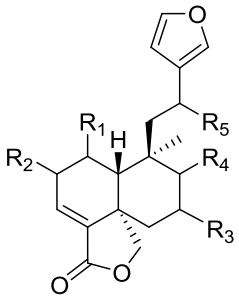
301	raspailol	*Raspailia* species	*Phytochemistry*, 1995, **39**, 443-445



397

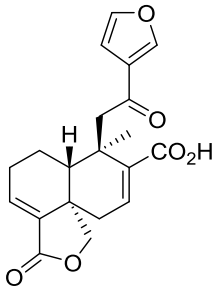
397	raspailenone	*Raspailia* species	*Phytochemistry*, 1995, **39**, 443-445

***SALVIA* Genus**



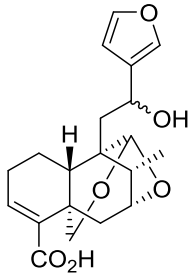
298-300

		R1	R2	R3	R4	R5		
298	2*α*-hydroxy-7*α*-acetoxy-12-oxo-15:16-epoxy-neoclerodan-3, 13(16),14-trien18:19-olide	H	OH	αOAc	αMe	=O	*Salvia urolepis*	*Phytochemistry*, 1995, **38**, 171-174
299	—	H	H	βOAc	αMe	OH	*Salvia miniata*	*Phytochemistry*, 2011, **72**, 265-275
300	*ent*-(5*R*,9*S*,l0*S*)-7*S*-acetoxy-15,16-epoxy-l*S*,2*S*,12ζ-trihydroxy-cleroda-3,13(16),14-trien-18,19-olide	αOH	βOH	αOAc	βMe	OH	*Salvia haenke*	*Tetrahedron*, 1997, **53**, 14719-14728



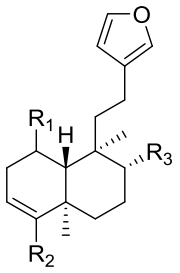
304

304	dugesin G	*Salvia dugesii*	*Nat. Prod. Bioprospect.*, 2011, **1**, 81-86



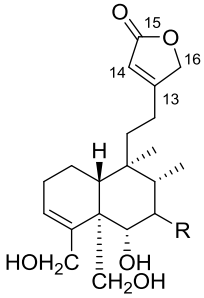
319

319	—	*Salvia miniata*	*Phytochemistry*, 2011, **72**, 265-275



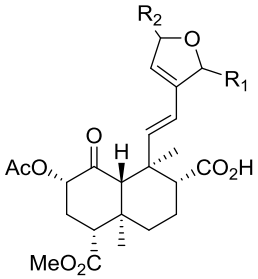
405-409

		R1	R2	R3		
405	divinatorin A	αOH	CO_2H	Me	*Salvia divinorum*	*J. Nat. Prod.*, 2003, **66**, 1242-1244
406	divinatorin B	αOH	CO_2Me	CH_2OH		
407	divinatorin C	H	CO_2H	CH_2OAc		
408	(-)-hardwickiic acid	H	CO_2H	Me		
409	divinatorin D	αOH	CO_2Me	CH_2OAc	*Salvia divinorum*	*Bioorg. Med. Chem.*, 2005, **13**, 5635-5639
410	divinatorin E	αOH	CO_2Me	CHO		



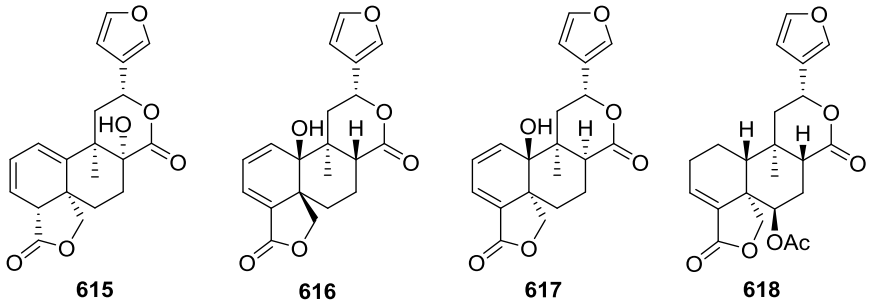
555-556

555	thymonin	H	*Salvia thymoides*	*Phytochemistry*, 1997, **46**, 1249-1254
556	7β-hydroxythymonin	βOH		

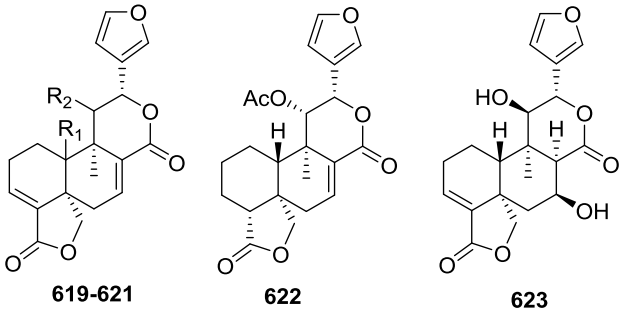


587,588

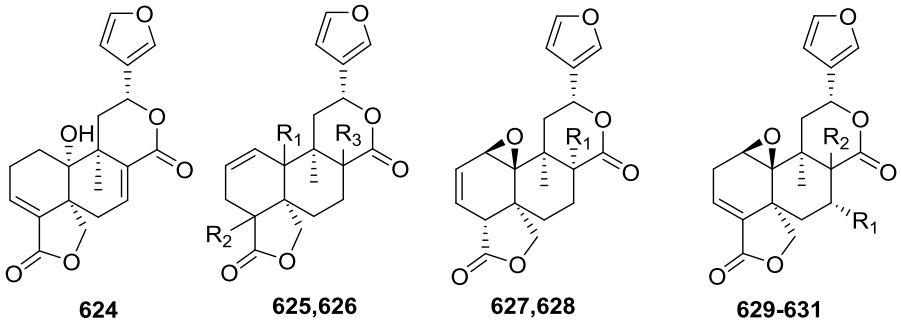
587	salvidivin C	OH	=O	*Salvia divinorum*	*J. Nat. Prod.*, 2006, **69**, 1782-1786
588	salvidivin D	=O	OH		



615	tehuanin D	*Salvia herbacea*	*J. Nat. Prod.*, 2012, **75**, 951-958
616	salvimicrophyllin C	*Salvia microphylla*	*J. Nat. Prod.*, 2014, **77**, 1088-1092
617	salvimicrophyllin D		
618	dugesin E	*Salvia dugesii*	*Nat. Prod. Bioprospect.*, 2011, **1**, 81-86

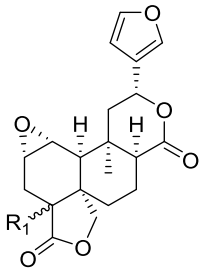


619	*ent*-(5*R*,9*R*)-15,16-epoxy-l0*S*-hydroxy-cleroda-3,13(16),14-triene-17,12*S*;18,19-diolide	αOH	H	*Salvia haenkei*	*Tetrahedron*, 1997, **53**, 14719-14728
620	—	βH	αOH	*Salvia miniata*	*Phytochemistry*, 2011, **72**, 265-275
621	—	βOH	H		
622	—	—	—		
623	—	—	—		



624	*ent*-(5*R*,9*R*)-15,16-epoxy-10*S*-hydroxycleroda-3,7,13(16),14-tetraene-17,12*S*,18,19-diolide	—	—	—	*Salvia haenkei*	*Tetrahedron*, 1997, **53**, 14719-14728
625	*ent*-(4*S*,5*R*,9*S*,10*R*)-15,16-epoxycleroda-1,13(16),14-trien-17,12*S*;18,19-diolide	αH	αH	αH		
626	infuscatin	βOH	βOH	αOH	*Salvia infuscata*	*Phytochem. Anal.*, 1994, **5**, 302-304
627	tehuanin E	OH	—	—	*Salvia*	*J. Nat. Prod.*, 2012,

628	1β,10β-epoxysalviarin	H	—	—	*herbacea*	**75**, 951-958
629	tehuanin F	OH	βH	—		
630	tehuanin G	H	αOH	—		
631	tehuanin H	H	H	—		



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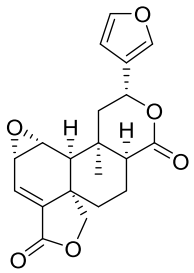

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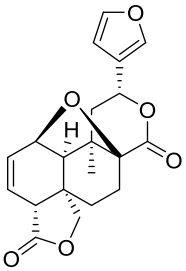

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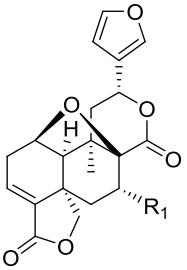
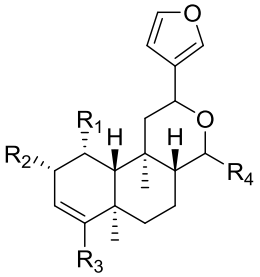


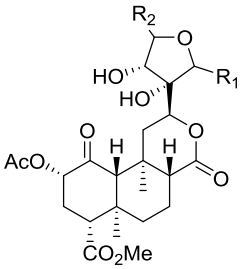
636,637

632	lα,2α-epoxy-3,4α-dihydrolinearolactone	αH	*Salvia reptans*	*Phytochemistry*, 1991, **30**, 2335-2338
633	polystachyne D	βH	*Salvia polystachya*	*Phytochemistry*, 2000, **53**, 103-109
634	polystachyne E	—		
635	tehuanin A	—	*Salvia herbacea*	*J. Nat. Prod.*, 2012, **75**, 951-958
636	tehuanin B	H		
637	tehuanin C	OH		



659-665

659	salvinorin C	OAc	OAc	CO_2Me	=O	*Salvia divinorum*	*Org. Lett.*, 2001, **3**, 3935-3937
660	salvinorin D	OAc	OH	CO_2Me	=O		*J. Nat. Prod.*, 2003, **66**, 703-705
661	salvinorin E	OH	OAc	CO_2Me	=O		
662	salvinorin F	OH	H	CO_2Me	=O		
663	salvinorin H	OH	OH	CO_2Me	=O		*J. Nat. Prod.*, 2006, **69**, 1782-1786
664	salvinorin I	OH	OH	CO_2Me	βOH		
665	salvinorin J	OH	OAc	CO_2Me	α,β-OH		*J. Nat. Prod.*, 2009, **72**, 1361-1363



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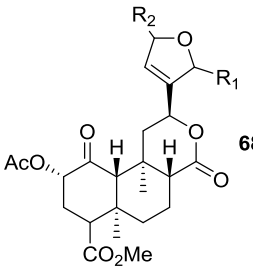
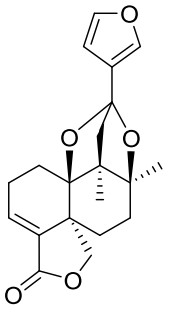


686,687

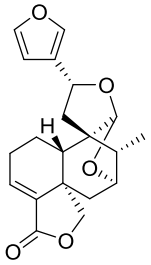
684	salvinicin A	βOMe	βOMe	*Salvia divinorum*	*Org. Lett.*, 2005, **7**, 3017-3020
685	salvinicin B	αOMe	αOMe		

686	salvidivin A	=O	OH		*J. Nat. Prod.*, 2006, **69**, 1782-1786
687	salvidivin B	OH	=O		



691

691	salvianduline D	*Salvia miniata*	*Phytochemistry*, 2011, **72**, 265-275



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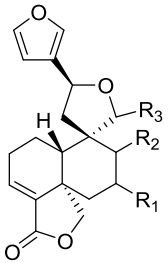

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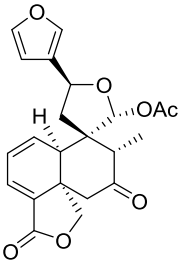

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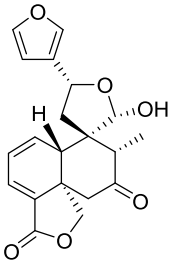
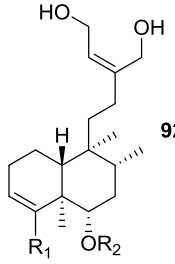
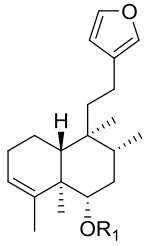


696

692	*trans*-1,2-dihydrosalvifaricin	—	—	—	*Salvia fulgens*	*J. Nat. Med.*, 2006, **60**, 58-63
693	—	=O	βMe	αOAc	*Salvia miniata*	*Phytochemistry*, 2011, **72**, 265-275
694	—	αOH	αMe	βOAc		
695	salvifolin	—	—	—	*Salvia tiliaefolia*	*J. Org. Chem.*, 1990, **55**, 3522-3525
696	dugesin F	—	—	—	*Salvia dugesii*	*Nat. Prod. Bioprospect.*, 2011, **1**, 81-86

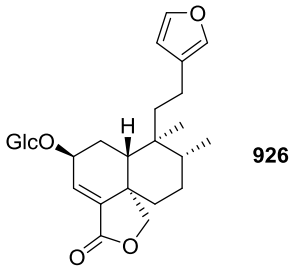


920-922



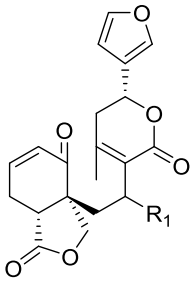
923

920	salvigreside A	Me	β-D-Glc	*Salvia greggii*	*Phytochemistry*, 2004, **65**, 2577-2581
921	salvigreside B	Me	6-*O*-acetyl-β-D-Glc		
922	salvigreside C	CH_2OH	6-*O*-acetyl-β-D-Glc		
923	salvigreside D	6-*O*-acetyl-β-D-Glc	—		



926

926	amarisolide	*Salvia amarissima*	*Phytochemistry*, 1996, **42**, 1105-1108



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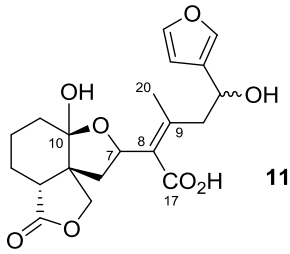
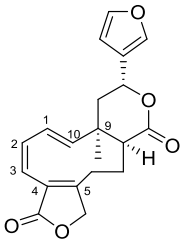


1111

1102	salvianduline A	αOAc	*Salvia lavanduloides*	*Phytochemistry*, 1991, **30**, 3357-3360
1103	salvianduline B	βOH		
1111	—	—	*Salvia miniata*	*Phytochemistry*, 2011, **72**, 265-275



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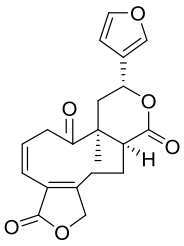
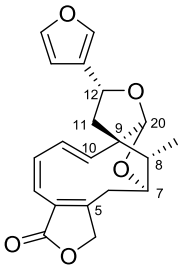


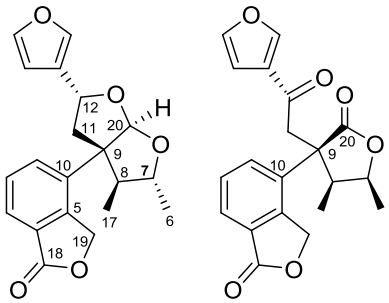
1123

1122	salvimicrophyllin A	*Salvia microphylla*	*J. Nat. Prod.*, 2014, **77**, 1088-1092
1123	salvimicrophyllin B		



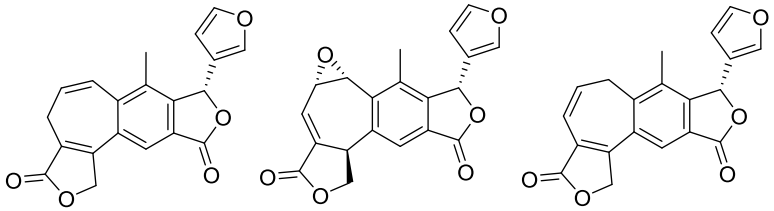
1136

1136	tonalensin	*Salvia tonalensis*	*J. Chem. Crystallogr.*, 1996, **26**, 239-242



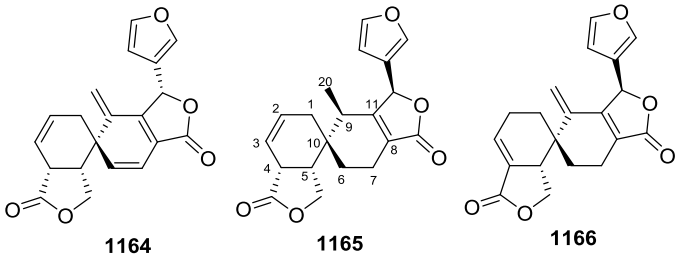
1140 **1141**

1140	rhyacophiline	*Salvia rhyacophila*	*Tetrahedron*, 1991, **47**, 7199-7208
1141	salvireptanolide	*Salvia reptans*	*Phytochemistry*, 1991, **30**, 2335-2338



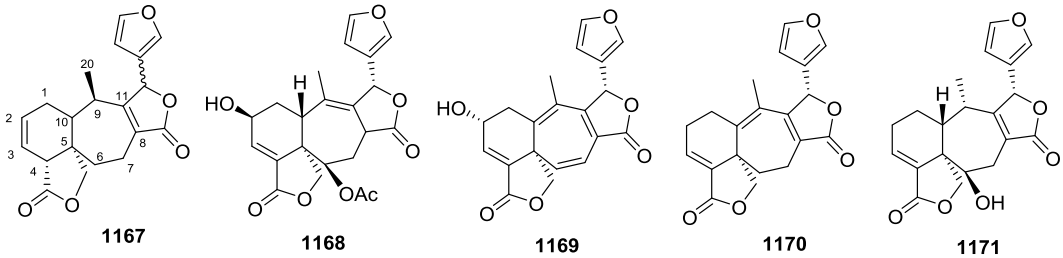
1161 **1162** **1163**

1161	isosalvipuberulin	*Salvia leucantha*	*J. Nat. Med.*, 2006, **60**, 206-209
1162	salvileucantholide		*Tetrahedron*, 1994, **50**, 11593-11600
1163	dugesin B	*Salvia dugesii*	*Helv. Chim. Acta*, 2004, **87**, 949-955



1164 **1165** **1166**

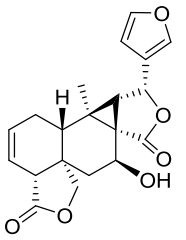
1164	spiroleucantholide	*Salvia leucantha*	*J. Nat. Med.*, 2006, **60**, 206-209
1165	salvioccidentalin	*Salvia occidentalis*	*Molecules*, 2011, **16**, 9109-9115
1166	dugesin C	*Salvia dugesii*	*Nat. Prod. Bioprospect.*, 2011, **1**, 81-86



1167 **1168** **1169** **1170** **1171**

1167	blepharolide B	*Salvia blepharophylla*	*Phytochemistry*, 1999, **52**, 1535-1540
1168	2β-hydroxysalvigenolide	*Salvia xalapensis*	*J. Nat. Prod.*, 2005, **68**, 787-790

1169	salviandulin E	*Salvia leucantha*	*Tetrahedron*, 1994, **50**, 11593-11600
1170	dugesin A	*Salvia dugesii*	*Helv. Chim. Acta*, 2004, **87**, 949-955
1171	dugesin D		*Nat. Prod. Bioprospect.*, 2011, **1**, 81-86



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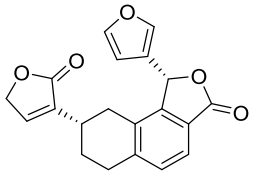

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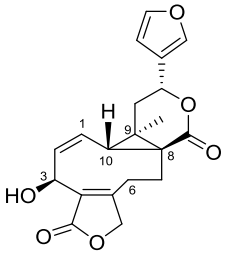
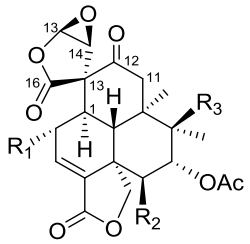


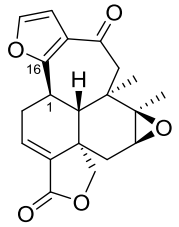
1180

1172	blepharolide A	*Salvia blepharophylla*	*Phytochemistry*, 1999, **52**, 1535-1540
1173	tilifodiolide	*Salvia dugesii*	*J. Org. Chem.*, 1990, **55**, 3522-3525
1180	microphyllandiolide	*Salvia microphylla*	*Org. Lett.*, 2013, **15**, 3210-3213



1207-1210

		R1	R2	R3		
1207	salvilanguiduline A	H	H	H	*Salvia languidula*	*Tetrahedron Lett.*, 1992, **33**, 581-584
1208	salvilanguiduline B	OH	H	H		
1209	salvilanguiduline C	H	OH	H		
1210	salvilanguiduline D	H	H	OH		



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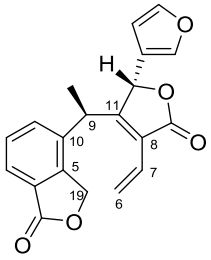

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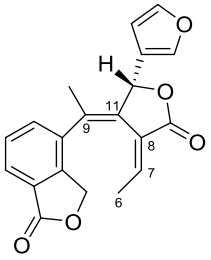
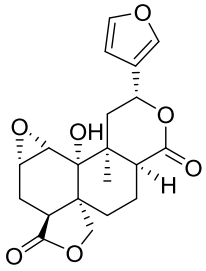


1224

1222	salvixalapoxide	*Salvia xalapensis*	*J. Nat. Prod.*, 2005, **68**, 787-790
1223	salvixalapadiene		
1224	isosalvixalapadiene		



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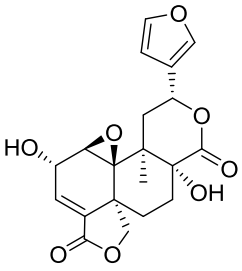

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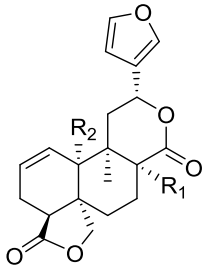
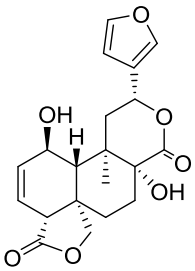


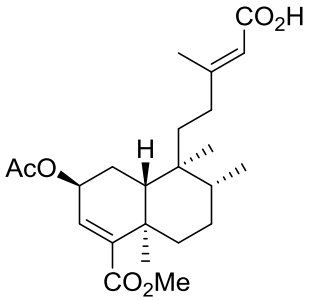
1302 $R_1 = R_2 = OH$
1303 $R_1 = H$, $R_2 = OH$
1304 $R_1 = OH$, $R_2 = H$



1305

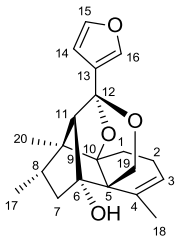
1300	sepulturin A	*Salvia shannoni*	*J. Nat. Prod.*, 2013, **76**, 1970-1975
1301	sepulturin B		
1302	sepulturin C		
1303	sepulturin D		
1304	sepulturin E		
1305	sepulturin F		

***SCAPANIA* Genus**

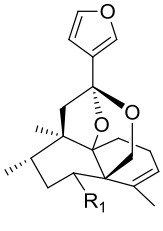


176

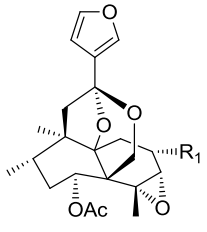
176	2*β*-acetoxy-19-carboxymethyl-cleroda-3,13-dien-15-oic acid	*Scapania bolandeli*	*Phytochemistry*, 1999, **52**, 1551-1553



343



344-348



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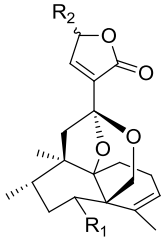
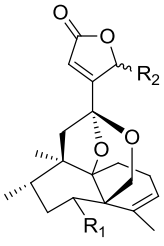


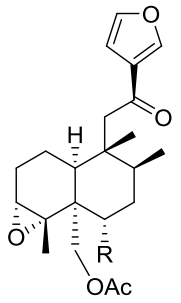
351-353



354,355

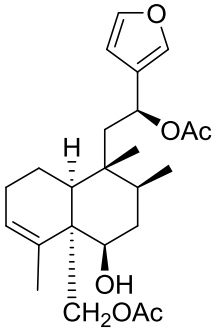
		R1	R2		
343	scaparvin A	—	—	*Scapania parva*	*Org. Lett.*, 2010, **12**, 4404-4407
344	scaparvin B	=O	—		

345	scaparvin C	αOH	—		
346	scaparvin D	αOAc	—		
347	parvitexin A	H	—	*Scapania parvitexta*	*Biosci. Biotechnol. Biochem.*, 2007, **71**, 2751-2758
348	parvitexin B	βOAc	—		
349	parvitexin C	βOH	—		
350	scaparvin E	OAc	—	*Scapania parva*	*Org. Lett.*, 2010, **12**, 4404-4407
351	stephanialide A	=O	OH	*Scapania stephanii*	*Phytochemistry*, 2014, **105**, 85-91
352	stephanialide B	βOH	OH		
353	stephanialide C	βOAc	OH		
354	stephanialide D	=O	OH		
355	stephanialide E	βOAc	OH		



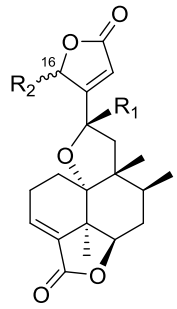
356,357

356	parvitexin D	OAc	*Scapania parvitexta*	*Biosci. Biotechnol. Biochem.*, 2007, **71**, 2751-2758
357	parvitexin E	OH		



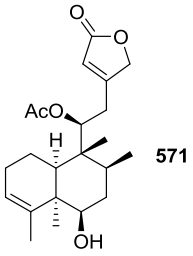
403

403	scaparvin F	*Scapania parva*	*Phytochem. Lett.*, 2012, **5**, 535–540

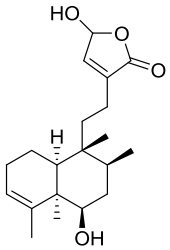


478-480

		R1	R2		
478	ciliatolide B	OEt	OH	*Scapania ciliata*	*Chem. Biodivers.*, 2013, **10**, 1606-1612
479	ciliatolide C	OMe	OH		
480	ciliatolide D	OEt	OEt		

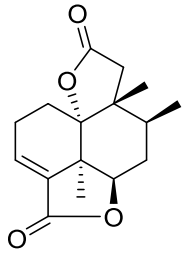


571



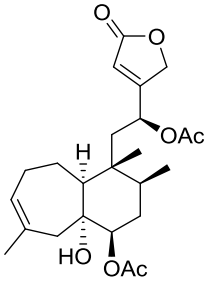
572

571	scapanialide A	*Scapania parva*	*Phytochem. Lett.*, 2012, **5**, 535–540
572	scapanialide C		



1094

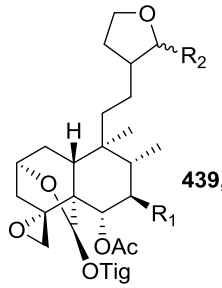
1094	ciliatolide A	*Scapania ciliata*	*Chem. Biodivers.*, 2013, **10**, 1606-1612



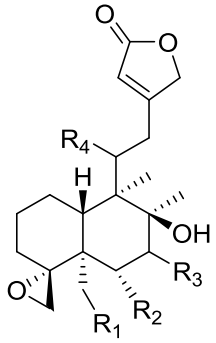
1160

1160	scapanialide B	*Scapania parva*	*Phytochem. Lett.*, 2012, **5**, 535–540

***SCUTELLARIA* Genus**



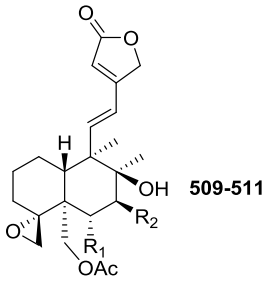
439	scutegalin B	OH	βOH	*Scutellaria galericulata*	*Phytochemistry*, 1993, **33**, 309-315, *Phytochemistry*, 1996, **41**, 247-253
440	scutegalin C	OTig	OH		



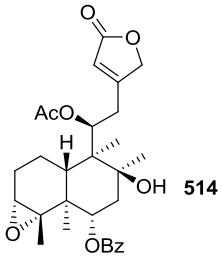
481-484, 486, 496-505

		R1	R2	R3	R4		
481	scutorientalin C	CH_2OH	OiBu	H	βOAc	*Scutellaria orientalis*	*Phytochemistry*, 1996, **43**, 173-178
482	scutalpin H	CH_2OAc	Y_1	H	βOAc	*Scutellaria alpina*	*Phytochemistry*, 1995, **38**, 181-187
483	scutalpin I	CH_2OAc	OBz	H	βOAc		
484	scutalpin L	CH_2OAc	OBz	βOBz	H		
486	scutalpin N	CH_2OAc	OBz	βOBz	H	*Scutellaria alpine*	*Phytochemistry*, 1998, **49**, 2449-2452
496	(4*S*,11*S*)-11-acetoxy-8β,19-dihydroxy-6α-tigloyloxy-4,18-epoxy-*neo*-clerod-13-en-15,16-olide	CH_2OH	OTig	H	OAc	*Scutellaria alpina*	*Yakugaku Zasshi*, 1994, **114**, 264-271, *Phytochemistry*, 1993, **34**, 1589-1594
497	scutalpin C	CH_2OAc	OTig	H	βOH		
498	scupolin A	CH_2OH	Y_1	H	βOAc	*Scutellaria polyodon*	*J. Nat. Prod.*, 1997, **60**, 1229-1235
499	scupolin B	CH_2OAc	OAc	H	βOAc		
500	scupolin C	CH_2OBz	OBz	H	βOAc		
501	scupolin D	CH_2OH	OH	βY_1	βOAc		
502	scupolin E	CH_2OH	Y_1	βOH	βOAc		
503	scupolin F	CO_2H	Y_1	H	H		
504	scutorientalin E	CH_2OAc	OCin	βOAc	H	*Scutellaria orientalis*	*Phytochemistry* 1997, **46**, 587-589

505	hastifolin A	Me	OCin	H	H	*Scutellaria hastifolia*	*Phytochemistry*, 2010, **71**, 2087-2091

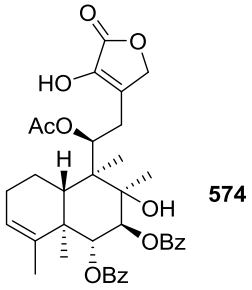


509-511



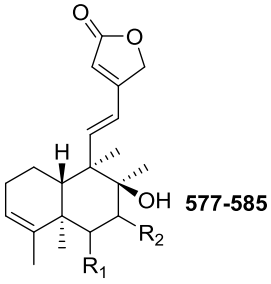
514

		R1	R2		
509	(4*S*)-19-acetoxy-8β-hydroxy-6α-tigloyloxy-4,18-epoxy-*neo*-cleroda-11,13-dien-15,16-olide	OTig	H	*Scutellaria alpina*	*Yakugaku Zasshi*, 1994, **114**, 264-271
510	scutalpin J	OBz	H		*Phytochemistry*, 1995, **38**, 181-187
511	scutalpin K	OBz	OBz		
514	scuterivulactone A	--	--	*Scutellaria rivularis*	*Chem. Pharm. Bull.*, 1997, **45**, 152-160

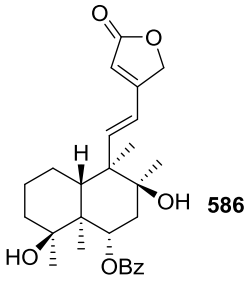


574

574	scutebata A	*Scutellaria barbata*	*J. Nat. Prod.*, 2010, **73**, 233-236



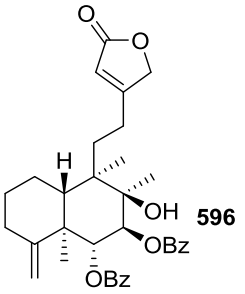
577-585



586

		R1	R2		
577	barbatin C	αOH	βOH	*Scutellaria barbata*	*J. Integr. Plant Biol.*, 2008, **50**, 699-702, *Fitoterapia*, 2010, **81**, 737-741, *Planta Med.*, 2011, **77**, 1536-1541, *Phytochemistry*, 2006, **67**, 1326-1330, *Planta Med.*, 2007, **73**, 1217-1220,
578	barbatin D	αOBz	βOBz		
579	barbatin E	Y_4	M_1		
580	scutebata I	αOAc	βOH		
581	scutebata J	αOBz	βOH		
582	scutebata K	αY_9	βOH		
583	6,7-di-*O*-acetoxybarbatin A	αOAc	βOAc		
584	6-(2,3-epoxy-2-isopropyl-*n*-propoxy)barbatin C	αM_2	βOH		

585	6-acetoxybarbatin C	αOAc	βOH		*J. Asian Nat. Prod. Res.*, 2010, **12**, 859-864
586	scuterivulactone D	—	—	*Scutellaria rivularis*	*Chem. Pharm. Bull.*, 1997, **45**, 152-160



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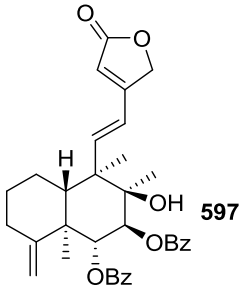
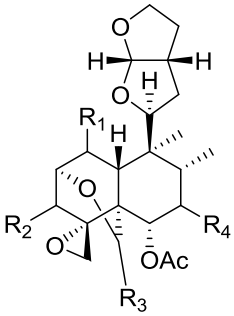


597

596	scutebaicalin	*Scutellaria baicalensis*	*Phytochemistry*, 1996, **43**, 835-837
597	scutebata L	*Scutellaria barbata*	*Planta Med.*, 2011, **77**, 1536-1541



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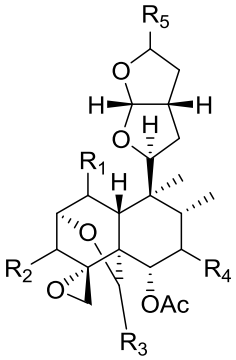
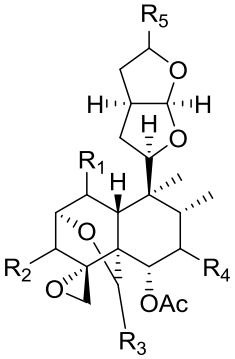


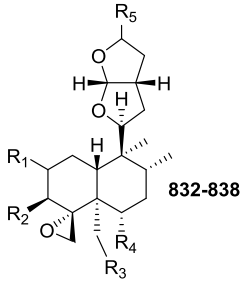
810-818



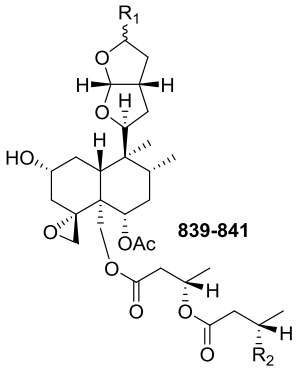
819,820

		R1	R2	R3	R4	R5		
805	14,15-dihydrojodrellin T	βOTig	H	OAc	H	—	*Scutellaria galericulata*	*Phytochemistry*, 1990, **29**, 1793-1796
806	scutegalin A	H	H	OTig	OTig	—		*Phytochemistry*, 1993, **33**, 309-315
807	scutecyprin	H	H	βOTig	H	—	*Scutellaria cypria* var. *elatior*	*Phytochemistry*, 1993, **33**, 931-932
808	scutecolumnin B	H	H	βY_1	H	—	*Scutellaria columnae*	*Phytochemistry*, 1992, **31**, 3639-3641
809	scutecolumnin C	H	H	βOH	H	—		
810	scutecyprol B	H	H	βOTig	H	OH	*Scutellaria cypria* var. *cypria*	*Phytochemistry*, 1996, **42**, 555-557
811	scupolin K	H	βOH	OiBu	H	OH	*Scutellaria polyodon*	*J. Nat. Prod.*, 2000, **63**, 1032-1034
812	6α-*O*-acetyl-15β,19β-di-*O*-ethyl-2,19:4,18:11,16:15,16-	H	H	OEt	H	βOEt	*Scutellaria discolor*	*Chem. Pharm. Bull.*, 1996, **44**,

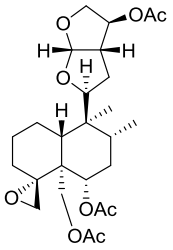
	tetraepoxyneoclerodane-6,15,19-triol							1540-1545
813	6α-*O*-acetyl-15α,19β-di-*O*-ethyl-2,19:4,18:11,16:15,16-tetraepoxyneoclerodane-6,15,19-triol	H	H	OEt	H	αOEt		
814	6α-*O*-acetyl-19β-*O*-ethyl-2,19:4,18:11,16:15,16-tetra-epoxyneoclerodane-6,15,19-triol	H	H	OEt	H	OH		
815	6α,19-di-*O*-acetyl-2,19:4,18:11,16:15,16-tetraepoxyneoclerodane-6,15,19-triol	H	H	OAc	H	OH		
816	scutalbin B	H	H	βY1	H	OH	*Scutellaria albida*	*Phytochemistry*, 1996, **42**, 1059-1064
817	scutalbin C	H	H	βOH	H	OH		
818	scutalsin	H	H	βOiBu	H	OH	*Scutellaria altissima*	
819	11-episcutecyprin	H	H	βOTig	H	H	*Scutellaria columnae*	*Phytochemistry*, 1997, **46**, 955-958
820	11-epi-scutecolumnin C	H	H	βOH	H	H	*Scutellaria columnae var columnae*	*Phytochemistry*, 1998, **49**, 811-815



832-838



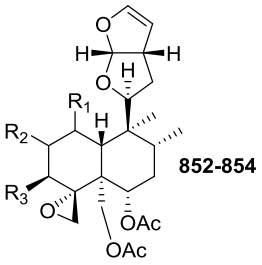
839-841

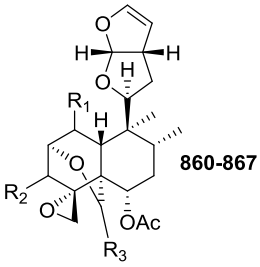


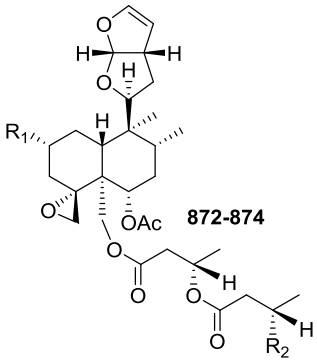
842

		R1	R2	R3	R4	R5		
832	15β-ethoxy-14-hydroclerodin	H	H	OAc	OAc	βOEt	*Scutellaria discolor*	*Chem. Pharm. Bull.*, 1996, **44**, 1540-1545
833	15α-ethoxy-14-hydroclerodin	H	H	OAc	OAc	αOEt		
834	14-hydro-15-hydroxy-6-*O*-deacetylclerodin	H	H	OAc	OH	OH		
835	scutelaterin C	Y1	H	OAc	OAc	OH	*Scutellaria lateriflora*	*Phytochemistry*, 1998, **48**, 687-691
836	scutellin A	H	H	OPr	OAc	βOMe	*Scutellaria barbata*	*Yunnan Zhiwu Yanjiu*, 2009, **31**, 474-476
837	scutalpin O	H	H	OiBu	OAc	OH	*Scutellaria alpine*	*Phytochemistry*, 1998, **49**, 2449-2452
838	scutecyprol A	H	H	OAc	OAc	OH	*Scutellaria cypria* var. *cypria*	*Phytochemistry*, 1996, **42**, 555-557
839	scupontin C	H	OAc	—	—	—	*Scutellaria*	*J. Nat. Prod.*, 1997, **60**,

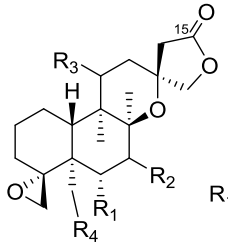
840	scupontin D	OH	OAc	—	—	—	*pontica*	348-355
841	scupontin F	OH	OX6	—	—	—		
842	scutalpin M	—	—	—	—	—	*Scutellaria alpina*	*Phytochemistry*, 1995, **38**, 181-187



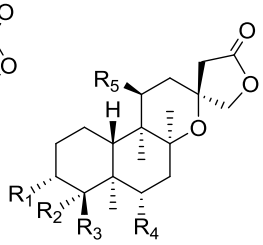




		R1	R2	R3		
852	galericulin	H	αOH	OTig	*Scutellaria galericulata*	*Phytochemistry*, 1990, **29**, 1793-1796
853	scutelaterin A	H	βOAc	H	*Scutellaria laterifora*	*Phytochemistry*, 1998, **48**, 687-691
854	scutelaterin B	H	βY_1	H		
860	jodrellin A	H	H	βOAc	*Scutellaria* spp.	*Phytochemistry*, 1991, **30**, 1125-1127
861	jodrellin B	H	H	βOiPr		
862	scupolin J	H	βOH	OiBu	*Scutellaria polyodon*	*J. Nat. Prod.*, 2000, **63**, 1032-1034
863	jodrellin T	βOTig	H	βOAc	*Scutellaria galericulata*	*Phytochemistry*, 1990, **29**, 1793-1796
864	19-*O*-deacetyljodrellin A	H	H	OH	*Scutellaria discolor*	*Chem. Pharm. Bull.*, 1996, **44**, 1540-1545
865	scutegrossin A	H	H	βOTig	*Scutellaria grossa*	*Chem. Pharm. Bull.*, 1997, **45**, 1097-1100
866	scutalbin A	H	H	βOH	*Scutellaria albida*	*Phytochemistry*, 1996, **42**, 1059-1064
867	scutecolumnin A	H	H	βY_1	*Scutellaria columnae*	*Phytochemistry*, 1992, **31**, 3639-3641
872	scupontin A	OH	OAc	—	*Scutellaria pontica*	*J. Nat. Prod.*, 1997, **60**, 348-355
873	scupontin B	H	OAc	—		
874	scupontin E	OH	X_6	—		



875-883



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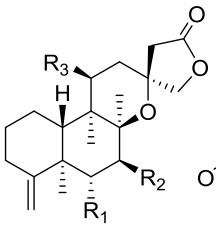

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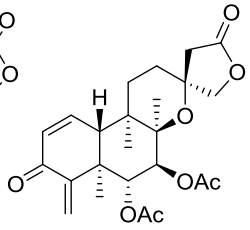

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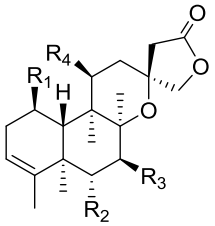

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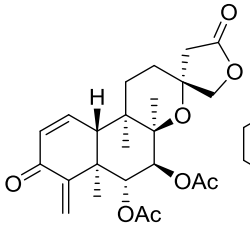

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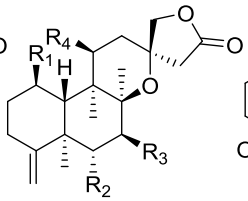

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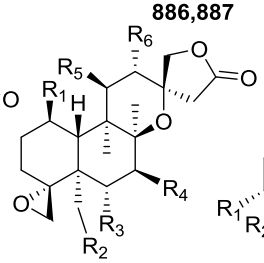

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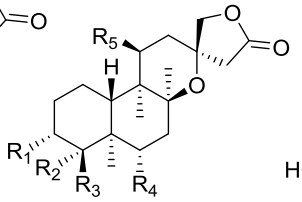

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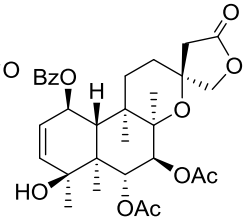
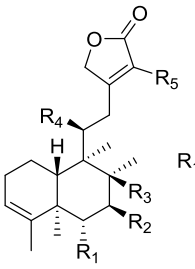


902

		R_1	R_2	R_3	R_4	R_5	R_6		
875	scutorientalin A	OiBu	H	H	OAc			*Scutellaria orientalis* subsp. *pinnatifida*	*Phytochemistry*, 1996, **43**, 173-178
876	scutorientalin C	OiBu	H	αOH	OAc				
877	scutorientalin D	OiBu	H	βOAc	OAc				*Phytochemistry*, 1997, **44**, 121-124
878	scutalpin D	OTig	H	βOAc	OAc			*Scutellaria alpina* subsp. *javalambrensis*	*Phytochemistry*, 1993, **34**, 1589-1594
879	11-deacetylscutalpin D	OTig	H	βOH	OAc				*Phytochemistry*, 1997, **44**, 593-597
880	scutalpin A	Y_1	βOAc	H	OAc			*Scutellaria alpine*	*Phytochemistry*, 1993, **34**, 453-456
881	scutalpin F	OAc	βOAc	H	OAc				*Phytochemistry*, 1994, **35**, 1285-1288
882	scutalpin G	OBz	H	βOAc	OAc				*Phytochemistry*, 1995, **38**, 181-187
883	hastifolin C	OCin	H	H	H			*Scutellaria hastifolia*	*Phytochemistry*, 2010, **71**, 2087-2091.
884	scuterivulactone C_2	OH	Me	OH	OBz	OAc		*Scutellaria rivularis*	*Chem. Pharm. Bull.*, 1997, **45**, 152-160
885	hastifolin E	H	OH	CH_2OH	OCin	H		*Scutellaria hastifolia*	*Phytochemistry*, 2010, **71**, 2087-2091.
886	hastifolin G	OCin	H	H					
887	barbatin A	H	OBz	OH	OBz			*Scutellaria barbata*	*Phytochemistry*, 2006, **67**, 1326-1330
888	barbatellarine E								*Helv. Chim. Acta.*, 2011, **94**, 643-649
889	barbatin B	OBz	OBz	OH					*Phytochemistry*, 2006, **67**, 1326-

									1330
890	scutebata D	OBz	OAc	OAc	H				*J. Nat. Prod.*, 2010, **73**, 233-236
891	scutebata E	OiBu	OAc	OAc	H				
892	barbatellarine F								*Chem. Nat. Cmpds.*, 2014, **50**, 256-257
893	scuteselerin	OAc	OH	Y_{12}	OAc			*Scutellaria seleriana*	*Phytochemistry*, 1998, **47**, 135-137
894	hastifolin F	H	OCin	H	H			*Scutellaria hastifolia*	*Phytochemistry*, 2010, **71**, 2087-2091
895	hastifolin B	H	H	OCin	H	H	H		
896	scutenisin	H	OH	OiBu	OiBu	H	H	*Scutellaria orientalis* subsp.*sintenisii*	*Phytochemistry*, 1998, **49**, 1825-1827
897	scutalpin E	H	OAc	OTig	OAc	H	H	*Scutellaria alpina*	*Phytochemistry*, 1994, **35**, 1285-1288
898	scuteguatemalin	OiBu	H	OAc	H	OAc	OiBu	*Scutellaria guatemalensis*	*Heterocycles*, 1997, **45**, 2247-2252
899	hastifolin D	H	OH	CH_2OH	OCin	H		*Scutellaria hastifolia*	*Phytochemistry*, 2010, **71**, 2087-2091
900	scuterivulactone C_1	OH	Me	OH	OBz	OAc		*Scutellaria rivularis*	*Chem. Pharm. Bull.*, 1997, **45**, 152-160
901	scuterivulactone B	=O	Me	H	OBz	OAc			
902	barbatellarine A							*Scutellaria barbata*	*Bioorg. Med. Chem. Lett.*, 2010, **20**, 288-290



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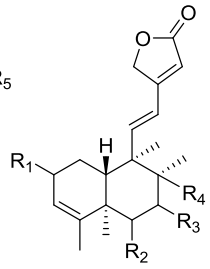

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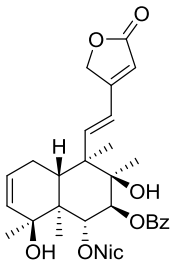

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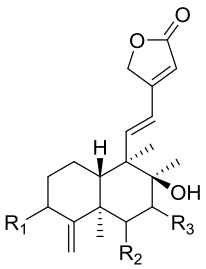
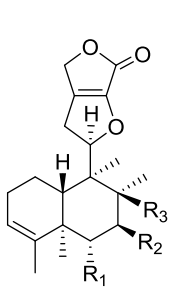


1010-1012

		R1	R2	R3	R4	R5		
992	scutebarbatine Z	ONic	OH	H	H	H	*Scutellaria barbata*	*Chem. Pharm. Bull.*, 2010, **58**, 1267-1270
993	scutebarbatine X	ONic	ONic	OH	OAc	OH		
994	scutebata B	ONic	OBz	OH	OAc	OH		*J. Nat. Prod.*, 2010, **73**, 233-236
995	scutebata C	ONic	OH	OH	OAc	OH		
996	barbatellarine B	ONic	OBz	OH	OAc	H		*Bioorg. Med. Chem. Lett.*, 2010, **20**, 288-290
997	scutebarbatine Y	H	αOBz	βONic	βOH	—		*Chem. Pharm. Bull.*, 2010, **58**, 1267-1270
998	scutehenanine A	H	αOH	βONic	βOH	—		*J. Nat. Prod.*, 2009,

999	6-*O*-acetylscutehenanine A	H	αOAc	βONic	βOH	—		**72**, 1793-1797
1000	6-*O*-(2-carbonyl-3-methyl-butanoyl)scutehenanine A	H	αOM_1	βONic	βOH	—		
1001	scutebarbatine B	H	αONic	βOBz	βOH	—		*Phytochemistry*, 2006, **67**, 1326-1330
1002	scutelinquanine C	H	αONic	βY_8	βOH	—		*Phytochem. Lett.*, 2010, **3**, 190-193
1003	scutebarbatine A	H	αONic	βONic	βOH	—		*Chin. Chem. Lett.*, 1996, **7**, 333-334
1004	scutebarbatine K	H	αONic	βOAc	βOH	—		*Chem. Pharm. Bull.*, 2008, **56**, 207-209
1005	scutebarbatine L	H	αONic	βY_4	βOH	—		
1006	2-carbonylscutebarbatine A	=O	αONic	βONic	βOH	—		*Planta Med.*, 2007, **73**, 1217-1220
1007	6-*O*-nicotinoylbarbatin A	H	αONic	βOH	βOH	—		
1008	8-*O*-nicotinoylbarbatin A	H	αOH	βOH	βONic	—		
1009	scutebarbatine C	—	—	—	—	—		*Chem. Pharm. Bull.*, 2006, **54**, 869-872
1010	scutebarbatine D	βOH	αONic	βOBz	—	—		
1011	scutebarbatine E	=O	αONic	βOBz	—	—		
1012	scutebarbatine O	αOH	βONic	αONic	—	—		*J. Asian Nat. Prod. Res.*, 2009, **11**, 451-456



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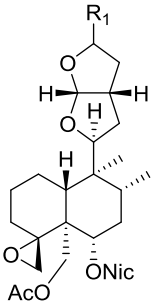

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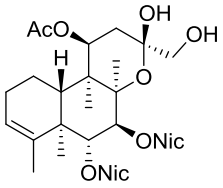

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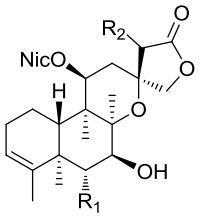

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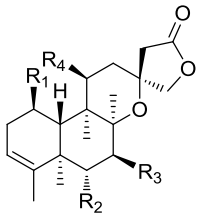

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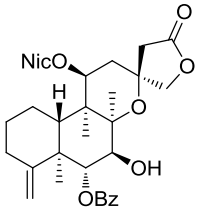

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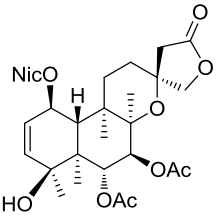

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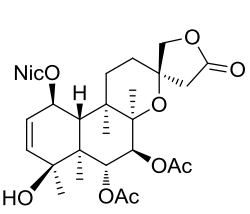
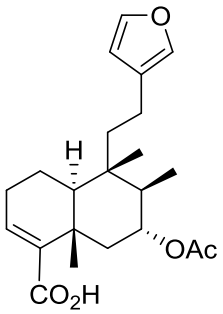


1054

		R1	R2	R3	R4	R5		
1027	scutehenanine D	OBz	ONic	OH	—	—	*Scutellaria barbata*	*J. Nat. Prod.*, 2009, **72**, 1793-1797
1028	scutebarbatine H	ONic	OH	OH	—	—		*Chem. Pharm. Bull.*, 2007, **55**, 1218-1221
1029	7-*O*-nicotinoylscutebarbatine H	ONic	ONic	OH	—	—		
1030	scutebarbatine I	βOEt	—	—	—	—		*Chem. Pharm. Bull.*, 2008, **56**, 207-209
1031	scutebarbatine J	αOEt	—	—	—	—		
1032	scutelinquanine B	—	—	—	—	—		*Phytochem. Lett.*, 2010, **3**, 190-193
1033	scutelinquanine A	OAc	H	—	—	—		

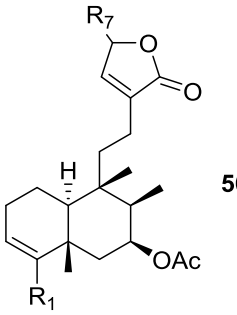
1034	scutehenanine H	OBz	OH	—	—	—		*Fitoterapia*, 2010, **81**, 737-741
1035	scutelinquanine D	OH	OH	—	—	—		*J. Asian Nat. Prod. Res.*, 2010, **12**, 859-864
1036	scutehenanine B* → scutebarbatine W (**1047**)	H	OBz	OH	ONic			*J. Nat. Prod.*, 2009, **72**, 1793-1797
1037	scutebarbatine F* → scutebata F (**1045**) = barbatine C **(1048**)	H	ONic	OAc	OAc			*Chem. Pharm. Bull.*, 2006, **54**, 869-872
1038	scutebarbatine G* → **1039**	H	OH	OH	ONic			*Chem. Pharm. Bull.*, 2007, **55**, 1218-1221
1039	—	ONic	OH	OH	H			
1040	6,7-di-*O*-nicotinoylscute-barbatine G* → **1041**	H	ONic	ONic	ONic			
1041		ONic	ONic	ONic	H			
1042	6-*O*-nicotinoyl-7-*O*-acetylscutebarbatine G* → barbatine D (**1049**)	H	ONic	OAc	ONic			
1043	6-*O*-nicotinoylscutebarbatine G* → **1044**	H	ONic	OH	ONic			*J. Asian Nat. Prod. Res.*, 2009, **11**, 451-456
1044		ONic	ONic	OH	H	—		
1045	scutebata F = barbatine C (**1048)**	ONic	OAc	OAc	H	—		*J. Nat. Prod.*, 2010, **73**, 233-236
1046	scutebata G	OBz	ONic	OBz	H	—		
1047	scutebarbatine W	OBz	ONic	OH	H	—		*Chem. Pharm. Bull.*, 2010, **58**, 1267-1270
1048	barbatine C= scutebata F (**1045**)	ONic	OAc	OAc	H	—		*Eur. J. Org. Chem.*, 2009, 5810-5815
1049	barbatine D	ONic	ONic	OAc	H	—		
1050	barbatine A	H	ONic	OAc	ONic	—		
1051	barbatine B	H	ONic	ONic	ONic	—		
1052	scutehenanine C							*J. Nat. Prod.*, 2009, **72**, 1793-1797
1053	barbatellarine C							*Helv. Chim. Acta*., 2011, **94**, 643-649
1054	barbatellarine D							

***SINDORA* Genus**



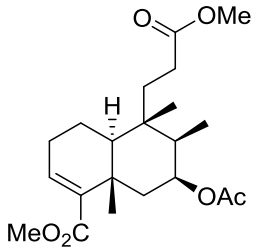
402

402	(+)-7*β*-acetoxy-15,16-epoxy-3,13(16),14-clerodatrien-18-oic acid	*Sindora sumatrana*	*Chem. Pharm. Bull.*, 1994, **42**, 1202-1207



568-570

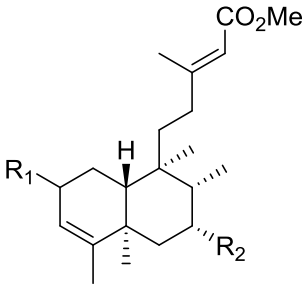
		R1	R7		
568	(+)-7β-acetoxy-18-oxo-3,13-clerodadien-16,15-olide	CHO	H	*Sindora sumatrana*	*Chem. Pharm. Bull.*, 1994, **42**, 1202-1207
569	(+)-7β-acetoxy-3,13-clerodadien-16,15-olid-18-oic acid	CO_2H	H		
570	(+)-7β-acetoxy-16-hydroxy-3,13-clerodadien-16,15-olid-18-oic	CO_2H	OH		



1085

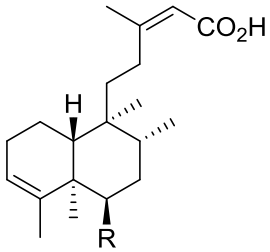
1085	(+)-7β-acetoxy-14,15,16-trinor-3-clerodene-13,18-dioate	*Sindora sumatrana*	*Chem. Pharm. Bull.*, 1994, **42**, 1202-1207

***SOLIDAGO* Genus**



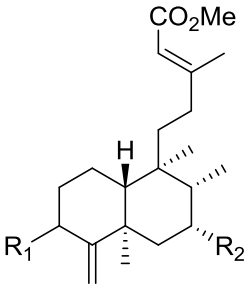
178 R1 = =O, R2 = OAc
179 R1 = β-OH, R2 = OAc
180 R1 = α-OH, R2 = H
179 R1 = β-OH, R2 = H

178	—	*Solidago altissima*	*Phytochemistry*, 1999, **52**, 487-493
179	—		
180	—		
181	—		



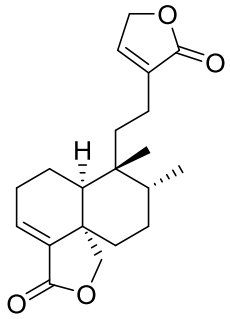
200 R = OTig
201 R = OAng

200	solidagocanin A	*Solidago canadensis*	*Helv. Chim. Acta*, 2012, **95**, 1121-1125
201	solidagocanin B		



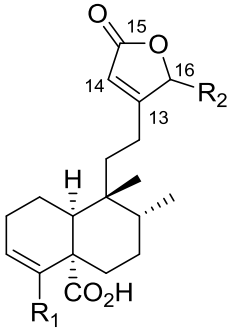
282 R1 = α-OH, R2 = OAc
283 R1 = β-OH, R2 = OAc
282 R1 = =O, R2 = H

282	—	*Solidago altissima*	*Phytochemistry*, 1999, **52**, 487-493
283	—		
284	—		

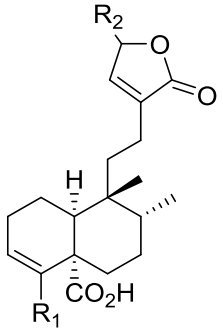


455

455	cleroda-3,13(14)-dien-16,15:18,19-diolide	*Solidago virgaurea*	*Phytochemistry*, 2010, **71**, 104–109

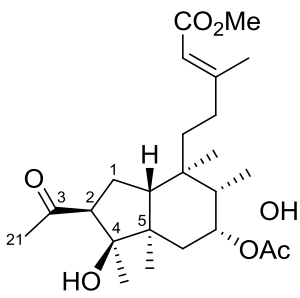


558-559



560-564

		R1	R2		
558	solidagoic acid H	Me	OH	*Solidago virgaurea*	*Phytochemistry*, 2010, **71**, 104–109
559	solidagoic acid I	CH_2OAng	OH		
560	solidagoic acid C	Me	H		
561	solidagoic acid D	CH_2OAng	H		
562	solidagoic acid E	Me	OH		
563	solidagoic acid F	CH_2OAng	OH		
564	solidagoic acid G	Me	OMe		



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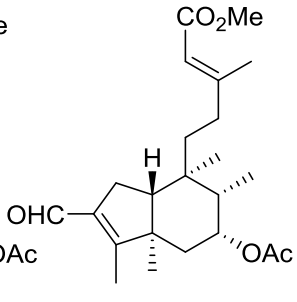
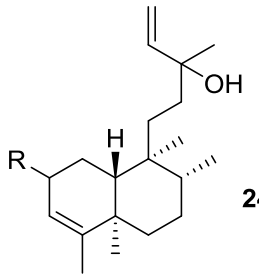


1147

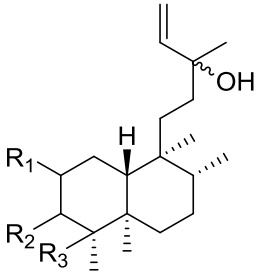
1146	—	*Solidago altissima*	*Phytochemistry*, 1999, **52**, 487-493
1147	—		

***STACHYS* Genus**



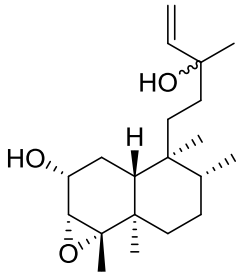
243-244

243	roseostachenol	αOH	*Stachys rosea*	*Phytochemistry*, 1994, **37**, 501-503
244	roseostachenone	=O		*Phytochemistry*, 1992, **31**, 3147-3149



268,269

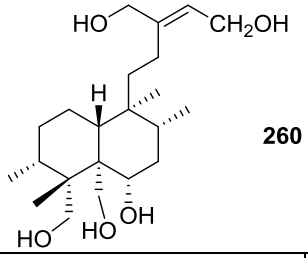
		R1	R2	R3		
268	roseotetrol	αOH	αOH	βOH	*Stachys rosea*	*Phytochemistry*, 1994, **37**, 501-503
269	roseostachone	H	=O	H		*Phytochemistry*, 1992, **31**, 3147-3149



294

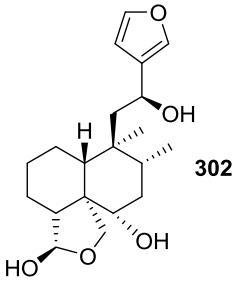
294	3α,4α-epoxyroseostachenol	*Stachys glutinosa*	*J. Nat. Prod.*, 2015, **78**, 69-76

***TEUCRIUM* Genus**



260

260	syspirensin B	*Teucrium chamaedrys* ssp. *syspirense*	*J. Nat. Prod.*, 1996, **59**, 457-460



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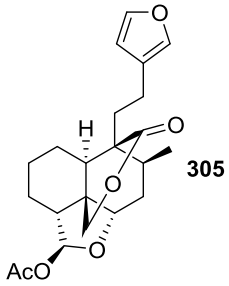

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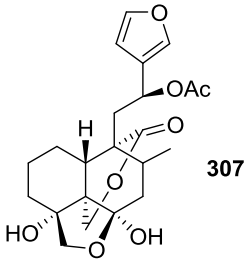
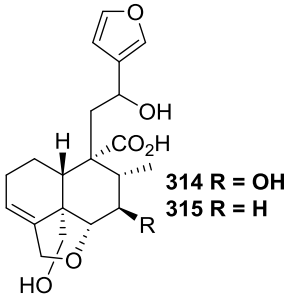
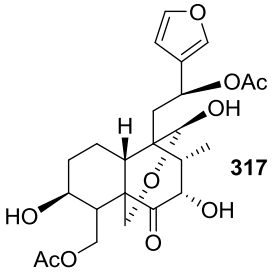


307

302	teumassilenin B	*Teucrium massiliense*	*J. Nat. Prod.*, 1998, **61**, 1242-1247
305	teuctomin	*Teucrium tomentosum*	*Nat. Prod. Res.*, 2010, **24**, 7-12
307	12-*O*-acetylteugnaphalodin	*Teucrium oxylepis*	*Phytochemistry*, 1991, **30**, 4079-4082



314 R = OH
315 R = H



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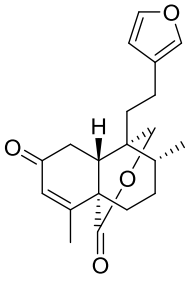
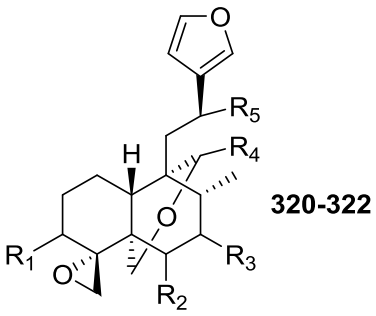


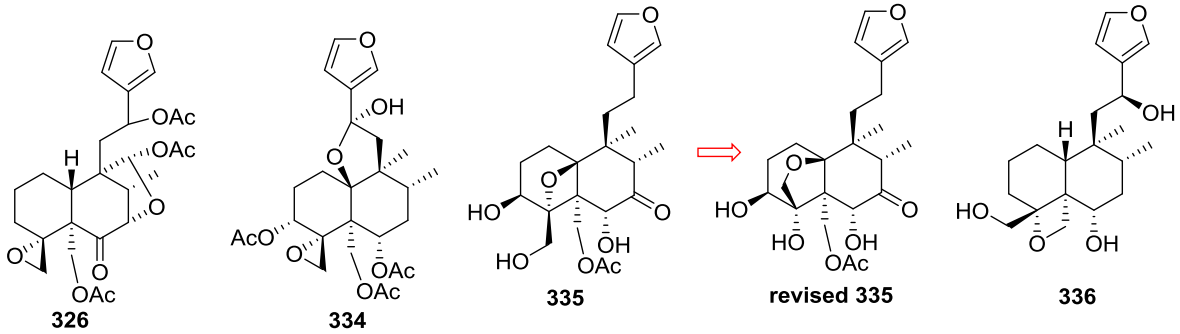
318

314	tepolin A	*Teucrium polium*	*Him. Prir. Soedin.*, 1992, **5**, 503-508
315	tepolin B		
316	difuranofruticol	*Teucrium fruticans*	*Phytochemistry*, 2005, **66**, 2298-2303
317	syrapolin II	*Teucrium polium*	*Jordan J. Chem.*, 2011, **6**, 339-345



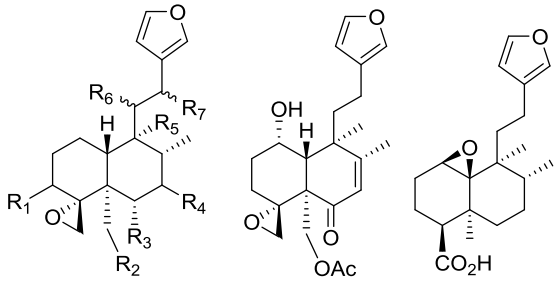
320-322

		R1	R2	R3	R4	R5		
320	6β-*O*-acetyl-3β-hydroxy-teucroxylepin	βOH	βOAc	H	=O	OH	*Teucrium yemense*	*Phytochemistry*, 1995, **40**, 1737-1741
321	teucroxylepin	H	βOH	H	=O	βOAc	*Teucrium oxylepis*	*Phytochemistry*, 1991, **30**, 4079-4082
322	montanin H	H	αOH	=O	αOH	OAc	*Teucrium montanum*	*Phytochemistry*, 1992, **31**, 4029-4030



326 **334** **335** **revised 335** **336**

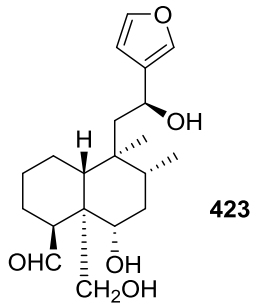
326	teucossin B	*Teucrium cossonii*	*Phytochemistry*, 1992, **31**, 3957-3960
334	teucrolin A	*Teucrium oliverianum*	*J. Nat. Prod.*, 1993, **56**, 830-842, *Phytochemistry*, 2002, **59**, 409-414
335	teucrolin E		
336	teumassilenin C	*Teucrium massiliense*	*J. Nat. Prod.*, 1998, **61**, 1242-1247



366-374 **375** **376**

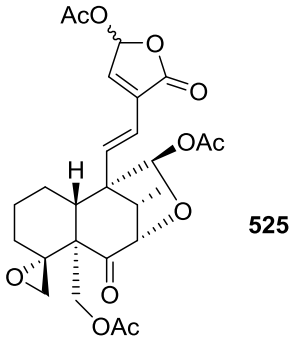
		R1	R2	R3	R4	R5	R6	R7		
366	teucossin A	H	OAc	OH	H	CH_2OAc	H	OAc	*Teucrium cossonii*	*Phytochemistry*, 1992, **31**, 3957-3960

367	teugracilin E	βOAc	OAc	OAc	H	CH_2OAc	H	OAc	*Teucrium gracile*	*Phytochemistry*, 1992, **31**, 3531-3534
368	teugracilin C	βOH	OAc	OH	H	Me	H	OAc		*Phytochemistry*, 1991, **30**, 3693-3697
369	teucrolivin D	βOAc	OAc	OH	βOAc	Me	H	H	*Teucrium oliverianum*	*Phytochemistry*, 1991, **30**, 1603-1606
370	teucrolivin E	βOAc	OAc	OH	=O	Me	H	H		
371	7*β*-hydroxyfruticolone	H	OAc	=O	βOH	Me	H	H	*Teucrium fruticans*	*Phytochemistry*, 2004, **65**, 387–392
372	11-hydroxyfruticolone	H	OAc	=O	H	Me	OH	H		
373	deacetylfruticolone	H	OH	=O	H	Me	H	H		
374	deoxyfruticolone	H	OAc	=O	H	Me	H	H		*Phytochemistry*, 2005, **66**, 2298-2303
375	didehydrofruticolone	—	—	—	—	—	—	—		



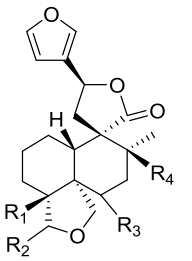
423

423	teumassilenin A	*Teucrium massiliense*	*J. Nat. Prod.*, 1998, **61**, 1242-1247

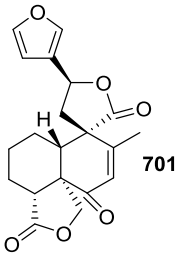


525

525	teucrasiolide	*Teucrium asiaticum*	*Phytochemistry*, 1997, **45**, 383-385

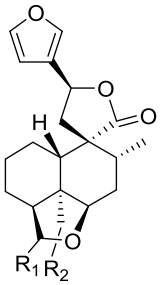


697-700

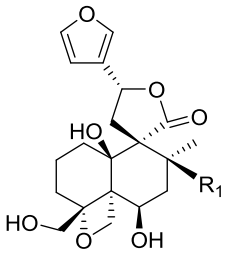


701

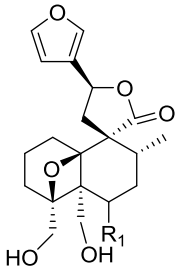
		R1	R2	R3	R4		
697	teupolin XII	H	βOMe	βOH	H	*Teucrium polium*	*Phytochemistry*, 2011, **72**, 2037-2044
698	teucvisin A	OH	=O	αOH	H	*Teucrium viscidum*	*Chem. Pharm. Bull.*, 2014, **62**, 472-476
699	teuperninB	H	=O	=O	OH	*Teucrium perny*	*Phytochemistry*, 1991, **30**, 1963-1966
700	teuperninC	H	=O	βOH	OH		
701	teupernin A	—	—	—	—		



704-706

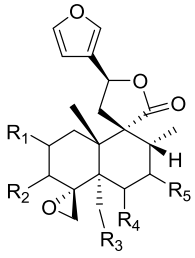


707-709



710,711

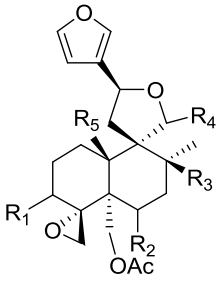
		R1	R2		
704	teupolin X	αOH	OH	*Teucrium polium*	*Phytochemistry*, 2011, **72**, 2037-2044
705	teupolin XI	αOMe	OH		
706	teucvisin B	=O	OAc	*Teucrium viscidum*	*Chem. Pharm. Bull.*, 2014, **62**, 472-476
707	12-*epi*-montanin D	H	—	*Teucrium maghrebinum*	*J. Nat. Prod.*, 2000, **63**, 1029-1031
708	teusandrin C	OH	—	*Teucrium sandrasicum*	*Phytochemistry*, 1997, **45**, 1653-1662
709	teusandrin D	H	—		
710	teusandrin E	=O	—		
711	teusandrin F	αOH	—		



720-726

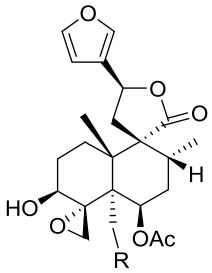
		R1	R2	R3	R4	R5		
720	teumassin	OH	H	OAc	=O	H	*Teucrium massiliense*	*Phytochemistry*, 1992, **31**, 4366-4367

721	4α,18-epoxy-tafricanin A	H	=O	OAc	=O	H	*Teucrium pestalozzae*	*Phytochemistry*, 1990, **29**, 988-989
722	20-oxo-teuflavin	H	=O	OAc	βOH	H		
723	teutrifidin	H	=O	OAc	=O	βOH	*Teucrium trifidum*	*Phytochemistry*, 1994, **36**, 1549-1550
724	3-*O*-deacetylteugracilin A	H	βOH	OAc	βOH	H	*Teucrium gracile*	*Phytochemistry*, 1991, **30**, 3693-3697
725	teugracilin A	H	βOAc	OAc	βOH	H		
726	teugracilin B	H	βOH	OAc	αOH	H		

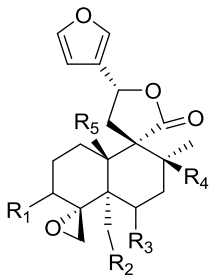


727-739

		R1	R2	R3	R4	R5		
727	teusandrin A	H	αOAc	OH	=O	OH	*Teucrium sandrasicum*	*Phytochemistry*, 1997, **45**, 1653-1662
728	teusandrin B	H	αOH	OH	=O	OH		
729	3-deacetylteumicropodine	βOAc	αOH	H	=O	H	*Teucrium polium*	*Phytochemistry*, 1994, **37**, 1663-1666
730	3,20-bis-diacetylteupyreinidine	βOH	αOAc	H	αOH	H		
731	6,20-bis-deacetylteupyreinidine	βOAc	αOH	H	αOH	H		
732	3,6,20-tri-deacetyl-teupyreinidine	βOH	αOH	H	αOH	H		
733	10-hydroxyteucjaponin B	H	βOH	H	=O	OH	*Teucrium fruticans*	*Phytochemistry*, 2005, **66**, 2298-2303
734	6-acetyl-10-hydroxy-teucjaponin B	H	βOAc	H	=O	OH		
735	6-acetylteucjaponin B	H	βOAc	H	=O	H		
736	12-*epi*-teupyreinin	βOAc	αOAc	H	=O	H	*Teucrium nudicaule*	*Nat. Prod. Res.*, 1996, **8**, 189-197
737	teubutilin B	H	αOAc	H	βOAc	H	*Teucrium abutiloides*	*Phytochemistry*, 1990, **29**, 579-584
738	teucrasiatin	H	=O	H	αOH	H	*Teucrium asiaticum*	*Phytochemistry*, 1996, **43**, 435-438
739	teugracilin D	βOH	αOH	H	αOAc	H	*Teucrium gracile*	*Phytochemistry*, 1992, **31**, 3531-3534

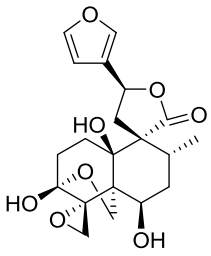


740 R = OH
741 R = OAc



742-747

		R1	R2	R3	R4	R5		
740	teucryemin	--	--	--	--	--	*Teucrium yemense*	*Phytochemistry*, 1995, **40**, 1737-1741
741	19-*O*-acetylteucryemin	--	--	--	--	--		
742	teucryeminone	βOAc	OAc	=O	H	βH		
743	12-*epi*-teucjaponin A	H	OAc	βOH	H	βH	*Teucrium maghrebinum*	*J. Nat. Prod.*, 2000, **63**, 1029-1031
744	sandrasin A	H	OAc	αOAc	OH	βOH	*Teucrium sandrasicum*	*Phytochemistry*, 1996, **42**, 775-778
745	6-deacetylsandrasin A	H	OAc	αOH	OH	βOH		
746	teubrevin C	βOAc	OAc	=O	H	H	*Teucrium brevifolium*	*Tetrahedron*, 1995, **51**, 837-848
747	teubrevin D	βOAc	OAc	=O	OH	OH		



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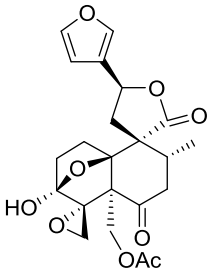

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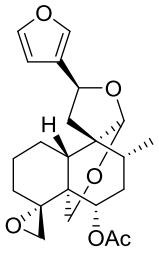
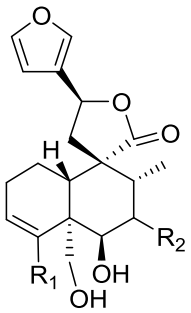


750

748	teupestalin A	*Teucrium pestalozzae*	*Phytochemistry*, 1990, **29**, 2229-2233
749	teupestalin B		
750	teubutilin A	*Teucrium abutiloides*	*Phytochemistry*, 1990, **29**, 579-584



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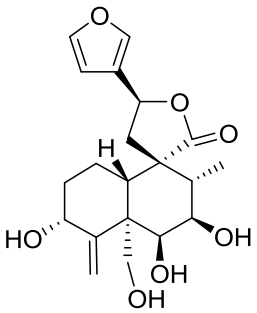
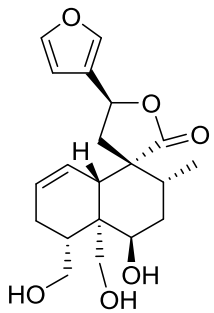


778

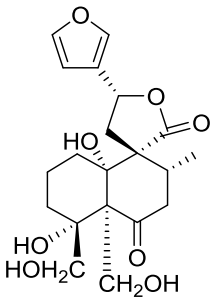


780

776[a]	teupernin D	CO_2Me	H	*Teucrium pernyi*	*Phytochemistry*, 1993, **33**, 716-717
777	teulolin A	CH_2OH	βOH	*Teucrium polium*	*Phytochemistry*, 1999, **51**, 921-925

778	teulolin B	—	—		
780	teupolin VI	—	—	*Teucrium polium*	*Phytochemistry*, 2011, **72**, 2037-2044

[a] Compound **1025** was also given the name 'teupernin D'.



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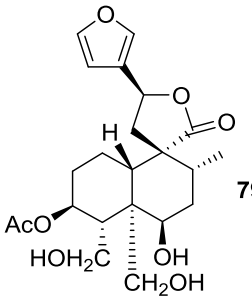
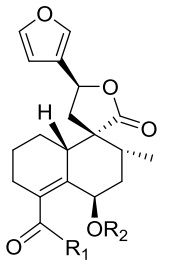
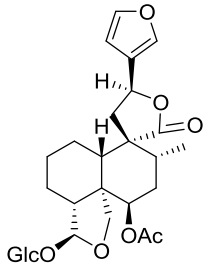


790

781	sandrasin B	*Teucrium sandrasicum*	*Phytochemistry*, 1996, **42**, 775-778
790	teuctomentin	*Teucrium tomentosum*	*Der Pharmacia Lettre*, 2014, **6**, 295-298

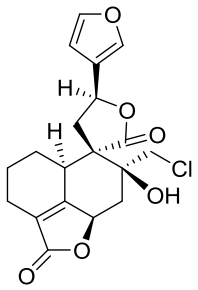


974-976

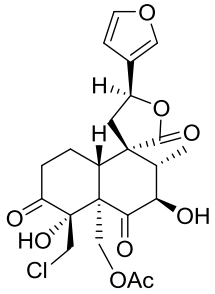


977

974	chamaedryoside A	OH	Glc	*Teucrium chamaedrys*	*Magn. Reson. Chem.*, 2009, **47**, 1007-1012
975	chamaedryoside B	O-6-α-Glc	H		
976	chamaedryoside C	O-6-β-Glc	H		
977	teulamioside	—	—	*Teucrium lamiifolium*	*Phytochemistry*, 1993, **34**, 1095-1098



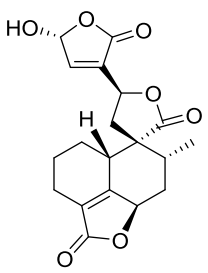
1025



1026

1025[a]	teupernin D	*Teucrium pernyi*	*Chem. Pharm. Bull.*, 1992, **40**, 2193-2195
1026	teuracemin	*Teucrium racemosum*	*Phytochemistry*, 1995, **40**, 505-507

[a] Compound **776** was also given the name 'teupernin D'.



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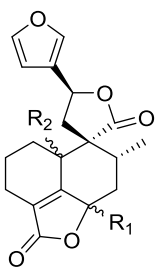

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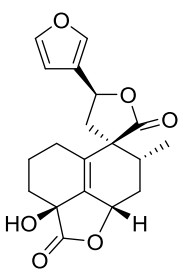

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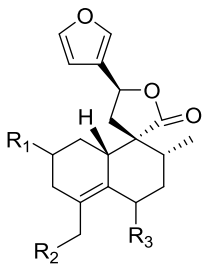
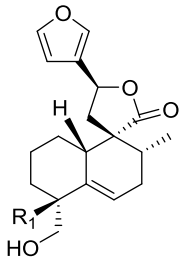
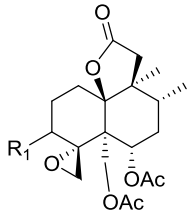


1077-1080



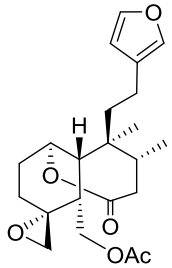
1081,1082

1069	teuponin	—	—	—	*Teucrium japonicum.*	*Phytochemistry*, 1991, **30**, 4175-4177
1070	teucvisin C	βOH	βH		*Teucrium viscidum*	*Chem. Pharm. Bull.*, 2014, **62**, 472-476
1071	teucvisin D	αH	αOH			
1072	teucvisin E	OH	—	—		
1077	teucorymbin	H	OAc	H	*Teucrium corymbosum*	*Phytochemistry*, 1995, **40**, 1481-1483
1078	syspirensin A	αOH	OH	αOH	*Teucrium chamaedrys* ssp. *syspirense*	*J. Nat. Prod.*, 1996, **59**, 457-460
1079	teupolin IX	H	OH	βOMe	*Teucrium polium*	*Phytochemistry*, 2011, **72**, 2037-2044
1080	12-epi-montanin B	H	OH	βOH	*Teucrium maghrebinum*	*J. Nat. Prod.*, 2000, **63**, 1029-1031
1081	teupolin VIII	OH	—	—	*Teucrium polium*	*Phytochemistry*, 2011, **72**, 2037-2044
1082	teupolin VII	OMe	—	—		



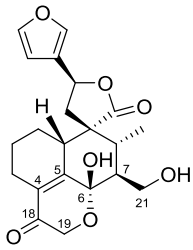
1095,1096

1095	teucrolin D	αOAc	*Teucrium oliverianum*	*J. Nat. Prod.*, 1993, **56**, 830-842
1096	teucrolivin F	=O		*Phytochemistry*, 1991, **30**, 1603-1606



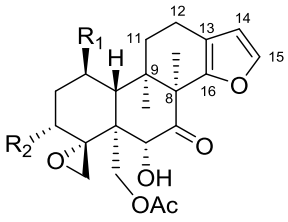
1139

1139	fruticolide	*Teucrium fruticans*	*Phytochemistry*, 1992, **31**, 3531-3534

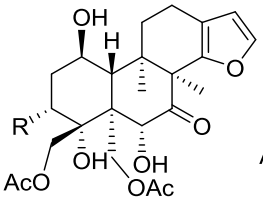


1181

1181	teubetonin	*Teucrium betonicum*	*Tetrahedron*, 1995, **51**, 2363-2368



1201,1202



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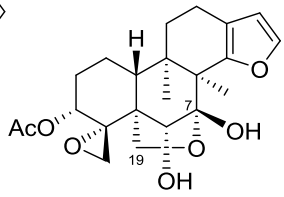

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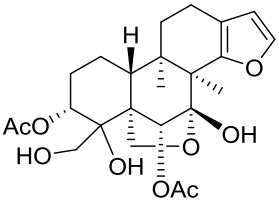
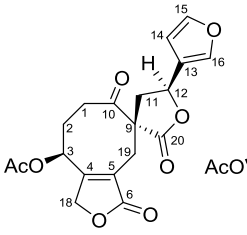


1206

1201	alysine A	OH	OAc	*Teucrium alyssifolium*	*Tetrahedron*, 1995, **51**, 11793-11800
1202	alysine C	H	OH		
1203	alysine B	OAc	—		
1204	3-deacetylalysine B	OH	—		
1205	alysine D	—	—		*J. Nat. Prod.*, 1997, **60**, 1045-1047
1206	alysine E	—	—		



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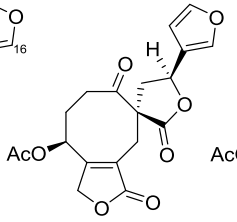

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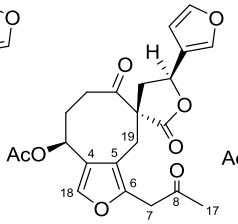

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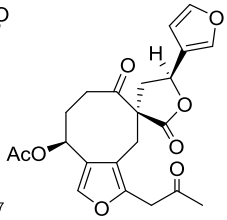

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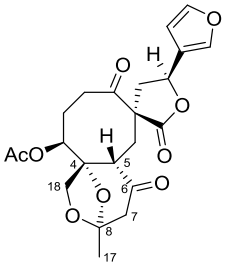
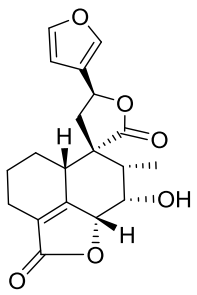


1221

1217	teubrevin E	*Teucrium brevifolium*	*Tetrahedron*, 1995, **51**, 837-848
1218	teubrevin F		
1219	teubrevin G		
1220	teubrevin H		
1221	teubrevin I		



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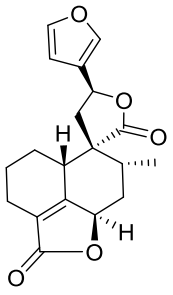
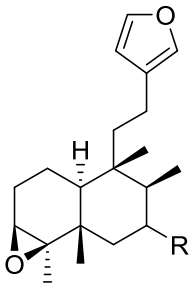


1316

1315	teucrin A	*Teucrium chamaedrys*	*Basic Clin. Pharmacol. Toxicol.*, 2011, **109**, 521-526
1316	teuchamaedryn A		

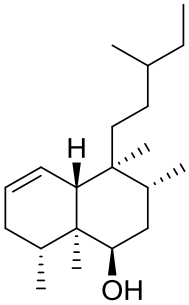
THYSANANTHUS **Genus**



364-365

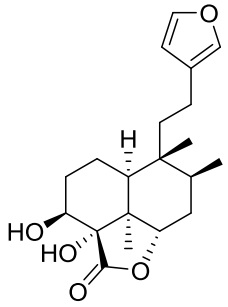
364	3*β*,4*β*:15,16-diepoxy-13(16),14-clerodadiene	H	*Thysananthus spathulistipus*	*Chem. Pharm. Bull.*, 2006, **54**, 1046-1049
365	thysaspathone	=O		

TINOSPORA **Genus**



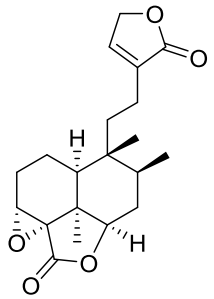
277

277	tinosporaclerodanol	*Tinospora cordifolia*	*Nat. Prod. Res.*, 2010, **24**, 926-934



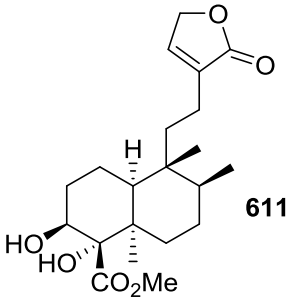
308

308	(2aβ,3α,5aβ,6β,7*R*,8aα)-6-[2-(3-furanyl)ethyl]-2a,3,4,5,5a,6,7,8,8a,8b-decahydro-2a,3-dihydroxy-6,7,8b-trimethyl-2*H*-naphtho[1,8-*bc*]furan-2-one	*Tinospora rumphii*	*J. Nat. Prod.*, 2000, **63**, 509-511



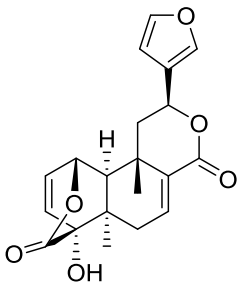
468

468	crispene E	*Tinospora crispa*	*Org. Biomol. Chem.*, 2015, **13**, 3882-3886



611

611	methyl(1α,4αa,5α,6*β*,8aα)-5-[2-(3-furan-3-ene-2-one)ethyl]-1,2,3,4,4a,5,6,7,8,8a-decahydro-1,2-dihydroxy-1-naphthalene carboxylate	*Tinospora rumphii*	*Org. Biomol. Chem.*, 2015, **13**, 3882-3886



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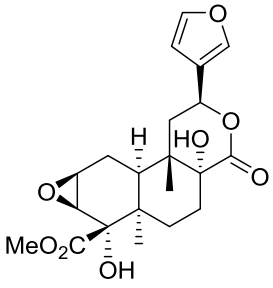

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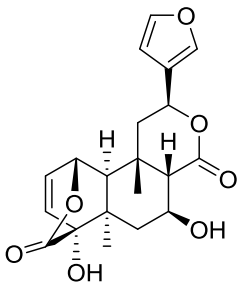
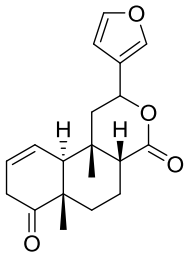


644

642	tinospin E	*Tinospora sagittata*	*Chem. Pharm. Bull.*, 2012, **60**, 1324-1328
643	tinosporin A		*Phytochem. Lett.*, 2015, **12**, 173-176
644	tinosporin B		



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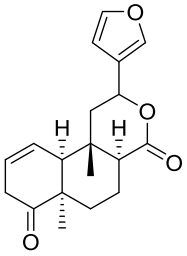

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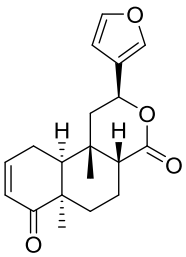

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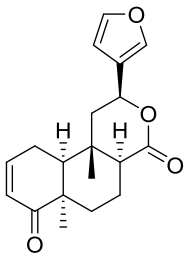

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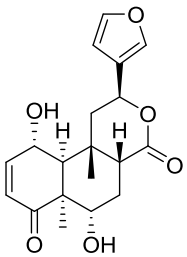
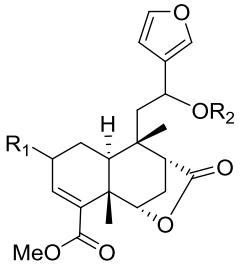


672

		R1	R2	R3	R4		
668	tinocallone A	βMe	βH	—	—	*Tinospora capillipes*	*Chin. Chem. Lett.*, 1992, **3**, 185-188
669	tinocallone B	αMe	αH	—	—		
670	tinocallone C	H	=O	H	βH		
671	tinocallone D	H	=O	H	αH		
672	tincordin	OH	=O	OH	βH	*Tinospora cordifolia*	*Nat. Prod. Res.*, 2013, **27**, 1431-1436



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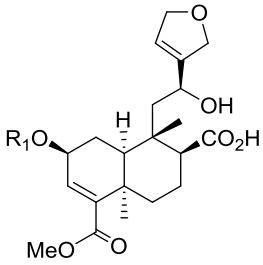

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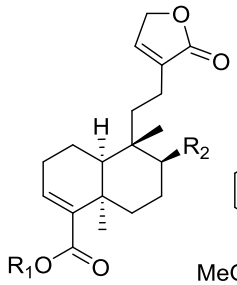

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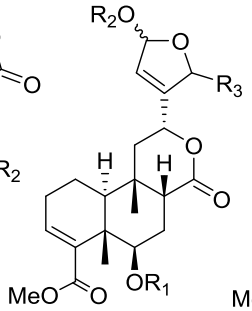

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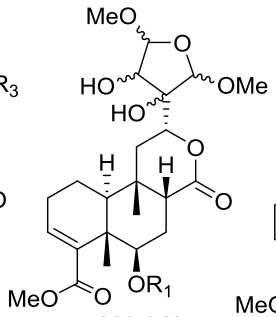

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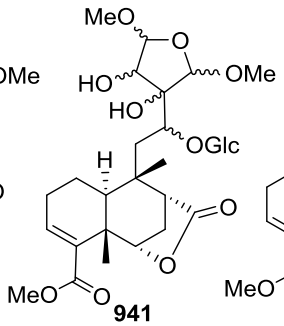

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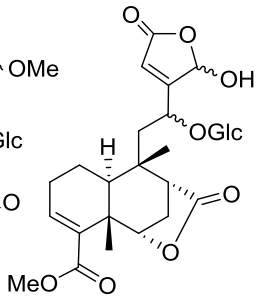

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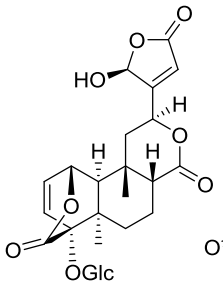

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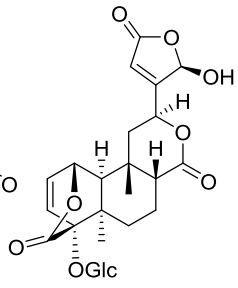

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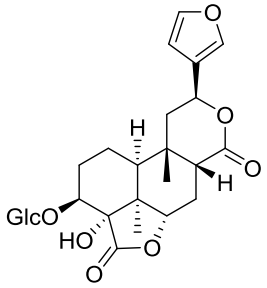

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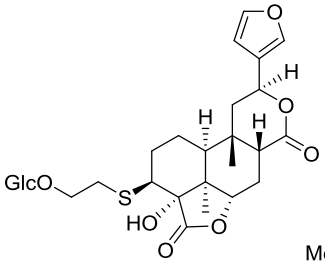

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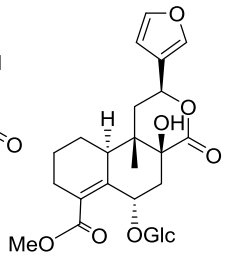

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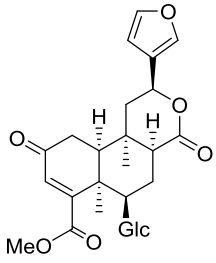

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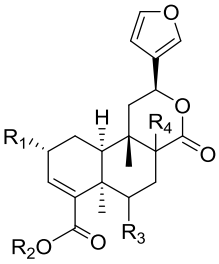

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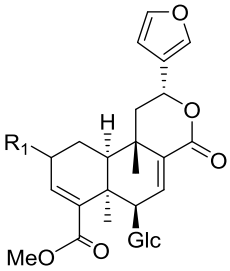

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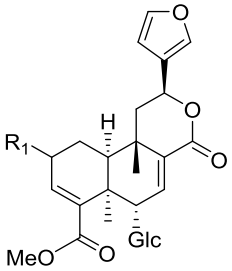

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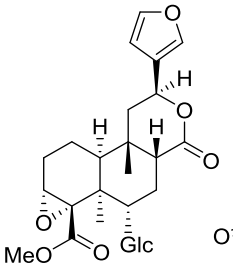

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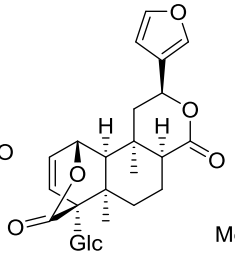

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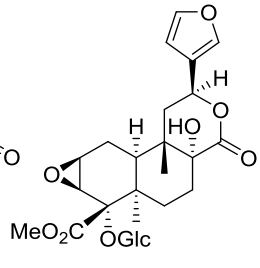

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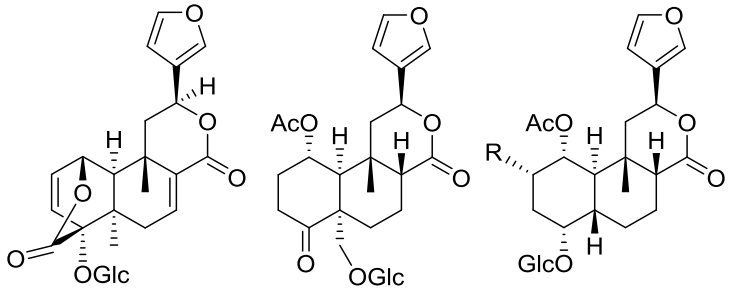
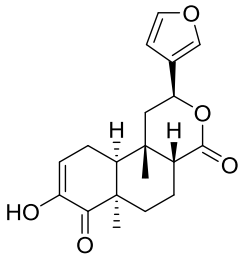


969 **970** **971,972**

		R1	R2	R3	R4		
927	borapetoside D	H	Glc-(6→1)-Glc	—	—	*Tinospora tuberculata*	*Liebigs Ann. Chem.*, 1993, 491-495
928	borapetoside E	H	Glc	—	—		
929	rumphioside I	αOH	Glc	—	—	*Tinospora rumphii*	*Phytochemistry*, 1996, **42**, 153-158
932	sagittatayunnanoside B	Glc-(6→1)-Glc			—	*Tinospora sagittata* var. *yunnanensis*	*Planta Med.*, 2014, **80**, 419-425
933	sagittatayunnanoside A	OH	CH_2OGlc				
934	sagittatayunnanoside C	OGlc	CH_2OGlc				
935	sagittatayunnanoside D	OH	CO_2Glc	—	—		
936	rumphioside A	β-D-Glc	H	=O	—	*Tinospora rumphii*	*Phytochemistry*, 1995, **40**, 1729-1736
937	rumphioside B	β-D-Glc	Me	=O	—		
938	rumphioside Ac-D	$Glc(Ac)_4$	Me	OMe	—		
939	rumphioside C	β-D-Glc	—	—	—		
940	rumphioside C-1	β-D-Glc	—	—	—		
941	rumphioside E	—	—	—	—		
942	rumphioside F	—	—	—	—		
943	cordifolide B	—	—	—	—	*Tinospora cordifolia*	*Org. Lett.*, 2012, **14**, 2118-2121
944	cordifolide C	—	—	—	—		
947	borapetoside A	—	—	—	—	*Tinospora crispa*	*J. Nat. Prod.*, 2010, **73**, 541-547
948	cordifolide A	—	—	—	—	*Tinospora cordifolia*	*Org. Lett.*, 2012, **14**, 2118-2121
949	cordioside	—	—	—	—		*Phytochemistry*, 1995, **38**, 447-449
950	(5*R*,6*R*,8*S*,9*R*,10*S*,12*S*)-15,16-epoxy-2-oxo-6-*O*-(β-D-gluco-pyranosyl)-cleroda-3,13(16),14-trien-17,12-olid-18-oic acid methyl ester	—	—	—	—	*Tinospora crispa*	*J. Nat. Prod.*, 2010, **73**, 541-547

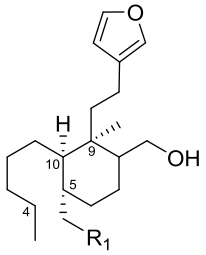
951	(2*R*,5*R*,6*R*,8*S*,9*S*,10*S*,12*S*)-15,16-epoxy-2-hydroxy-6-*O*-{β-D-glucopyranosyl-(1→6)-α-D-xylopyranosyl}-cleroda-3,13(16),14-trien-17,12-olid-18-oic acid methyl ester	αOH	Me	β-{β-D-Glc-(1→6)-α-D-Xyl}	αH		
952	(2*R*,5*R*,6*R*,8*R*,9*S*,10*S*,12*S*)-15,16-epoxy-2-hydroxy-6-*O*-(β-D-glucopyranosyl)-cleroda-3,13(16),14-trien-17,12-olid-18-oic acid methyl ester	αOH	Me	β-(β-D-Glc)	βH		
953	(5*R*,6*R*,8*S*,9*R*,10*R*,12*S*)-15,16-epoxy-2-oxo-6-*O*-(β-D-glucopyranosyl)-cleroda-3,13(16),14-trien-17,12-olid-18-oic acid methyl ester	=O	Me	β-(β-D-Glc)	αH		
954	epi-tinophylloloside	OGlc	Me	H	αH	*Tinospora capillipes*	*Chin. Chem. Lett.*, 1992, **3**, 185-188
955	tinospinoside A	OGlc	Me	H	βH	*Tinospora sagittata*	*Planta Med.*, 2012, **78**, 82-85
956	tinospinoside B	OGlc	Me	H	βOH		
957	tinospinoside C	OGlc	Me	H	αOH		
960	borapetoside C	H	Me	Glc	H	*Tinospora tuberculata*	*Liebigs Ann. Chem.*, 1993, 491-495
961	borapetoside G	=O	Me	Glc	H		
962	borapetoside F	H	—	—	—		
963	tinoscorside C	αOH	—	—	—	*Tinospora cordifolia*	*Fitoterapia*, 2010, **81**, 485-489
964	(2*R*,5*R*,6S,9*S*,10*S*,12*S*)-15,16-epoxy-2-hydroxy-6-*O*-(β-D-glucopyranosyl)-cleroda-3,7,13(16),14-tetraen-17,12-olid-18-oic acid methyl ester	αOH	—	—	—	*Tinospora crispa*	*J. Nat. Prod.*, 2010, **73**, 541-547
965	(5*R*,6S,9*S*,10*S*,12*S*)-15,16-epoxy-2-oxo-6-*O*-(β-D-glucopyranosyl)-cleroda-3,7,13(16),14-tetraen-17,12-olid-18-oic acid methyl ester	=O	—	—	—		
966	(3*R*,4*R*,5*R*,6*S*,8*R*,9*S*,10*S*,12*S*)-15,16-epoxy-3,4-epoxy-6-*O*-(β-D-glucopyranosyl)-cleroda-3,13(16),14-trien-17,12-olid-18-oic acid methyl ester	—	—	—	—		
967	(1*R*,4*S*,5*R*,8*S*,9*R*,10*S*,12*S*)-15,16- epoxy-4-*O*-(β-D-glucopyranosyl)-cleroda-2,13(16),14-triene-17(12),18(1)-diolide	—	—	—	—		

968	tinospinoside D	—	—	—	—	*Tinospora sagittata*	*Chem. Pharm. Bull.*, 2012, **60**, 1324-1328
969	tinospinoside E	—	—	—	—		
970	tinosposinenside A	—	—	—	—	*Tinospora sinensis*	*J. Nat. Prod.*, 2007, **70**, 1971-1976
971	tinosposinenside B	OAc	—	—	—		
972	tinosposinenside C	OH	—	—	—		



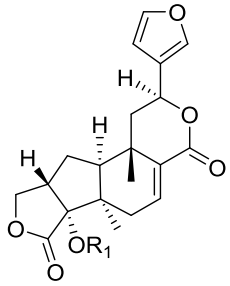
1056

1056	sagitone	*Tinosporasagittata* var. *yunnanensi*	*Molecules*, 2010, **15**, 8360-8365

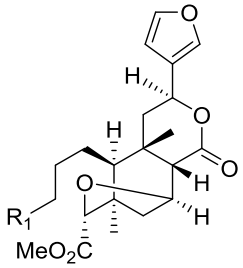


1137 R1 = H
1138 R1 = OH

1137	tinosporafuranol	*Tinospora cordifolias*	*Nat. Prod. Res.*, 2010, **24**, 926-9354
1138	tinosporafurandiol		



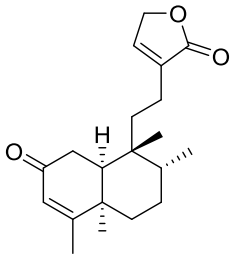
1174,1175



1176,1177

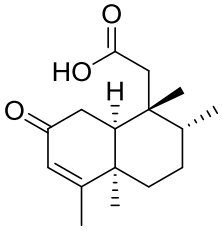
1174	baenzigeride A	H	*Tinospora baenzigeri*	*Phytochemistry*, 1999, **52**, 1335-1340
1175	baenzigeroside A	Glc		
1176	baenzigeride B	H		*Chem. Pharm. Bull.*, 2001, **49**, 854-857
1177	baenzigeroside B	Glc		

***VELLOZIA* Genus**



573

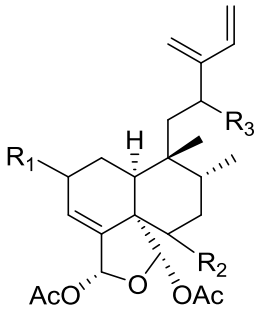
573	2-oxo-5α,8α-cleroda-3,13-dien-16,15-olide	*Vellozia bicolor*	*Phytochemistry*, 1994, **37**, 1115-1117



1090

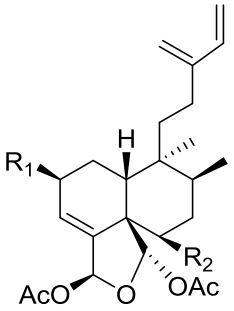
1090	2-oxo-5α,8β-13,14,15,16-tetranorclerod-3-en-12-oic acid	*Vellozia bicolor*	*Phytochemistry*, 1994, **37**, 1115-1117

ZUELANIA Genus



17 R_1 = α-OH, R_2 =α-OCin, R_3 = H
18 R_1 = β-OCin, R_2 = α-OH, R_3 = H
19 R_1 = α-OH, R_2 = α-X_{13}, R_3 = H
20 R_1 = α-OH, R_2 = α-X_{13}, R_3 = α-OH

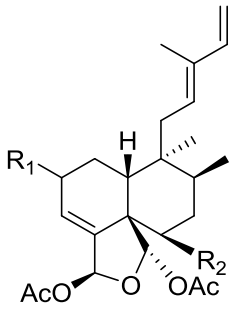
17	zuelaguidin A	*Zuelania guidonia*	*J. Nat. Prod.*, 2014, **77**, 455-463
18	zuelaguidin B		
19	zuelaguidin C		
20	zuelaguidin D		



44 R = OAc, R2 = OCin
45 R1 = H, R2 = H
75 R1 = OBz, R2 = OH

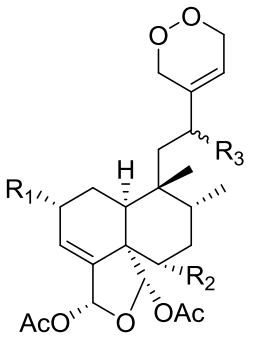
44	*rel*-2*β*-acetoxy-isozuelanin-6*β*-cinnamate	*Zuelania guidonia*	*Phytochemistry*, 1990, **29**, 2939-2942
45	isozuelanin*		
75	6*β*-hydroxyisozuelanin-2*β*-benzoate		

* Not an isolated compound



112 R1 = α-OH, R2 = OCin
113 R1 = α-OCin, R2 = OH
114 R1 = β-OH, R2 = OCin
120 R1 = α-OAc, R2 = OH
121 R1 = α-OOct, R2 = OH
122 R1 = β-OOct, R2 = OH
123 R1 = β-OBz, R2 = OH
124 R1 = α-OH, R2 = OBz
125 R1 = α-OH, R2 = X8
126 R1 = β-OBz, R2 = H

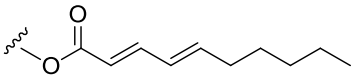
112	*rel*-2*α*-hydroxyzuelanin-6*β*-cinnamate	*Zuelania guidonia*	*Phytochemistry*, 1990, **29**, 1609-1614
113	*rel*-6*β*-hydroxyzuelanin-2*α*-cinnamate		
114	*rel*-2*β*-hydroxyzuelanin-6*β*-cinnamate		
120	6*β*-hydroxyzuelanin-2*α*-acetate	*Zuelania guidonia*	*Phytochemistry*, 1990, **29**, 2939-2942
121	6*β*-hydroxyzuelanin-2*α*-*n*-octacetate		
122	6*β*-hydroxyzuelanin-2*β*-*n*-octacetate		
123	6β-hydroxyzuelanin-2*β*-*n*-benzoate		
124	2*α*-hydroxyzuelanin-6*β*-*n*-benzoate		
125	2*α*-hydroxyzuelanin-6*β*-*n*-(3-hydroxy)-octanoate		
126	zuelanin-2*β*-benzoate		

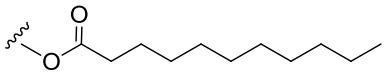


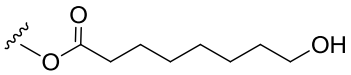
153-155

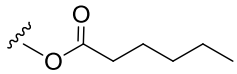
		R1	R2	R3		
153	zuelaguidin E	OH	OCin	H	*Zuelania guidonia*	*J. Nat. Prod*., 2014, **77**, 455-463
154	zuelaguidin G	Dc	OXyl	βOH		
155	zuelaguidin H	Dc	OXyl	αOH		

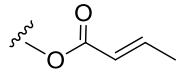
Abbreviation of Functional Groups

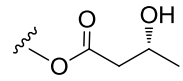
X_1 = 

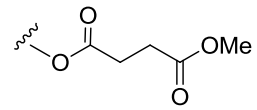
X_2 = 

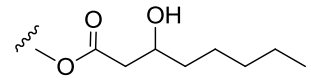
X_3 = 

X_4 = 

X_5 = 

X_6 = 

X_7 = 

X_8= 

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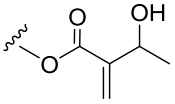
$X_{10} = CO(CH_2)_{18}Me$

$X_{11} = CO(CH_2)_{20}Me$

X_{12} = 

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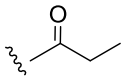
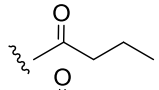
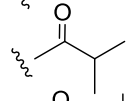
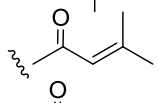
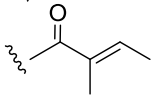
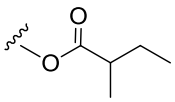
Pr = 

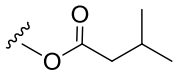
Bu = 

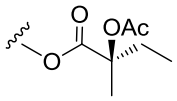
iBu = 

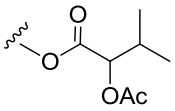
Sen = 

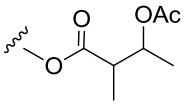
Tig = 

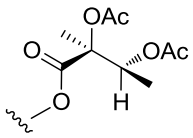
Y_1 = 

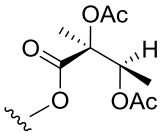
Y_2 = 

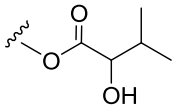
Y_3 = 

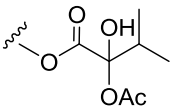
Y_4 = 

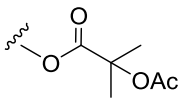
Y_5 = 

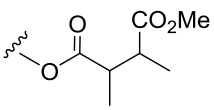
Y_6 = 

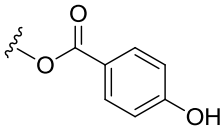
Y_7 = 

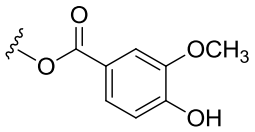
Y_8 = 

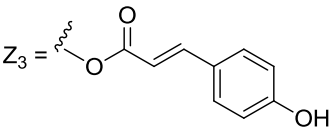
Y_9 = 

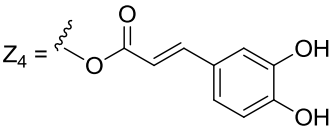
Y_{10} = 

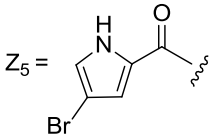
Y_{11} = 

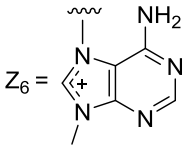
Z_1 = 

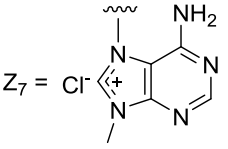
Z_2 = 

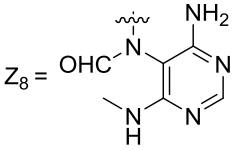
Z_3 = 

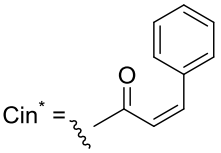
Z_4 = 

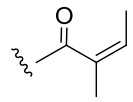
Z_5 = 

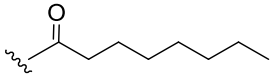
Z_6 = 

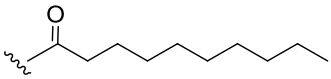
Z_7 = 

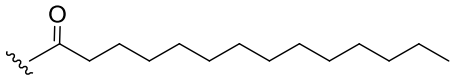
Z_8 = 

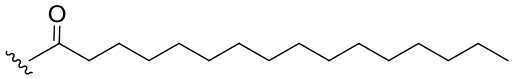
Cin^* = 

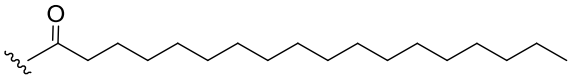
Ang = 

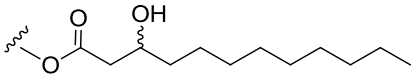
Oct = 

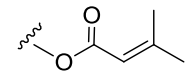
Dc = 

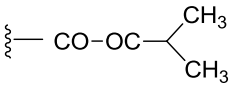
Myr = 

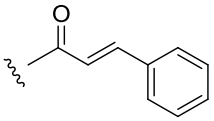
Pal = 

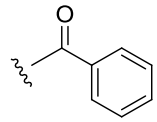
Ste = 

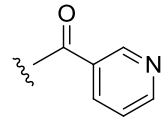
X_{13} = 

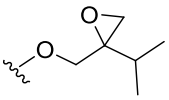
Y_{12} = 

M_1 = 

Cin = 

Bz = 

Nic = 

M_2 = 

T =