

SUPPLEMENTARY MATERIAL for

Clerodane Diterpenes: Sources, Structures, and Biological Activities

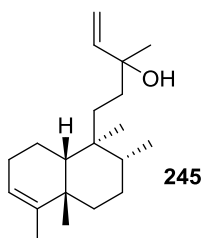
Rongtao Li^{a,b}, Susan L. Morris-Natschke^b, and Kuo-Hsiung Lee^{b,c*}*

CONTENT:

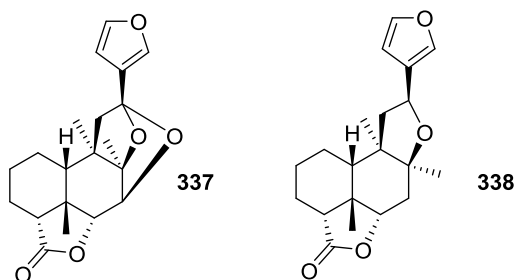
Structures of Clerodane Diterpenes arranged by Source

Abbreviations for Functional Groups

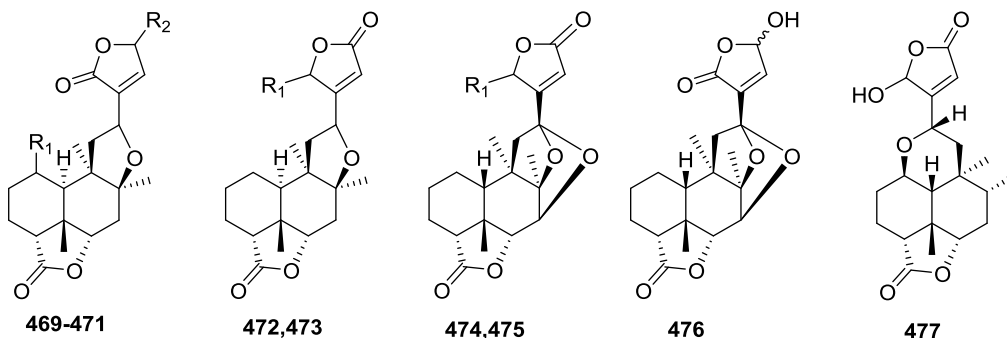
ADELANTHUS Genus



245	13-hydroxy- <i>cis-ent</i> -cleroda-3,14-diene	<i>Adelanthus lindenbergianus</i>	<i>Phytochemistry</i> , 2004, 65 , 127–137
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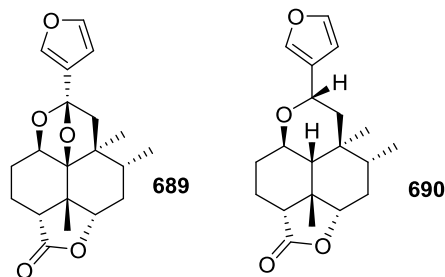


337	anastreptin	<i>Adelanthus lindenbergianus</i>	<i>Phytochemistry</i> , 2004, 65 , 127–137
338	8 β ,12:15,16-diepoxy- <i>cis-ent</i> -cleroda-13(16),14-dien-18 α ,6 α -olide		



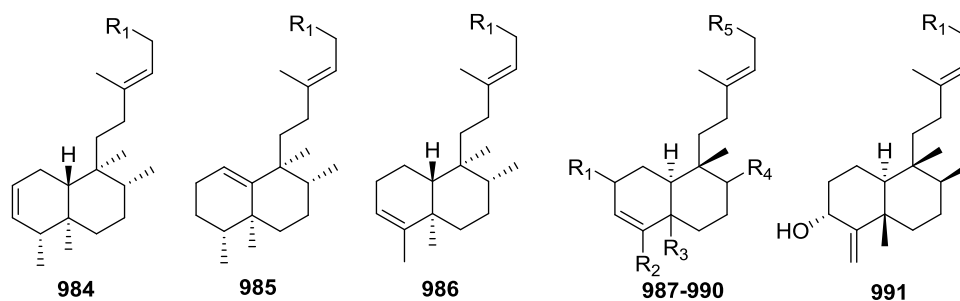
		R1	R2		
469	1 α -acetoxy-8 β ,12-epoxy-15-hydroxy- <i>cis-ent</i> -cleroda-13-en-16,15:18 α ,6 α -diolide	α OAc	OH	<i>Adelanthus lindenbergianus</i>	<i>Phytochemistry</i> , 2004, 65 , 127–137
470	8 β ,12-epoxy-15 α -hydroxy- <i>trans</i> -cleroda-13-en-16,15:18 α ,6 α -diolide	H	α OH		
471	8 β ,12-epoxy-15 β -hydroxy- <i>trans</i> -cleroda-13-en-16,15:18 α ,6 α -diolide	H	β OH		
472	8 β ,12-epoxy-16 α -hydroxy- <i>trans</i> -cleroda-13-en-15,16:18 α ,6 α -diolide	α OH	—		
473	8 β ,12-epoxy-16 β -hydroxy- <i>trans</i> -cleroda-13-en-15,16:18 α ,6 α -diolide	β OH	—		
474	7 β ,12:8 β ,12-diepoxy-16 α -hydroxy- <i>cis-ent</i> -cleroda-13-en-15,16:18 α ,6 α -diolide	α OH	—		
475	7 β ,12:8 β ,12-diepoxy-16 β -hydroxy- <i>cis-</i>	β OH	—		

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



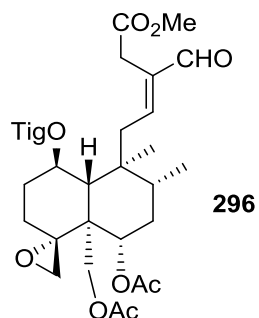
689	orcadensin	<i>Adelanthus lindenbergianus</i>	<i>Phytochemistry</i> , 2004, 65 , 127–137
690	1 β ,12:15,16-diepoxy- <i>cis-ent</i> -cleroda-13(16),14-dien-18 α ,6 α -olide		

AGELAS Genus

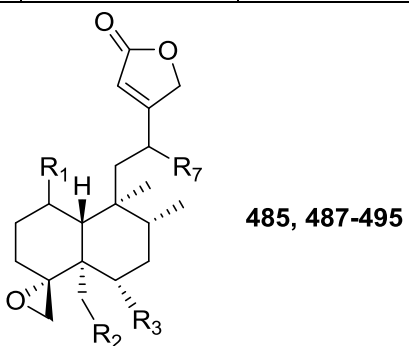


		R1	R2	R3	R4	R5		
984	agelasine K	Z ₇	—	—	—	—	<i>Agelas</i> cf. <i>mauritiana</i>	<i>J. Nat. Prod.</i> , 2008, 71 , 1451–1454
985	agelasine L	Z ₇	—	—	—	—		
986	axistatin 2	Z ₈	—	—	—	—	<i>Agelas axifera</i>	<i>J. Nat. Prod.</i> , 2013, 76 , 420-424
987	axistatin 1	H	Me	α Me	β Me	Z ₈		
988	agelasine P	=O	CH ₂ OZ ₅	α Me	β Me	Z ₆	<i>Agelas</i> sp. (NSS-19)	<i>Tetrahedron</i> , 2012, 68 , 9738-9744
989	agelasine Q	H	CH ₂ OZ ₅	α Me	α Me	Z ₆		
990	agelasine R	H	CH ₂ OZ ₅	β Me	β Me	Z ₆		
991	agelasine U	Z ₆	—	—	—	—		

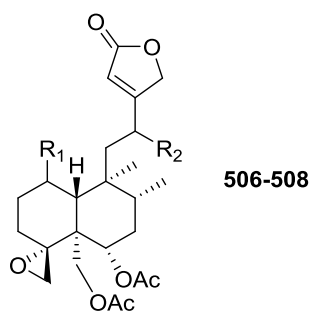
AJUGA Genus



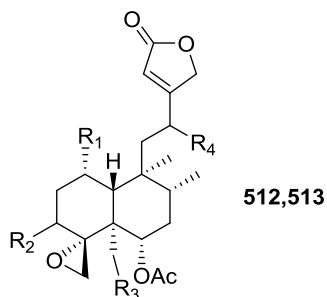
296	ajugacumbin J	<i>Ajuga decumbens</i>	<i>Nat. Prod. Res.</i> , 2014, 28 , 196-200
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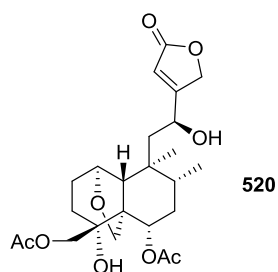
		R1	R2	R3	R7		
485	(12 <i>S</i>)-6 α -acetoxy-4 α ,18-epoxy-12-hydroxy-19-tigloyloxy- <i>neo</i> -clerod-13-en-15,16-olide	H	OTig	OAc	β OH	<i>Ajuga ciliate</i>	<i>Phytochem. Lett.</i> , 2012, 5 , 563-566
487	ajugapantin A	β OAc	OAc	OAc	α OAc	<i>Ajuga pantantha</i>	<i>Phytochemistry</i> , 1993, 34 , 1091-1094
488	ajugamacrin C	β OiBu	OAc	OAc	α OiBu		
489	ajugamacrin D	β OiBu	OAc	OAc	α OY ₁		
490	ajugamacrin E	β Y ₁	OAc	OAc	α OiBu	<i>Ajuga macrosperma</i>	<i>Phytochemistry</i> , 1993, 33 , 887-889
491	ajugamacrin A	β OAc	OAc	OAc	β iBu		
492	ajugamacrin B	β OAc	OAc	OAc	β Y ₁	<i>Ajuga decumbens</i>	<i>Biosci. Biotechnol. Biochem.</i> , 1997, 61 , 1518-1522
493	ajugatakasin A	OTig	OAc	OAc	OTig		
494	ajugatakasin B	Y ₁	OAc	OAc	Y ₁		
495	ajugamarin L2	H	OTig	OH	H	<i>Ajuga nipponensis</i>	<i>Chin. Chem. Lett.</i> , 1995, 6 , 581-582



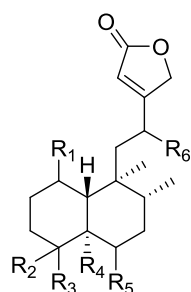
		R1	R2		
506	ajugalide A	β OH	α OAc	<i>Ajuga taiwanensis</i>	<i>Chem. Pharm. Bull.</i> , 2005, 53 , 164-167
507	ajugalide B	β OAc	α OH		
508	ajugalide C	H	α OH		



512	ajugacumbin E	OAc	β OAc	X_{12}	H	<i>Ajuga decumbens</i>	<i>Chem. Pharm. Bull.</i> , 1990, 38 , 3167-3168
513	3 α -hydroxyajugamarin F4	H	α OH	OAc	βY_1	<i>Ajuga reptans</i>	<i>Phytochemistry</i> , 1998, 47 , 1227-1232

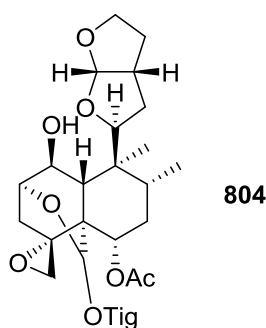
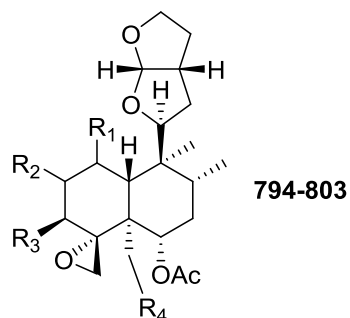


520	(12 <i>S</i>)-1 α ,19-epoxy-6 α ,18-diacetoxy-4 α ,12-dihydroxy- <i>neo</i> -clerod-13-en-15,16-olide					<i>Ajuga decumbens</i>	<i>Fitoterapia</i> , 2012, 83 , 1409-1414
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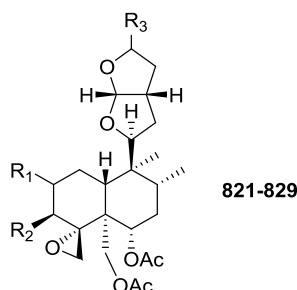


601-608

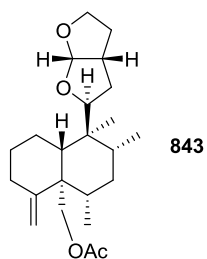
		R1	R2	R3	R4	R5	R6		
601	(12 <i>S</i>)-6 α ,18,19-tri-acetoxy-4 α ,12-dihydroxy-1 β -tigloyloxy- <i>neo</i> -clerod-13-en-15,16-olide	β OTig	β CH ₂ OAc	α OH	CH ₂ OAc	β OAc	β OH	<i>Ajuga ciliate</i>	<i>Fitoterapia</i> , 2011, 82 , 1123-1127
602	ajugaciliatin I	H	β CH ₂ OAc	α OH	CH ₂ OTig	β OH	H		<i>J. Nat. Prod.</i> , 2011, 74 , 1575–1583
603	ajugaciliatin J	H	β CH ₂ OTig	α OH	CH ₂ OH	β OH	H		
604	(12 <i>S</i>)-18,19-diacetoxy-4 α ,6 α ,12-trihydroxy-1 β -tigloyloxy- <i>neo</i> -clerod-13-en-15,16-olide	β OTig	β CH ₂ OAc	α OH	CH ₂ OAc	β OH	β OH	<i>Ajuga decumbens</i>	<i>Planta Med.</i> , 2012, 78 , 1579-1583
605	4 α ,6 α -dihydroxy-18-(4'-methoxy-4'-oxobutyryloxy)-19-tigloyloxy- <i>neo</i> -clerod-13-en-15,16-olide	H	β CH ₂ X ₇	α OH	CH ₂ OTig	β OH	β H		
606	6 α ,18-diacetoxy-4 α -hydroxy-19-tigloyloxy- <i>neo</i> -clerod-13-en-15,16-olide	H	β CH ₂ OAc	α OH	CH ₂ OTig	β OAc	H	<i>Ajuga ciliate</i>	<i>Phytochem. Lett.</i> , 2012, 5 , 563-566
607	ajugalide D	H	H	α CO ₂ Me	Me	α OH	α OH	<i>Ajuga taiwanensis</i>	<i>Chem. Pharm. Bull.</i> , 2005, 53 , 164-167
608	ajugacumbin F	H	β CH ₂ OH	α OH	CH ₂ OTig	α OH	H	<i>Ajuga decumbens</i>	<i>Chem. Pharm. Bull.</i> , 1990, 38 , 3167-3168



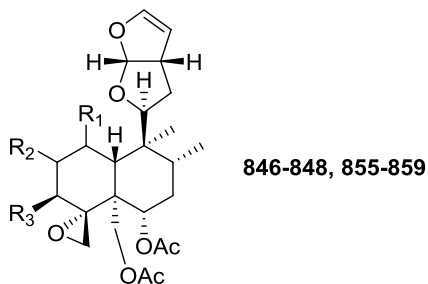
No.	Compound Name	R ₁	R ₂	R ₃	R ₄	Source	Ref.
794	lupulin F	H	αOH	OPr	OAc	<i>Ajuga lupulina</i>	<i>Indian J. Chem.</i> , 1999, 38B , 743-745
795	ajubractin C	H	H	MeBuO	OAc	<i>Ajuga bracteosa</i>	<i>J. Nat. Prod.</i> , 2011, 74 , 1036-1041
796	ajubractin D	H	αOH	OiBu	OAc		
797	ajubractin E	H	H	OH	OAc		
798	areptin A	βOH	αOAc	Y ₁	OAc	<i>Ajuga reptans</i>	<i>Phytochemistry</i> , 1998, 49 , 2443-2447
799	ajugavensin A	βOY ₁	H	H	OAc	<i>Ajuga genevensis</i>	<i>Phytochemistry</i> , 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	<i>Ajuga reptans</i>	<i>Phytochemistry</i> , 1998, 47 , 1227-1232
803	ajugorientin	βOTig	H	OH	OAc	<i>Ajuga orientalis</i>	<i>Phytochemistry</i> , 1997, 45 , 121-123
804	ajugapyrin A	--	--	--	--	<i>Ajuga pyramidalis</i>	<i>Phytochemistry</i> , 1998, 47 , 303-305



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

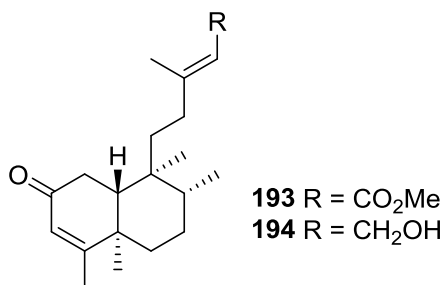


843	lupulin C	<i>Ajuga lupulina</i>	<i>J. Nat. Prod.</i> , 1996, 59 , 668-670
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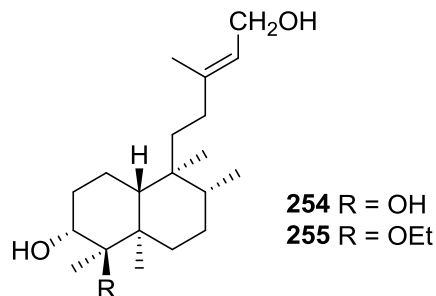


846	lupulin E	H	α OH	OPr	<i>Ajuga lupulina</i>	<i>Indian J. Chem.</i> , 1999, 38B ,
847	ajugachin A	H	α OH	OiBu	<i>Ajuga chamaepitys</i>	<i>Phytochemistry</i> , 1990, 29 , 2931-2933
848	ajugachin B	H	α OH	Y ₁₁		
855	ajubractin A	H	H	MeBuO	<i>Ajuga bracteosa</i>	<i>J. Nat. Prod.</i> , 2011, 74 , 1036- 1041
856	ajubractin B	H	H	iBuO		
857	ajugapitin	H	α OH	MeBuO		
858	areptin B	β OTig	H	OH	<i>Ajuga reptans</i>	<i>Phytochemistry</i> , 1998, 49 ,
859	14,15-	β Y ₁	H	OH		<i>Phytochemistry</i> , 1998, 47 ,

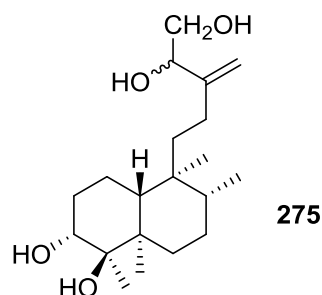
AMOORA Genus



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

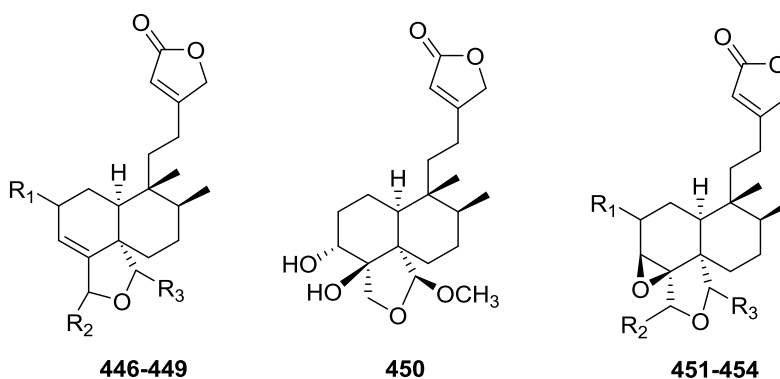


254	3 α ,4 β ,13 <i>E</i> -neoclerod-13-ene-3,4,15-triol	<i>Amoora stellatosquamosa</i>	<i>Helv. Chim. Acta</i> , 2004, 87 , 1279-1286
255	3 α ,4 β ,13 <i>E</i> -4-ethoxy-neoclerod-13-ene-3,15-diol		



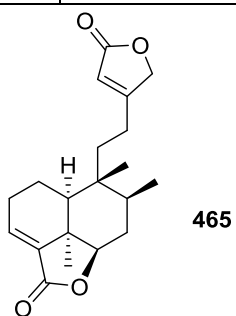
275	(3 α ,4 β -14 <i>RS</i>)-neo-clerod-13(16)-ene-3,4,14,15-tetrol	<i>Amoora stellatosquamosa</i>	<i>Helv. Chim. Acta</i> , 2004, 87 , 1279-1286
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AMPHIACHYRIS Genus

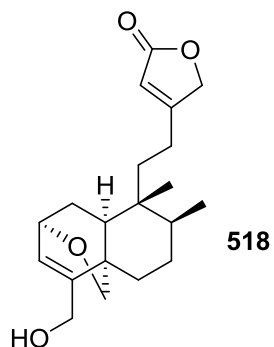


446	amphiacrolide A	H	H	=O	<i>Amphiachyris dracunculoides</i>	<i>J. Nat. Prod.</i> , 1990, 53 , 1312-1326 <i>J. Nat. Prod.</i> , 1996, 59 , 463-468 <i>J. Nat. Prod.</i> , 1996, 59 , 5-14
447	amphiacrolide B	H	=O	H		
448	amphiacrolide C	H	H	OH		
449	amphiacrolide L	β OH	=O	H		
450	amphiacrolide J	—	—	—		
451	amphiacrolide D	H	H	OH		
452	amphiacrolide M	β OH	H	β OH		
453	amphiacrolide E	H	α OEt	α OH		

454	amphiacrolide I	H	α OMe	α OH		
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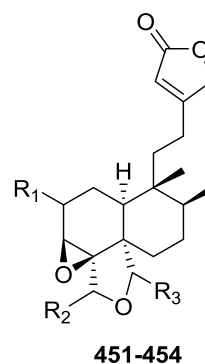
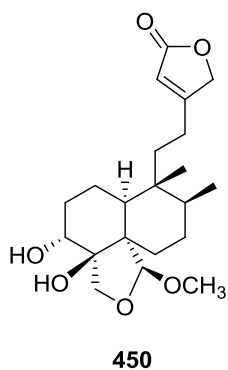
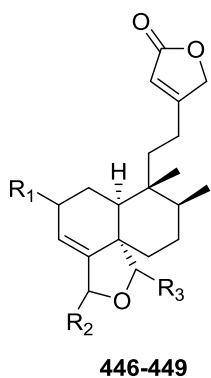


465	amphiacrolide F	<i>Amphiachyris dracunculoides</i>	<i>J. Nat. Prod.</i> , 1996, 59 , 5-14			
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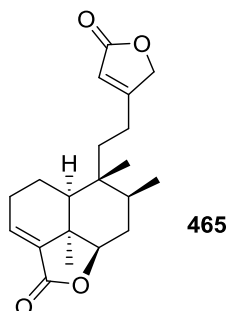
518	amphiacrolide K	<i>Amphiachyris dracunculoides</i>	<i>J. Nat. Prod.</i> , 1996, 59 , 463-468			
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AMPHIACHYRIS Genus

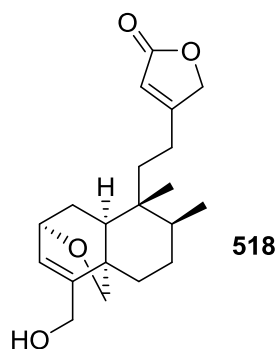


446	amphiacrolide A	H	H	=O	<i>Amphiachyris dracunculoides</i>	<i>J. Nat. Prod.</i> , 1990, 53 , 1312-1326
447	amphiacrolide B	H	=O	H		<i>J. Nat. Prod.</i> , 1996, 59 , 463-468
448	amphiacrolide C	H	H	OH		<i>J. Nat. Prod.</i> , 1996, 59 , 5-14
449	amphiacrolide L	β OH	=O	H		

450	amphiacrolide J	—	—	—		
451	amphiacrolide D	H	H	OH		
452	amphiacrolide M	β OH	H	β OH		
453	amphiacrolide E	H	α OEt	α OH		
454	amphiacrolide I	H	α OMe	α OH		

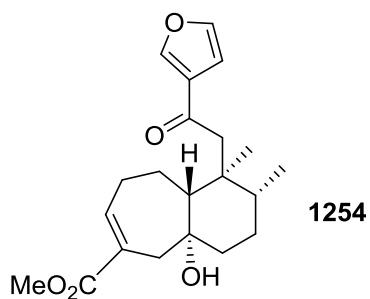


465	amphiacrolide F	<i>Amphiachyris dracunculoides</i>	<i>J. Nat. Prod.</i> , 1996, 59 , 5-14
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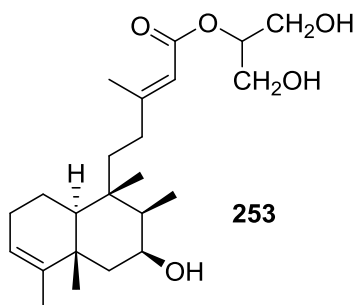
518	amphiacrolide K	<i>Amphiachyris dracunculoides</i>	<i>J. Nat. Prod.</i> , 1996, 59 , 463-468
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APARISTHIUM Genus

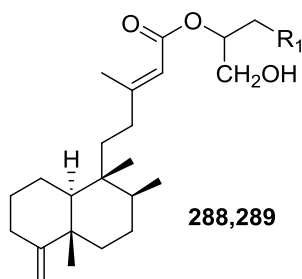


1254	aparisthman	<i>Aparisthium cordatum</i>	<i>Phytomedicine</i> , 2001, 8 , 94-100
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AUSTRODORIS Genus

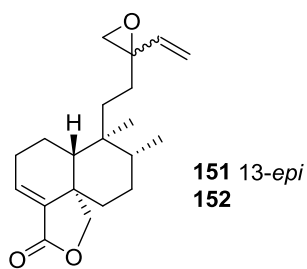
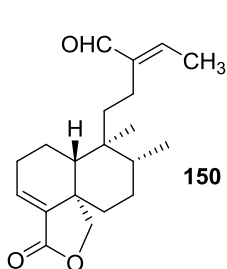


253	palmadorin C	<i>Austrodoris kerguelenensis</i>	<i>J. Nat. Prod.</i> , 2010, 73 , 416–421
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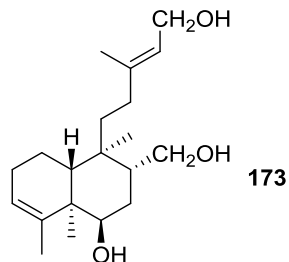


288	palmadorin A	OH	<i>Austrodoris kerguelenensis</i>	<i>J. Nat. Prod.</i> , 2010, 73 , 416–421
289	palmadorin B	OAc		

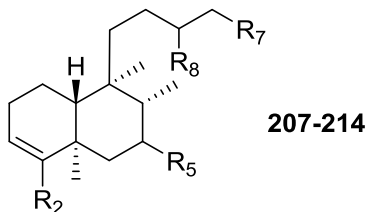
BACCHARIS Genus



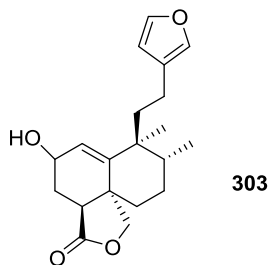
150	baclinal	<i>Baccharis linearis</i>	<i>Phytochemistry</i> , 1996, 41 , 1123-1127
151	13- <i>epi</i> -baclinepoxide		
152	baclinepoxide		



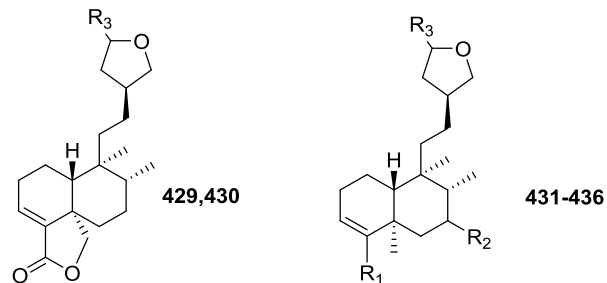
173	platypodiol	<i>Baccharis platypoda</i>	<i>Tetrahedron Lett.</i> , 2014, 55 , 4898-4900
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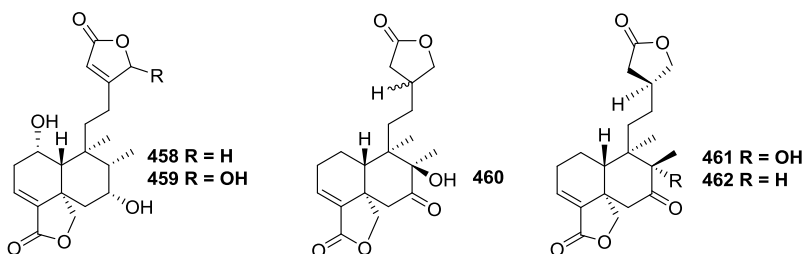
		R2	R5	R7	R8		
207	trinerdiol	CH ₂ OH	H	CH ₂ OH	Me	<i>Baccharis trinervis</i>	<i>Phytochemistry</i> , 1993, 34 , 1377-1384
208	15-acetyl-trinerdiol	CH ₂ OH	H	CH ₂ OAc	Me		
209	18-acetyl-trinerdiol	CH ₂ OAc	H	CH ₂ OH	Me		
210	18-methylmalonyl-trinerdiol	CH ₂ OMe-Mal	H	CH ₂ OH	Me		
211	15,18-diacetyl-trinertriol	CH ₂ OAc	H	CH ₂ OAc	CH ₂ OH		
212	14,15,18-triacetyl-trinertetrol	CH ₂ OAc	αOH	CH ₂ OAc	CH ₂ OAc		
213	15,16-diacetyl-trinertriol	CH ₂ OH	H	CH ₂ OAc	CH ₂ OAc		
214	15-hydroxy-16-acetoxy-ent-clerod-3-en-18-oic acid	CO ₂ H	H	CH ₂ OH	CH ₂ OAc	<i>Baccharis gaudichaudiana</i>	<i>Chem Pharm Bull</i> , 2007, 55 , 1532-1534



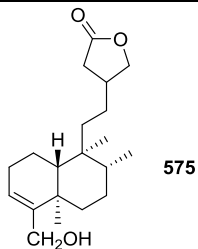
303	gaudichaudone	<i>Baccharis gaudichaudiana</i>	<i>J. Nat. Prod.</i> , 1994, 57 , 801-807
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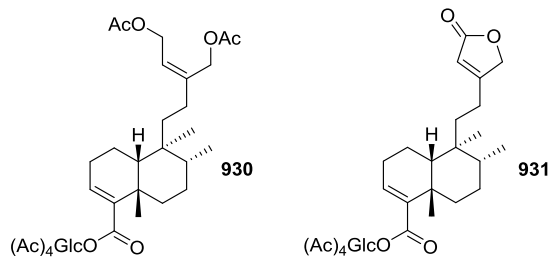
		R1	R2	R3		
429	trinerolide	—	—	α OMe	<i>Baccharis trinervis</i>	<i>Phytochemistry</i> , 1993, 34 , 1377-1384
430	15-epitrinerolide	—	—	β OMe		
431	18-acetyl-7 α -hydroxy-epimethyltrineracetel	CH ₂ OAc	α OH	β OMe		
432	18-methylmalonyl-7 α -hydroxy-methyltrineracetel	CH ₂ OMe-malo	α OH	α OMe		
433	18-methylmalonyl-7 α -hydroxy-epimethyltrineracetel	CH ₂ OMe-malo	α OH	β OMe	<i>Baccharis articulata</i>	<i>Phytochemistry</i> , 1993, 34 , 1087-1090
434	15,16-epoxy-7 α ,18-dihydroxy-15-methoxy- <i>ent</i> -clerod-3-ene	CH ₂ OH	α OH	OMe		
435	15,16-epoxy-15 α -methoxy- <i>ent</i> -clerod-3-en-18-oic acid	COOH	H	α OMe	<i>Baccharis gaudichaudiana</i>	<i>J. Nat. Prod.</i> , 2006, 69 , 274-276
436	13- <i>epi</i> -15,16-epoxy-15 α -methoxy- <i>ent</i> -clerod-3-en-18-oic acid	COOH	H	β OMe		



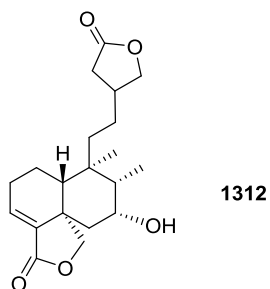
458	1 α ,7 α -dihydroxyneocleroda-3,13-dien-16,15:18,19-diolide	<i>Baccharis crispa</i>	<i>J. Nat. Prod.</i> , 1997, 60 , 490-492
459	1 α ,7 α ,15-trihydroxyneocleroda-3,13-dien-16,15:18,19-diolide		
460	8 β -hydroxy-7-oxo- <i>ent</i> -cleroda-3-en-15,18-dilactone	<i>Baccharis articulata</i>	<i>Phytochemistry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



575	trinerolactone	<i>Baccharis trinervis</i>	<i>Phytochemistry</i> , 1993, 34 , 1377-1384
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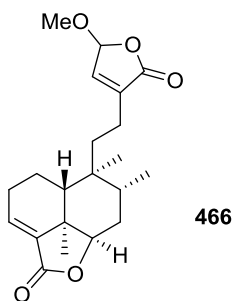


930	<i>cis</i> -cleroda-15,16-dihydroxy-3,13(<i>Z</i>)-dien-18- <i>O</i> -[β -D-galacto-pyranosyl]-peracetyylester	<i>Baccharis sagittalis</i>	<i>Phytochemistry</i> , 2002, 61 , 899-905
931	<i>cis</i> -cleroda-3,13(14)-dien-15,16-olide-18- <i>O</i> -[β -D-galacto-pyranosyl]-peracetyylester		



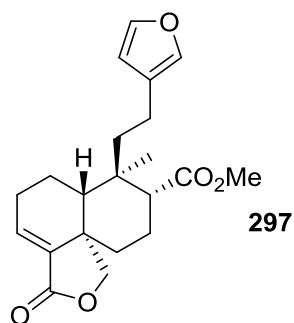
1312	--	<i>Baccharis trimeta</i>	<i>Phytochemistry</i> , 2000, 55 , 617-619
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BALLOTA Genus

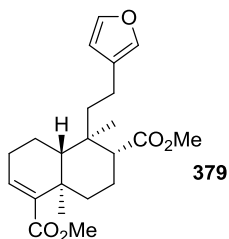


466	ballatenolide A	<i>Ballota limbata</i>	<i>Helv. Chim. Acta</i> , 2004, 87 , 682-689
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BARRINGTONIA Genus

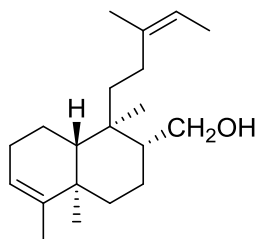


297	nasimalun A	<i>Barringtonia racemosa</i>	<i>J. Nat. Prod.</i> , 2000, 63 , 410-411
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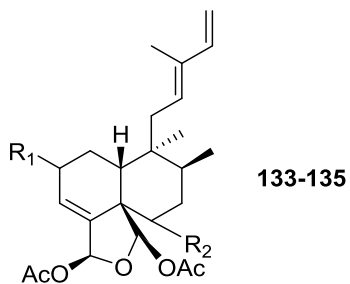
379	nasimalun B	<i>Barringtonia racemosa</i>	<i>J. Nat. Prod.</i> , 2000, 63 , 410-411
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BRAZILIAN PROPOLIS

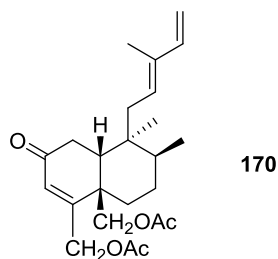


203	PMS-1	<i>Brazilian propolis</i>	<i>Anticancer Res.</i> , 1996, 16 , 2669-2672
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BUCIDA Genus

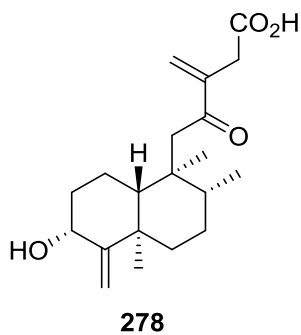


		R1	R2		
133	bucidasarin A	β OiBu	β OH	<i>Bucida buceras</i>	<i>Bioorg. Med. Chem. Lett.</i> , 2002, 12 , 345-348
134	bucidasarin B	β Y ₁	β OH		
135	bucidasarin C	β OiBu	H		

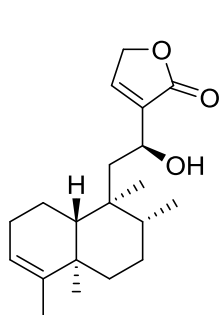


170	bucidasarin D	<i>Bucida buceras</i>	<i>Bioorg. Med. Chem. Lett.</i> , 2002, 12 , 345-348
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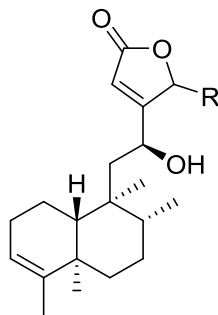
CALLICARPA Genus



278	pentandranoic acid C	<i>Callicarpa pentandra</i>	<i>J. Nat. Prod.</i> , 2000, 63 , 1062-1065
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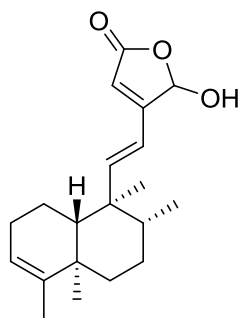


535



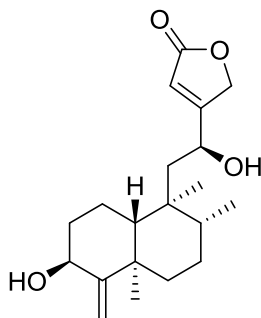
536-538

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



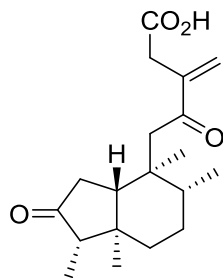
576

576	16 ζ -hydroxycleroda-3,11(<i>E</i>),13-trien-15,16-olide	<i>Callicarpa americana</i>	<i>J. Nat. Prod.</i> , 2007, 70 , 372-377
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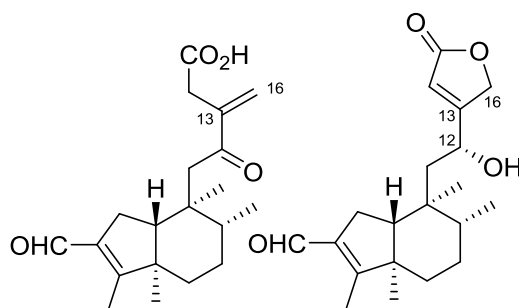
596

595	3 α ,12(<i>S</i>)-dihydroxy-cleroda-4(18),13-dien-15,16-olide	<i>Callicarpa americana</i>	<i>J. Nat. Prod.</i> , 2007, 70 , 372-377
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1055

1055	pentandranic acid B	<i>Callicarpa pentandra</i>	<i>J. Nat. Prod.</i> , 2000, 63 , 1062-1065
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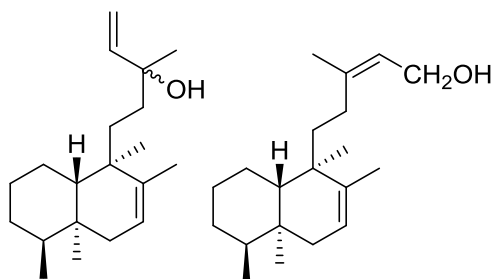


1153

1154

1153	pentandranic acid A	<i>Callicarpa pentandra</i>	<i>J. Nat. Prod.</i> , 2000, 63 , 1062-1065
1154	pentandralactone		

CAREX Genus

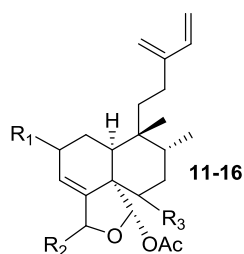
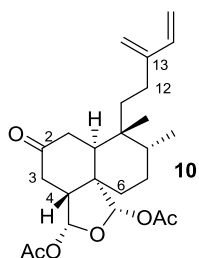


270

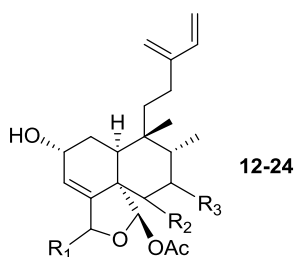
271

270	13-hydroxycyclocleroda-7,14-diene	<i>Carex distachya</i>	<i>Nat. Prod. Commun.</i> , 2010, 5 , 1539-1542
271	15-hydroxycyclocleroda-7,13-diene		

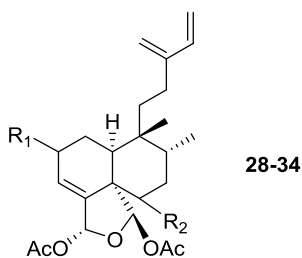
CASEARIA Genus



		R1	R2	R3		
10	balanspene A	—	—	—	<i>Casearia balansae</i>	<i>J. Nat. Prod.</i> , 2014, 77 , 2182–2189
11	balanspene B	=O	α OBu	H		
12	balanspene C	α Y ₁	α OBu	H		
13	balanspene D	α OBu	α OBu	α OMe		
14	balanspene E	α Y ₁	α OBu	α OMe		
15	balanspene F	α Y ₁	α OMe	α OMe		
16	balanspene G	β OAc	α OMe	α OMe		

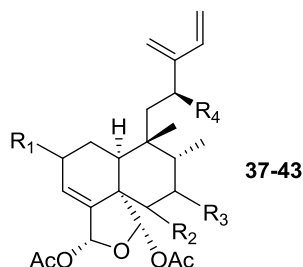


		R1	R2	R3		
21	casearupestrin A	α OAc	α X ₁	β OH	<i>Casearia rupestris</i>	<i>J. Nat. Prod.</i> , 2011, 74 776–781
22	casearupestrin B	α OAc	α OH	β X ₁		
23	casearupestrin C	α OMe	α OH	β X ₁		
24	casearupestrin D	α OAc	α OAc	β X ₁		

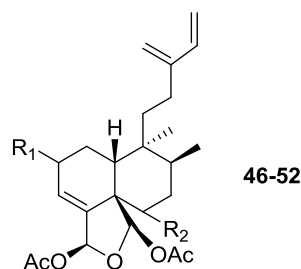


		R1	R2		
28	<i>ent</i> -6 β -hydroxy-isozuelanin-2 β -(2-methyl)butanoate	α Y ₁	α OH	<i>Casearia corymbosa</i>	<i>Phytochemistry</i> , 1990, 29 , 3591-3595
29	<i>ent</i> -6 β -methoxy-isozuelanin-2 β -(2-methyl)butanoate	α Y ₁	α OMe		
30	<i>ent</i> -2 β -(2-methyl)butoxy-3,4-dihydro-4 α -isozuelanin	α Y ₁	H		

31	<i>ent</i> -6 β -hydroxy-isozuelanin-2 β -(2-methyl)propanoate	α OiBu	α OH		
32	<i>ent</i> -6 β -methoxy-isozuelanin-2 β -(2-methyl)propanoate	α OiBu	α OMe		
33	<i>ent</i> -2 β -hydroxy-3,4-dihydro-4 α -isozuelanin	α OH	H		
34	<i>ent</i> -2 β -acetoxy-3,4-dihydro-4 α -isozuelanin	α OAc	H		

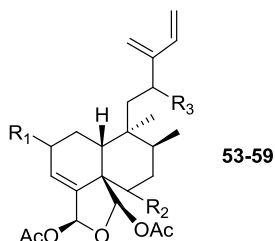


		R1	R2	R3	R4		
37	caseanigrescen A	α OBu	α OH	β OAc	H	<i>Casearia nigrescens</i>	<i>J. Nat. Prod.</i> , 2007, 70 , 206-209
38	caseanigrescen B	α OBu	α OH	β OH	H		
39	caseanigrescen C	α OBu	α OAc	β OH	H		
40	caseanigrescen D	α OBu	α OH	H	H		
41	argutin F	α X ₁	OH	β H	OOH	<i>Casearia arguta</i>	<i>J. Nat. Prod.</i> , 2010, 73 , 2013-2018
42	argutin G	α X ₁	OH	β OH	OOH		
43	argutin H	α OH	X ₁	β OH	OOH		

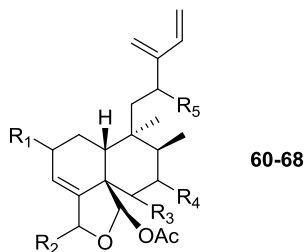


		R1	R2		
46	<i>rel</i> -18(<i>S</i>),19(<i>R</i>)-diacetoxy-18,19-epoxy-6(<i>R</i>)-methoxy-2(<i>S</i>)-(2 ζ -methylbutanoyloxy)-5(<i>R</i>),8(<i>S</i>),9(<i>S</i>),10(<i>R</i>)-cleroda-3,13(16),14-triene	β Y ₁	β OMe	<i>Casearia tremula</i>	<i>Phytochemistry</i> , 1996, 41 , 565-570
47	<i>rel</i> -18(<i>S</i>),19(<i>R</i>)-diacetoxy-18,19-epoxy-2(<i>S</i>)-(2 ζ -methylbutanoyloxy)-5(<i>R</i>),8(<i>S</i>),9(<i>S</i>),10(<i>R</i>)-cleroda-3,13(16),14-triene	β Y ₁	β H		
48	<i>rel</i> -18(<i>S</i>),19(<i>R</i>)-diacetoxy-18,19-epoxy-6(<i>R</i>)-hydroxy-2(<i>S</i>)-(2 ζ -methylbutanoyloxy)-5(<i>R</i>),8(<i>S</i>),9(<i>S</i>),10(<i>R</i>)-cleroda-3,13(16),14-triene	β Y ₁	β OH		
49	<i>rel</i> -18(<i>S</i>),19(<i>R</i>)-diacetoxy-18,19-epoxy-6(<i>R</i>)-hydroxy-2(<i>S</i>)-undecanoyloxy-5(<i>R</i>),8(<i>S</i>),9(<i>S</i>),10(<i>R</i>)-cleroda-3,13(16),14-triene	β X ₂	β OH		
50	<i>rel</i> -18(<i>S</i>),19(<i>R</i>)-diacetoxy-18,19-epoxy-6(<i>R</i>)-hydroxy-2(<i>S</i>)-octanoyloxy-5(<i>R</i>),8(<i>S</i>),9(<i>S</i>),10(<i>R</i>)-cleroda-	β OOct	β OH		

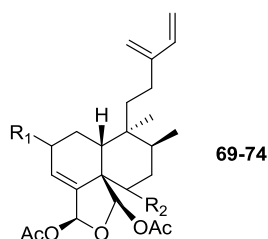
	3,13(16),14-triene				
51	<i>rel</i> -18(<i>S</i>),19(<i>R</i>)-diacetoxy-18,19-epoxy-6(<i>R</i>)-hydroxy-2(<i>S</i>)-(3 ζ -hydroxyoctanoyloxy)-5(<i>R</i>),8(<i>S</i>),9(<i>S</i>),10(<i>R</i>)-cleroda-3,13(16),14-triene	βX_3	βOH		
52	<i>rel</i> -18(<i>S</i>),19(<i>R</i>)-diacetoxy-18,19-epoxy-2(<i>R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



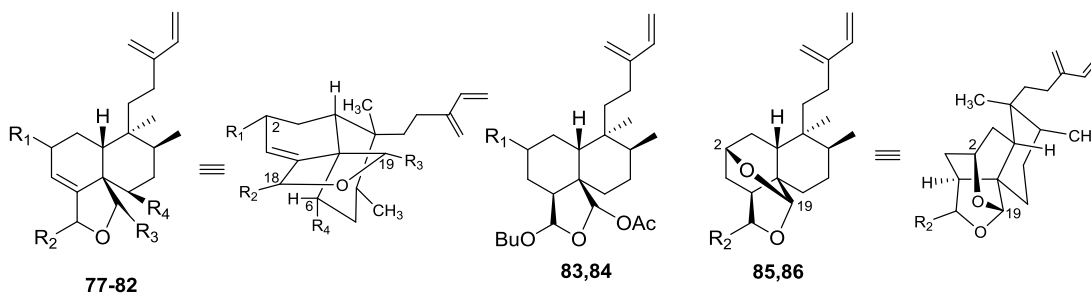
		R1	R2	R3		
53	casearlucin B	αOAc	βOMe	H	<i>Casearia lucida</i>	<i>J. Nat. Prod.</i> , 2002, 65 , 100-107
54	casearlucin D	βY_1	βOAc	H		
55	casearlucin H	βY_1	βOH	αOH		
56	casearlucin I	βY_1	βOH	βOH		
57	casearlucin M	βY_1	βOMe	H		
58	casearlucin J	αY_1	βOH	αOH		
59	casearlucin K	αY_1	βOH	βOH		



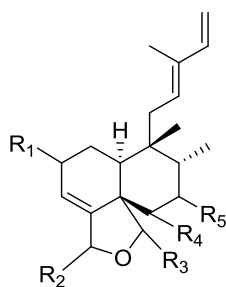
		R1	R2	R3	R4	R5		
60	caseamembrin A	βY_1	βOBU	βOH	H	H	<i>Casearia membranacea</i>	<i>J. Nat. Prod.</i> , 2004, 67 , 316-321
61	caseamembrin B	βY_1	βOMe	βOH	H	H		
62	caseamembrin C	βY_1	βOBU	βOH	βOH	H		
63	caseamembrin D	βY_1	βOBU	βOH	βOAc	H		<i>J. Nat. Prod.</i> , 2005, 68 , 1665-1668
64	caseamembrin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



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

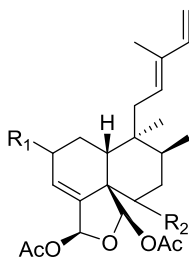


77	caseabalansin C	α OAc	OEt	OAc	OMe	<i>Casearia balansae</i>	<i>J. Nat. Prod.</i> , 2013, 76 , 1573-1579
78	2-epicaseabalansin C	β OAc	OEt	OAc	OMe		
79	caseabalansin D	β Y ₁	OEt	OAc	OH		
80	caseabalansin E	β Y ₁	OMe	OH	OMe		
81	caseabalansin F	=O	OAc	OAc	OMe		
82	caseabalansin G	=O	OBu	OAc	OMe		
83	caseabalansin B	α OH	—	—	—		
84	2-epicaseabalansin B	β OH	—	—	—		
85	caseabalansin A	—	β OH	—	—		
86	18-epicaseabalansin A	—	α OH	—	—		



87-111

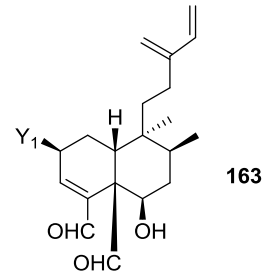
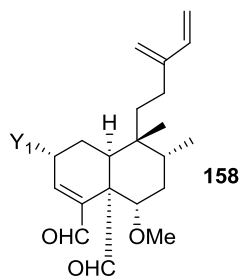
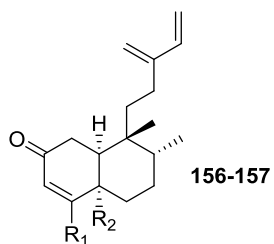
		R1	R2	R3	R4	R5		
87	casearvestrin A	β OiBu	α OAc	α OAc	α OH	H	<i>Casearia sylvestris</i>	<i>J. Nat. Prod.</i> , 2002, 65 , 95-99
88	casearvestrin B	β Y ₁	α OAc	α OAc	α OH	H		
89	casearvestrin C	β X ₄	α OAc	α OAc	α OH	H		
90	argutin A	α X ₁	α OAc	α OAc	OH	H	<i>Casearia arguta</i>	<i>J. Nat. Prod.</i> , 2010, 73 , 2013-2018
91	argutin B	α OH	α OAc	α OAc	X ₁	H		
92	argutin C	α X ₁	α OAc	α OAc	OH	OH		
93	argutin D	α OH	α OAc	α OAc	X ₁	OH		
94	argutin E	α X ₁	α OAc	α OAc	H	OH		
95	esculentin B	α Y ₂	β OAc	β OAc	β OH	α OH	<i>Casearia esculenta</i>	<i>Indian J. Chem.</i> , 2002, 41B , 2706-2708
96	casearborin A	α Z ₁	α OAc	α OAc	α H	H	<i>Casearia arborea</i>	<i>J. Nat. Prod.</i> , 2000, 63 , 657-661
97	casearborin B	α Z ₂	α OAc	α OAc	α H	H		
98	casearborin C	α OH	α OAc	α OAc	α Z ₁	H		
99	casearborin D	α Z ₁	α OAc	α OAc	α OH	H		
100	casearborin E	α OAc	α OAc	α OAc	α Z ₁	H		
104	caseargrewiin E	α OBu	α OAc	α OAc	H	H	<i>Casearia grewiifolia</i>	<i>J. Nat. Prod.</i> , 2007, 70 , 1122-1126
105	caseargrewiin F	α OBu	α OAc	α OAc	α OH	H		
106	caseargrewiin G	α OBu	α OMe	α OAc	α OH	H		
107	caseargrewiin H	α X ₄	α OAc	α OAc	H	H		
108	caseargrewiin I	α X ₄	α OAc	α OAc	α OH	H		
109	caseargrewiin J	α X ₄	α OMe	α OAc	α OH	H		
110	caseargrewiin K	α X ₄	α OMe	α OAc	α OH	β OH		
111	caseargrewiin L	α Y ₂	α OAc	α OAc	α OH	H		



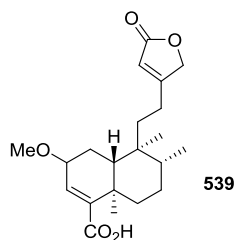
115-119, 127-128

		R1	R2		
115	casearlucin A	β Y ₁	β OH	<i>Casearia lucida</i>	<i>J. Nat. Prod.</i> , 2002, 65 , 100-107

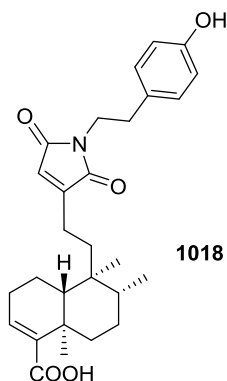
116	casearlucin C	βY_1	βOAc		
117	casearlucin F	βY_1	H		
118	casearlucin G	αY_1	H		
119	caseamembrol A	αY_1	βOH	<i>Casearia membranacea</i>	<i>Chem. Pharm. Bull.</i> , 2004, 52 , 108-110
127	caseobliquin A	αOAc	βZ_1	<i>Casearia obliqua</i>	<i>J. Nat. Prod.</i> , 2009, 72 , 1847-1850
128	caseobliquin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



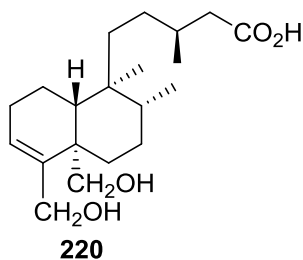
		R1	R2		
156	2-oxo-18-hydroxy-10 α ,17 α ,19 α ,20 β -(-)-cleroda-3,13(16),14-triene	CH ₂ OH	αMe	<i>Casearia corymbosa</i>	<i>Phytochemistry</i> , 1990, 29 , 3591-3595
157	2-oxo-18,19-diacetoxy-10 α ,17 α ,19 α ,20 β -(-)-cleroda-3,13(16),14-triene	CH ₂ OAc	αCH_2OAc		
158	balanspene H	—	—	<i>Casearia balansae</i>	<i>J. Nat. Prod.</i> , 2014, 77 , 2182–2189
163	caseamembrin F	—	—	<i>Casearia membranacea</i>	<i>J. Nat. Prod.</i> , 2004, 67 , 316-321



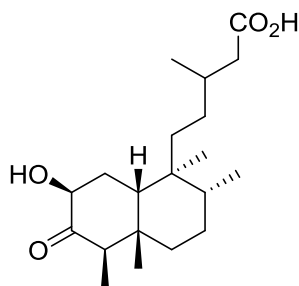
539	2 β -methoxy-cleroda-3,13-dien-18-carboxy-15,16-olide	<i>Casearia sylvestris</i>	<i>Fitoterapia</i> , 2009, 80 , 404–407
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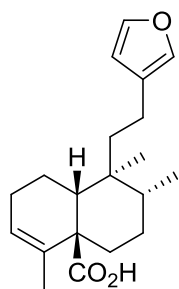
***CHRYSOCOMA* Genus**



220	18,19-dihydroxyclerod-3-en-15-oic acid	<i>Chrysocoma comaurea</i>	<i>Phytochemistry</i> , 1991, 30 , 607-609
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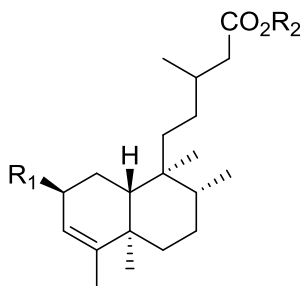


261	2β-hydroxy-3-oxo- <i>cis</i> -clerodan-15-oic acid	<i>Chrysocoma comaurea</i>	<i>Phytochemistry</i> , 1991, 30 , 607-609
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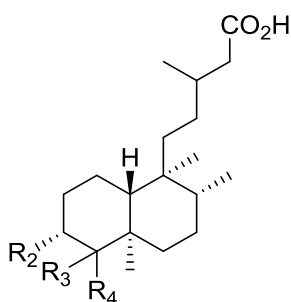
413	15,16-epoxy- <i>cis</i> -cleroda-3,13(16),14-trien-19-oic acid	<i>Chrysocoma comaurea</i>	<i>Phytochemistry</i> , 1991, 30 , 607-609
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CLAUSENA Genus



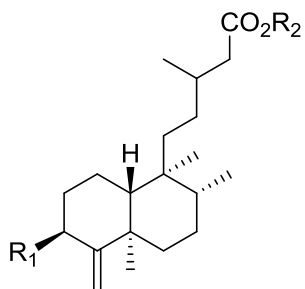
231 R1 = OCHO, R2 = H
 232 R1 = OAc, R2 = H
 233 R1 = H, R2 = Et

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



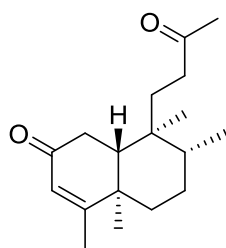
263 R2 = H, R3 = α-OH, R4 = β-CH₂OH
 264 R2 = H, R3 = β-OH, R4 = α-CH₃
 265 R2 = H, R3 = α-OH, R4 = β-CH₃

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



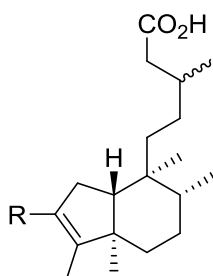
279 R1 = OH, R2 = H
 280 R1 = H, R2 = Et

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



1088

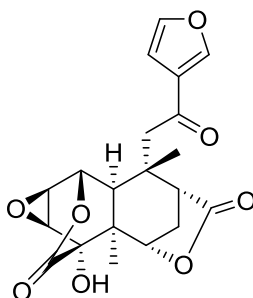
1088	14,15-dinorclerod-3-ene-2,13-dione	<i>Clausena dunniana</i>	<i>Helv. Chim. Acta.</i> , 2003, 86 , 3187-3193
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1150 R = CO₂H
1151 R = CHO

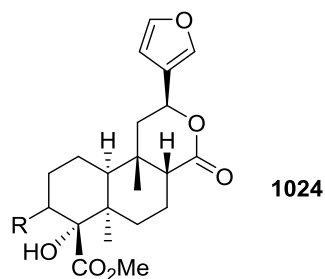
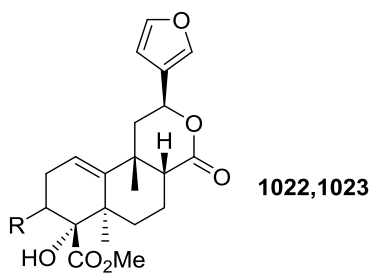
1150	dunniana acid A	<i>Clausena dunniana</i>	<i>J. Nat. Prod.</i> , 2002, 65 , 392-394
1151	dunniana acid B		

CLEIDION Genus



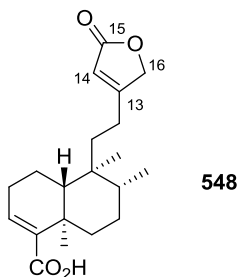
342

342	apiciflorin	<i>Cleidion spiciflorum</i>	<i>Phytochemistry</i> , 2006, 67 , 1029-1033
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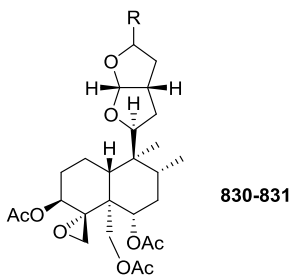


1022	cleidbrevoid A	β T	<i>Cleidion brevipetiolatum</i>	<i>Fitoterapia</i> , 2012, 83 , 1100-1104
1023	cleidbrevoid B	α T		
1024	cleidbrevoid C	β T		

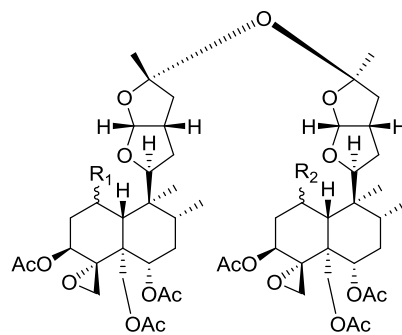
CLERODENDRUM Genus



548	clerodermic acid	<i>Clerodendrum inerme</i>	<i>Phytochemistry</i> , 1990, 29 , 3671-3673
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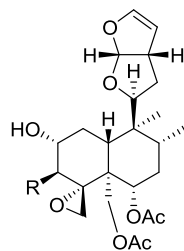


		R		
830	15-methoxy-14,15-dihydro-3-epicaryoptin	β OMe	<i>Clerodendrum inerme</i>	<i>Phytochemistry</i> , 1992, 31 , 338-340
831	14,15-dihydro-15 β -methoxy-3-epicaryoptin	OH		<i>Phytochemistry</i> , 2005, 66 , 643-648



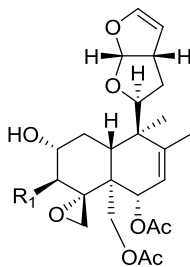
844,845

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



849-851

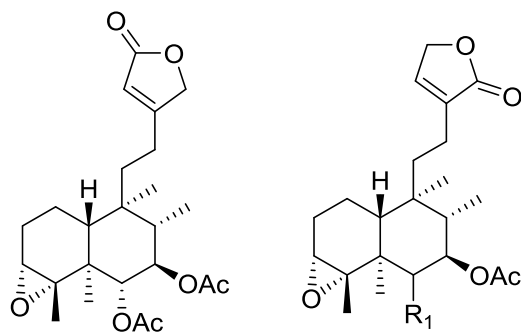
		R1		
849	clerodendrin B	Y ₃	<i>Clerodendrum inerme</i>	<i>Phytochemistry</i> , 1993, 34 , 572-574
850	clerodendrin C	Y ₁₀		
851	clerodendrin H	Y ₇	<i>Clerodendrum trichotomum</i>	<i>Phytochemistry</i> , 1998, 49 , 1975-1980



868-871

		R1		
868	clerodendrin I	Y ₆	<i>Clerodendrum trichotomum</i>	<i>Biosci. Biotechnol. Biochem.</i> , 1999, 63 , 1795-1797
869	clerodendrin E	Y ₁₀		<i>Phytochemistry</i> , 1998, 49 , 1975-1980
870	clerodendrin F	Y ₇		
871	clerodendrin G	Y ₁		

COLOUHOUNIA Genus

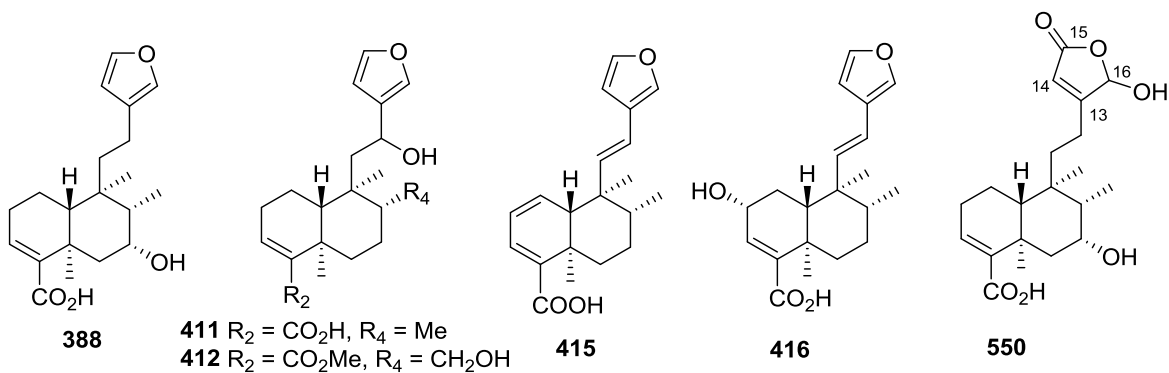


515

516,517

515	seguiniilactone A	—	<i>Colquhounia seguinii</i>	<i>J. Integr. Plant Biol.</i> , 2014, 56 , 928-940
516	seguiniilactone B	α OAc		
517	seguiniilactone C	H		

CONYZA Genus



388

411 R₂ = CO₂H, R₄ = Me

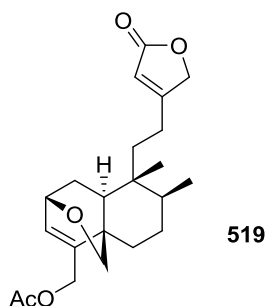
412 R₂ = CO₂Me, R₄ = CH₂OH

415

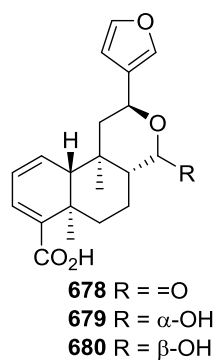
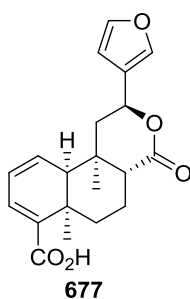
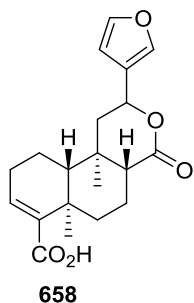
416

550

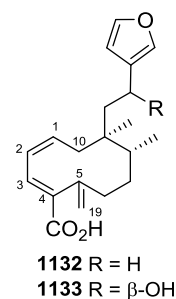
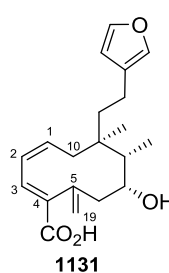
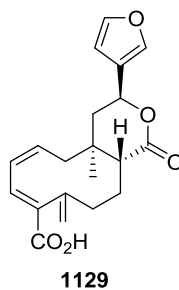
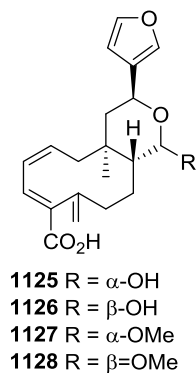
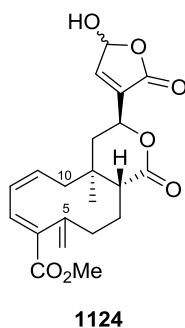
388	7 α -hydroxyhardwickiic acid	<i>Conyza hypoleuca</i>	<i>Phytochemistry</i> 1991, 30 , 575-581
411	12-hydroxyhardwickiic acid		
412	12,17-dihydroxyhardwickiic acid methyl ester		
415	1,2,11,12E-tetrahydrohardwickiic acid		
416	2 α -hydroxy-11,12E-dehydrohardwickiic acid		
550	conyhypolide A		



519	conyzalactone	<i>Conyza blinii</i>	<i>Heterocycles</i> , 1999, 51 , 605-609
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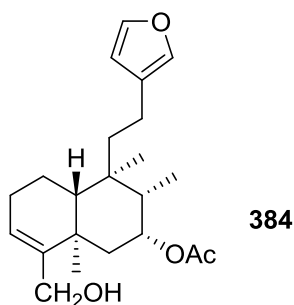
658	17-oxo-1,2-dihydrowelwitschic acid	<i>Conyza welwitschii</i>	<i>Phytochemistry</i> , 1990, 29 , 2247-2252
677	17-oxo-10-epi-welwitschic acid		
678	17-oxo-welwitschic acid		
679	17 α -hydroxywelwitschic acid		
680	17 β -hydroxywelwitschic acid		



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

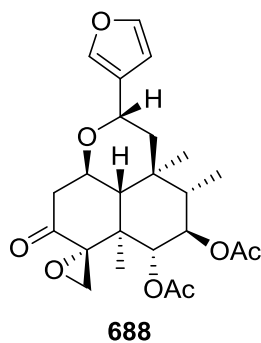
1131	7 α -hydroxystrictic acid	<i>Conyza hypoleuca</i>	<i>Phytochemistry</i> 1991, 30 , 575-581
1132	11,12 <i>E</i> -dehydrostrictic acid		
1133	12-hydroxystrictic acid	<i>Conyza welwitschii</i>	<i>Phytochemistry</i> , 1990, 29 , 2247-2252

COPAIFERA Genus



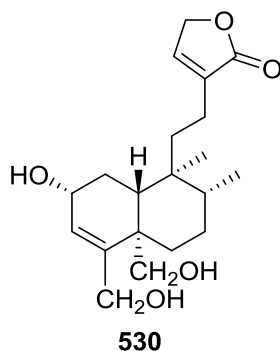
384	7 α -acetoxycornutin D	<i>Copaifera</i> sp.	<i>Phytochemistry</i> , 1996, 42 , 1653-1656
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CORNUTIA Genus



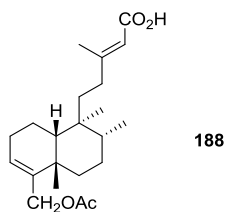
688	cornutin A	<i>Cornutia grandifolia</i>	<i>J. Org. Chem.</i> , 1992, 57 , 862-866
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CRASSOCEPHALUM Genus

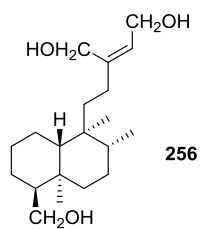


530	<i>ent</i> -2 β ,18,19-trihydroxycyclo- <i>roda</i> -3,13-dien-16,15-olide	<i>Crassocephalum bauchiense</i>	<i>Nat. Prod. Res.</i> , 2015, 29 , 1990-1994
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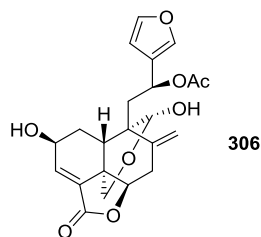
CROTON Genus



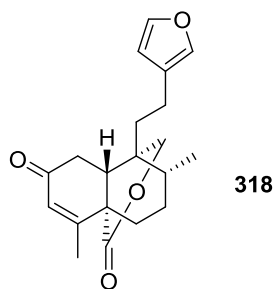
188	crotonic acid	<i>Croton chilensis</i>	<i>Bol. Soc. Chil. Quim.</i> , 1995, 40 , 157-162
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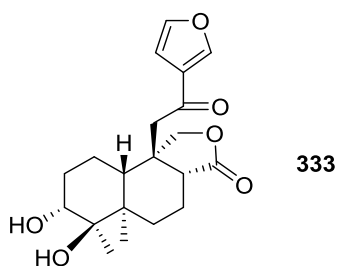
256	crolechinol	<i>Croton lechleri</i>	<i>Phytochemistry</i> , 1993, 32 , 755-760
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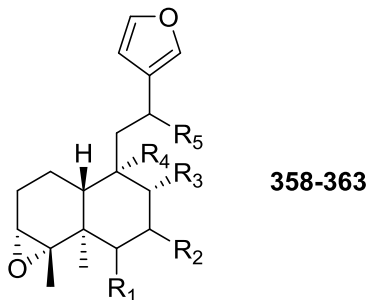
306	plaunol E	<i>Croton stellatopilosus</i>	<i>J. Nat. Med.</i> , 2013, 67 , 174-181
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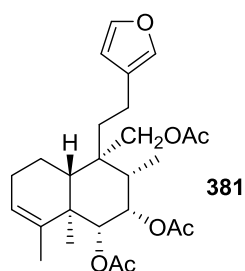
318	sacacarin	<i>Croton cajucara</i>	<i>Phytochemistry</i> , 1998, 49 , 823-828
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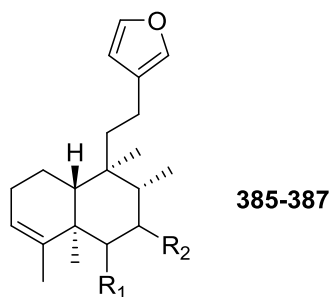
333	furocrotinsulolide B	<i>Croton insularis</i>	<i>Helv. Chim. Acta.</i> , 2005, 88 , 2654-2660
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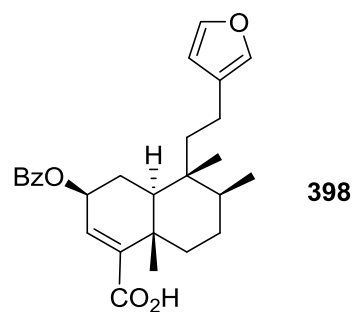
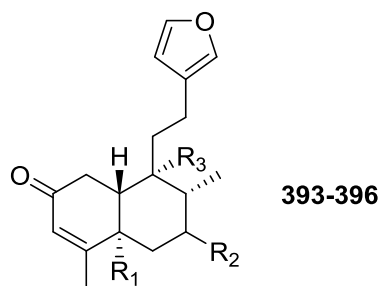
		R1	R2	R3	R4	R5		
358	epoxychiromodine	H	H	CO ₂ Me	Me	=O	<i>Croton megalocarpus</i>	<i>Phytochemistry</i> , 1992, 31 , 2055-2058
359	eluterin C	H	αOAc	Me	CH ₂ OH	H	<i>Croton eluteria</i>	<i>J. Agric. Food Chem.</i> , 2002, 50 , 5131-5138
360	eluterin D	H	αOH	Me	CH ₂ OAc	H		
361	eluterin E	H	αOAc	Me	CH ₂ OH	βOH		
362	eluterin F	αOAc	αOAc	Me	CH ₂ OAc	H		
363	eluterin G	αOAc	αOAc	Me	CHO	H		



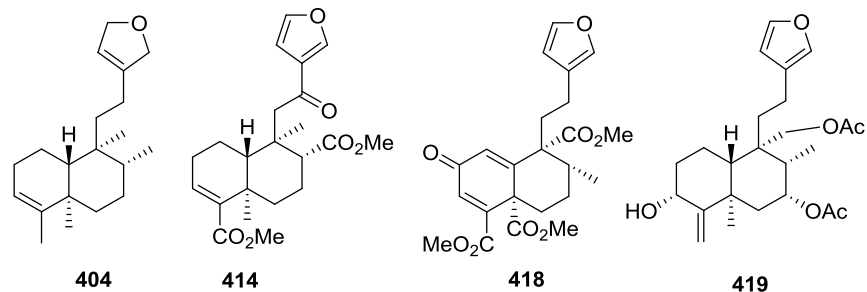
381	eluterin K	<i>Croton eluteria</i>	<i>J. Agric. Food Chem.</i> , 2003, 51 , 6970-6974
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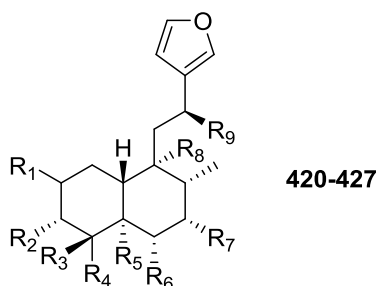
		R1	R2		
385	6 α -hydroxyannonene	α OH	H	<i>Croton sonderianus</i>	<i>Phytochemistry</i> , 1994, 36 , 1457-1463
386	6 α ,7 β -dihydroxyannonene	α OH	β OH		
387	6 α ,7 β -diacetoxyannonene	α OAc	β OAc		



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

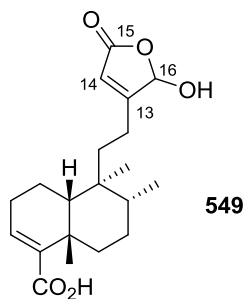


404	crotonolide G	<i>Croton laui</i>	<i>J. Nat. Prod.</i> , 2014, 77 , 1013-1020
414	crotomembranafuran	<i>Croton membranaceus</i>	<i>Nat. Prod. Commun.</i> , 2008, 3 , 1875-1878
418	crotonoligaketone	<i>Croton oligandrum</i>	<i>Z. Naturforsch. C</i> , 2014, 69 , 181-185
419	eluterin B	<i>Croton eluteria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

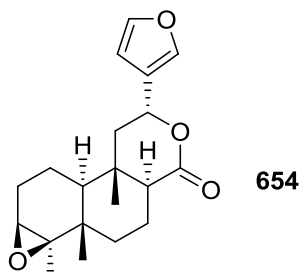


		R1	R2	R3	R4	R5	R6	R7	R8	R9		
420	crotonolide H	H	OH	OH	Me	Me	H	H	Me	OH	<i>Croton laui</i>	<i>J. Nat. Prod.</i> , 2014, 77 , 1013-1020
421	12-deoxycrotonolide H	H	OH	OH	Me	Me	H	H	Me	H		
422	crolechinic acid	H	H	H	β CO ₂ H	Me	H	H	Me	H	<i>Croton lechleri</i>	<i>Phytochem.</i> , 1993, 32 , 755-760
424	cascahilladione	=O	H	H	α Me	Me	H	H	Me	=O	<i>Croton eluteria</i>	<i>J. Agric. Food Chem.</i> , 2003, 51 , 6970-6974
425	eluterin A	H	=O	H	β Me	Me	H	OAc	CH ₂ OAc	H		<i>J. Agric. Food Chem.</i> , 2002, 50 , 5131-5138
426	3,12-dioxo-15,16-epoxycrocloda-13(16),14-dien-9-al	H	=O	H	β Me	Me	H	H	CHO	=O	<i>Croton hovarum</i>	<i>Phytochem.</i> , 1997, 45 , 379-381
427	3 α ,4 β -dihydroxy-15,16-epoxy-12-	H	OH	OH	α Me	Me	H	H	CHO	=O		<i>Phytochem.</i> , 1996, 41 , 561-563

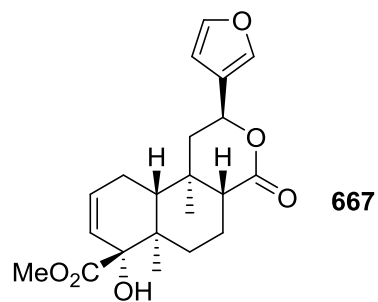
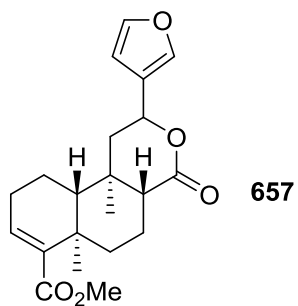
	oxo-cleroda-13(16),14-dien-9-al											
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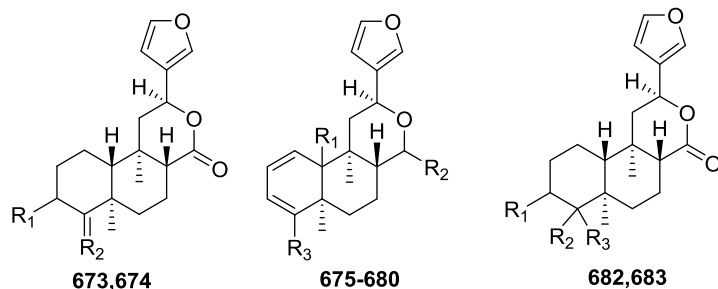
549	(-)-12,16-dihydroxy- <i>cis</i> -cleroda-3,13-dien-15-oic acid-15,16-olide	<i>Croton schiedeanus</i>	<i>Phytochemistry</i> , 1999, 51 , 643-649
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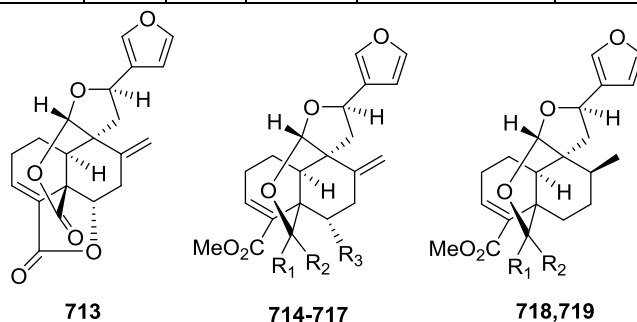
654	3,4,15,16-diepoxy-cleroda-13(16),14-diene-12,17-olide	<i>Croton oblongifolius</i>	<i>Phytochem. Lett.</i> , 2011, 4 , 147-150
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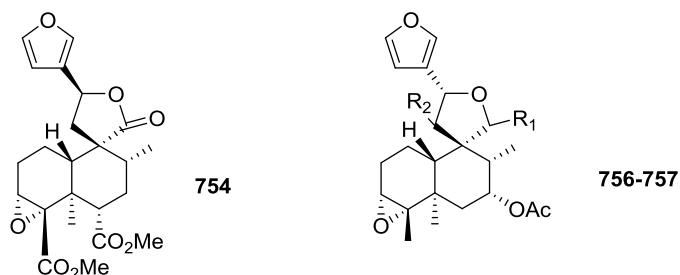
657	12-epi-methyl-barbascoate	<i>Croton ururucana</i>	<i>Phytochemistry</i> , 1998, 49 , 171-174
667	8-epicordatin	<i>Croton palanostigma</i>	<i>J. Braz. Chem. Soc.</i> , 2010, 21 , 731-739



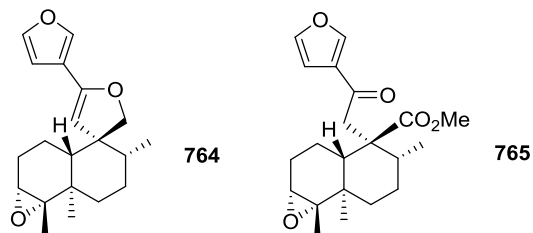
		R1	R2	R3		
673	crotonolide E	=O	α Me	—	<i>Croton laui</i>	<i>J. Nat. Prod.</i> , 2014, 77 , 1013-1020
674	crotonolide F	α OH	CH ₂	—		
675	—	α H	=O	CO ₂ Me	<i>Croton jimenezii</i>	<i>Ingenieria Y Ciencia Quimica</i> , 2000, 19 , 68-73
676	—	β H	=O	CO ₂ Me		
682	methyl 3-oxo-12-epibarbascoate	=O	H	CO ₂ Me	<i>Croton urucurana</i>	<i>J. Braz. Chem. Soc.</i> , 2013, 24 , 609-614.
683	furocrotonsulolide A	α OH	β OH	α Me	<i>Croton insularis</i>	<i>Helv. Chim. Acta.</i> , 2005, 88 , 2654-2660



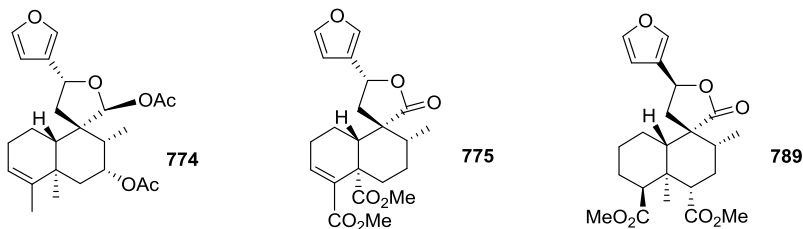
713	crotonolide A	—	—	—	—	<i>Croton laui</i>	<i>J. Nat. Prod.</i> , 2014, 77 , 1013-1020
714	crotonolide B	H	OH	H	—		
715	isocrotonolide B	OH	H	H	—		
716	crotonolide C	H	OH	OAc	—		
717	isocrotonolide C	OH	H	OAc	—		
718	crotonolide D	OH	OAc	—	—		
719	isocrotonolide D	H	OH	—	—		



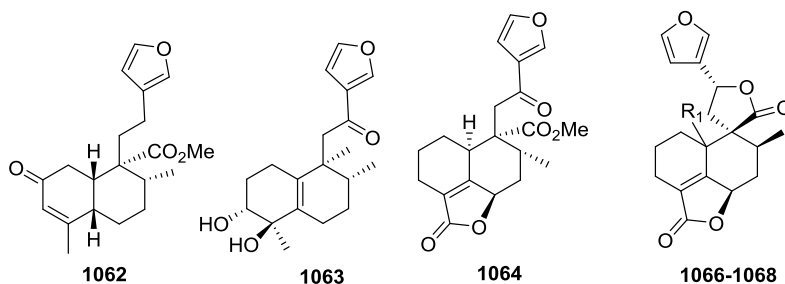
		R1	R2		
754	korberin A	—	—	<i>Croton lechleri</i>	<i>Phytochemistry</i> , 1993, 34 , 265-268
756	eluterin J	H	=O	<i>Croton eluteria</i>	<i>J. Agric. Food Chem.</i> , 2002, 50 , 5131-5138
757	eluterin I	β OAc	H		



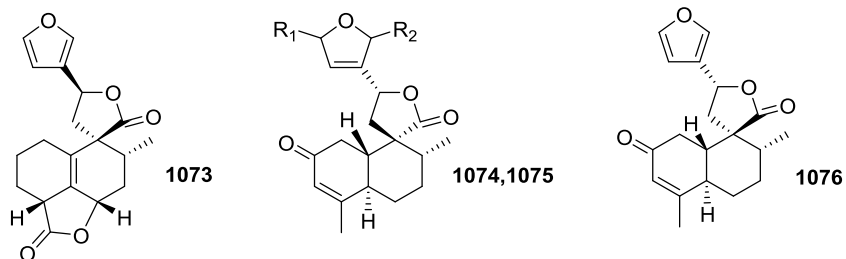
764	crotonpene A	<i>Croton yanhuui</i>	<i>Fitoterapia</i> , 2014, 95 , 229-233
765	crotonpene B		



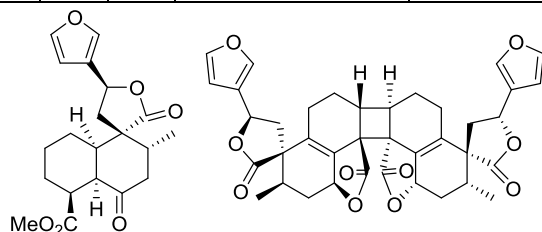
774	eluterin H	<i>Croton eluteria</i>	<i>J. Agric. Food Chem.</i> , 2002, 50 , 5131-5138
775	crotocorylifuran	<i>Croton haumanianus</i>	<i>Tetrahedron</i> , 1990, 46 , 5199-5202
779	korberin B	<i>Croton lechleri</i>	<i>Phytochemistry</i> , 1993, 34 , 265-268



1062	cajucarin B	—	<i>Croton cajucara</i>	<i>Chem. Pharm. Bull.</i> , 1990, 38 , 701-705
1063	3α,4β-dihydroxy-15,16-epoxy-19-nor-12-oxo-cleroda-5(10),13(16),14-triene	—	<i>Croton hovarum</i>	<i>Phytochemistry</i> , 1997, 45 , 379-381
1064	crotoeurin C	---	<i>Croton euryphyllus</i>	<i>Bioorg. Med. Chem. Lett.</i> , 2015, 25 , 1329-1332
1066	jatrophoidin	αCO ₂ Me	<i>Croton jatrophoides</i>	<i>Planta Med.</i> , 2009, 75 , 262-267
1067	isoteucvin	βH		
1068	crassifolin G	αOH	<i>Croton crassifolius</i>	<i>J. Nat. Prod.</i> , 2012, 75 , 2188-2192



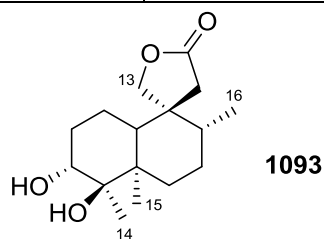
1073	crassifolin H	—	—	<i>Croton crassifolius</i>	<i>Heterocycles</i> , 2014, 89 , 1585-1593
1074	cajucarinolide	OH	=O	<i>Croton cajucara</i>	<i>Planta Med.</i> , 1992, 58 , 549-551
1075	isocajucarinolide	=O	OH		
1076	<i>trans</i> -dehydrocrotonin	—	—	<i>Croton cajucara</i>	<i>J. Braz. Chem. Soc.</i>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



1083

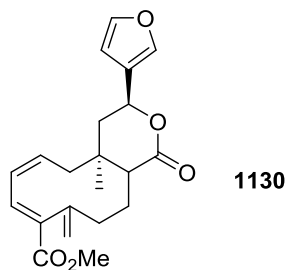
1084

1083	crotoeurin B	<i>Croton euryphyllus</i>	<i>Bioorg. Med. Chem. Lett.</i> , 2015, 25 , 1329-1332
1084	crotoeurin A		



1093

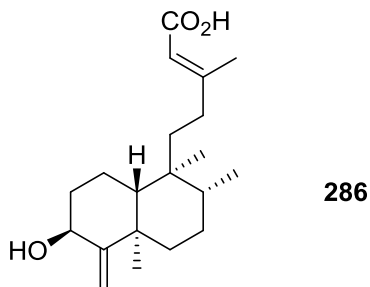
1093	crotoinsulactone	<i>Croton insularis</i>	<i>Helv. Chim. Acta.</i> , 2005, 88 , 2654-2660
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1130

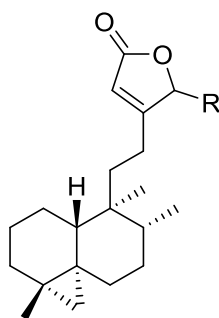
1130	—	<i>Croton jimenezii</i>	<i>Ingenieria Y Ciencia Quimica</i> , 2000, 19 , 68-73
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CYATHOCALYX Genus



286	3-hydroxy-cleroda-4(18),13Z-dien-15-oic acid	<i>Cyathocalyx zeylanica</i>	<i>Phytochemistry</i> , 1995, 39 , 443-445
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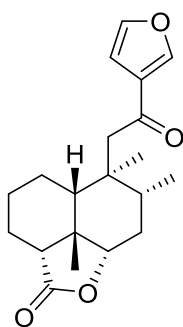
CYSTODYTES Genus



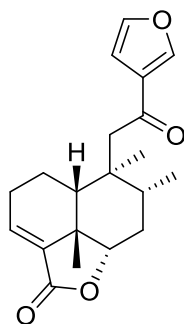
612-613

612	dytesinin A	OH	<i>Cystodytes</i> sp	<i>Tetrahedron</i> 2000, 56 , 7923-7926
613	dytesinin B	H		

DEMOTARISIA Genus



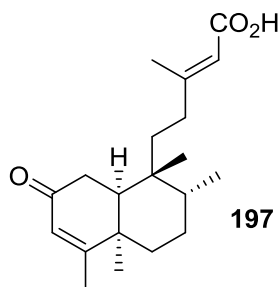
309



310

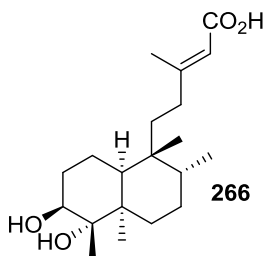
309	dihydrolinguifolide	<i>Demotarisia linguifolia</i>	<i>Phytochemistry</i> , 1990, 29 , 3229-3231
310	linguifolide		

DETARIUM Genus

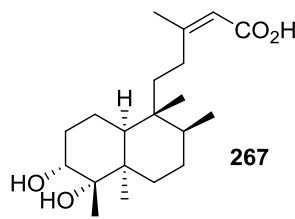


197

197	5 α ,8 α -2-oxokolavenic acid	<i>Detarium microcarpum</i>	<i>J. Nat. Prod.</i> , 2006, 69 , 768-773
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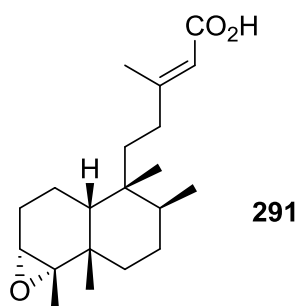


266



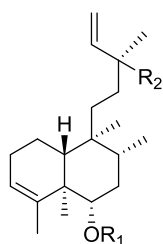
267

266	3,4-dihydroxycyclohexan-13E-en-15-oic acid	<i>Detarium microcarpum</i>	<i>J. Nat. Prod.</i> , 2006, 69 , 768-773
267	3,4-dihydroxycyclohexan-13Z-en-15-oic acid		



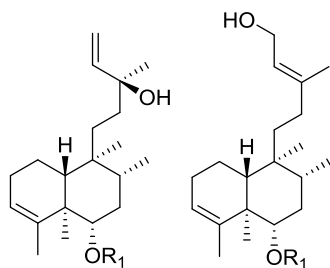
291	3,4-epoxyclerodan-13 <i>E</i> -en-15-oic acid	<i>Detarium microcarpum</i>	<i>J. Nat. Prod.</i> , 2006, 69 , 768-773
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DICRANOPTERIS Genus



903-906

905	(6 <i>S</i> ,13 <i>S</i>)-6- <i>O</i> -[β -D-glucopyranosyl-(1 \rightarrow 4)- α -L-rhamnopyranosyl]-13- <i>O</i> -[α -L-rhamnopyranosyl-(1 \rightarrow 4)- β -D-fucopyranosyl]-cleroda-3,14-diene	α -L-Rha-(4 \rightarrow 1)- β -D-Glc	β -{ β -D-Fuc-(4 \rightarrow 1)- α -L-Rha}	<i>Dicranopteris pedata</i>	<i>Phytochemistry</i> , 1997, 46 , 839-844
906	(6 <i>S</i> ,13 <i>S</i>)-cleroda-3,14-diene-6,13-diol-6- <i>O</i> - β -glucopyranosyl-13- <i>O</i> - β -fucopyranosyl-(1 \rightarrow 2)- α -rhamnopyranoside	β -Glc	β -{ α -Rha-(2 \rightarrow 1)- β -Fuc}		

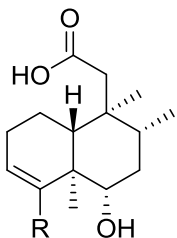


910,911

912,913

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

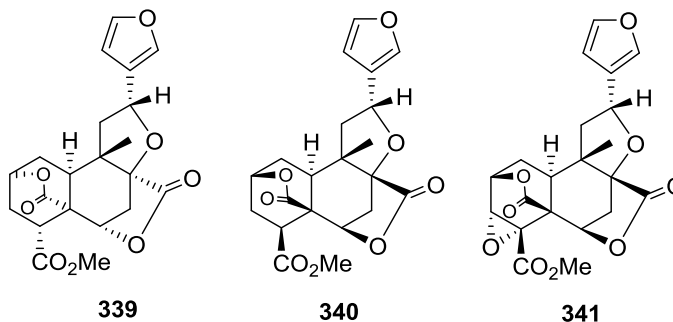
		Rha		
912	6- <i>O</i> -[6- <i>O</i> -acetyl-β-D-glucopyranosyl-(1-4)-α-L-rhamnopyranosyl]-(13 <i>E</i>)-cleroda-3,13-dien-15-ol	6- <i>O</i> -acetyl-β-D-Glc-(1→4)-α-L-Rha		
913	6- <i>O</i> -[β-D-glucopyranosyl]-(1→4)-α-L-rhamnopyranosyl-(13 <i>E</i>)-cleroda-3,13-dien-15-ol	β-Glc-(1→4)-α-L-Rha		



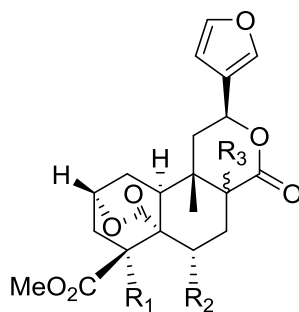
1091-1092

1091	18-hydroxyaylthonic acid	CH ₂ OH	<i>Dicranopteris dichotoma</i>	<i>J. Nat. Prod.</i> , 2007, 70 , 265-268
1092	18-oxo-aylthonic acid	CHO		

DIOSCOREA Genus

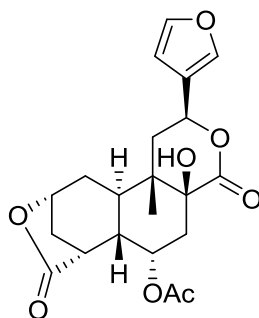


339	bafoudiosbulbin A	<i>Dioscorea bulbifera</i>	<i>Phytochemistry</i> , 2006, 67 , 1957-1963
340	bafoudiosbulbin D		<i>Helv. Chim. Acta</i> , 2007, 90 , 1599-1605
341	bafoudiosbulbin E		



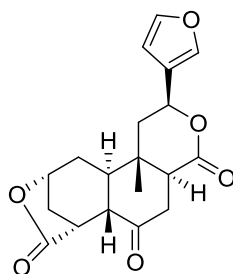
650-653

		R1	R2	R3		
650	antadiosbulbin A	OH	H	α H	<i>Dioscorea antaly</i>	<i>Phytochemistry</i> , 2010, 71 , 1007-1013
651	antadiosbulbin B	OH	H	β H		
652	bafoudiosbulbin F	H	H	β OH	<i>Dioscorea bulbifera</i>	<i>Phytochemistry</i> , 2008, 69 , 2374-2379
653	bafoudiosbulbin G	H	α OAc	β OH		



1065

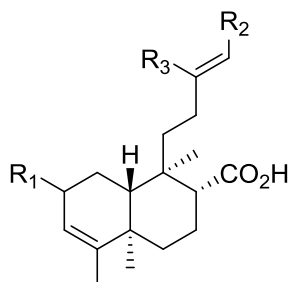
1065	15,16-epoxy-6a-O-acetyl-8 β -hydroxy-19-nor-clero-13(16),14-diene-17,12;18,2-diolide	<i>Dioscorea bulbifera</i>	<i>Nat. Prod. Commun.</i> , 2011, 6 , 1069-1072
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1313

1313	disobulbin D (DBD)	<i>Dioscorea bulbifera</i>	<i>Chem. Pharm. Bull.</i> , 1968, 16 , 2430-2435, <i>Phytochemistry</i> , 1984, 23 , 623-625
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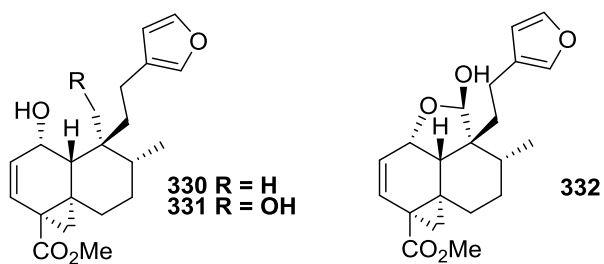
DIPLOSTEPHIUM Genus



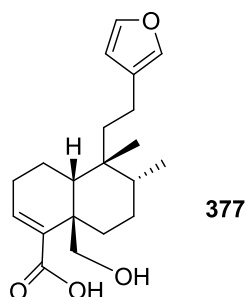
183-185

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

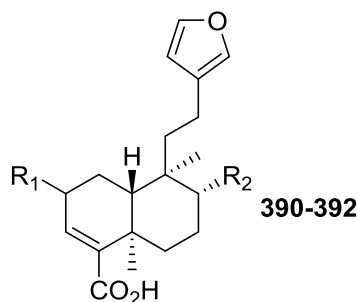
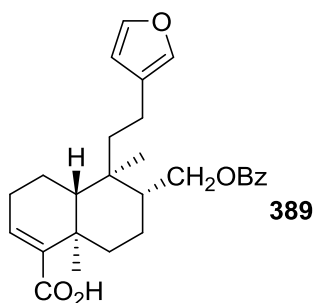
DODONAEA Genus



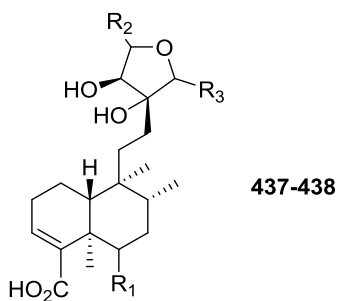
330	methyl dodonate A	<i>Dodonaea viscosa</i>	<i>Tetrahedron</i> , 2001, 57 , 2981-2989
331	methyl dodonate B		
332	methyl dodonate C		



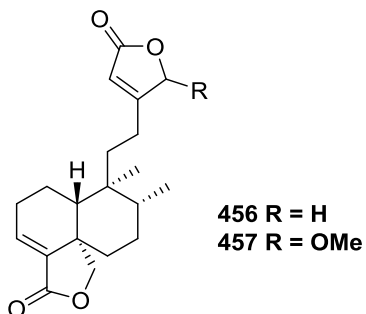
377	vishautriwaic acid	<i>Dodonaea viscosa</i>	<i>Z. Naturforsch. B</i> , 2010, 65 , 83-86
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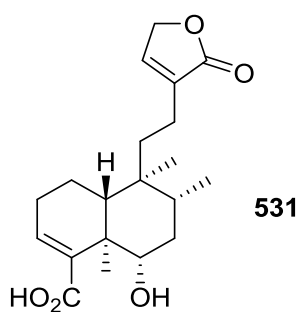
		R1	R2		
389	15,16-epoxy-8 <i>R</i> -(benzoyloxy)methyl-cleroda-3,13(16),14-trien-18-oic acid	CO ₂ H	CH ₂ OBz	<i>Dodonaea polyandra</i>	<i>J. Nat. Prod.</i> , 2011, 74 , 650-657
390	15,16-epoxy-8 <i>R</i> -(benzoyloxy)methyl-2 <i>R</i> -hydroxycleroda-3,13(16),14-trien-18-oic acid	αOH	CH ₂ OBz		
391	15,16-epoxy-2 <i>R</i> -benzoyloxycleroda-3,13(16),14-trien-18-oic acid	αOBz	Me		
392	15,16-epoxy-8 <i>R</i> -(benzoyloxy)methyl-2-oxocleroda-3,13(16),14-trien-18-oic acid	=O	CH ₂ OBz		



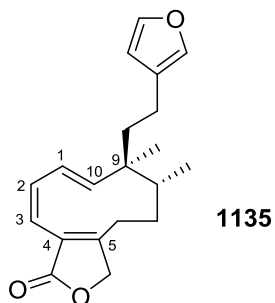
		R1	R2	R3		
437	visclerodol acid	H	βOAc	βOAc	<i>Dodonaea viscosa</i>	<i>Z. Naturforsch. B</i> , 2010, 65 , 83-86, <i>Phytochem. Lett.</i> , 2014, 8 , 10-15
438	13,14-dihydroxy-15,16-dimethoxy-(-)-6α-hydroxy-5α,8α,9α,10α-cleroda-3-en-18-oic acid	αOH	βOMe	βOMe		



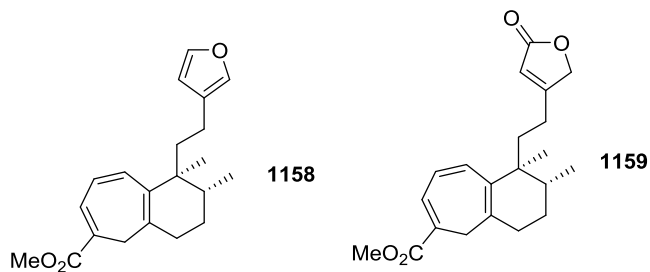
456	mkapwanin	<i>Dodonaea angustifolia</i>	<i>Phytochem. Lett.</i> , 2010, 3 , 217–220
457	15-methoxymkapwanin		



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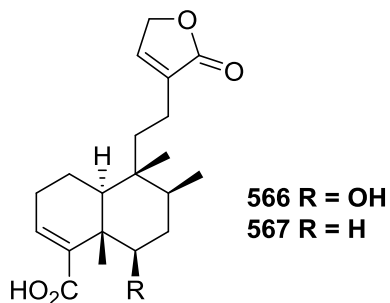


1135	dodonolide	<i>Dodonaea viscosa</i>	<i>Tetrahedron</i> , 2001, 57 , 2981-2989
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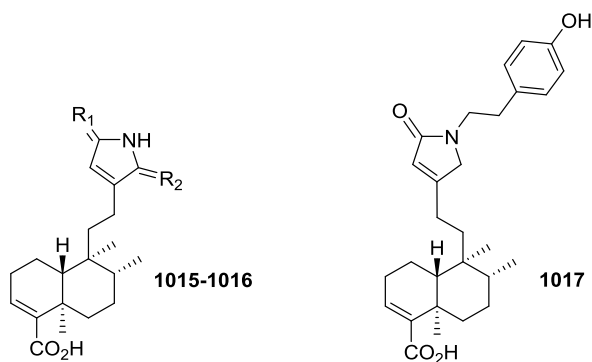
1158	methyl dodovisate A	<i>Dodonaea viscosa</i>	<i>J. Asian. Nat. Prod. Res.</i> , 2010, 12 , 7-14
1159	methyl dodovisate B		

DURANTA Genus

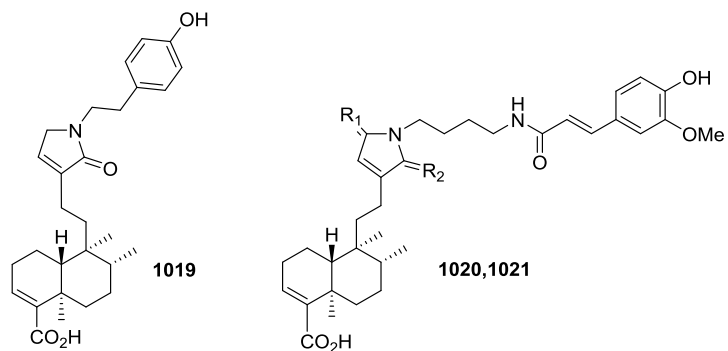


566	(-)-6β-hydroxy-5β,8β,9β,10α-cleroda-3,13-dien-16,15-olid-18-oic acid	<i>Duranta repens</i>	<i>Chem. Pharm. Bull.</i> , 2004, 52 , 785-789
567	(+)-3,13-clerodadien-16,15-olid-18-oic acid		

ECHINODORUS Genus

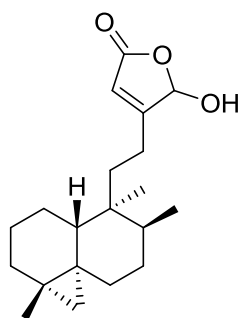


		R1	R2		
1015	echinophyllin C	H ₂	O	<i>Echinodorus macrophyllus</i>	<i>J. Nat. Prod.</i> , 2000, 63 , 1576-1579
1016	echinophyllin F	O	H ₂		
1017	echinophyllin D	—	—		



		R1	R2		
1019	echinophyllin A	—	—	<i>Echinodorus macrophyllus</i>	<i>Tetrahedron Lett.</i> , 2000, 41 , 2939-2943
1020	echinophyllin B	H ₂	O		<i>J. Nat. Prod.</i> , 2000, 63 , 1576-1579
1021	echinophyllin E	O	H ₂		

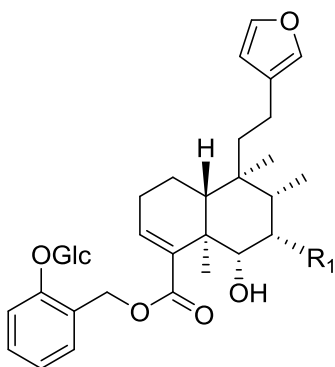
ECHINOMURICEA Genus



614

614	echinoclerodane A	<i>Echinomuricea</i> sp	<i>Molecules</i> , 2012, 17 , 9443-9450
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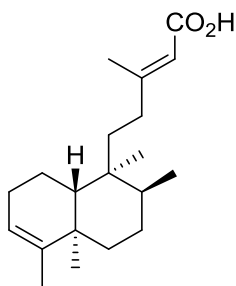
ELSHOLTZIA Genus



924,925

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

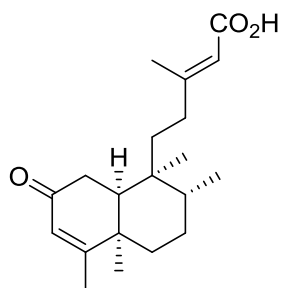
ENTADA Genus



182

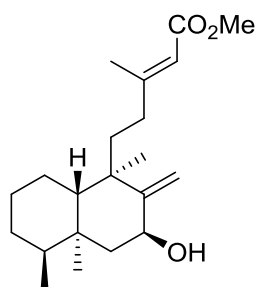
182	diastereoisomer of kolavenol	<i>Entada abyssinica</i>	<i>J. Ethnopharmacol.</i> , 1998, 61 , 179-183
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EPERUA Genus



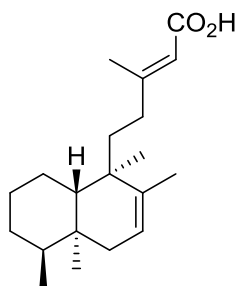
198

198	(13 <i>E</i>)-2-oxo-5α- <i>cis</i> -17α,20α-cleroda-3,13-diene-15-oic acid	<i>Eperua purpurea</i>	<i>Phytochemistry</i> , 1991, 30 , 3474-3475
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258

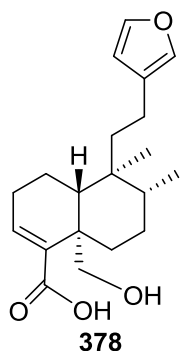
258	(-)-7β-hydroxycleroda-8(17),13 <i>E</i> -dien-15-oic acid	<i>Eperua leucantha</i>	<i>J. Nat. Prod.</i> , 1992, 55 , 845-850
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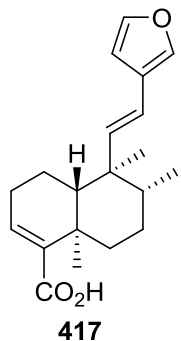
272

272	(-)-cleroda-7,13 <i>E</i> -dien-15-oic acid	<i>Eperua purpurea</i>	<i>J. Nat. Prod.</i> , 1993, 56 , 1586-1589
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EREMOCARPUS Genus

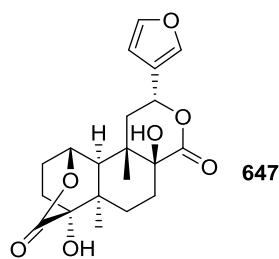
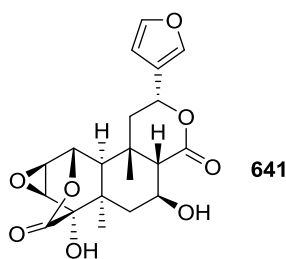


378	hautriwaic acid	<i>Eremocarpus setigerus</i>	<i>Indian J. Chem. B</i> , 1991, 30 , 1054-1055
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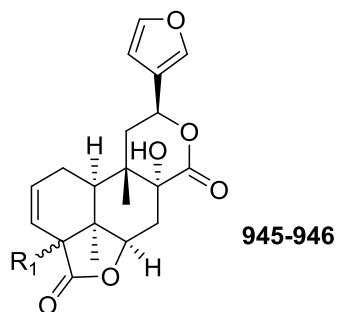


417	dehydrohardwickiic acid	<i>Eremocarpus setigerus</i>	<i>Indian J. Chem. B</i> , 1991, 30 , 1054-1055
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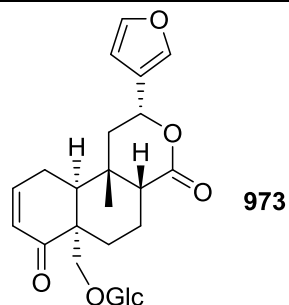
FIBRAUREA Genus



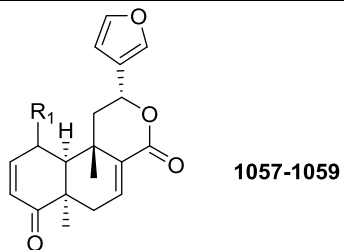
641	fibrauretin A	<i>Fibraurea tinctoria</i>	<i>J. Nat. Prod.</i> , 2007, 70 , 1930-1933
647	epi-8-hydroxycolumbin	<i>Fibraurea tinctoria</i>	<i>Bioorg. Med. Chem.</i> , 2008, 16 , 9603-9609



945	fibrauretin A	α OGlc	<i>Fibraurea tinctoria</i>	<i>J. Nat. Prod.</i> , 2007, 70 , 1930-1933
946	<i>epi</i> -fibrauretin A	β OGlc		

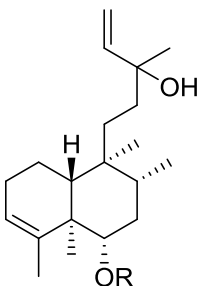


973	<i>epi</i> -12-palmatoside G		<i>Fibraurea tinctoria</i>	<i>J. Nat. Prod.</i> , 2007, 70 , 1930-1933
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1057	fibaruretin D	H	<i>Fibraurea tinctoria</i>	<i>Bioorg. Med. Chem.</i> , 2008, 16 , 9603-9609
1058	fibaruretin E	α OH		
1059	fibaruretin F	=O		

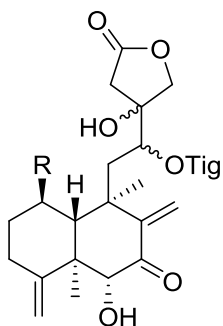
GLEICHENIA Genus



903-904

903	α -vinyl-1,2,3,4,4a,7,8,8a-octahydro- α ,1,2,4a,5-pentamethyl-1-naphthalenepropanol-4- <i>O</i> - β -glucopyranoside	β -Glc	<i>Gleichenia japonica</i>	<i>Chem. Lett.</i> , 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- <i>O</i> - α -rhamnopyranosyl-(1 \rightarrow 2)- β -glucopyranoside	β -Glc-(2 \rightarrow 1)- α -L-Rha		

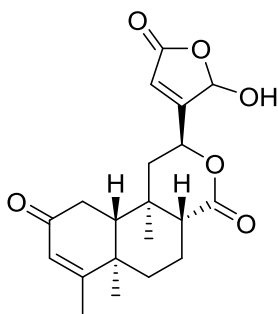
GLOSSOCARYA Genus



598-600

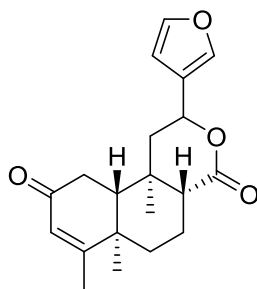
598	calcicolin A	OiBu	<i>Glossocarya calcicola</i>	<i>Phytochemistry</i> , 2005, 66 , 2844-2850
599	calcicolin B	OTig		
600	calcicolin C	Y1		

GOMPHOSTEMMA Genus



527

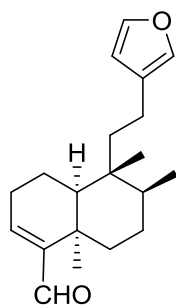
527	microdon B	<i>Gomphostemma microdon</i>	<i>Z. Naturforsch., B: J. Chem. Sci.</i> , 2009, 64 , 443-446
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656

656	microdon A	<i>Gomphostemma microdon</i>	<i>Z. Naturforsch., B: J. Chem. Sci.</i> , 2009, 64 , 443-446
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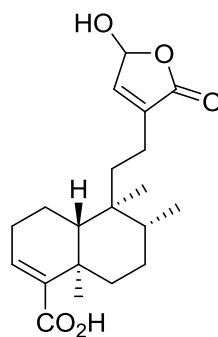
GOTTSCHELIA Genus



401

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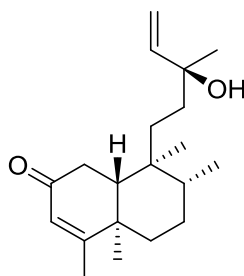
GRANGEA Genus



532

532	15-hydroxy-16-oxo-15,16H-hardwickiic acid	<i>Grangea maderaspatana</i>	<i>Phytochemistry</i> , 1999, 52 , 1341-1343
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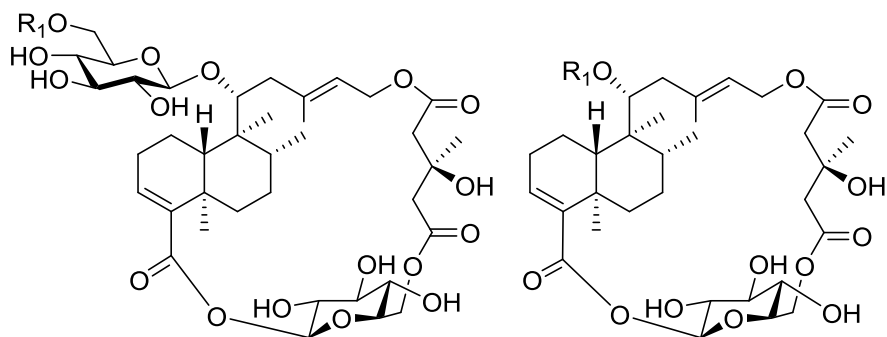
GUAREA Genus



246

246	(-)-2-oxo-13-hydroxy-3,14-clerodandiene	<i>Guarea trichilioides</i>	<i>Phytochemistry</i> , 1996, 41 , 1159-1161
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HALOPHILA-SYPHONOTA Genus

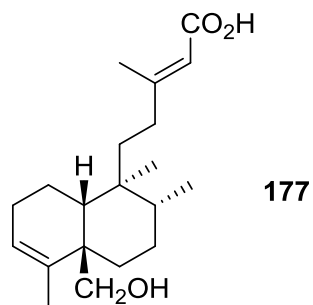


978,979

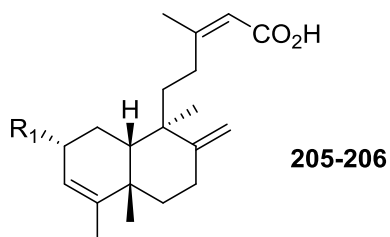
980,981

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

HAPLOPAPPUS Genus

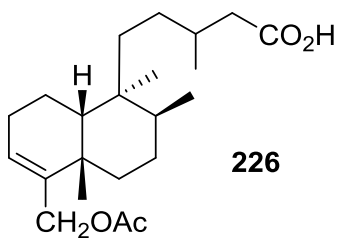


177	deserticolinic acid	<i>Haplopappus deserticola</i>	<i>Phytochemistry</i> , 1999, 52 , 1531-1533
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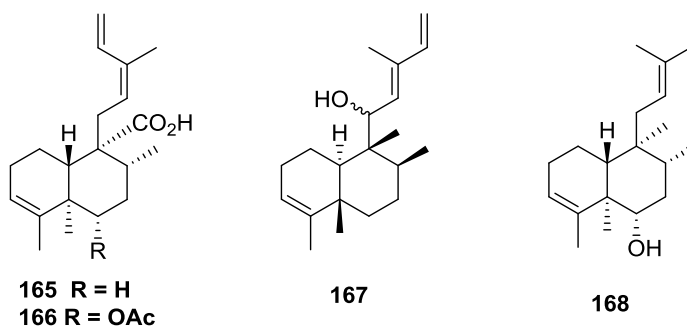
205	2α-hydroxy- <i>cis</i> -cleroda-3,13(Z),8,17-	OH	<i>Haplopappus</i>	<i>Planta Med.</i> , 2003,
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	trien-15-oic acid		<i>foliosus</i>	69 , 675-677
206	2 α -acetoxy- <i>cis</i> -cleroda-3,13(Z),8,17-trien-15-oic acid	OAc		

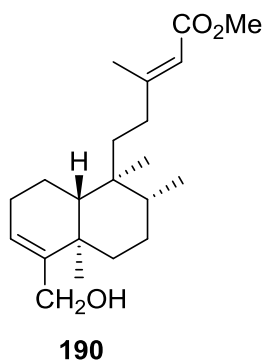


226	18-acetoxy- <i>cis</i> -cleroda-3-en-15-oic acid	<i>Haplopappus uncinatus</i>	<i>J. Ethnopharmacol.</i> , 2006, 103 , 297-301
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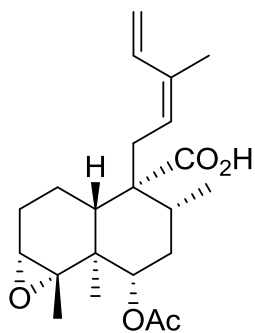
HETEROSCYPHUS Genus



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

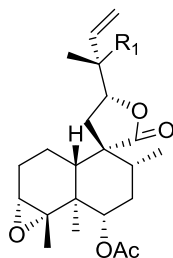


190	18-hydroxy-5,10- <i>trans</i> -cleroda-3,13E-dien-15-oic acid methyl ester	<i>Heteroscyphus planus</i>	<i>Phytochemistry</i> , 1996, 41 , 581-587
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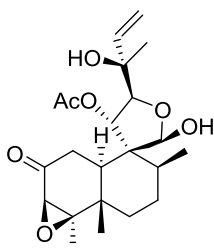


292

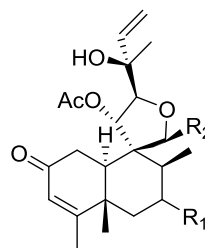
292	heteroscyphic acid C	<i>Heteroscyphus planus</i>	<i>Phytochemistry</i> , 1994, 37 , 1263-1268
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768-769



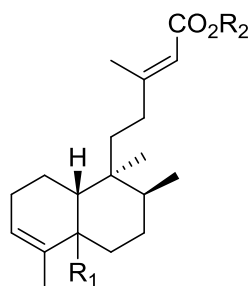
770



771-773

768	heteroscypholide A	β OAc	—	<i>Heteroscyphus planus</i>	<i>Phytochemistry</i> , 1996, 41 , 581-587
769	heteroscypholide B	β OH	—		
770	heteroscyphone A	—	—	<i>Heteroscyphus planus</i>	<i>Phytochemistry</i> , 1995, 38 , 119-127
771	heteroscyphone B	H	β OH		
772	heteroscyphone C	H	H		
773	heteroscyphone D	β OH	β OH		

HYMENAEA Genus

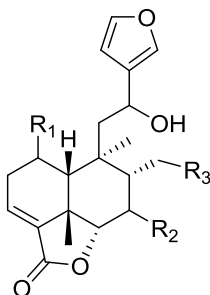


195 R₁ = α-Me, R₂ = H

196 R₁ = β-Me, R₂ = Me

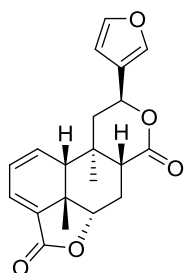
195	(-)-(5R,8S,9S,10R)-cleroda-3,13E-dien-15-oic acid	<i>Hymenaea courbaril</i>	<i>Phytochemistry</i> , 2001, 58 , 1153-1157
196	methyl (5S,8S,9S,10R)-cleroda-3,13E-dien-15-oate		

JAMESONIELLA Genus

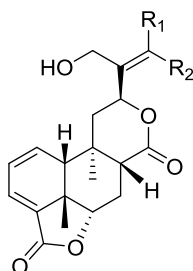


310-313

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

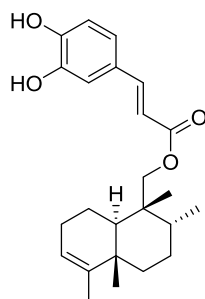


638



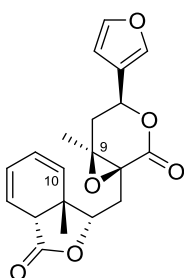
639 R1 = CO₂H, R2 = H
640 R1 = H, R2 = CO₂H

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

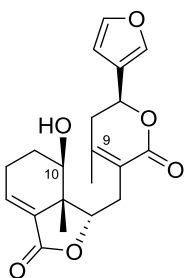


1097

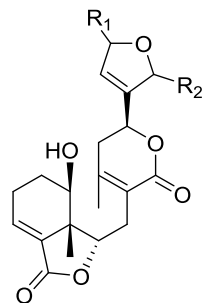
1097	—	<i>Jamesoniella colorata</i>	<i>Nat. Prod. Commun.</i> , 2010, 5 , 999-1003
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1098

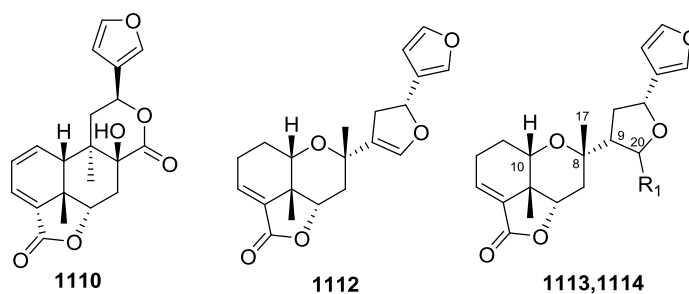


1099

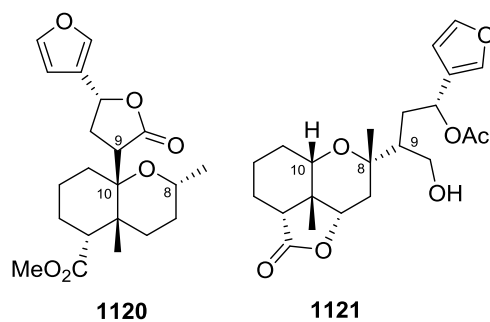


1100,1101

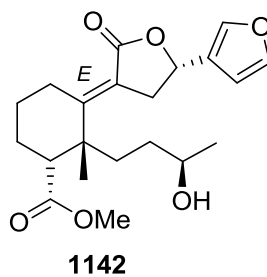
1098	jamesoniellide F	—	—	<i>Jamesoniella autumnalis</i>	<i>Phytochemistry</i> , 1995, 39 , 859-868, <i>Phytochemistry</i> , 1999, 51 , 743-750
1099	jamesoniellide I	—	—		
1100	jamesoniellide K	OH	=O	<i>Jamesoniella colorata</i>	<i>Phytochemistry</i> , 2003, 63 , 227-233
1101	jamesoniellide L	=O	OH		



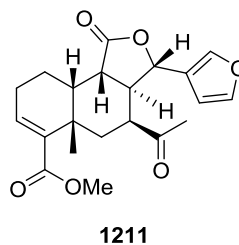
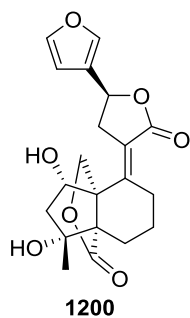
1110	15,16-epoxy-8-hydroxy-1,3,13(16),14-clerodatetraene-17,12:18,6-diolide	—	<i>Jamesoniella autumnalis</i>	<i>Phytochemistry</i> , 1995, 39 , 859-868
1112	jamesoniellide D	—		<i>Phytochemistry</i> , 1995, 39 , 859-868,
1113	jamesoniellide E	=O		<i>Phytochemistry</i> , 1999, 51 , 743-750
1114	jamesoniellide H	α OH		



1120	jamesoniellide A	<i>Jamesoniella autumnalis</i>	<i>J. Nat. Prod.</i> , 1992, 55 , 111-121
1121	jamesoniellide B		

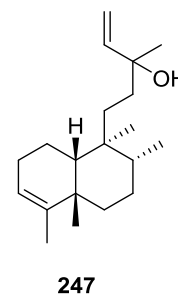
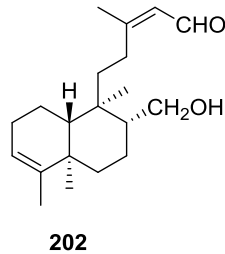
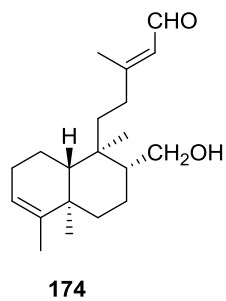
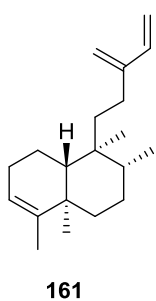


1142	jamesoniellide J	<i>Jamesoniella autumnalis</i>	<i>Phytochemistry</i> , 1999, 51 , 743-750
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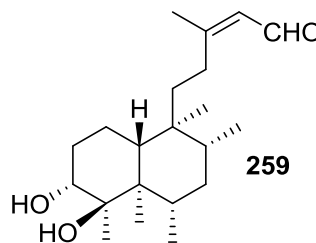
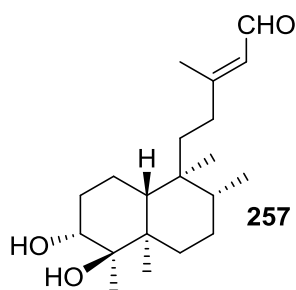


1200	jamesoniellide C	<i>Jamesoniella autumnalis</i>	<i>Phytochemistry</i> , 1994, 37 , 491-494
1211	cephaloziellin Q	<i>Jamesoniella colorata</i>	<i>Nat. Prod. Commun.</i> , 2010, 5 , 999-1003

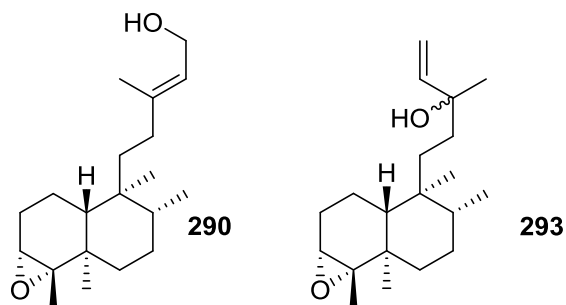
JUNGERMANNIA Genus



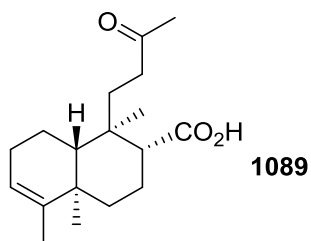
161	<i>ent</i> -clerod-3,13(16),14-triene	<i>Jungermannia infusca</i>	<i>Phytochemistry</i> , 1998, 49 , 601-608
174	17-hydroxy-3,13 <i>E</i> -clerodadien-15-al		<i>Chem. Pharm. Bull.</i> , 2000, 48 , 1818-1821
202	17-hydroxy-3,13 <i>Z</i> -clerodadien-15-al		<i>J. Nat. Prod.</i> , 2001, 64 , 1309-1317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



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

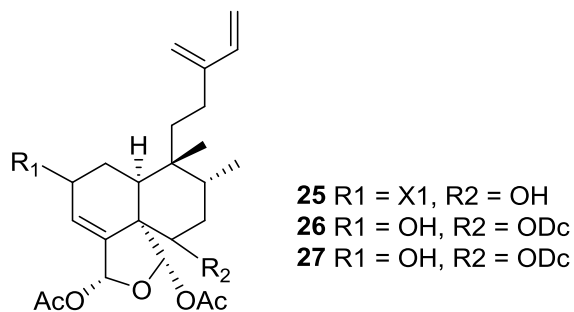


290	<i>ent-3β,4β-epoxyclerod-13E-en-15-ol</i>	<i>Jungermannia hyalina</i>	<i>Phytochemistry</i> , 1995, 40 , 209-212
293	<i>ent-3β,4β-epoxy-clerod-14-en-13ζ-ol</i>	<i>Jungermannia paroica</i>	<i>Phytochemistry</i> , 1992, 31 , 1420-1421

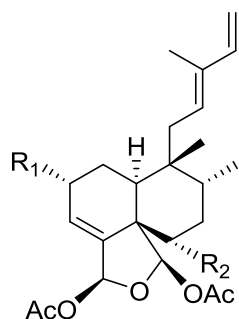


1089	bis-norinfuscaic acid	<i>Jungermannia infusca</i>	<i>Phytochemistry</i> , 1998, 49 , 601-608
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LAETIA Genus

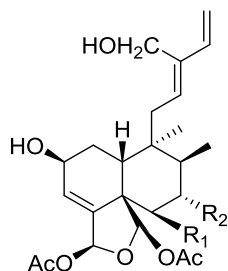


25	corymbulosin A	<i>Laetia corymbulosa</i>	<i>Phytochemistry</i> , 2000, 55 , 233-236
26	corymbulosin B		
27	corymbulosin C		



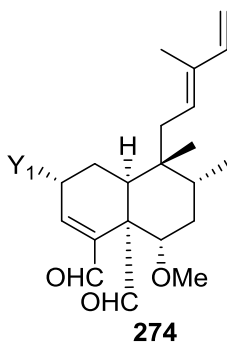
- 101** R₁ = Y₁, R₂ = OH
102 R₁ = OiBu, R₂ = OBz
103 R₁ = Y₁, R₂ = OBz

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



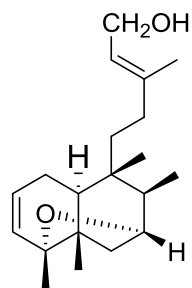
- 129** R₁ = OMyr, R₂ = OH
130 R₁ = OPal, R₂ = OH
131 R₁ = OH, R₂ = OMyr
132 R₁ = OH, R₂ = OPal

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



274	laetiaprocerine D	<i>Laetia procera</i>	<i>Bioorg. Med. Chem. Lett.</i> , 2005, 15 , 5065–5070
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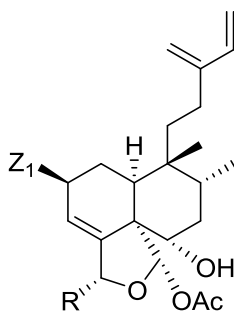
LEONURUS Genus



276

276	leojaponin A	<i>Leonurus japonicus</i>	<i>Chin. Chem. Lett.</i> , 2014, 25 , 677-679
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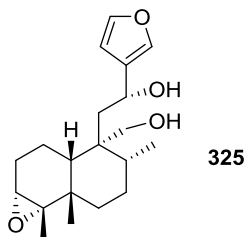
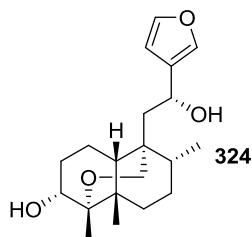
LICANIA Genus



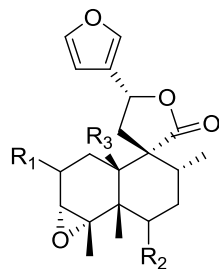
35 R = OMe
36 R = OAc

35	intrapetacin A	<i>Licania intrapetiolaris</i>	<i>J. Nat. Prod.</i> , 2001, 64 , 497-501
36	intrapetacin B		

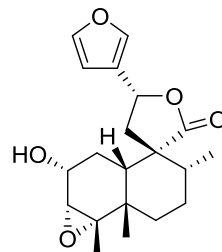
MICROGLOSSA Genus



324	3 α ,12-dihydroxy-4 α ,20,15,16-bisepoxy-8 β ,10 β H-ent-cleroda-13(16),14-diene	<i>Microglossa pyrrhopappa</i>	<i>Phytochemistry</i> , 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		

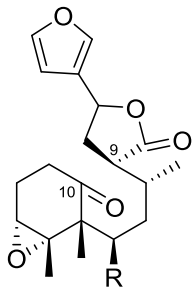


760-763



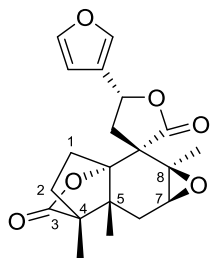
767

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

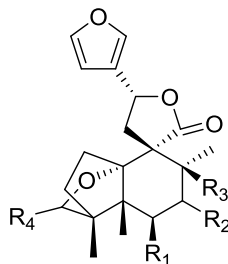


1104-1109

		R		
1104	pyrrhopappolide	H	<i>Microglossa pyrrhopappa</i>	<i>Phytochemistry</i> , 1990, 29 , 3233-3241
1105	6 β -hydroxypyrrhopappolide	OH		
1106	6 β -angeloyloxy-pyrrhopappolide	OAng		
1107	6 β -seneciolyloxy-pyrrhopappolide	OSen		
1108	6 β -tigloyloxy-pyrrhopappolide	OTig		
1109	6 β -[2-methylbutyryloxy]-pyrrhopappolide	OMeBu		

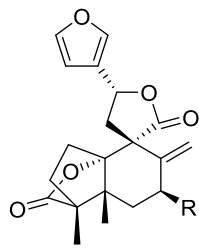


1182

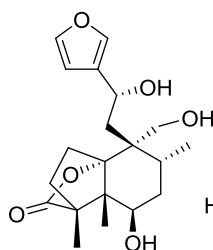


1183-1187

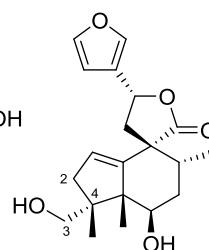
		R1	R2	R3	R4		
1182	7β,8β-epoxyisochiliolide lactone	—	—	—	—	<i>Microglossa pyrrhopappa</i>	<i>Phytochemistry</i> , 1990, 29 , 3233-3241
1183	6β-angeloyloxyisochiliolide lactone	OAng	H	H	=O		
1184	6β-[2-methylbutyryloxy]-isochiliolide lactone	OMeBu	H	H	=O		
1185	8β-hydroxyisochiliolide lactone	H	H	OH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



1191 R = H
1192 R = OAc



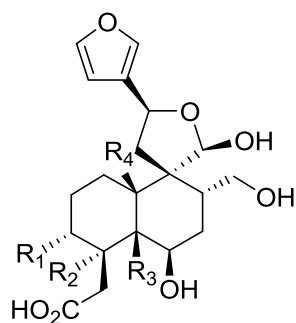
1193



1194

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

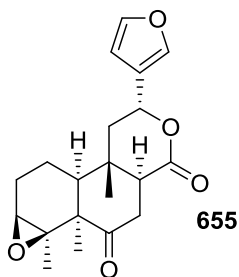
MUSA Genus



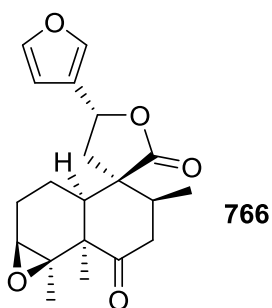
791-793

791	musabalbisiene A	OH	CO ₂ H	CHO	CHO	<i>Musa balbisiana</i>	<i>Phytochemistry</i> , 1992, 31 , 2173-2175
792	musabalbisiene B	OH	CHO	CO ₂ H	CH ₂ OH		
793	musabalbisiene C	OAng	CH ₂ OH	CH ₂ OH	CH ₂ OH		

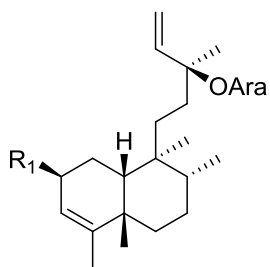
NANNOGLOTTIS Genus



655	ravidin A	<i>Nannoglottis ravida</i>	<i>Phytochemistry</i> , 2004, 65 , 2533-2537
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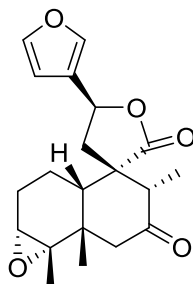
766	ravidin B	<i>Nannoglottis ravida</i>	<i>Phytochemistry</i> , 2004, 65 , 2533-2537
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907-909

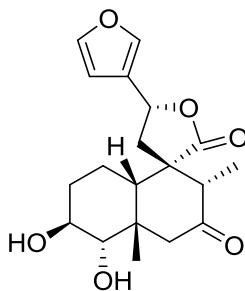
907	(5 <i>S</i> ,8 <i>R</i> ,9 <i>S</i> ,10 <i>R</i> ,13 <i>S</i>)-10βH-13- <i>O</i> -α-L-arabinopyranosyl-2-oxo-17α,19β,20α-trimethyl-3,14-clerodadiene	=O	<i>Nannoglottis carpesioides</i>	<i>Fitoterapia</i> , 2014, 93 , 39-46
908	(5 <i>S</i> ,8 <i>R</i> ,9 <i>S</i> ,10 <i>R</i> ,13 <i>S</i>)-10βH-13-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

NARDOPHYLLUM Genus



755

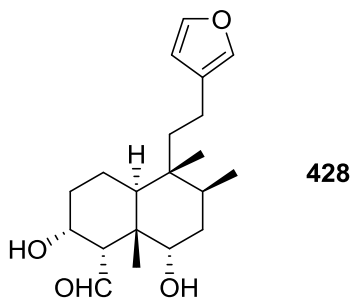
755	—	<i>Nardophyllum lanatum</i>	<i>Phytochemistry</i> , 1990, 29 , 1227-1230
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1061

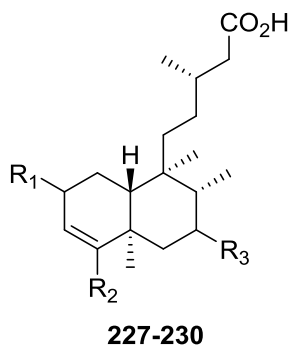
1061	—	<i>Nardophyllum lanatum</i>	<i>Phytochemistry</i> , 1990, 29 , 1227-1230
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NEPETA Genus



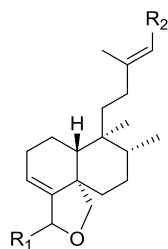
428	nepetalanal	<i>Nepeta juncea</i>	<i>Magn. Reson. Chem.</i> , 2009, 47 , 625-627
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NUXIA Genus

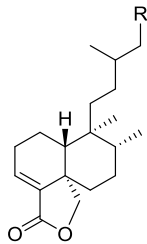


		R1	R2	R3		
227	(13 <i>S</i>)- <i>ent</i> -7β-hydroxy-3-cleroden-15-oic acid	H	Me	αOH	<i>Nuxia sphaerocephala</i>	<i>Phytochemistry</i> , 2006, 67 , 444-451
228	<i>ent</i> -7β-hydroxy-2-oxo-3-cleroden-15-oic acid	=O	Me	αOH		
229	<i>ent</i> -2,7-dioxo-3-cleroden-15-oic acid	=O	Me	=O		
230	<i>ent</i> -18-(<i>E</i>)-caffeoyloxy-7β-hydroxy-3-cleroden-15-oic acid	H	CH ₂ Z ₄	αOH		

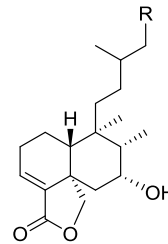
OLEARIA Genus



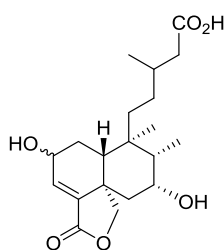
136 R₁ = =O, R₂ = CH₂OMal
137 R₁ = β-OMe, R₂ = CO₂H
138 R₁ = α-OMe, R₂ = CO₂H



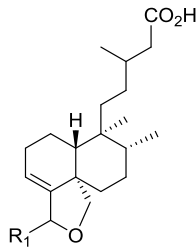
139 R = CO₂H
140 R = CH₂OMal
145 R = CH₂OH



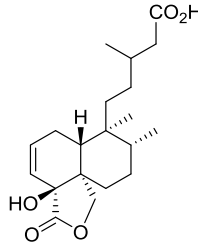
141 R = CO₂H
142 R = CH₂OMal
146 R = CH₂OH



143 C-2α
144 C-2β

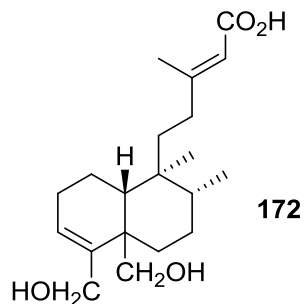


147 R = β-OMe
148 R = α-OMe

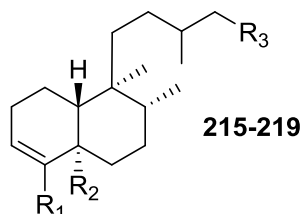


149

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

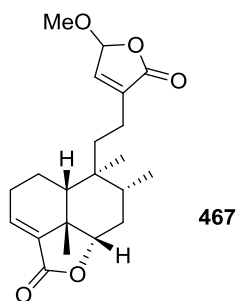


172	18,19-dihydroxy- <i>ent</i> -cleroda-3,13 <i>E</i> -dien-15-oic acid	<i>Olearia teretifolia</i>	<i>Phytochemistry</i> , 1992, 31 , 1703-1711
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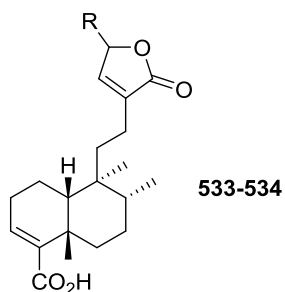


		R1	R2	R3		
215	19-hydroxykovoalic acid	CO ₂ H	CH ₂ OH	CO ₂ H	<i>Olearia teretifolia</i>	<i>Phytochemistry</i> , 1992, 31 , 1703-1711
216	18-oxo-19-seneciyl-oxy- <i>ent</i> -clerod-3-en-15-oic acid	CHO	CH ₂ OSen	CO ₂ H		
217	18-oxo- <i>ent</i> -clerod-3-en-15,19-dioic acid	CHO	CO ₂ H	CO ₂ H		
218	15,19-dihydroxy- <i>ent</i> -clerod-3-en-18-oic acid	CO ₂ H	CH ₂ OH	CH ₂ OH		
219	15,18,19-trihydroxy- <i>ent</i> -clerod-3-ene	CH ₂ OH	CH ₂ OH	CH ₂ OH		

OTOSTEGIA Genus

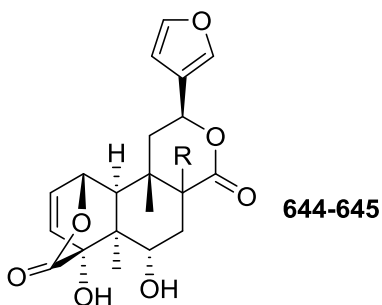


467	limbatolide A	<i>Otostegia limbata</i>	<i>Chem. Pharm. Bull.</i> , 2005, 53 , 378-381
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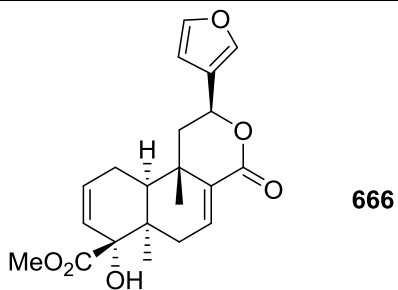


533	limbatolide B	OMe	<i>Otostegia limbata</i>	<i>Chem. Pharm. Bull.</i> , 2005, 53 , 378-381
534	limbatolide C	H		

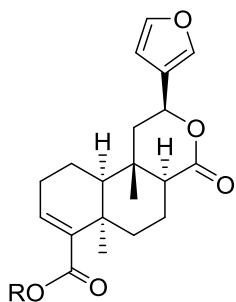
PENIANTHUS Genus



645	6-hydroxycolumbin	β H	<i>Penianthus zenkeri</i>	<i>Phytochemistry</i> , 1991, 30 , 1957-1962
646	6-hydroxyisocolumbin	α H		

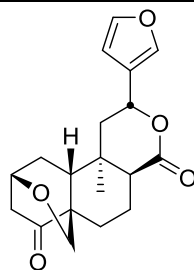


666	penianthic acid methyl ester	<i>Penianthus zenkeri</i>	<i>Phytochemistry</i> , 1991, 30 , 1957-1962
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958-959

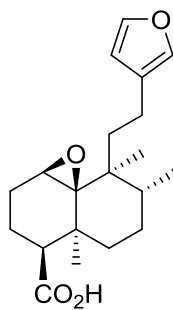
958	floribundic acid glucoside	Glc	<i>Penianthus zenkeri</i>	<i>Phytochemistry</i> , 1991, 30 , 1957-1962
959	zenkerin	-Xyl-(1→6)-Glc		



1060

1060	peniankerine	<i>Penianthus zenkeri</i>	<i>Phytochemistry</i> , 1997, 46 , 165-167
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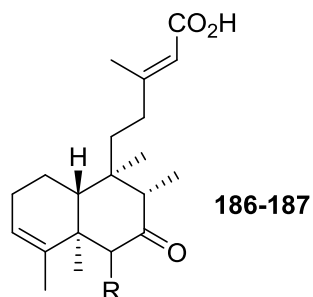
PHLOMIS Genus



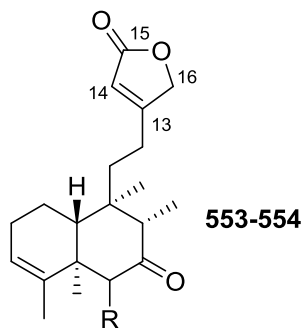
376

376	phlomeic acid	<i>Phlomis bracteosa</i>	<i>Nat. Prod. Commun.</i> , 2011, 6 , 171-173
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PLATYCHAETE Genus

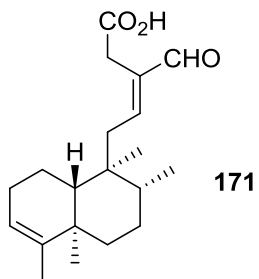


186	7-oxo-ent-clerodan-3,13E-dien-15-oic acid	H	<i>Platychaete aucheri</i>	<i>Phytochemistry</i> , 1990, 29 , 985-987
187	6 α -hydroxy-7-oxo-ent-clerodan-3,13E-dien-15-oic acid	α OH		

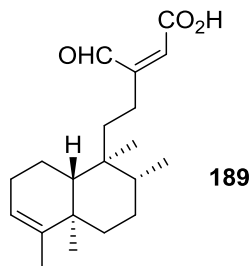


553	7-oxo-ent-clerodan-3,13-dien-15,16-olide	H	<i>Platychaete aucheri</i>	<i>Phytochemistry</i> , 1990, 29 , 985-987
554	6-hydroxy-7-oxo-ent-clerodane-3,13-dien-15,16-olide	α OH		

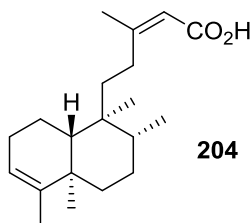
POLYALTHIA Genus



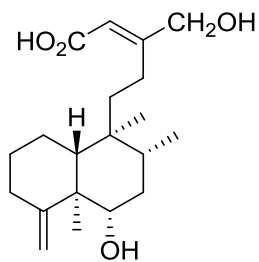
171	3,12E-kolavadien-15-oic acid-16-al	<i>Polyalthia viridis</i>	<i>Phytochemistry</i> , 1993, 34 , 457-460
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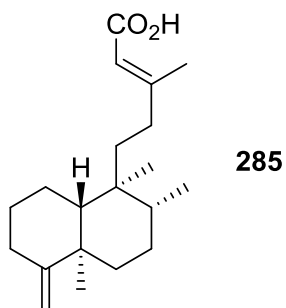
189	polyalthialdoic acid	<i>Polyalthia longifolia</i>	<i>Planta Med.</i> , 1991, 57 , 380-383
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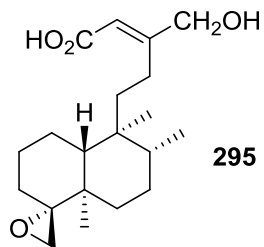
204	16-oxo-cleroda-3,13(14) <i>E</i> -diene-15-oic acid	<i>Polyalthia longifolia</i>	<i>Fitoterapia</i> , 2005, 76 , 336-339
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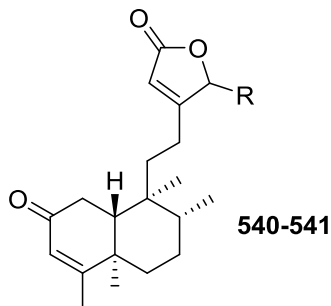
281	6 α ,16-dihydroxycleroda-4(18),13-dien-15-oic acid	<i>Polyalthia longifolia</i>	<i>J. Nat. Prod.</i> , 2009, 72 , 1960-1963
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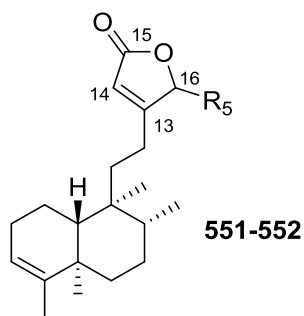
285	cleroda-4(18),13(14) <i>E</i> -dien-15-oic acid	<i>Polyalthia cheliensis</i>	<i>Phytochemistry</i> , 1995, 39 , 447-448
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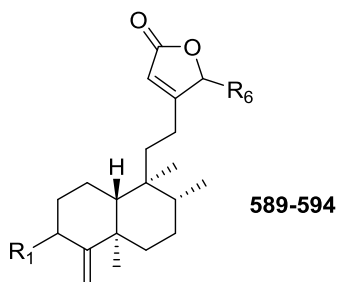
295	4 α ,18 β -epoxy-16-hydroxycycloclerod-13-en-15-oic acid	<i>Polyalthia longifolia</i>	<i>J. Nat. Prod.</i> , 2009, 72 , 1960-1963
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540	16(<i>R</i>)-3,13 <i>Z</i> -kolavadien-16,15-olide-2-one	α OH	<i>Polyalthia viridis</i>	<i>Phytochemistry</i> , 1990, 29 , 653-655
541	16(<i>S</i>)-3,13 <i>Z</i> -kolavadien-16,15-olide-2-one	β OH		

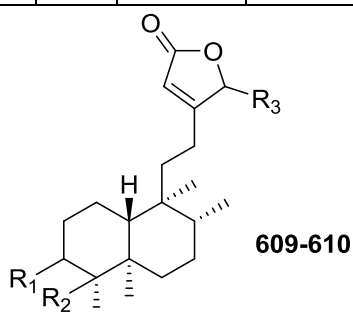


551	16 α -hydroxy-cleroda-3,13 <i>Z</i> -diene-15,16-olide	α OH	<i>Polyalthia longifolia</i>	<i>Fitoterapia</i> , 2005, 76 , 336-339
552	16 α -methoxycyclocleroda-3,13 <i>Z</i> -dien-16,15-olide	α OMe		<i>J. Nat. Prod.</i> , 1992, 55 , 256-258

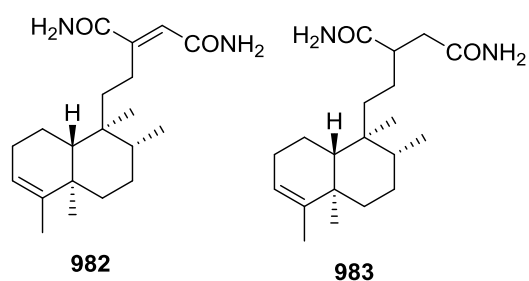


		R1	R2		
589	(-)-3 α ,16 α -dihydroxycyclocleroda-4(18),13(14) <i>Z</i> -dien-15,16-olide	α OH	α OH	<i>Polyalthia longifolia</i>	<i>Nat. Prod. Res.</i> , 2010, 24 , 1687-1694

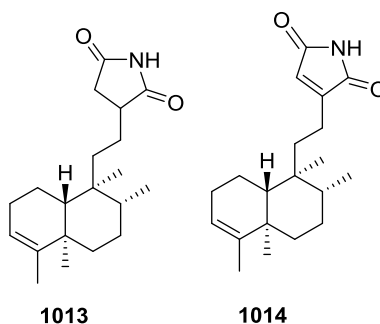
590	3 β ,16 α -dihydroxycleroda-4(18),13(14) <i>Z</i> -dien-15,16-olide	β OH	α OH	<i>Polyalthia barnesii</i>	<i>Phytochemistry</i> 1994, 37 , 1659-1662
591	cleroda-4(18),13-dien-16,15-olide	H	H	<i>Polyalthia longifolia</i>	<i>Phytochemistry</i> 1995, 38 , 189-194
592	16-hydroxycleroda-4(18),13-dien-16,15-olide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



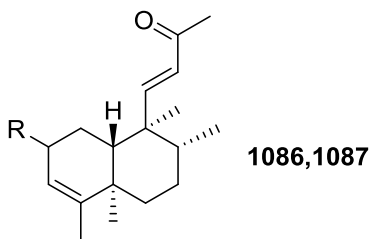
		R1	R2	R3		
609	4 β ,16 α -dihydroxycleroda-13(14) <i>Z</i> -en-15,16-olide	H	β OH	α OH	<i>Polyalthia barnesii</i>	<i>Phytochemistry</i> 1994, 37 , 1659-1662
610	16-hydroxycleroda-13-ene-15,16-olide-3-one	=O	H	OH	<i>Polyalthia longifolia</i> var. <i>pendula</i>	<i>Planta Med.</i> , 2006, 72 , 1344-1347



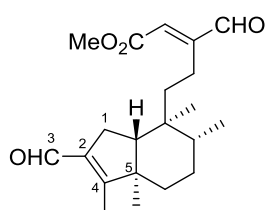
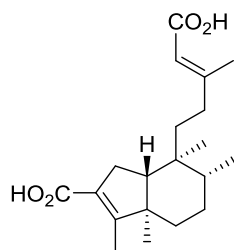
982	cleroda-3,13(14) <i>E</i> -diene-15,16-diamide	<i>Polyalthia longifolia</i>	<i>Phytochem. Lett.</i> , 2015, 11 , 28-31
983	cleroda-3-ene-15,16-diamide		



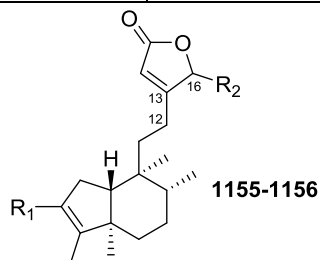
1013	cleroda-3-ene yrrolidine-15,16-dione	<i>Polyalthia longifolia</i>	<i>Phytochem. Lett.</i> , 2015, 11 , 28-31
1014	cleroda-3-ene yrrole-15,16-dione		



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

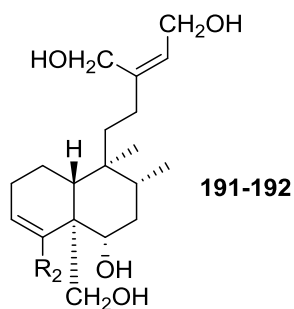


1148	(4→2)-abeo-cleroda-2,13 <i>E</i> -dien-2,14-dioic acid	<i>Polyalthia longifolia</i> var. <i>pendula</i>	<i>Molecules</i> , 2014, 19 , 2049-2060
1149	(4→2)-abeo-2,13-diformyl-cleroda-2,13 <i>E</i> -dien-14-oic acid		

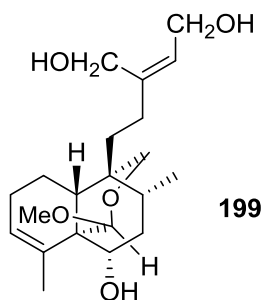


		R1	R2		
1155	(4→2)-abeo-16(R&S)-2,13 <i>Z</i> -kolavadien-16,15-olide-3-al	CHO	βOH	<i>Polyalthia viridis</i>	<i>Phytochemistry</i> , 1990, 29 , 653-655
1156	polylongifoliaic A	CO ₂ H	OH	<i>Polyalthia longifolia</i> var. <i>pendula</i>	<i>RSC Advances</i> , 2014, 4 , 23707-23712

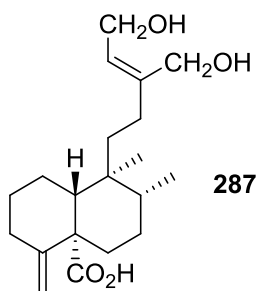
PORTULACA Genus



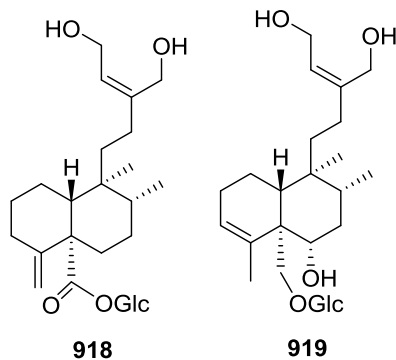
191	pilosanol A	Me	<i>Portulaca pilosa</i>	<i>Phytochemistry</i> , 1991, 30 , 4075-4077
192	pilosanol B	CH ₂ OH		



199	portulene acetal	<i>Portulaca grandiflora</i>	<i>J. Nat. Prod.</i> , 1997, 60 , 912-914
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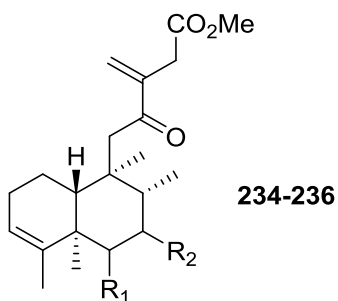


287	porwenin A	<i>Portulaca okinawensis</i>	<i>J. Nat. Prod.</i> , 2001, 64 , 804-805
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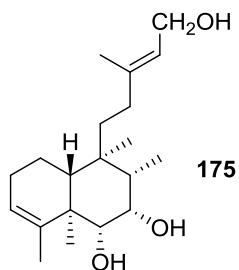
918	porwenin B	<i>Portulaca okinawensis</i>	<i>J. Nat. Prod.</i> , 2001, 64 , 804-805
919	pilosanol C	<i>Portulaca pilosa</i>	<i>Phytochemistry</i> , 1991, 30 , 4075-4077

PREMNA Genus

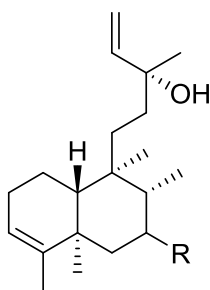


		R1	R2		
234	premnone A	α OCin (<i>trans</i>)	β OH	<i>Premna tomentosa</i>	<i>Phytochemistry</i> , 2006, 67 , 1243–1248
235	premnone B	α OCin (<i>cis</i>)	β OH		
236	premnone C	α OH	β OCin (<i>trans</i>)		

PTYCHOPETALUM Genus

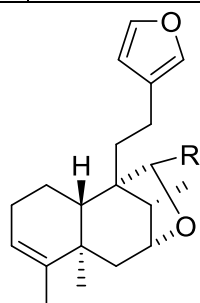


175	6 α ,7 α -dihydroxykolavenol	<i>Ptychopetalum olacoides</i>	<i>Nat. Prod. Commun.</i> , 2011, 6 , 327-332
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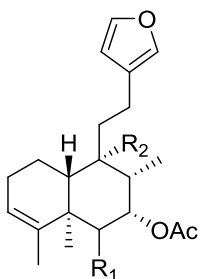
237-238

237	7-oxo-kolavelool	=O	<i>Ptychopetalum olacoides</i>	<i>Nat. Prod. Commun.</i> , 2011, 6 , 327-332
238	7 α -hydroxykolavelool	α OH		



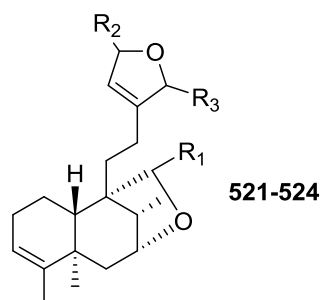
327-329

327	ptychonolide	=O	<i>Ptychopetalum olacoides</i>	<i>J. Nat. Prod.</i> , 2008, 71 , 1760-1763
328	20-O-methylptychonal acetal	β OMe		
329	ptychonal hemiacetal	β OH		



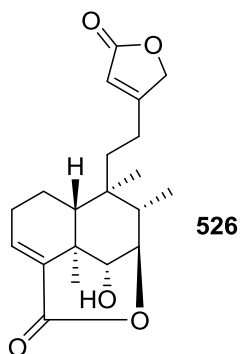
380, 382-383

		R1	R2		
380	ptychonal	H	CHO	<i>Ptychopetalum olacoides</i>	<i>J. Nat. Prod.</i> , 2008, 71 , 1760-1763
382	6 α ,7 α -dihydroxyannonene	α OH	Me	<i>Ptychopetalum olacoides</i>	<i>Bioorg. Med. Chem. Lett.</i> , 2009, 19 , 882-886
383	7 α ,20-dihydroxyannonene	H	CH ₂ OH		

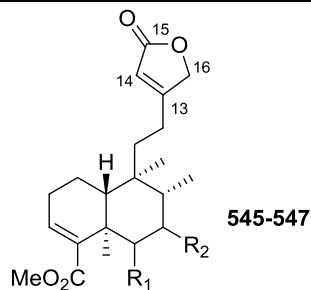
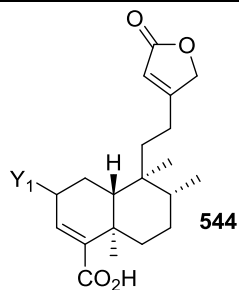


		R1	R2	R3		
521	ptycholide I	=O	OMe	=O	<i>Ptychopetalum olacoides</i>	<i>Nat. Prod. Commun.</i> , 2011, 6 , 327-332
522	ptycholide II	OMe	OMe	=O		
523	ptycholide III	OMe	H	=O		
524	ptycholide IV	OMe	=O	OH		

PULICARIA Genus

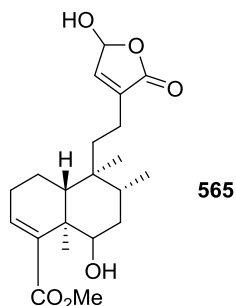


526	6 α -hydroxycleroda-3,13-dien-15(16),4(7)-diolide	<i>Pulicaria wightiana</i>	<i>Helv. Chim. Acta.</i> , 2008, 91 , 2081-2088
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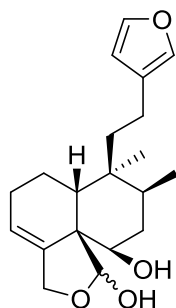
		R1	R2		
544	2 β -(2-methylbutanoyl)cleroda-3,13-dien-15,16-olid-18-oic acid	—	—	<i>Pulicaria wightiana</i>	<i>Helv. Chim. Acta.</i> , 2008, 91 , 2081-2088
545	methyl 6-oxocleroda-3,13-dien-15,16-olid-18-	=O	H		

	oate				
546	methyl 6 α -hydroxycyclo-3,13-dien-15,16-olide-18-oate	α OH	H		
547	methyl 6 α ,7 α -dihydroxycyclo-3,13-dien-15,16-olide-18-oate	α OH	α OH		

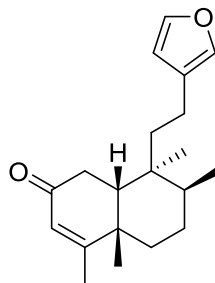


565	methyl 6,15-dihydroxycyclo-3,13-dien-16,15-olide-18-oate	<i>Pulicaria wightiana</i>	<i>Helv. Chim. Acta.</i> , 2008, 91 , 2081-2088
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RASPAILIA Genus

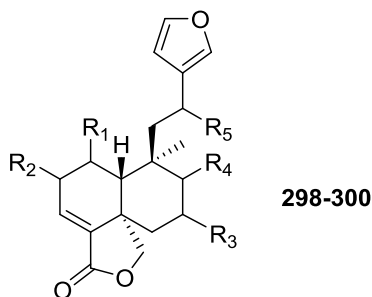


301	raspailol	<i>Raspailia</i> species	<i>Phytochemistry</i> , 1995, 39 , 443-445
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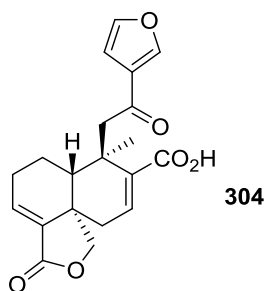


397	raspailenone	<i>Raspailia</i> species	<i>Phytochemistry</i> , 1995, 39 , 443-445
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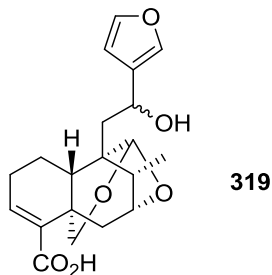
SALVIA Genus



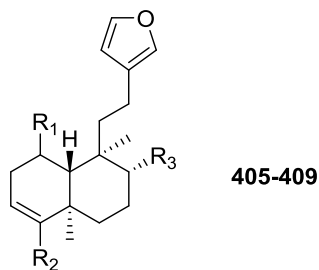
		R1	R2	R3	R4	R5		
298	2 α -hydroxy-7 α -acetoxy-12-oxo-15:16-epoxy-neoclerodan-3,13(16),14-trien-18:19-olide	H	OH	α OAc	α Me	=O	<i>Salvia urolepis</i>	<i>Phytochemistry</i> , 1995, 38 , 171-174
299	—	H	H	β OAc	α Me	OH	<i>Salvia miniata</i>	<i>Phytochemistry</i> , 2011, 72 , 265-275
300	<i>ent</i> -(5 <i>R</i> ,9 <i>S</i> ,10 <i>S</i>)-7 <i>S</i> -acetoxy-15,16-epoxy-1 <i>S</i> ,2 <i>S</i> ,12 ζ -trihydroxy-cleroda-3,13(16),14-trien-18,19-olide	α OH	β OH	α OAc	β Me	OH	<i>Salvia haenke</i>	<i>Tetrahedron</i> , 1997, 53 , 14719-14728



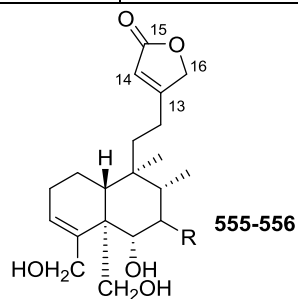
304	dugesin G	<i>Salvia dugesii</i>	<i>Nat. Prod. Bioprospect.</i> , 2011, 1 , 81-86
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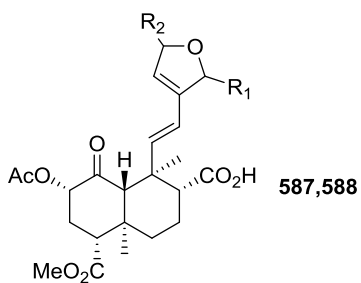
319	—	<i>Salvia miniata</i>	<i>Phytochemistry</i> , 2011, 72 , 265-275
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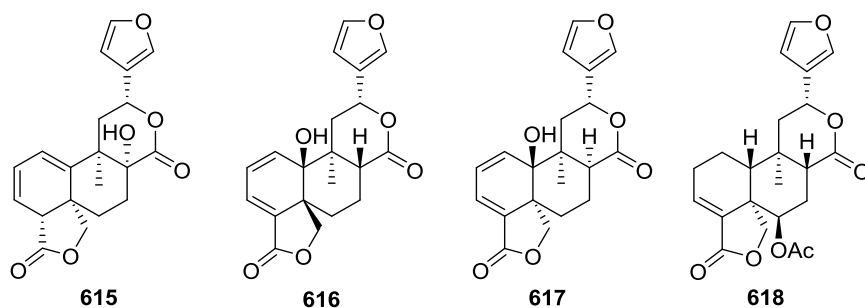
		R1	R2	R3		
405	divinatorin A	α OH	CO ₂ H	Me	<i>Salvia divinorum</i>	<i>J. Nat. Prod.</i> , 2003, 66 , 1242-1244
406	divinatorin B	α OH	CO ₂ Me	CH ₂ OH		
407	divinatorin C	H	CO ₂ H	CH ₂ OAc		
408	(-)-hardwickiic acid	H	CO ₂ H	Me		
409	divinatorin D	α OH	CO ₂ Me	CH ₂ OAc	<i>Salvia divinorum</i>	<i>Bioorg. Med. Chem.</i> , 2005, 13 , 5635-5639
410	divinatorin E	α OH	CO ₂ Me	CHO		



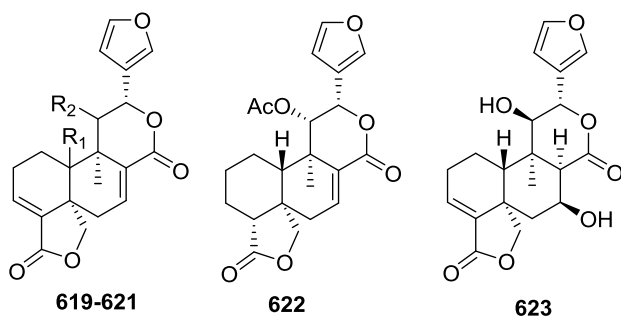
555	thymonin	H	<i>Salvia thymoides</i>	<i>Phytochemistry</i> , 1997, 46 , 1249-1254
556	7 β -hydroxythymonin	β OH		



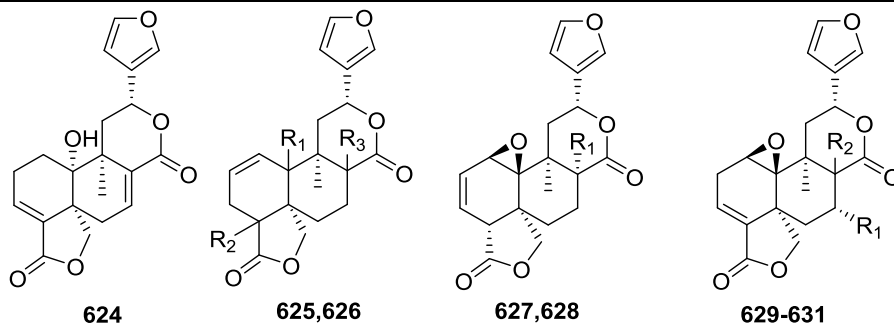
587	salvidivin C	OH	=O	<i>Salvia divinorum</i>	<i>J. Nat. Prod.</i> , 2006, 69 , 1782-1786
588	salvidivin D	=O	OH		



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

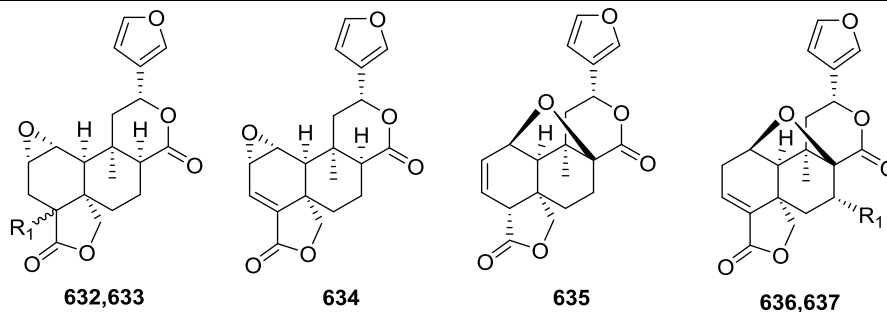


619	<i>ent</i> -(5 <i>R</i> ,9 <i>R</i>)-15,16-epoxy-10 <i>S</i> -hydroxy-cleroda-3,13(16),14-triene-17,12 <i>S</i> ;18,19-diolide	α OH	H	<i>Salvia haenkei</i>	<i>Tetrahedron</i> , 1997, 53 , 14719-14728
620	—	β H	α OH	<i>Salvia miniata</i>	<i>Phytochemistry</i> , 2011, 72 , 265-275
621	—	β OH	H		
622	—	—	—		
623	—	—	—		

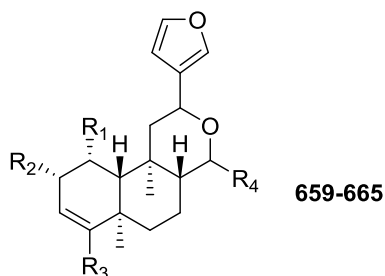


624	<i>ent</i> -(5 <i>R</i> ,9 <i>R</i>)-15,16-epoxy-10 <i>S</i> -hydroxycleroda-3,7,13(16),14-tetraene-17,12 <i>S</i> ,18,19-diolide	—	—	—	<i>Salvia haenkei</i>	<i>Tetrahedron</i> , 1997, 53 , 14719-14728
625	<i>ent</i> -(4 <i>S</i> ,5 <i>R</i> ,9 <i>S</i> ,10 <i>R</i>)-15,16-epoxycleroda-1,13(16),14-trien-17,12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

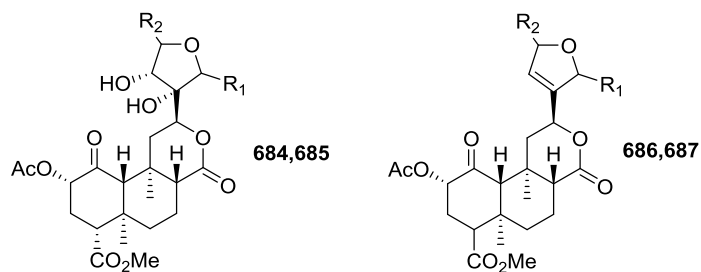
628	1 β ,10 β -epoxysalviarin	H	—	—	<i>herbacea</i>	75 , 951-958
629	tehuanin F	OH	β H	—		
630	tehuanin G	H	α OH	—		
631	tehuanin H	H	H	—		



632	1 α ,2 α -epoxy-3,4 α -dihydrolinearolactone	α H	<i>Salvia reptans</i>	<i>Phytochemistry</i> , 1991, 30 , 2335-2338
633	polystachyne D	β H	<i>Salvia polystachya</i>	<i>Phytochemistry</i> , 2000, 53 , 103-109
634	polystachyne E	—		
635	tehuanin A	—	<i>Salvia herbacea</i>	<i>J. Nat. Prod.</i> , 2012, 75 , 951-958
636	tehuanin B	H		
637	tehuanin C	OH		

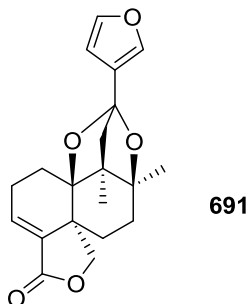


659	salvinorin C	OAc	OAc	CO ₂ Me	=O	<i>Salvia divinorum</i>	<i>Org. Lett.</i> , 2001, 3 , 3935-3937
660	salvinorin D	OAc	OH	CO ₂ Me	=O		<i>J. Nat. Prod.</i> , 2003, 66 , 703-705
661	salvinorin E	OH	OAc	CO ₂ Me	=O		<i>J. Nat. Prod.</i> , 2006, 69 , 1782-1786
662	salvinorin F	OH	H	CO ₂ Me	=O		
663	salvinorin H	OH	OH	CO ₂ Me	=O		<i>J. Nat. Prod.</i> , 2009, 72 , 1361-1363
664	salvinorin I	OH	OH	CO ₂ Me	β OH		
665	salvinorin J	OH	OAc	CO ₂ Me	α , β -OH		

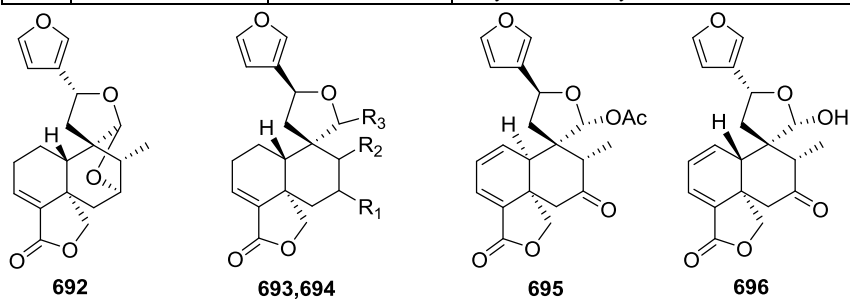


684	salvincin A	β OMe	β OMe	<i>Salvia divinorum</i>	<i>Org. Lett.</i> , 2005, 7 , 3017-3020
685	salvincin B	α OMe	α OMe		

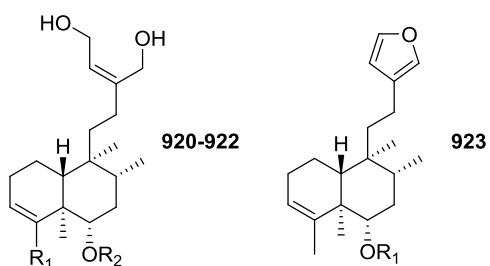
686	salvidivin A	=O	OH		<i>J. Nat. Prod.</i> , 2006, 69 , 1782-1786
687	salvidivin B	OH	=O		



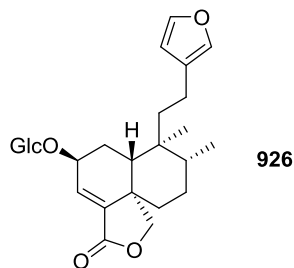
691	salvianduline D	<i>Salvia miniata</i>	<i>Phytochemistry</i> , 2011, 72 , 265-275		
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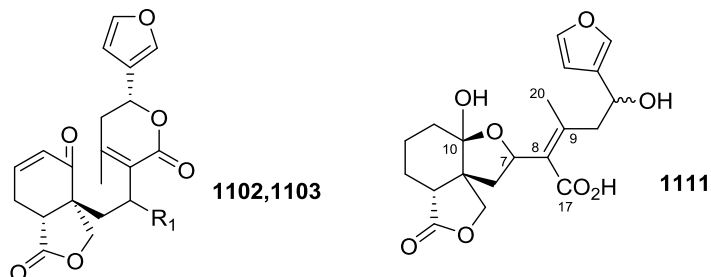
692	<i>trans</i> -1,2-dihydrosalvifaricin	—	—	—	<i>Salvia fulgens</i>	<i>J. Nat. Med.</i> , 2006, 60 , 58-63
693	—	=O	β Me	α OAc	<i>Salvia miniata</i>	<i>Phytochemistry</i> , 2011, 72 , 265-275
694	—	α OH	α Me	β OAc		
695	salvifolin	—	—	—	<i>Salvia tiliaefolia</i>	<i>J. Org. Chem.</i> , 1990, 55 , 3522-3525
696	dugesin F	—	—	—	<i>Salvia dugesii</i>	<i>Nat. Prod. Bioprospect.</i> , 2011, 1 , 81-86



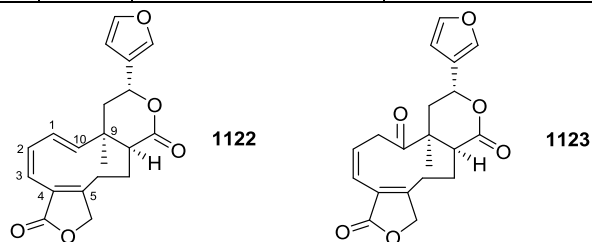
920	salvigreside A	Me	β -D-Glc	<i>Salvia greggii</i>	<i>Phytochemistry</i> , 2004, 65 , 2577-2581
921	salvigreside B	Me	6- <i>O</i> -acetyl- β -D-Glc		
922	salvigreside C	CH ₂ OH	6- <i>O</i> -acetyl- β -D-Glc		
923	salvigreside D	6- <i>O</i> -acetyl- β -D-Glc	—		



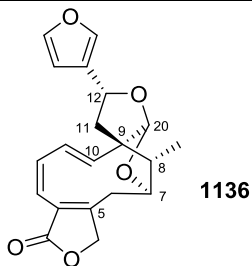
926	amarisolide	<i>Salvia amarissima</i>	<i>Phytochemistry</i> , 1996, 42 , 1105-1108
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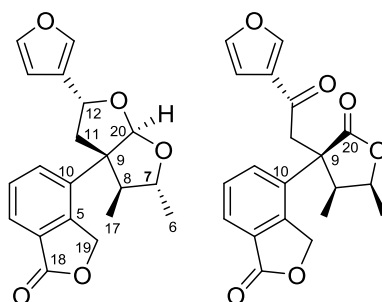
1102	salvianduline A	α OAc	<i>Salvia lavanduloides</i>	<i>Phytochemistry</i> , 1991, 30 , 3357-3360
1103	salvianduline B	β OH		
1111	—	—	<i>Salvia miniata</i>	<i>Phytochemistry</i> , 2011, 72 , 265-275



1122	salvimicrophyllin A	<i>Salvia microphylla</i>	<i>J. Nat. Prod.</i> , 2014, 77 , 1088-1092
1123	salvimicrophyllin B		



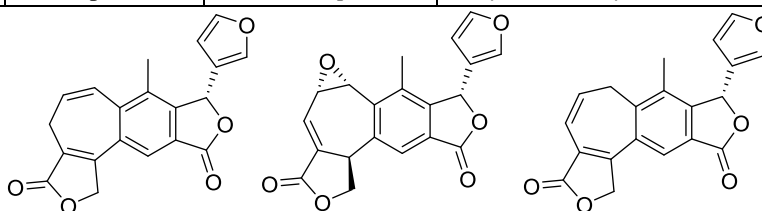
1136	tonalensin	<i>Salvia tonalensis</i>	<i>J. Chem. Crystallogr.</i> , 1996, 26 , 239-242
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1140	rhyacophiline	<i>Salvia rhyacophila</i>	<i>Tetrahedron</i> , 1991, 47 , 7199-7208
1141	salvireptanolide	<i>Salvia reptans</i>	<i>Phytochemistry</i> , 1991, 30 , 2335-2338

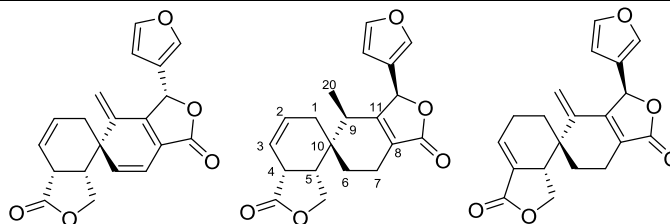


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1161	isosalvipuberulin	<i>Salvia leucantha</i>	<i>J. Nat. Med.</i> , 2006, 60 , 206-209
1162	salvileucantholide		<i>Tetrahedron</i> , 1994, 50 , 11593-11600
1163	dugesin B	<i>Salvia dugesii</i>	<i>Helv. Chim. Acta</i> , 2004, 87 , 949-955

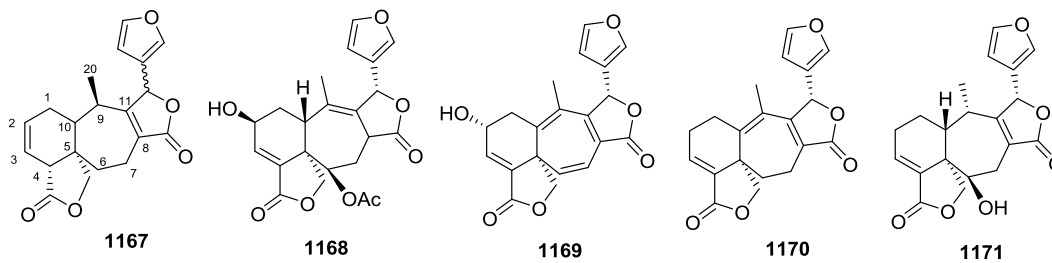


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1164	spiroleucantholide	<i>Salvia leucantha</i>	<i>J. Nat. Med.</i> , 2006, 60 , 206-209
1165	salvioccidentalin	<i>Salvia occidentalis</i>	<i>Molecules</i> , 2011, 16 , 9109-9115
1166	dugesin C	<i>Salvia dugesii</i>	<i>Nat. Prod. Bioprospect.</i> ,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



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1168

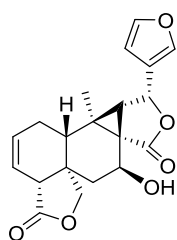
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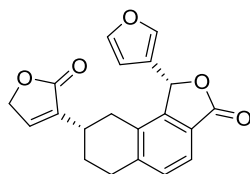
1171

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

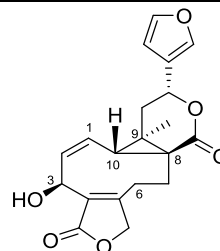
1169	salviandulin E	<i>Salvia leucantha</i>	<i>Tetrahedron</i> , 1994, 50 , 11593-11600
1170	dugesin A	<i>Salvia dugesii</i>	<i>Helv. Chim. Acta</i> , 2004, 87 , 949-955
1171	dugesin D		<i>Nat. Prod. Bioprospect.</i> , 2011, 1 , 81-86



1172

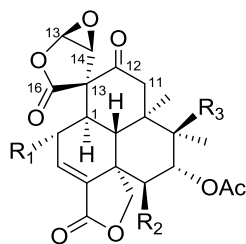


1173



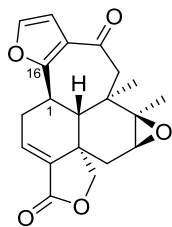
1180

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

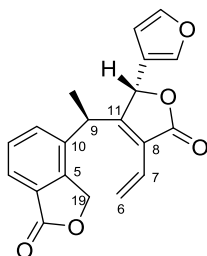


1207-1210

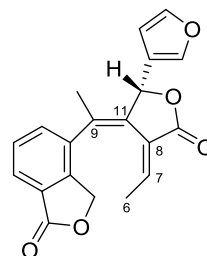
		R1	R2	R3		
1207	salvilanguiduline A	H	H	H	<i>Salvia languidula</i>	<i>Tetrahedron Lett.</i> , 1992, 33 , 581-584
1208	salvilanguiduline B	OH	H	H		
1209	salvilanguiduline C	H	OH	H		
1210	salvilanguiduline D	H	H	OH		



1222

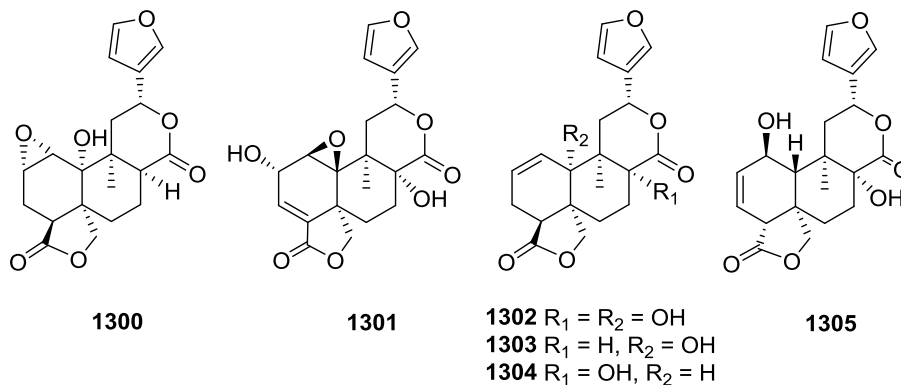


1223



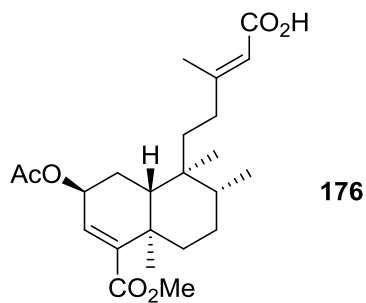
1224

1222	salvixalapoxide	<i>Salvia xalapensis</i>	<i>J. Nat. Prod.</i> , 2005, 68 , 787-790
1223	salvixalapadiene		
1224	isosalvixalapadiene		

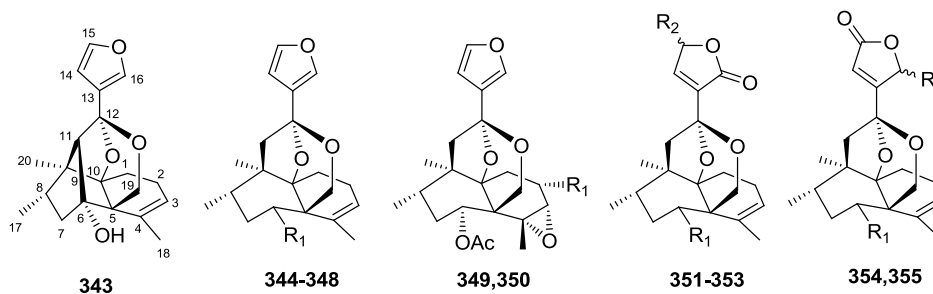


1300	seulpturin A	<i>Salvia shannoni</i>	<i>J. Nat. Prod.</i> , 2013, 76 , 1970-1975
1301	seulpturin B		
1302	seulpturin C		
1303	seulpturin D		
1304	seulpturin E		
1305	seulpturin F		

SCAPANIA Genus

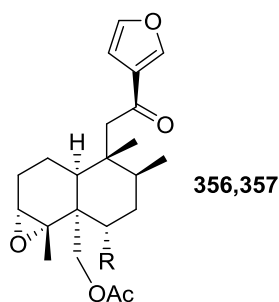


176	2β-acetoxy-19-carboxymethyl-cleroda-3,13-dien-15-oic acid	<i>Scapania bolandeli</i>	<i>Phytochemistry</i> , 1999, 52 , 1551-1553
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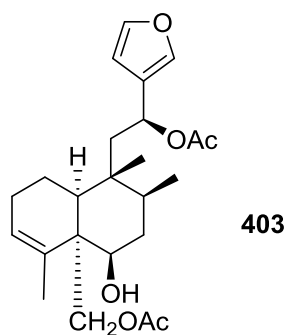


		R1	R2		
343	scaparvin A	—	—	<i>Scapania parva</i>	<i>Org. Lett.</i> , 2010, 12 , 4404-4407
344	scaparvin B	=O	—		

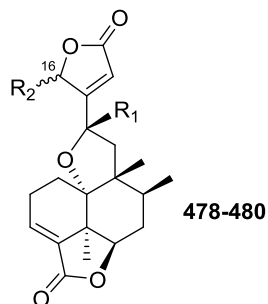
345	scaparvin C	α OH	—		
346	scaparvin D	α OAc	—		
347	parvitexin A	H	—	<i>Scapania parvitexta</i>	<i>Biosci. Biotechnol. Biochem.</i> , 2007, 71 , 2751-2758
348	parvitexin B	β OAc	—		
349	parvitexin C	β OH	—		
350	scaparvin E	OAc	—	<i>Scapania parva</i>	<i>Org. Lett.</i> , 2010, 12 , 4404-4407
351	stephanialide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



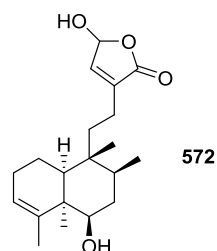
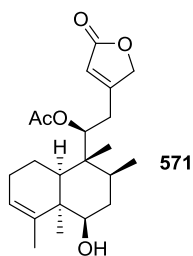
356	parvitexin D	OAc	<i>Scapania parvitexta</i>	<i>Biosci. Biotechnol. Biochem.</i> , 2007, 71 , 2751-2758
357	parvitexin E	OH		



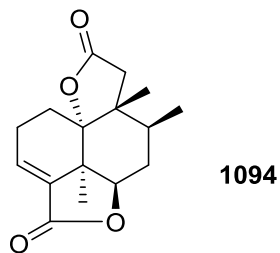
403	scaparvin F	<i>Scapania parva</i>	<i>Phytochem. Lett.</i> , 2012, 5 , 535-540
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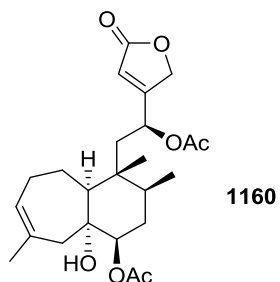
		R1	R2		
478	ciliatolide B	OEt	OH	<i>Scapania ciliata</i>	<i>Chem. Biodivers.</i> , 2013, 10 , 1606-1612
479	ciliatolide C	OMe	OH		
480	ciliatolide D	OEt	OEt		



571	scapanialide A	<i>Scapania parva</i>	<i>Phytochem. Lett.</i> , 2012, 5 , 535–540
572	scapanialide C		

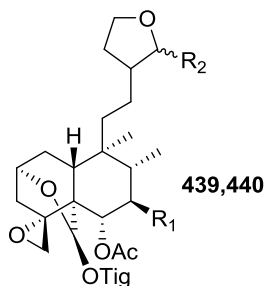


1094	ciliatolide A	<i>Scapania ciliata</i>	<i>Chem. Biodivers.</i> , 2013, 10 , 1606-1612
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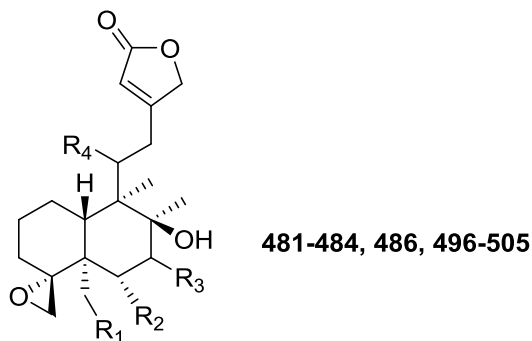


1160	scapanialide B	<i>Scapania parva</i>	<i>Phytochem. Lett.</i> , 2012, 5 , 535–540
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SCUTELLARIA Genus

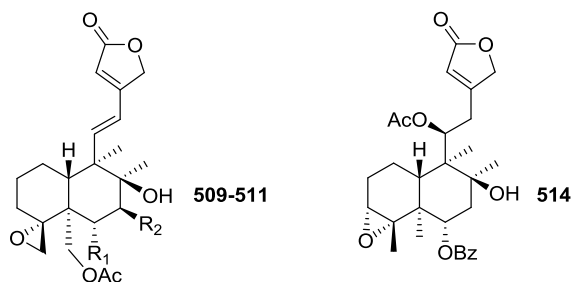


439	scutegalin B	OH	β OH	<i>Scutellaria galericulata</i>	<i>Phytochemistry</i> , 1993, 33 , 309-315, <i>Phytochemistry</i> , 1996, 41 , 247-253
440	scutegalin C	OTig	OH		

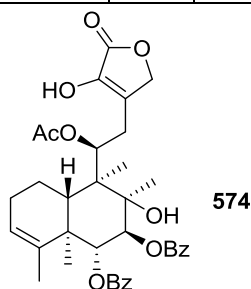


		R1	R2	R3	R4		
481	scutorientalin C	CH ₂ OH	OiBu	H	β OAc	<i>Scutellaria orientalis</i>	<i>Phytochemistry</i> , 1996, 43 , 173-178
482	scutalpin H	CH ₂ OAc	Y ₁	H	β OAc	<i>Scutellaria alpina</i>	<i>Phytochemistry</i> , 1995, 38 , 181-187
483	scutalpin I	CH ₂ OAc	OBz	H	β OAc		
484	scutalpin L	CH ₂ OAc	OBz	β OBz	H		
486	scutalpin N	CH ₂ OAc	OBz	β OBz	H	<i>Scutellaria alpina</i>	<i>Phytochemistry</i> , 1998, 49 , 2449-2452
496	(4 <i>S</i> ,11 <i>S</i>)-11-acetoxy-8 β ,19-dihydroxy-6 α -tigloyloxy-4,18-epoxy- <i>neo</i> -clerod-13-en-15,16-olide	CH ₂ OH	OTig	H	OAc	<i>Scutellaria alpina</i>	<i>Yakugaku Zasshi</i> , 1994, 114 , 264-271, <i>Phytochemistry</i> , 1993, 34 , 1589-1594
497	scutalpin C	CH ₂ OAc	OTig	H	β OH	<i>Scutellaria polyodon</i>	<i>J. Nat. Prod.</i> , 1997, 60 , 1229-1235
498	scupolin A	CH ₂ OH	Y ₁	H	β OAc		
499	scupolin B	CH ₂ OAc	OAc	H	β OAc		
500	scupolin C	CH ₂ OBz	OBz	H	β OAc		
501	scupolin D	CH ₂ OH	OH	β Y ₁	β OAc		
502	scupolin E	CH ₂ OH	Y ₁	β OH	β OAc		
503	scupolin F	CO ₂ H	Y ₁	H	H		
504	scutorientalin E	CH ₂ OAc	OCin	β OAc	H	<i>Scutellaria orientalis</i>	<i>Phytochemistry</i> 1997, 46 , 587-589

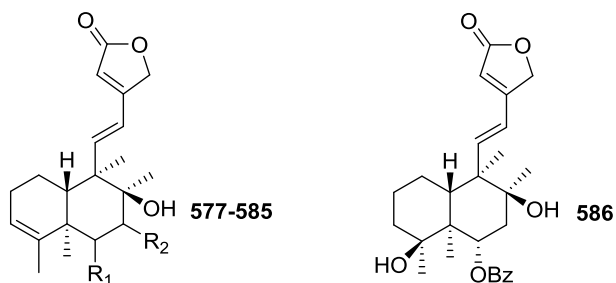
505	hastifolin A	Me	OCin	H	H	<i>Scutellaria hastifolia</i>	<i>Phytochemistry</i> , 2010, 71 , 2087-2091
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		R1	R2		
509	(4 <i>S</i>)-19-acetoxy-8β-hydroxy-6α-tigloyloxy-4,18-epoxy- <i>neo</i> -cleroda-11,13-dien-15,16-olide	OTig	H	<i>Scutellaria alpina</i>	<i>Yakugaku Zasshi</i> , 1994, 114 , 264-271
510	scutalpin J	OBz	H		<i>Phytochemistry</i> , 1995, 38 , 181-187
511	scutalpin K	OBz	OBz		
514	scuterivulactone A	--	--	<i>Scutellaria rivularis</i>	<i>Chem. Pharm. Bull.</i> , 1997, 45 , 152-160

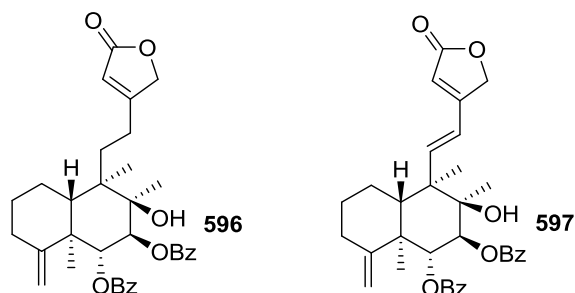


574	scutebata A	<i>Scutellaria barbata</i>	<i>J. Nat. Prod.</i> , 2010, 73 , 233-236
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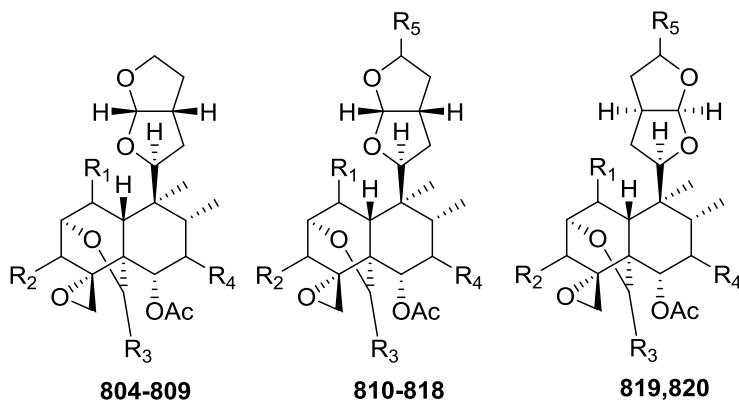


		R1	R2		
577	barbatin C	αOH	βOH	<i>Scutellaria barbata</i>	<i>J. Integr. Plant Biol.</i> , 2008, 50 , 699-702, <i>Fitoterapia</i> , 2010, 81 , 737-741, <i>Planta Med.</i> , 2011, 77 , 1536-1541, <i>Phytochemistry</i> , 2006, 67 , 1326-1330, <i>Planta Med.</i> , 2007, 73 , 1217-1220,
578	barbatin D	αOBz	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- <i>O</i> -acetoxybarbatin A	αOAc	βOAc		
584	6-(2,3-epoxy-2-isopropyl- <i>n</i> -propoxy)barbatin C	αM ₂	βOH		

585	6-acetoxybarbatin C	α OAc	β OH		<i>J. Asian Nat. Prod. Res.</i> , 2010, 12 , 859-864
586	scuterivulactone D	—	—	<i>Scutellaria rivularis</i>	<i>Chem. Pharm. Bull.</i> , 1997, 45 , 152-160

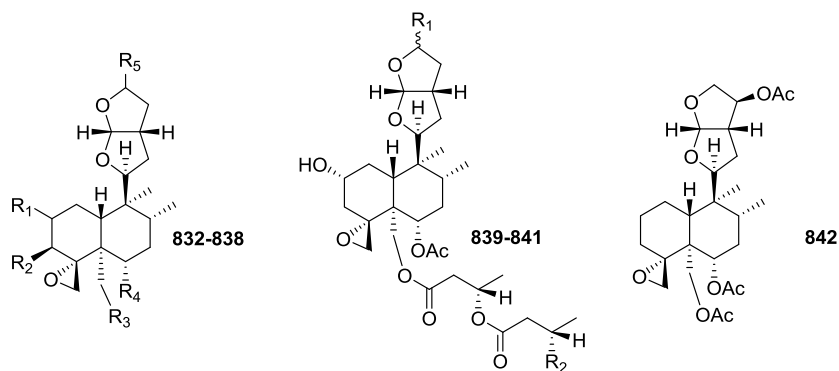


596	scutebaicalin	<i>Scutellaria baicalensis</i>	<i>Phytochemistry</i> , 1996, 43 , 835-837
597	scutebata L	<i>Scutellaria barbata</i>	<i>Planta Med.</i> , 2011, 77 , 1536-1541



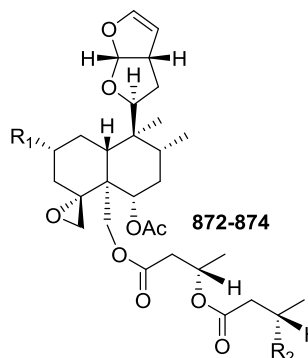
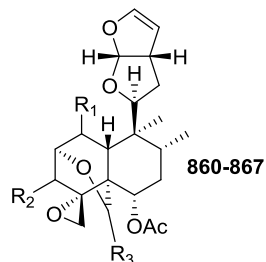
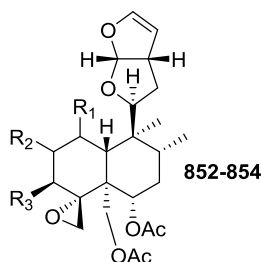
		R1	R2	R3	R4	R5		
805	14,15-dihydrojodrellin T	β OTig	H	OAc	H	—	<i>Scutellaria galericulata</i>	<i>Phytochemistry</i> , 1990, 29 , 1793-1796
806	scutegalin A	H	H	OTig	OTig	—		<i>Phytochemistry</i> , 1993, 33 , 309-315
807	scutecyprin	H	H	β OTig	H	—	<i>Scutellaria cypria</i> var. <i>elatior</i>	<i>Phytochemistry</i> , 1993, 33 , 931-932
808	scutecolumnin B	H	H	β Y ₁	H	—	<i>Scutellaria columnae</i>	<i>Phytochemistry</i> , 1992, 31 , 3639-3641
809	scutecolumnin C	H	H	β OH	H	—		
810	scutecyprol B	H	H	β OTig	H	OH	<i>Scutellaria cypria</i> var. <i>cypria</i>	<i>Phytochemistry</i> , 1996, 42 , 555-557
811	scupolin K	H	β OH	OiBu	H	OH	<i>Scutellaria polyodon</i>	<i>J. Nat. Prod.</i> , 2000, 63 , 1032-1034
812	6 α -O-acetyl-15 β ,19 β -di-O-ethyl-2,19:4,18:11,16:15,16-	H	H	OEt	H	β OEt	<i>Scutellaria discolor</i>	<i>Chem. Pharm. Bull.</i> , 1996, 44 ,

	tetraepoxyneoclerodane-6,15,19-triol							1540-1545
813	6 α -O-acetyl-15 α ,19 β -di-O-ethyl-2,19:4,18:11,16:15,16-tetraepoxyneoclerodane-6,15,19-triol	H	H	OEt	H	α OEt		
814	6 α -O-acetyl-19 β -O-ethyl-2,19:4,18:11,16:15,16-tetraepoxyneoclerodane-6,15,19-triol	H	H	OEt	H	OH		
815	6 α ,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	β Y1	H	OH	<i>Scutellaria albida</i>	<i>Phytochemistry</i> , 1996, 42 , 1059-1064
817	scutalbin C	H	H	β OH	H	OH		
818	scutalsin	H	H	β OiBu	H	OH	<i>Scutellaria altissima</i>	
819	11-episcuteceprin	H	H	β OTig	H	H	<i>Scutellaria columnae</i>	<i>Phytochemistry</i> , 1997, 46 , 955-958
820	11-epi-scutecolumnin C	H	H	β OH	H	H	<i>Scutellaria columnae</i> var <i>columnae</i>	<i>Phytochemistry</i> , 1998, 49 , 811-815

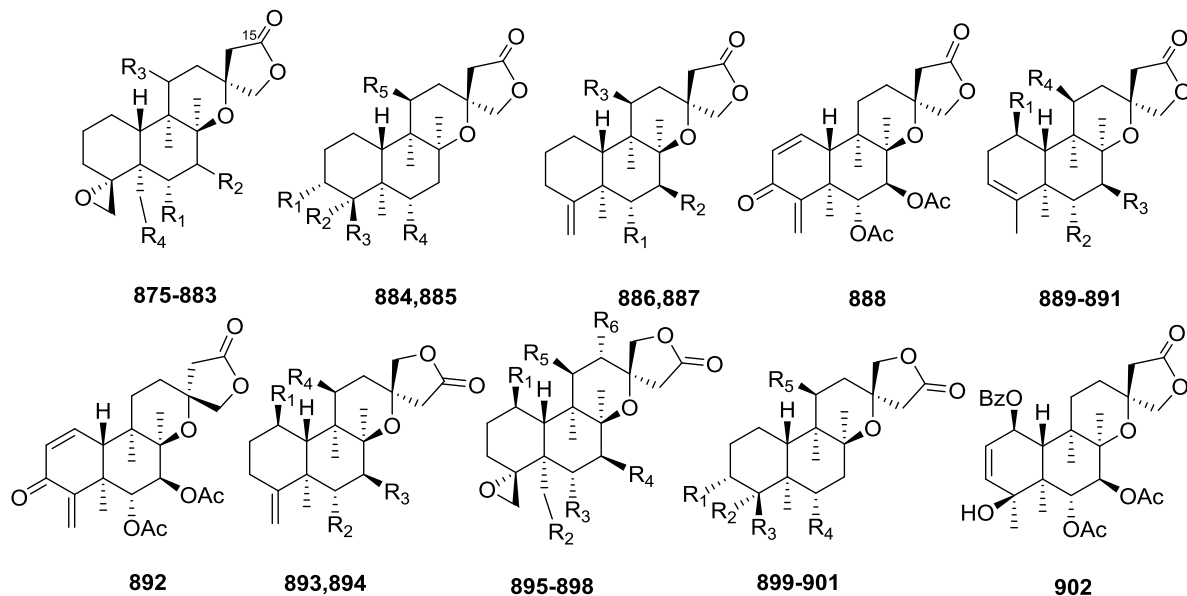


		R1	R2	R3	R4	R5		
832	15 β -ethoxy-14-hydroclerodin	H	H	OAc	OAc	β OEt	<i>Scutellaria discolor</i>	<i>Chem. Pharm. Bull.</i> , 1996, 44 , 1540-1545
833	15 α -ethoxy-14-hydroclerodin	H	H	OAc	OAc	α OEt		
834	14-hydro-15-hydroxy-6-O-deacetylclerodin	H	H	OAc	OH	OH		
835	scutelaterin C	Y1	H	OAc	OAc	OH	<i>Scutellaria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

840	scupontin D	OH	OAc	—	—	—	<i>pontica</i>	348-355
841	scupontin F	OH	OX ₆	—	—	—		
842	scutalpin M	—	—	—	—	—	<i>Scutellaria alpina</i>	<i>Phytochemistry</i> , 1995, 38 , 181-187

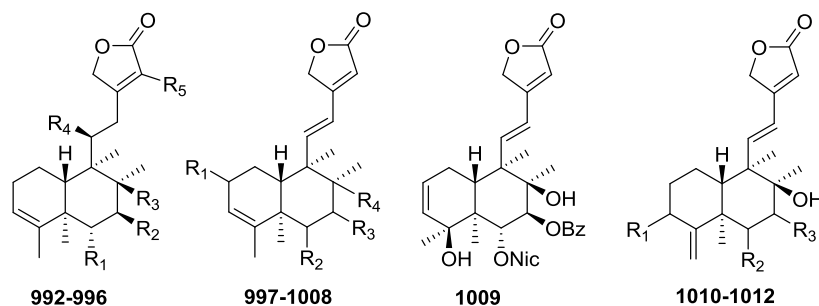


		R1	R2	R3		
852	galericulin	H	α OH	OTig	<i>Scutellaria galericulata</i>	<i>Phytochemistry</i> , 1990, 29 , 1793-1796
853	scutelaterin A	H	β OAc	H	<i>Scutellaria laterifora</i>	<i>Phytochemistry</i> , 1998, 48 , 687-691
854	scutelaterin B	H	β Y ₁	H		
860	jodrellin A	H	H	β OAc	<i>Scutellaria</i> spp.	<i>Phytochemistry</i> , 1991, 30 , 1125-1127
861	jodrellin B	H	H	β OiPr		
862	scupolin J	H	β OH	OiBu	<i>Scutellaria polyodon</i>	<i>J. Nat. Prod.</i> , 2000, 63 , 1032-1034
863	jodrellin T	β OTig	H	β OAc	<i>Scutellaria galericulata</i>	<i>Phytochemistry</i> , 1990, 29 , 1793-1796
864	19-O-deacetyl-jodrellin A	H	H	OH	<i>Scutellaria discolor</i>	<i>Chem. Pharm. Bull.</i> , 1996, 44 , 1540-1545
865	scutegrossin A	H	H	β OTig	<i>Scutellaria grossa</i>	<i>Chem. Pharm. Bull.</i> , 1997, 45 , 1097-1100
866	scutalbin A	H	H	β OH	<i>Scutellaria albida</i>	<i>Phytochemistry</i> , 1996, 42 , 1059-1064
867	scutecolumnin A	H	H	β Y ₁	<i>Scutellaria columnae</i>	<i>Phytochemistry</i> , 1992, 31 , 3639-3641
872	scupontin A	OH	OAc	—	<i>Scutellaria pontica</i>	<i>J. Nat. Prod.</i> , 1997, 60 , 348-355
873	scupontin B	H	OAc	—		
874	scupontin E	OH	X ₆	—		



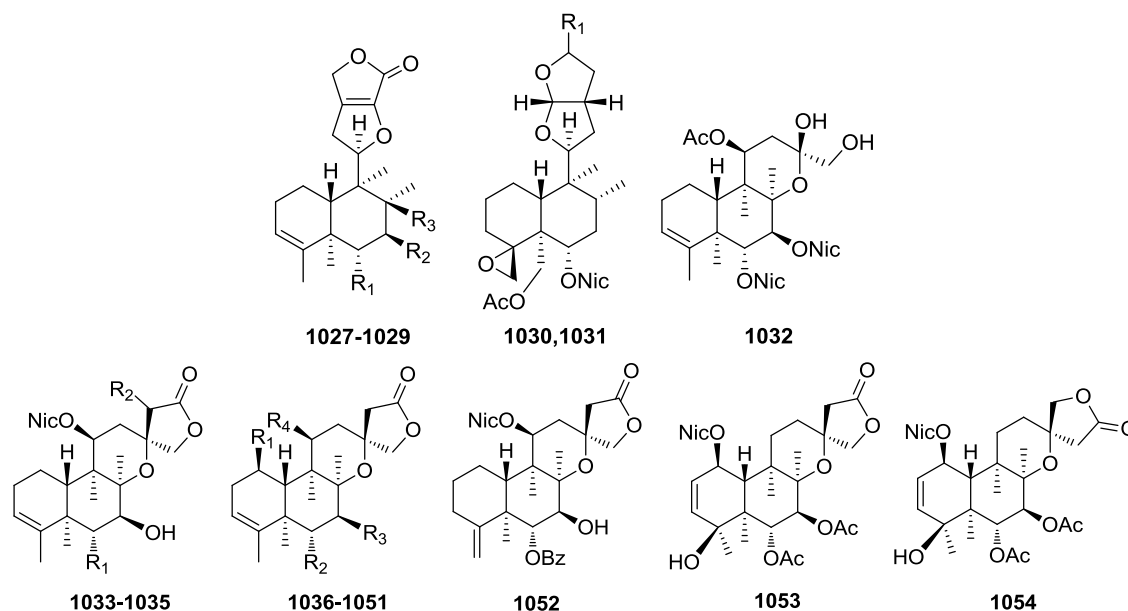
		R ₁	R ₂	R ₃	R ₄	R ₅	R ₆		
875	scutorientalin A	OiBu	H	H	OAc			<i>Scutellaria orientalis</i> subsp. <i>pinnatifida</i>	<i>Phytochemistry</i> , 1996, 43 , 173-178
876	scutorientalin C	OiBu	H	αOH	OAc				<i>Phytochemistry</i> , 1997, 44 , 121-124
877	scutorientalin D	OiBu	H	βOAc	OAc				<i>Phytochemistry</i> , 1993, 34 , 1589-1594
878	scutalpin D	OTig	H	βOAc	OAc			<i>Scutellaria alpina</i> subsp. <i>javalambrensis</i>	<i>Phytochemistry</i> , 1997, 44 , 593-597
879	11-deacetylscutalpin D	OTig	H	βOH	OAc				<i>Phytochemistry</i> , 1993, 34 , 453-456
880	scutalpin A	Y ₁	βOAc	H	OAc			<i>Scutellaria alpina</i>	<i>Phytochemistry</i> , 1994, 35 , 1285-1288
881	scutalpin F	OAc	βOAc	H	OAc				<i>Phytochemistry</i> , 1995, 38 , 181-187
882	scutalpin G	OBz	H	βOAc	OAc				<i>Phytochemistry</i> , 2010, 71 , 2087-2091.
883	hastifolin C	OCin	H	H	H			<i>Scutellaria hastifolia</i>	<i>Chem. Pharm. Bull.</i> , 1997, 45 , 152-160
884	scuterivulactone C ₂	OH	Me	OH	OBz	OAc		<i>Scutellaria hastifolia</i>	<i>Phytochemistry</i> , 2010, 71 , 2087-2091.
885	hastifolin E	H	OH	CH ₂ OH	OCin	H			<i>Scutellaria barbata</i>
886	hastifolin G	OCin	H	H				<i>Helv. Chim. Acta.</i> , 2011, 94 , 643-649	
887	barbatin A	H	OBz	OH	OBz			<i>Phytochemistry</i> , 2006, 67 , 1326-1330	
888	barbatellarine E							<i>Helv. Chim. Acta.</i> , 2011, 94 , 643-649	
889	barbatin B	OBz	OBz	OH				<i>Phytochemistry</i> , 2006, 67 , 1326-	

									1330
890	scutebata D	OBz	OAc	OAc	H				<i>J. Nat. Prod.</i> , 2010, 73 , 233-236
891	scutebata E	OiBu	OAc	OAc	H				<i>Chem. Nat. Cmpds.</i> , 2014, 50 , 256-257
892	barbatellarine F								<i>Phytochemistry</i> , 1998, 47 , 135-137
893	scuteselerin	OAc	OH	Y ₁₂	OAc			<i>Scutellaria seleriana</i>	<i>Phytochemistry</i> , 2010, 71 , 2087-2091
894	hastifolin F	H	OCin	H	H			<i>Scutellaria hastifolia</i>	<i>Phytochemistry</i> , 1998, 49 , 1825-1827
895	hastifolin B	H	H	OCin	H	H	H	<i>Scutellaria orientalis</i> subsp. <i>sintenisii</i>	<i>Phytochemistry</i> , 1994, 35 , 1285-1288
896	scutenisin	H	OH	OiBu	OiBu	H	H	<i>Scutellaria alpina</i>	<i>Heterocycles</i> , 1997, 45 , 2247-2252
897	scutalpin E	H	OAc	OTig	OAc	H	H	<i>Scutellaria guatemalensis</i>	<i>Phytochemistry</i> , 2010, 71 , 2087-2091
898	scuteguatemalin	OiBu	H	OAc	H	OAc	OiBu	<i>Scutellaria rivularis</i>	<i>Bioorg. Med. Chem. Lett.</i> , 2010, 20 , 288-290
899	hastifolin D	H	OH	CH ₂ OH	OCin	H		<i>Scutellaria barbata</i>	
900	scuterivulactone C ₁	OH	Me	OH	OBz	OAc			
901	scuterivulactone B	=O	Me	H	OBz	OAc			
902	barbatellarine A								



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

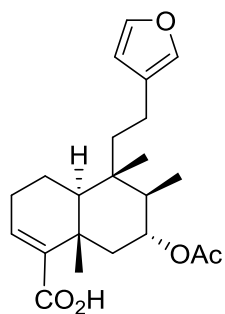
999	6-O-acetylscutehenanine A	H	α OAc	β ONic	β OH	—		72, 1793-1797	
1000	6-O-(2-carbonyl-3-methylbutanoyl)scutehenanine A	H	α OM ₁	β ONic	β OH	—			
1001	scutebarbatine B	H	α ONic	β OBz	β OH	—			<i>Phytochemistry</i> , 2006, 67 , 1326-1330
1002	scutelinquanine C	H	α ONic	β Y ₈	β OH	—			<i>Phytochem. Lett.</i> , 2010, 3 , 190-193
1003	scutebarbatine A	H	α ONic	β ONic	β OH	—			<i>Chin. Chem. Lett.</i> , 1996, 7 , 333-334
1004	scutebarbatine K	H	α ONic	β OAc	β OH	—			<i>Chem. Pharm. Bull.</i> , 2008, 56 , 207-209
1005	scutebarbatine L	H	α ONic	β Y ₄	β OH	—			
1006	2-carbonylscutebarbatine A	=O	α ONic	β ONic	β OH	—			<i>Planta Med.</i> , 2007, 73 , 1217-1220
1007	6-O-nicotinoylbarbatin A	H	α ONic	β OH	β OH	—			
1008	8-O-nicotinoylbarbatin A	H	α OH	β OH	β ONic	—			
1009	scutebarbatine C	—	—	—	—	—			<i>Chem. Pharm. Bull.</i> , 2006, 54 , 869-872
1010	scutebarbatine D	β OH	α ONic	β OBz	—	—			
1011	scutebarbatine E	=O	α ONic	β OBz	—	—	<i>J. Asian Nat. Prod. Res.</i> , 2009, 11 , 451-456		
1012	scutebarbatine O	α OH	β ONic	α ONic	—	—			



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

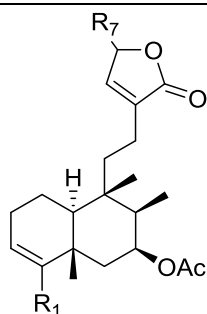
1034	scutehenanine H	OBz	OH	—	—	—	<i>Fitoterapia</i> , 2010, 81 , 737-741 <i>J. Asian Nat. Prod. Res.</i> , 2010, 12 , 859-864 <i>J. Nat. Prod.</i> , 2009, 72 , 1793-1797 <i>Chem. Pharm. Bull.</i> , 2006, 54 , 869-872 <i>Chem. Pharm. Bull.</i> , 2007, 55 , 1218-1221 <i>J. Asian Nat. Prod. Res.</i> ,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

SINDORA Genus



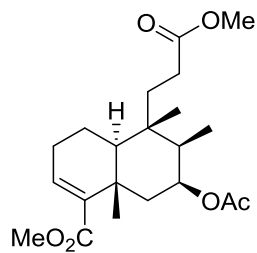
402

402	(+)-7β-acetoxy-15,16-epoxy-3,13(16),14-clerodatrien-18-oic acid	<i>Sindora sumatrana</i>	<i>Chem. Pharm. Bull.</i> , 1994, 42 , 1202-1207
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568-570

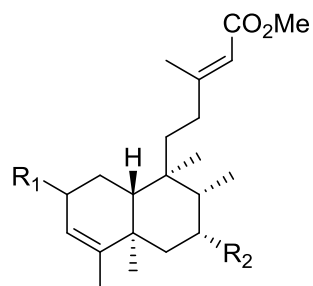
		R1	R7		
568	(+)-7β-acetoxy-18-oxo-3,13-clerodadien-16,15-olide	CHO	H	<i>Sindora sumatrana</i>	<i>Chem. Pharm. Bull.</i> , 1994, 42 , 1202-1207
569	(+)-7β-acetoxy-3,13-clerodadien-16,15-olid-18-oic acid	CO ₂ H	H		
570	(+)-7β-acetoxy-16-hydroxy-3,13-clerodadien-16,15-olid-18-oic	CO ₂ H	OH		



1085

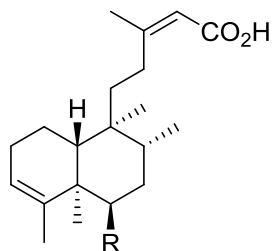
1085	(+)-7β-acetoxy-14,15,16-trinor-3-clerodene-13,18-dioate	<i>Sindora sumatrana</i>	<i>Chem. Pharm. Bull.</i> , 1994, 42 , 1202-1207
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SOLIDAGO Genus



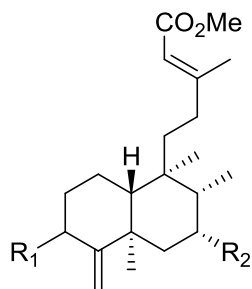
178 R₁ = =O, R₂ = OAc
 179 R₁ = β-OH, R₂ = OAc
 180 R₁ = α-OH, R₂ = H
 179 R₁ = β-OH, R₂ = H

178	—	<i>Solidago altissima</i>	<i>Phytochemistry</i> , 1999, 52 , 487-493
179	—		
180	—		
181	—		



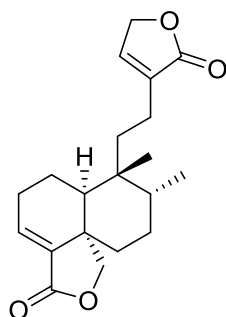
200 R = OTig
 201 R = OAng

200	solidagocanin A	<i>Solidago canadensis</i>	<i>Helv. Chim. Acta</i> , 2012, 95 , 1121-1125
201	solidagocanin B		



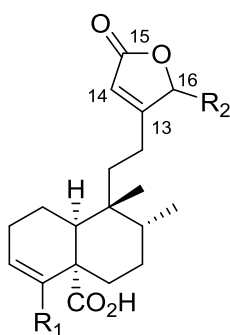
282 R₁ = α-OH, R₂ = OAc
 283 R₁ = β-OH, R₂ = OAc
 282 R₁ = =O, R₂ = H

282	—	<i>Solidago altissima</i>	<i>Phytochemistry</i> , 1999, 52 , 487-493
283	—		
284	—		

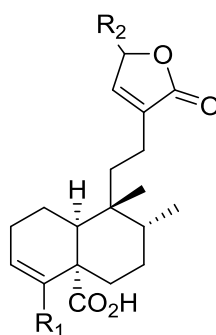


455

455	cleroda-3,13(14)-dien-16,15:18,19-dioidide	<i>Solidago virgaurea</i>	<i>Phytochemistry</i> , 2010, 71 , 104–109
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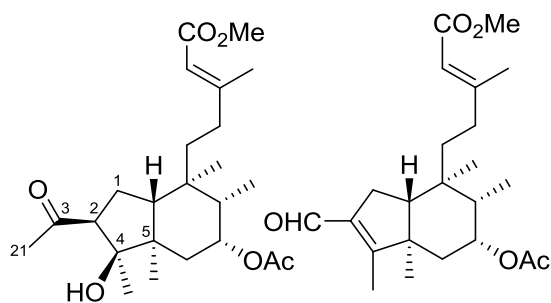


558-559



560-564

		R1	R2		
558	solidagoic acid H	Me	OH	<i>Solidago virgaurea</i>	<i>Phytochemistry</i> , 2010, 71 , 104–109
559	solidagoic acid I	CH ₂ OAng	OH		
560	solidagoic acid C	Me	H		
561	solidagoic acid D	CH ₂ OAng	H		
562	solidagoic acid E	Me	OH		
563	solidagoic acid F	CH ₂ OAng	OH		
564	solidagoic acid G	Me	OMe		

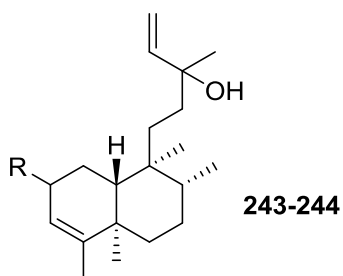


1146

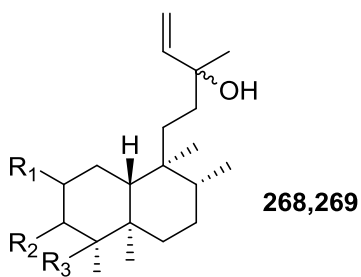
1147

1146	—	<i>Solidago altissima</i>	<i>Phytochemistry</i> , 1999, 52 , 487-493
1147	—		

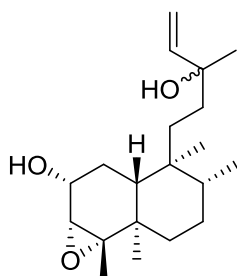
STACHYS Genus



243	roseostachenol	α OH	<i>Stachys rosea</i>	<i>Phytochemistry</i> , 1994, 37 , 501-503
244	roseostachenone	=O		<i>Phytochemistry</i> , 1992, 31 , 3147-3149



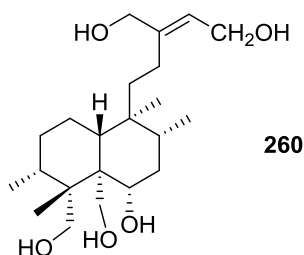
		R1	R2	R3		
268	roseotetrol	α OH	α OH	β OH	<i>Stachys rosea</i>	<i>Phytochemistry</i> , 1994, 37 , 501-503
269	roseostachone	H	=O	H		<i>Phytochemistry</i> , 1992, 31 , 3147-3149



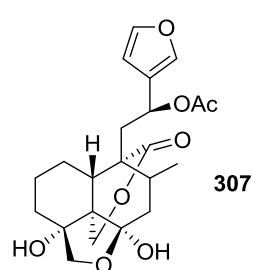
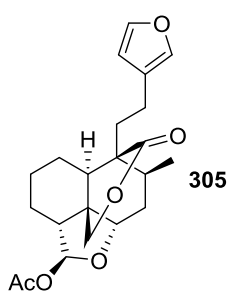
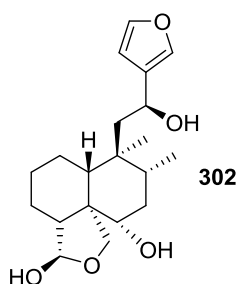
294

294	3 α ,4 α -epoxyroseostachenol	<i>Stachys glutinosa</i>	<i>J. Nat. Prod.</i> , 2015, 78 , 69-76
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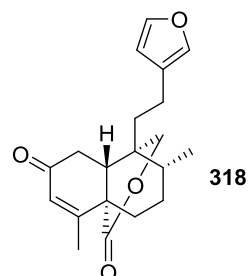
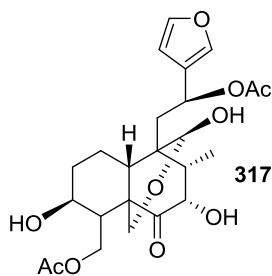
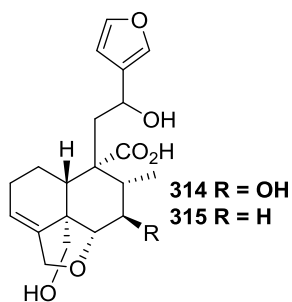
TEUCRIUM Genus



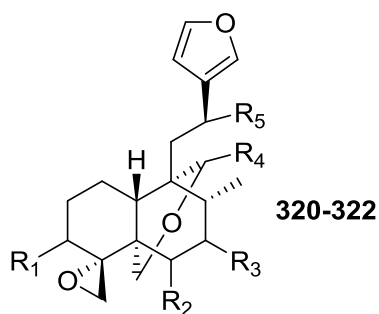
260	sypirensin B	<i>Teucrium chamaedrys</i> ssp. <i>sypirensis</i>	<i>J. Nat. Prod.</i> , 1996, 59 , 457-460
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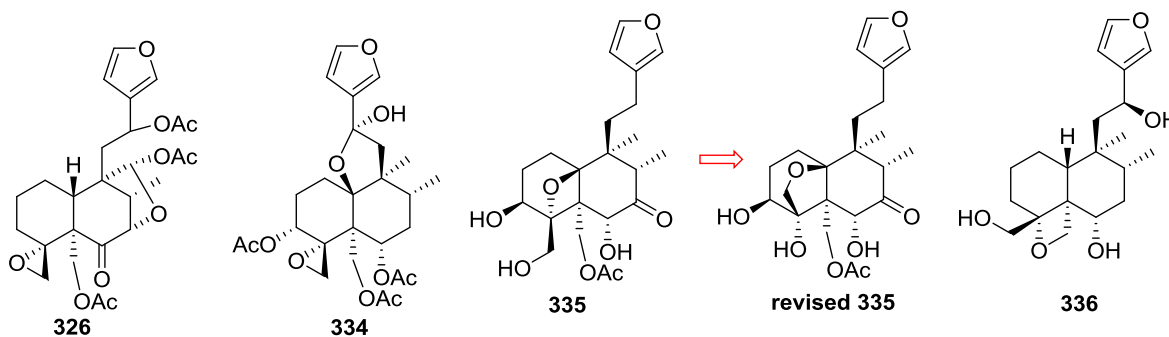
302	teumassilenin B	<i>Teucrium massiliense</i>	<i>J. Nat. Prod.</i> , 1998, 61 , 1242-1247
305	teuctomin	<i>Teucrium tomentosum</i>	<i>Nat. Prod. Res.</i> , 2010, 24 , 7-12
307	12-O-acetylteugnaphalodin	<i>Teucrium oxylepis</i>	<i>Phytochemistry</i> , 1991, 30 , 4079-4082



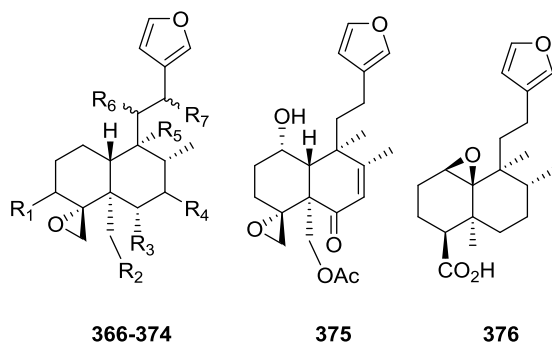
314	tepolin A	<i>Teucrium polium</i>	<i>Him. Prir. Soedin.</i> , 1992, 5 , 503-508
315	tepolin B		
316	difuranofruticol	<i>Teucrium fruticans</i>	<i>Phytochemistry</i> , 2005, 66 , 2298-2303
317	syrapolin II	<i>Teucrium polium</i>	<i>Jordan J. Chem.</i> , 2011, 6 , 339-345



		R1	R2	R3	R4	R5		
320	6 β -O-acetyl-3 β -hydroxy-teucroxylopin	β OH	β OAc	H	=O	OH	<i>Teucrium yemense</i>	<i>Phytochemistry</i> , 1995, 40 , 1737-1741
321	teucroxylopin	H	β OH	H	=O	β OAc	<i>Teucrium oxylepis</i>	<i>Phytochemistry</i> , 1991, 30 , 4079-4082
322	montanin H	H	α OH	=O	α OH	OAc	<i>Teucrium montanum</i>	<i>Phytochemistry</i> , 1992, 31 , 4029-4030

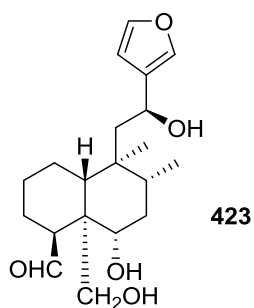


326	teucosin B	<i>Teucrium cossonii</i>	<i>Phytochemistry</i> , 1992, 31 , 3957-3960
334	teucrolin A	<i>Teucrium oliverianum</i>	<i>J. Nat. Prod.</i> , 1993, 56 , 830-842,
335	teucrolin E		<i>Phytochemistry</i> , 2002, 59 , 409-414
336	teumassilenin C	<i>Teucrium massiliense</i>	<i>J. Nat. Prod.</i>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

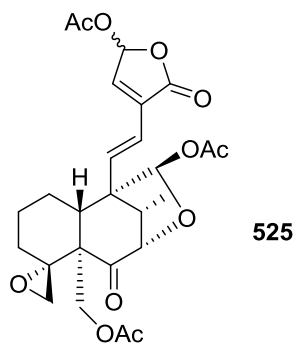


		R1	R2	R3	R4	R5	R6	R7		
366	teucosin A	H	OAc	OH	H	CH ₂ OAc	H	OAc	<i>Teucrium cossonii</i>	<i>Phytochemistry</i> , 1992, 31 , 3957-3960

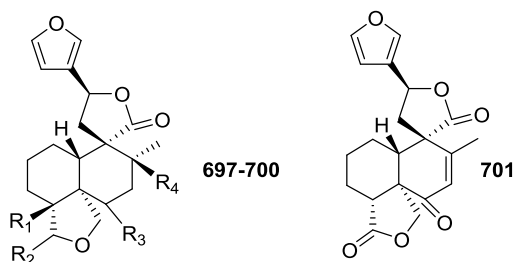
367	teugracilin E	β OAc	OAc	OAc	H	CH ₂ OAc	H	OAc	<i>Teucrium gracile</i>	<i>Phytochemistry</i> , 1992, 31 , 3531-3534
368	teugracilin C	β OH	OAc	OH	H	Me	H	OAc		<i>Phytochemistry</i> , 1991, 30 , 3693-3697
369	teucrolivin D	β OAc	OAc	OH	β OAc	Me	H	H	<i>Teucrium oliverianum</i>	<i>Phytochemistry</i> , 1991, 30 , 1603-1606
370	teucrolivin E	β OAc	OAc	OH	=O	Me	H	H		
371	7 β -hydroxyfruticolone	H	OAc	=O	β OH	Me	H	H	<i>Teucrium fruticans</i>	<i>Phytochemistry</i> , 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		
375	didehydrofruticolone	—	—	—	—	—	—	—		<i>Phytochemistry</i> , 2005, 66 , 2298-2303



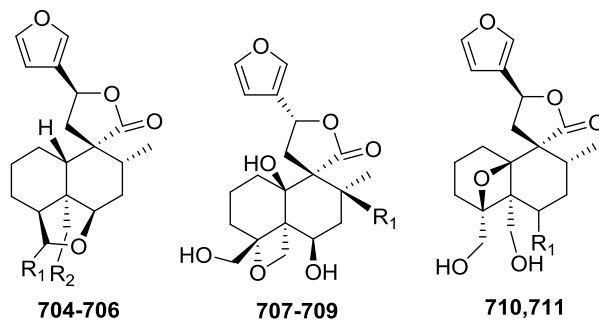
423	teumassilenin A	<i>Teucrium massiliense</i>	<i>J. Nat. Prod.</i> , 1998, 61 , 1242-1247
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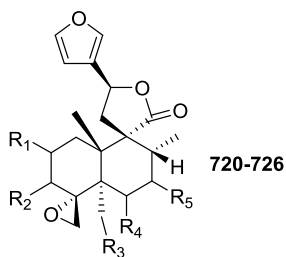
525	teucrasiolide	<i>Teucrium asiaticum</i>	<i>Phytochemistry</i> , 1997, 45 , 383-385
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		R1	R2	R3	R4		
697	teupolin XII	H	β OMe	β OH	H	<i>Teucrium polium</i>	<i>Phytochemistry</i> , 2011, 72 , 2037-2044
698	teucvisin A	OH	=O	α OH	H	<i>Teucrium viscidum</i>	<i>Chem. Pharm. Bull.</i> , 2014, 62 , 472-476
699	teuperninB	H	=O	=O	OH	<i>Teucrium perny</i>	<i>Phytochemistry</i> , 1991, 30 , 1963-1966
700	teuperninC	H	=O	β OH	OH		
701	teupernin A	—	—	—	—		

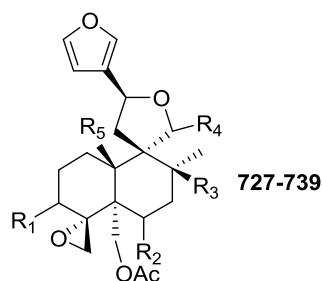


		R1	R2		
704	teupolin X	α OH	OH	<i>Teucrium polium</i>	<i>Phytochemistry</i> , 2011, 72 , 2037-2044
705	teupolin XI	α OMe	OH		
706	teucvisin B	=O	OAc	<i>Teucrium viscidum</i>	<i>Chem. Pharm. Bull.</i> , 2014, 62 , 472-476
707	12- <i>epi</i> -montanin D	H	—	<i>Teucrium maghrebinum</i>	<i>J. Nat. Prod.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

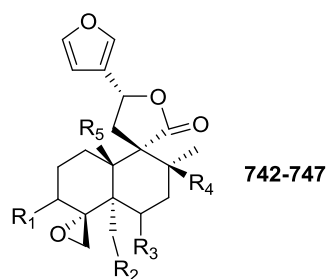
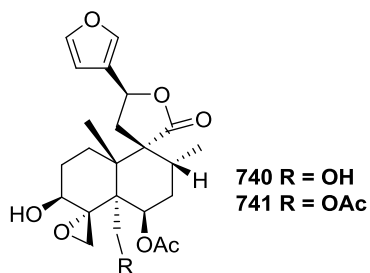


		R1	R2	R3	R4	R5		
720	teumassin	OH	H	OAc	=O	H	<i>Teucrium massiliense</i>	<i>Phytochemistry</i> , 1992, 31 , 4366-4367

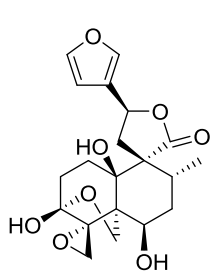
721	4 α ,18-epoxy-tafricanin A	H	=O	OAc	=O	H	<i>Teucrium pestalozzae</i>	<i>Phytochemistry</i> , 1990, 29 , 988-989
722	20-oxo-teuflavin	H	=O	OAc	β OH	H		
723	teutridin	H	=O	OAc	=O	β OH	<i>Teucrium trifidum</i>	<i>Phytochemistry</i> , 1994, 36 , 1549-1550
724	3-O-deacetylteugracilin A	H	β OH	OAc	β OH	H	<i>Teucrium gracile</i>	<i>Phytochemistry</i> , 1991, 30 , 3693-3697
725	teugracilin A	H	β OAc	OAc	β OH	H		
726	teugracilin B	H	β OH	OAc	α OH	H		



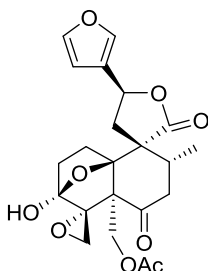
		R1	R2	R3	R4	R5		
727	teusandrin A	H	α OAc	OH	=O	OH	<i>Teucrium sandrasicum</i>	<i>Phytochemistry</i> , 1997, 45 , 1653-1662
728	teusandrin B	H	α OH	OH	=O	OH		
729	3-deacetylteumicropodine	β OAc	α OH	H	=O	H	<i>Teucrium polium</i>	<i>Phytochemistry</i> , 1994, 37 , 1663-1666
730	3,20-bis-deacetylteupyreinidine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



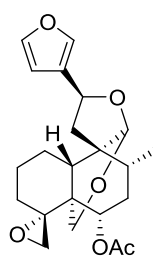
		R1	R2	R3	R4	R5		
740	teucrymin	--	--	--	--	--	<i>Teucrium yemense</i>	<i>Phytochemistry</i> , 1995, 40 , 1737-1741
741	19- <i>O</i> -acetylteucrymin	--	--	--	--	--		
742	teucryminone	β OAc	OAc	=O	H	β H		
743	12- <i>epi</i> -teucjaponin A	H	OAc	β OH	H	β H	<i>Teucrium maghrebinum</i>	<i>J. Nat. Prod.</i> , 2000, 63 , 1029-1031
744	sandrasin A	H	OAc	α OAc	OH	β OH	<i>Teucrium sandrasicum</i>	<i>Phytochemistry</i> , 1996, 42 , 775-778
745	6-deacetylsandrasin A	H	OAc	α OH	OH	β OH		
746	teubrevin C	β OAc	OAc	=O	H	H	<i>Teucrium brevifolium</i>	<i>Tetrahedron</i> , 1995, 51 , 837-848
747	teubrevin D	β OAc	OAc	=O	OH	OH		



748

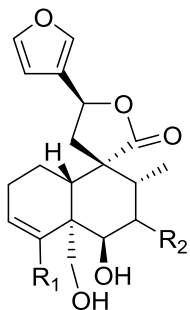


749

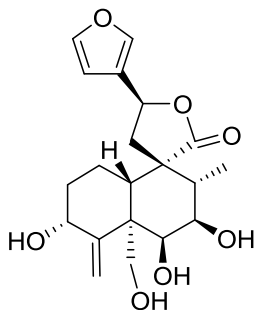


750

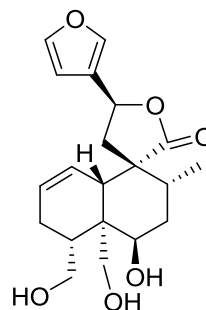
748	teupestalin A	<i>Teucrium pestalozzae</i>	<i>Phytochemistry</i> , 1990, 29 , 2229-2233
749	teupestalin B		
750	teubutilin A	<i>Teucrium abutiloides</i>	<i>Phytochemistry</i> , 1990, 29 , 579-584



776,777

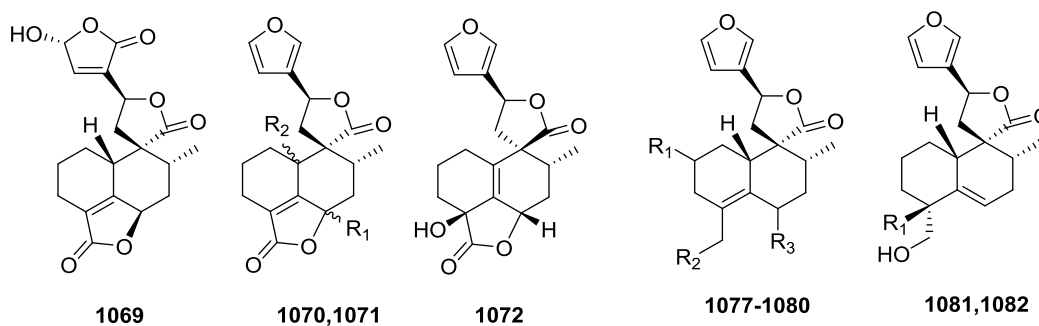


778

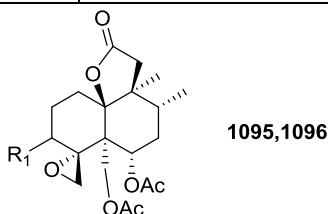


780

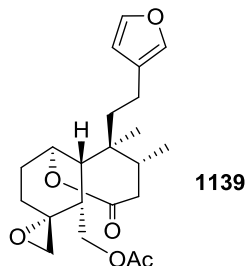
776 ^a	teupernin D	CO ₂ Me	H	<i>Teucrium pernyi</i>	<i>Phytochemistry</i> , 1993, 33 , 716-717
777	teulolin A	CH ₂ OH	β OH	<i>Teucrium polium</i>	<i>Phytochemistry</i> , 1999, 51 , 921-925



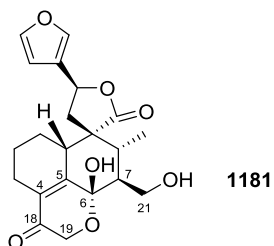
1069	teuponin	—	—	—	<i>Teucrium japonicum.</i>	<i>Phytochemistry</i> , 1991, 30 , 4175-4177
1070	teucvisin C	β OH	β H		<i>Teucrium viscidum</i>	<i>Chem. Pharm. Bull.</i> , 2014, 62 , 472-476
1071	teucvisin D	α H	α OH			
1072	teucvisin E	OH	—	—		
1077	teucorymbin	H	OAc	H	<i>Teucrium corymbosum</i>	<i>Phytochemistry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



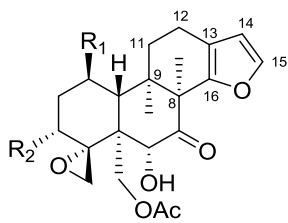
1095	teucrolin D	α OAc	<i>Teucrium oliverianum</i>	<i>J. Nat. Prod.</i> , 1993, 56 , 830-842
1096	teucrolivin F	=O		<i>Phytochemistry</i> , 1991, 30 , 1603-1606



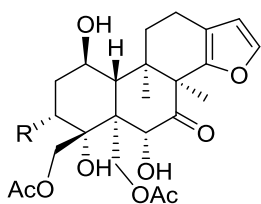
1139	fruticolide	<i>Teucrium fruticans</i>	<i>Phytochemistry</i> , 1992, 31 , 3531-3534
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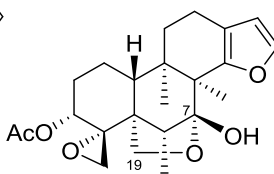
1181	teubetonin	<i>Teucrium betonicum</i>	<i>Tetrahedron</i> , 1995, 51 , 2363-2368
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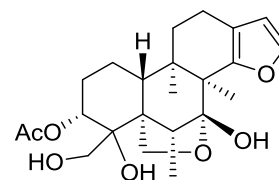
1201,1202



1203,1204

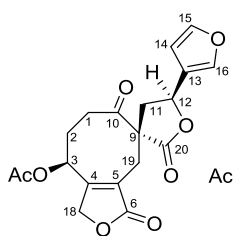


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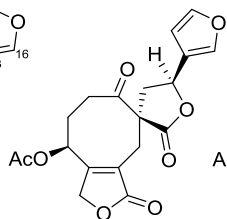


1206

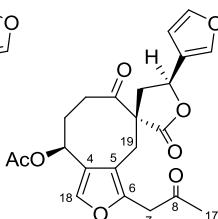
1201	alysine A	OH	OAc	<i>Teucrium alyssifolium</i>	<i>Tetrahedron</i> , 1995, 51 , 11793-11800
1202	alysine C	H	OH		
1203	alysine B	OAc	—		
1204	3-deacetylalysine B	OH	—		
1205	alysine D	—	—	<i>J. Nat. Prod.</i> , 1997, 60 , 1045-1047	
1206	alysine E	—	—		



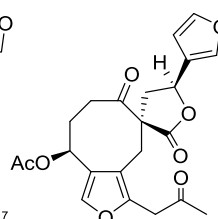
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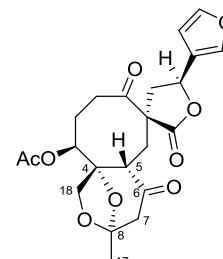
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1219

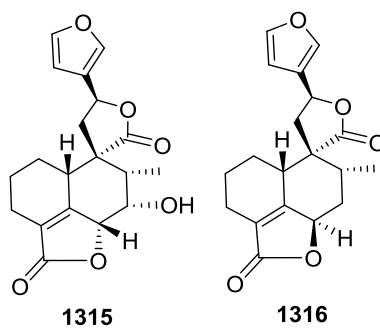


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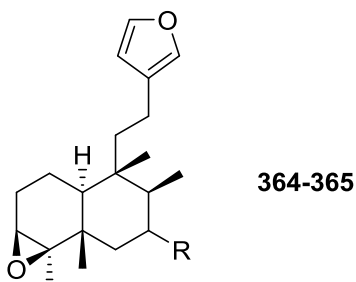
1221

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



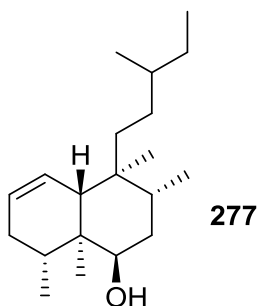
1315	teucrin A	<i>Teucrium chamaedrys</i>	<i>Basic Clin. Pharmacol. Toxicol.</i> , 2011, 109 , 521-526
1316	teuchamaedryn A		

THYSANANTHUS Genus

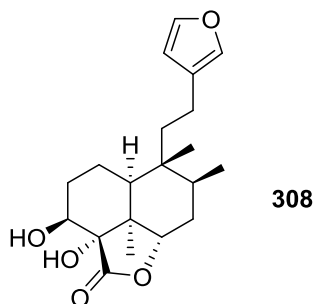


364	3 β ,4 β :15,16-diepoxy-13(16),14-clerodadiene	H	<i>Thysananthus spathulistipus</i>	<i>Chem. Pharm. Bull.</i> , 2006, 54 , 1046-1049
365	thysaspathone	=O		

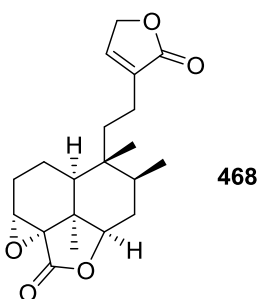
TINOSPORA Genus



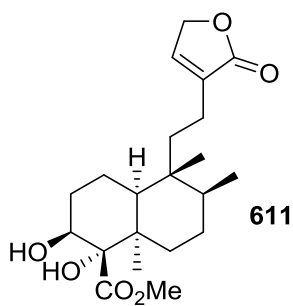
277	tinosporaclerodanol	<i>Tinospora cordifolia</i>	<i>Nat. Prod. Res.</i> , 2010, 24 , 926-934
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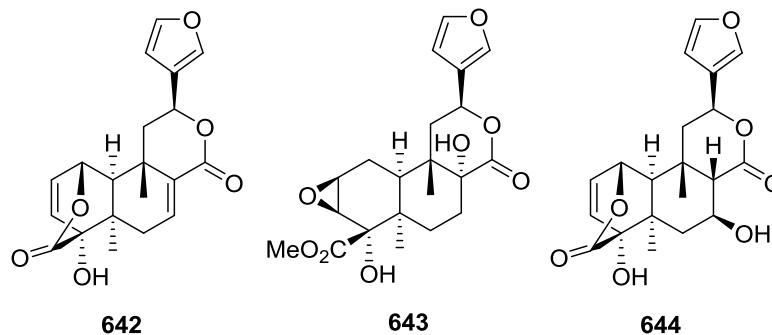
308	(2a β ,3 α ,5a β ,6 β ,7R,8 α)-6-[2-(3-furanyl)ethyl]-2a,3,4,5,5a,6,7,8,8a,8b-decahydro-2a,3-dihydroxy-6,7,8b-trimethyl-2H-naphtho[1,8-bc]furan-2-one	<i>Tinospora rumphii</i>	<i>J. Nat. Prod.</i> , 2000, 63 , 509-511
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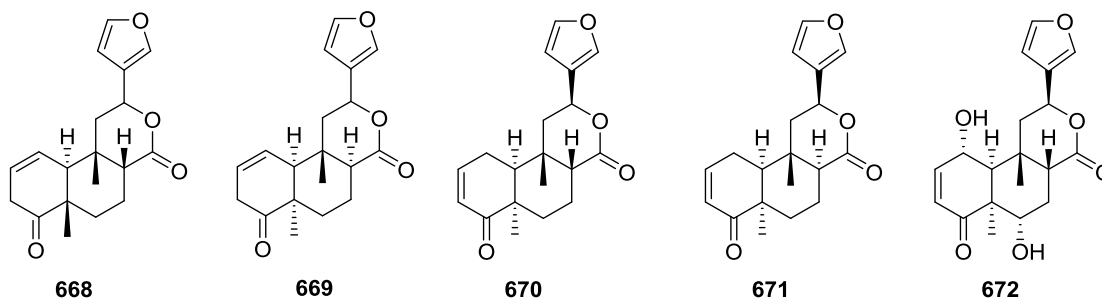
468	crispene E	<i>Tinospora crispa</i>	<i>Org. Biomol. Chem.</i> , 2015, 13 , 3882-3886
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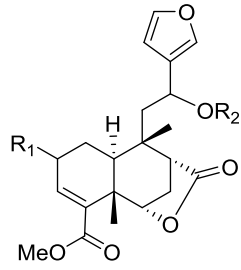
611	methyl(1 α ,4 α a,5 α ,6 β ,8 α)-5-[2-(3-furan-3-ene-2-one)ethyl]-1,2,3,4,4a,5,6,7,8,8a-decahydro-1,2-dihydroxy-1-naphthalene carboxylate	<i>Tinospora rumphii</i>	<i>Org. Biomol. Chem.</i> , 2015, 13 , 3882-3886
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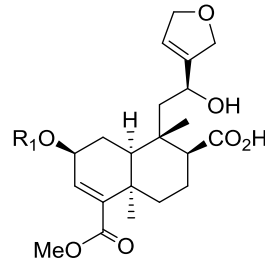
642	tinospin E	<i>Tinospora sagittata</i>	<i>Chem. Pharm. Bull.</i> , 2012, 60 , 1324-1328
643	tinosporin A		<i>Phytochem. Lett.</i> , 2015, 12 , 173-176
644	tinosporin B		



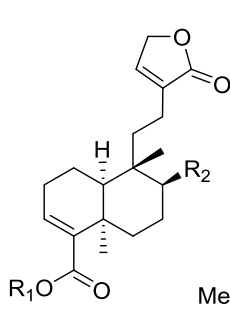
		R1	R2	R3	R4		
668	tinocallone A	β Me	β H	—	—	<i>Tinospora capillipes</i>	<i>Chin. Chem. Lett.</i> , 1992, 3 , 185-188
669	tinocallone B	α Me	α H	—	—		
670	tinocallone C	H	=O	H	β H		
671	tinocallone D	H	=O	H	α H		
672	tincordin	OH	=O	OH	β H	<i>Tinospora cordifolia</i>	<i>Nat. Prod. Res.</i> , 2013, 27 , 1431-1436



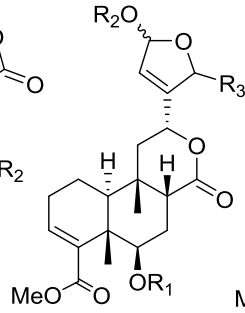
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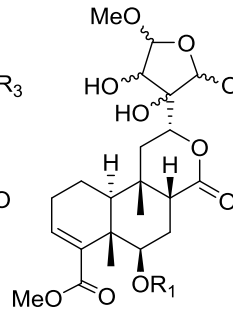
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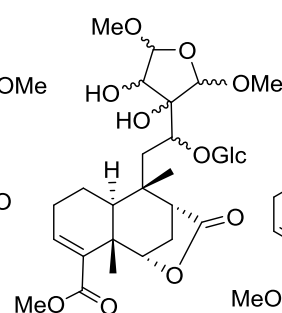
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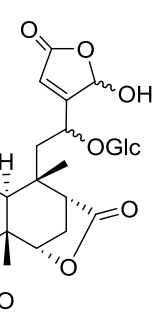
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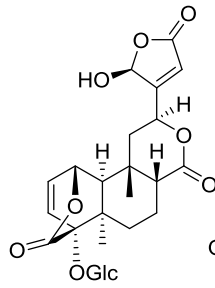
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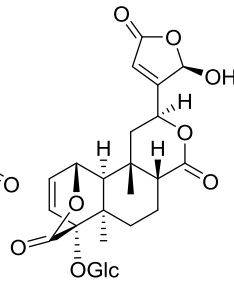
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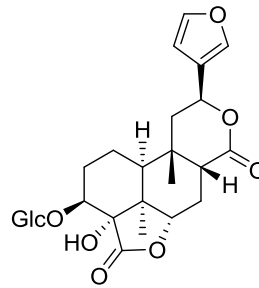
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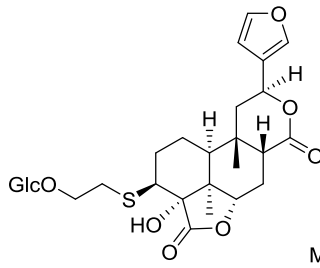
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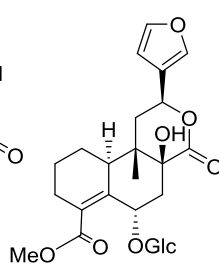
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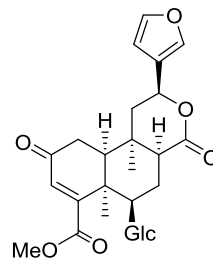
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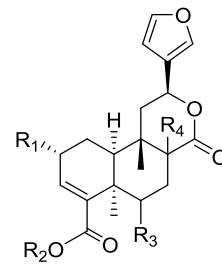
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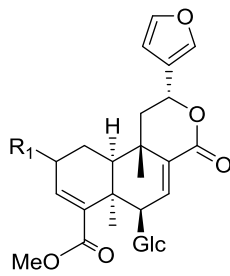
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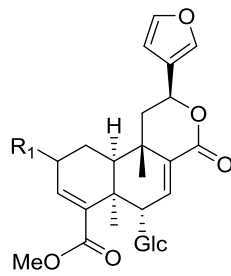
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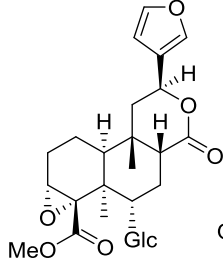
951-961



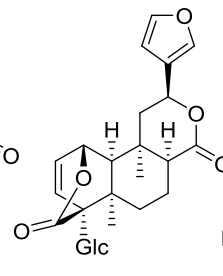
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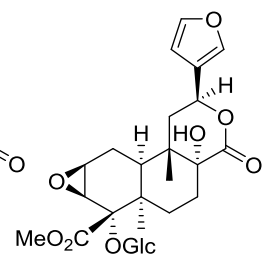
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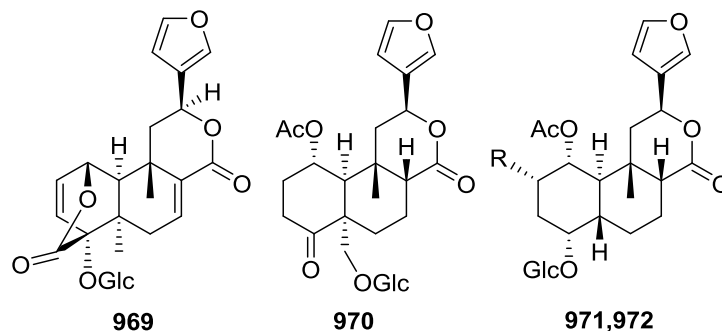
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967



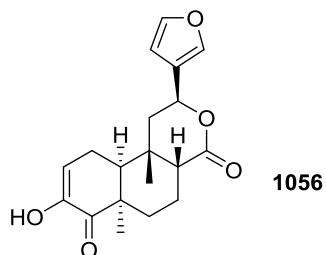
968



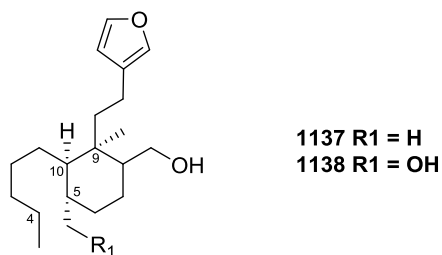
		R1	R2	R3	R4		
927	borapetoside D	H	Glc-(6→1)-Glc	—	—	<i>Tinospora tuberculata</i>	<i>Liebig's Ann. Chem.</i> , 1993, 491-495
928	borapetoside E	H	Glc	—	—		
929	rumphioside I	αOH	Glc	—	—	<i>Tinospora rumphii</i>	<i>Phytochemistry</i> , 1996, 42 , 153-158
932	sagittatayunnanoside B	Glc-(6→1)-Glc			—	<i>Tinospora sagittata</i> var. <i>yunnanensis</i>	<i>Planta Med.</i> , 2014, 80 , 419-425
933	sagittatayunnanoside A	OH	CH ₂ OGlc				
934	sagittatayunnanoside C	OGlc	CH ₂ OGlc				
935	sagittatayunnanoside D	OH	CO ₂ Glc	—	—		
936	rumphioside A	β-D-Glc	H	=O	—	<i>Tinospora rumphii</i>	<i>Phytochemistry</i> , 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	—	—	—	—	<i>Tinospora cordifolia</i>	<i>Org. Lett.</i> , 2012, 14 , 2118-2121
944	cordifolide C	—	—	—	—		
947	borapetoside A	—	—	—	—	<i>Tinospora crispa</i>	<i>J. Nat. Prod.</i> , 2010, 73 , 541-547
948	cordifolide A	—	—	—	—	<i>Tinospora cordifolia</i>	<i>Org. Lett.</i> , 2012, 14 , 2118-2121
949	cordioside	—	—	—	—		<i>Phytochemistry</i> , 1995, 38 , 447-449
950	(5 <i>R</i> ,6 <i>R</i> ,8 <i>S</i> ,9 <i>R</i> ,10 <i>S</i> ,12 <i>S</i>)-15,16-epoxy-2-oxo-6- <i>O</i> -(β-D-glucopyranosyl)-cleroda-3,13(16),14-trien-17,12-olid-18-oic acid methyl ester	—	—	—	—	<i>Tinospora crispa</i>	<i>J. Nat. Prod.</i> , 2010, 73 , 541-547

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

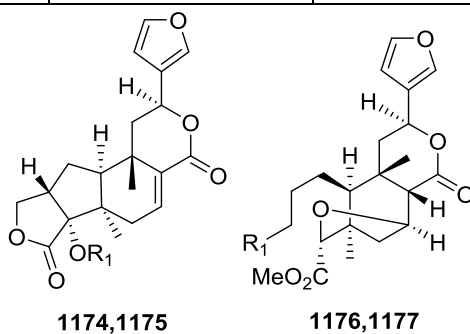
968	tinospinoside D	—	—	—	—	<i>Tinospora sagittata</i>	<i>Chem. Pharm. Bull.</i> , 2012, 60 , 1324-1328
969	tinospinoside E	—	—	—	—		
970	tinosposinenside A	—	—	—	—	<i>Tinospora sinensis</i>	<i>J. Nat. Prod.</i> , 2007, 70 , 1971-1976
971	tinosposinenside B	OAc	—	—	—		
972	tinosposinenside C	OH	—	—	—		



1056	sagitone	<i>Tinosporasagittata</i> var. <i>yunnanensi</i>	<i>Molecules</i> , 2010, 15 , 8360-8365
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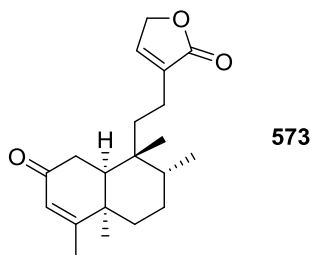


1137	tinosporafuranol	<i>Tinospora cordifolias</i>	<i>Nat. Prod. Res.</i> , 2010, 24 , 926-9354
1138	tinosporafurandiol		

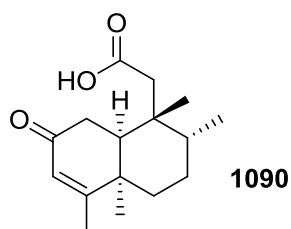


1174	baenzigeride A	H	<i>Tinospora baenzigeri</i>	<i>Phytochemistry</i> , 1999, 52 , 1335-1340
1175	baenzigeroside A	Glc		
1176	baenzigeride B	H		<i>Chem. Pharm. Bull.</i> , 2001, 49 , 854-857
1177	baenzigeroside B	Glc		

VELLOZIA Genus

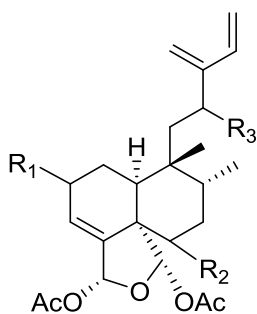


573	2-oxo-5 α ,8 α -cleroda-3,13-dien-16,15-olide	<i>Vellozia bicolor</i>	<i>Phytochemistry</i> , 1994, 37 , 1115-1117
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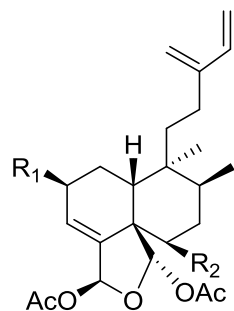
1090	2-oxo-5 α ,8 β -13,14,15,16-tetranorclerod-3-en-12-oic acid	<i>Vellozia bicolor</i>	<i>Phytochemistry</i> , 1994, 37 , 1115-1117
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ZUELANIA Genus



- 17** R₁ = α -OH, R₂ = α -OCin, R₃ = H
18 R₁ = β -OCin, R₂ = α -OH, R₃ = H
19 R₁ = α -OH, R₂ = α -X₁₃, R₃ = H
20 R₁ = α -OH, R₂ = α -X₁₃, R₃ = α -OH

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



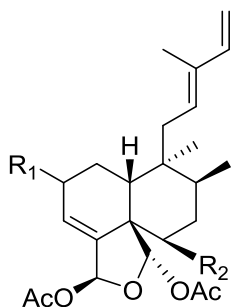
44 R = OAc, R2 = OCin

45 R1 = H, R2 = H

75 R1 = OBz, R2 = OH

44	<i>rel</i> -2 β -acetoxy-isozuelanin-6 β -cinnamate	<i>Zuelania guidonia</i>	<i>Phytochemistry</i> , 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

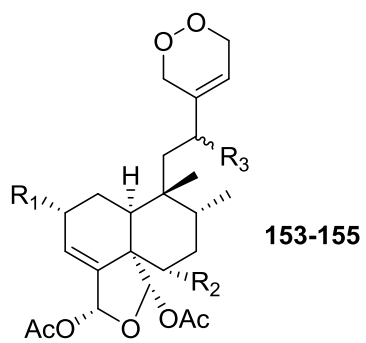
123 R1 = β -OBz, R2 = OH

124 R1 = α -OH, R2 = OBz

125 R1 = α -OH, R2 = X8

126 R1 = β -OBz, R2 = H

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



		R1	R2	R3		
153	zuelaguidin E	OH	OCin	H	<i>Zuelania guidonia</i>	<i>J. Nat. Prod.</i> , 2014, 77 , 455-463
154	zuelaguidin G	Dc	OXyl	β OH		
155	zuelaguidin H	Dc	OXyl	α OH		

Abbreviation of Functional Groups

