

## **Plant Triterpenoids with Bond-missing skeletons: Biogenesis, Distribution and Bioactivity**

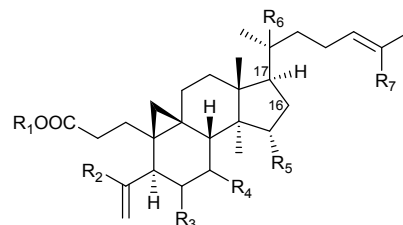
### **SUPPORTING INFORMATION**

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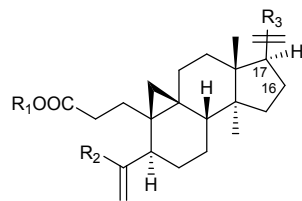
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<sup>2</sup>Dipartimento di Scienze del Farmaco, Università del Piemonte Orientale, Largo Donegani 2, 28100 Novara, Italy.



**Table S1: 3,4-*seco*-Cycloartane**

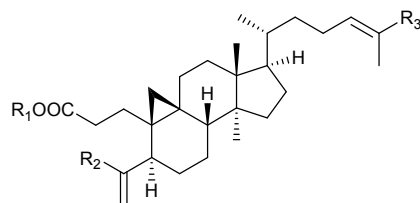


Compound	R <sub>1</sub>	R <sub>2</sub>	R <sub>3</sub>	R <sub>4</sub>	R <sub>5</sub>	R <sub>6</sub>	R <sub>7</sub>	$\Delta^{16,17}$	Source	Reference
Nigranoic acid	H	Me	H	H	H	H	COOH	-	<i>Schisandra nigra</i> <i>Schisandra sphaerandra</i>	<i>Chem. Lett.</i> 1972, 725 <i>J. Nat. Prod.</i> 1996, <b>59</b> , 525
Nigranoic acid methyl ester	Me	Me	H	H	H	H	COOH	-	<i>Illicium verum</i>	<i>Phytochemistry</i> 1998, <b>48</b> , 1169
Nigranoic acid ethyl ester	Et	Me	H	H	H	H	COOH	-	<i>Schisandra henry</i>	<i>Chem. Nat. Comp.</i> 2010, <b>46</b> , 569
Nigranoic acid dimethyl ester	Me	Me	H	H	H	H	COOH	-	<i>Tillandsia usneoides</i>	<i>Phytochemistry</i> 1995, <b>39</b> , 665
Shiglausin N	H	Me	$\beta$ -epoxide		H	H	COOH	-	<i>Schisandra glaucescens</i>	<i>Fitoterapia</i> 2012, <b>83</b> , 926
Shiglausin O	Me	Me	OH	OH	H	H	COOH	-	<i>Schisandra glaucescens</i>	<i>Fitoterapia</i> 2012, <b>83</b> , 926
Shiglausin M	Me	Me	H	$\beta$ -OH	H	H	COOH	-	<i>Schisandra glaucescens</i>	<i>Fitoterapia</i> 2012, <b>83</b> , 926
Angustific acid B	H	Me	H	$\beta$ -OH	OH	OH	COOH	+	<i>Kadsura angustifolia</i>	<i>Bioorg. Med. Chem. Lett.</i> 2011, <b>13</b> , 1502
Sinocalycanchinensin A	H	H	H	H	H	H	COOH	-	<i>Sinocalicanthus chinensis</i>	<i>Bioorg. Med. Chem.</i> 2011, <b>19</b> , 2790
Sinocalycanchinensin B	Me	H	H	H	H	H	COOH	-	<i>Sinocalicanthus chinensis</i>	<i>Bioorg. Med. Chem.</i> 2011, <b>19</b> , 2790
Sinocalycanchinensin E	Pytyl	H	H	H	H	H	COOH	-	<i>Sinocalicanthus chinensis</i>	<i>Bioorg. Med. Chem.</i> 2011, <b>19</b> , 2790
Coccinetane A	H	Me	H	H	H	H	Me	-	<i>Kadsura coccinea</i>	<i>Tetrahedron</i> 1999, <b>55</b> , 119
Sootepin E	H	Me	H	H	H	H	Me	-	<i>Gardenia sootepensis</i>	<i>J. Nat. Prod.</i> , 2009, <b>72</b> , 1161
Sootepin C	Me	CH <sub>2</sub> OH	H	H	H	H	Me	-	<i>Gardenia sootepensis</i>	<i>J. Nat. Prod.</i> , 2009, <b>72</b> , 1161
Secaubryenol	H	CH <sub>2</sub> OH	H	H	H	H	Me	-	<i>Gardenia aubryi</i>	<i>J. Nat. Prod.</i> 2006, <b>69</b> , 1711

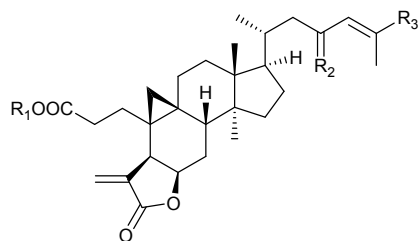


Compound	R <sub>1</sub>	R <sub>2</sub>	R <sub>3</sub>	$\Delta^{16,17}$	Source	Reference
Coccinetane B	H	Me		-	<i>Kadsura coccinea</i>	<i>Tetrahedron</i> 1999, <b>55</b> , 119
Coccinetane C	H	Me		-	<i>Kadsura coccinea</i>	<i>Tetrahedron</i> 1999, <b>55</b> , 119
Coccinetane D	H	Me		-	<i>Kadsura coccinea</i>	<i>Tetrahedron</i> 1999, <b>55</b> , 119
Coccinetane E	H	Me		-	<i>Kadsura coccinea</i>	<i>Tetrahedron</i> 1999, <b>55</b> , 119
Coccinetane F	H	Me		-	<i>Kadsura coccinea</i>	<i>Tetrahedron</i> 1999, <b>55</b> , 119
Coccinetane G	H	Me		-	<i>Kadsura coccinea</i>	<i>Tetrahedron</i> 1999, <b>55</b> , 119
Coccinetane H	H	Me		-	<i>Kadsura coccinea</i>	<i>Tetrahedron</i> 1999, <b>55</b> , 119
Securvienol	Me	Me		-	<i>Gardenia urvillei</i>	<i>Phytochemistry</i> 2016, <b>122</b> , 193
Secodienurvellic acid	H	Me		-	<i>Gardenia urvillei</i>	<i>Phytochemistry</i> 2016, <b>122</b> , 193
Securvitriol	H	CH <sub>2</sub> OH		-	<i>Gardenia urvillei</i>	<i>Phytochemistry</i> 2016, <b>122</b> , 193
Secaubrytriol	H	CH <sub>2</sub> OH		-	<i>Gardenia aubryi</i>	<i>J. Nat. Prod.</i> 2006, <b>69</b> , 1711

Schiglausin K	Me	Me		+	<i>Schisandra glaucescens</i>	<i>Fitoterapia</i> 2012, <b>83</b> , 926
Schiglausin L	Me	Me		-	<i>Schisandra glaucescens</i>	<i>Fitoterapia</i> 2012, <b>83</b> , 926

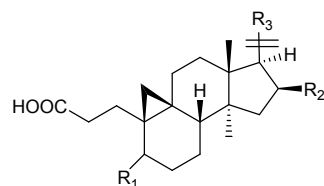


Compound	R <sub>1</sub>	R <sub>2</sub>	R <sub>3</sub>	Source	Reference
Sootepin D	Me	CH <sub>2</sub> OH	Me	<i>Gardenia sootepensis</i>	<i>J. Nat. Prod.</i> , 2009, <b>72</b> , 1161
Sootepindial	H	CHO	CHO	<i>Gardenia sootepensis</i>	<i>Chem. Pharm. Bull.</i> 2012. <b>60</b> , 1538

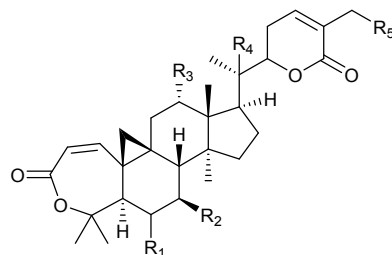


Compound	R <sub>1</sub>	R <sub>2</sub>	R <sub>3</sub>	Source	Reference
Sootepin A	Me	H,H	CH <sub>2</sub> OH	<i>Gardenia sootepensis</i>	<i>J. Nat. Prod.</i> 2009, <b>72</b> , 1161
Sootepin B	H	H,H	Me	<i>Gardenia sootepensis</i>	<i>J. Nat. Prod.</i> 2009, <b>72</b> , 1161
Sootepenic acid	Me	H,H	COOH	<i>Gardenia sootepensis</i>	<i>J. Nat. Prod.</i> 2009, <b>72</b> , 1161
Tubiferolide	H	H,H	Me	<i>Gardenia sootepensis</i>	<i>Chem. Pharm. Bull.</i> 2012. <b>60</b> , 1538
Tubiferolide methyl ester	Me	H, H	Me	<i>Gardenia sootepensis</i>	<i>Chem. Pharm. Bull.</i> 2012. <b>60</b> , 1538
Coronalolide methyl ester	Me	H,H	CHO	<i>Gardenia sootepensis</i>	<i>Chem. Pharm. Bull.</i> 2012. <b>60</b> , 1538

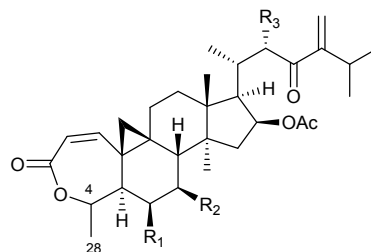
Secaubryolide	Me	=O	Me	<i>Gardenia aubryi</i>	<i>J. Nat. Prod.</i> 2006, <b>69</b> , 1711
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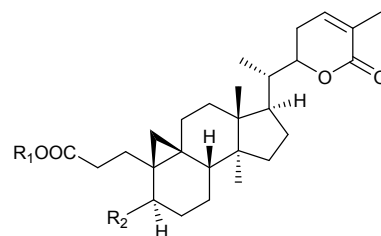
Compound	R <sub>1</sub>	R <sub>2</sub>	R <sub>3</sub>	Source	Reference
Neomacroin		OAc		<i>Neoboutonia macrocalyx</i>	<i>Phytochemistry</i> , 2014, <b>102</b> , 189
Ananosin E		H		<i>Kadsura ananosma</i>	<i>Phytochemistry</i> , 2015, <b>109</b> , 36




Compound	R <sub>1</sub>	R <sub>2</sub>	R <sub>3</sub>	R <sub>4</sub>	R <sub>5</sub>	Source	Reference
Renchanglactone A	β-OH	H	H	OH	H	<i>Kadsura renchangiana</i>	<i>Nat. Prod. Res.</i> , 2008, <b>22</b> , 203
Angustifodilactone A	α-OH	H	OH	OH	H	<i>Kadsura angustifolia</i>	<i>Bioorg. Med. Chem. Lett.</i> , 2011, <b>21</b> , 961
Angustifodilactone B	α-OH	H	OH	OH	OH	<i>Kadsura angustifolia</i>	<i>Bioorg. Med. Chem. Lett.</i> , 2011, <b>21</b> , 961
Schisanbilactone A	β-OAc	H	H	H	H	<i>Schisandra bicolor</i>	<i>Helv. Chim. Acta</i> , 2009, <b>92</b> , 2086
Schisanbilactone B	β-OH	H	H	OH	H	<i>Schisandra bicolor</i>	<i>Helv. Chim. Acta</i> , 2009, <b>92</b> , 2086
Schisfendilactone A	H	OH	H	H	H	<i>Schisandra sphenanthera</i>	<i>Arch. Pharmacol. Res.</i> , 2014, <b>37</b> , 168

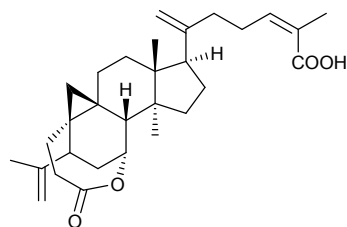


Compound	R <sub>1</sub>	R <sub>2</sub>	R <sub>3</sub>	Δ <sup>4,28</sup>	Source	Reference
Neomacrolactone	H	H	OH	-	<i>Neoboutonia macrocalyx</i>	<i>Phytochemistry</i> , 2014, <b>102</b> , 189
4-Methyleneneomacrolactone	H	H	OH	+	<i>Neoboutonia macrocalyx</i>	<i>Phytochemistry</i> , 2014, <b>102</b> , 189
6-Hydroxyneomacrolactone	OH	H	OH	-	<i>Neoboutonia macrocalyx</i>	<i>Phytochemistry</i> , 2014, <b>102</b> , 189
6-Hydroxyacetylneomacrolactone	OH	H	OAc	-	<i>Neoboutonia macrocalyx</i>	<i>Phytochemistry</i> , 2014, <b>102</b> , 189
Acetylneomacrolactone	H	H	OAc	-	<i>Neoboutonia macrocalyx</i>	<i>Phytochemistry</i> , 2014, <b>102</b> , 189
6,7-Epoxyacetylneomacrolactone		-O-	OAc	-	<i>Neoboutonia macrocalyx</i>	<i>Phytochemistry</i> , 2014, <b>102</b> , 189
6,7-Epoxyneomacrolactone		-O-	OH	-	<i>Neoboutonia macrocalyx</i>	<i>Phytochemistry</i> , 2014, <b>102</b> , 189

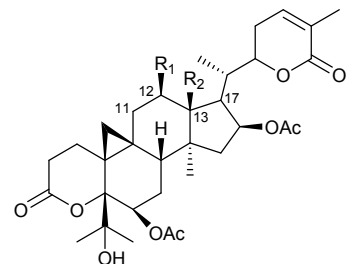


Compound	R <sub>1</sub>	R <sub>2</sub>	Source	Reference
Schinalactone C	H		<i>Schisandra sphenanthera</i>	<i>Org. Lett.</i> , 2010, <b>12</b> , 1208
Propinic lactone A	Me		<i>Schisandra propinqua</i> var. <i>propinqua</i>	<i>Chin. J. Nat. Med.</i> , 2010, <b>8</b> , 1
Sinocalyanchinensin D	H		<i>Calycanthus chinensis</i>	<i>Bioorg. Med. Chem.</i> , 2010, <b>19</b> , 2790

Sinocalyanchinensin E	Me		<i>Calycanthus chinensis</i>	<i>Bioorg. Med. Chem.</i> , 2010, <b>19</b> , 2790
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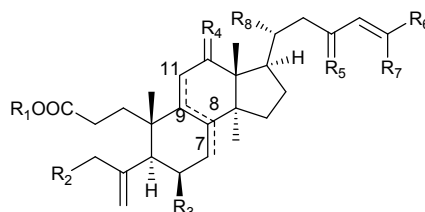


Compound	Source	Reference
Angustifica acid A	<i>Kadsura angustifolia</i>	<i>Bioorg. Med. Chem. Lett.</i> , 2011, <b>21</b> , 961



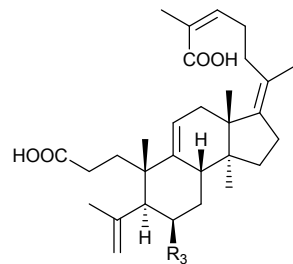
Compound	R <sub>1</sub>	R <sub>2</sub>	$\Delta$	Source	Reference
Ananosin D	H	Me	11,12	<i>Kadsura ananosma</i>	<i>Phytochemistry</i> , 2015, <b>109</b> , 36
Ananosin C	Me	H	13,17	<i>Kadsura ananosma</i>	<i>Phytochemistry</i> , 2015, <b>109</b> , 36

**Table S2: 3,4-*seco*-Lanostane**

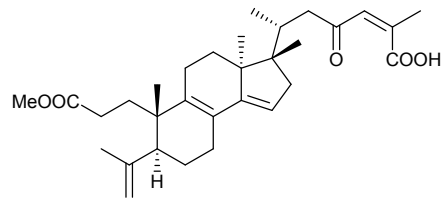


Compound	R <sub>1</sub>	R <sub>2</sub>	R <sub>3</sub>	R <sub>4</sub>	R <sub>5</sub>	R <sub>6</sub>	R <sub>7</sub>	R <sub>8</sub>	Δ	Source	Reference
Secococcinic acid F	H	H	H	H,H	H,H	COOH	Me	Me	9(11)	<i>Kadsura coccinea</i>	<i>J. Nat. Prod.</i> , 2008, <b>71</b> ,990
Schiglausin D	H	H	OH	H,H	H,H	Me	COOH	Me	9(11)	<i>Schisandra glaucescens</i>	<i>Planta Med.</i> , 2012, <b>78</b> , 472
Schiglausin E	Me	H	H	H,H	H,H	Me	COOH	Me	9(11)	<i>Schisandra glaucescens</i>	<i>Planta Med.</i> , 2012, <b>78</b> , 472
Schiglausin F	Me	OH	H	H,H	α-OH,β-H	Me	COOH	Me	9(11)	<i>Schisandra glaucescens</i>	<i>Planta Med.</i> , 2012, <b>78</b> , 472
Schiglausin G	Me	H	H	=O	H,H	Me	COOH	Me	9(11)	<i>Schisandra glaucescens</i>	<i>Planta Med.</i> , 2012, <b>78</b> , 472
Secococcinic acid F	H	H	H	H,H	H,H	Me	Me	Me	8,9	<i>Kadsura coccinea</i>	<i>Planta Med.</i> , 2012, <b>78</b> , 1661
Kadpolysperin J	Me	H	H	H,H	H,H	Me	COOH	Me	8,9	<i>Kadsura polysperma</i>	<i>Tetrahedron</i> , 2012, <b>68</b> , 4820
Kadpolysperin K	Me	H	H	H,H	H,H	COOH	Me	Me	8,9	<i>Kadsura polysperma</i>	<i>Tetrahedron</i> , 2012, <b>68</b> , 4820
Kadsuracoccininc acid B	H	H	H	H,H	H,H	Me	Me	Me	9(11)	<i>Kadsura coccinea</i>	<i>J. Nat. Prod.</i> , 2008, <b>71</b> ,739
Kadsuracoccininc acid C	H	H	H	H,H	H,H	COOH	Me	Me	9(11)	<i>Kadsura coccinea</i>	<i>J. Nat. Prod.</i> , 2008, <b>71</b> ,739
Secococcininc acid B	H	H	H	H,H	H,H	Me	Me	Me	7,8	<i>Kadsura coccinea</i>	<i>J. Nat. Prod.</i> , 2008, <b>71</b> ,990
Secococcininc acid F	H	H	H	H,H	H,H	Me	Me	Me	7,8	<i>Kadsura coccinea</i>	<i>Planta Med.</i> , 2012, <b>78</b> , 1661
Kadpolysperin I	H	H	H	H,H	H,H	COOH	Me	Me	7,8	<i>Kadsura polysperma</i> <i>Abies koreana</i>	<i>Tetrahedron</i> , 2012, <b>68</b> , 4820 <i>Phytochemistry</i> , 2004, <b>65</b> , 2545
Kadpolysperin K	H	H	H	H,H	H,H	Me	COOH	Me	8,9	<i>Kadsura polysperma</i> <i>Schisandra propinqua</i>	<i>Tetrahedron</i> , 2012, <b>68</b> , 4820 <i>Can. J. Chem.</i> 1988, <b>88</b> , 414
Leplaeric acid A	H	H	H	H,H	H,H	Me	Me	COOH	7,8	<i>Leplaea mayombensis</i>	<i>J. Nat. Prod.</i> , 2017, <b>80</b> ,2644
Leplaeric acid B	Me	H	H	H,H	H,H	Me	Me	COOH	7,8	<i>Leplaea mayombensis</i>	<i>J. Nat. Prod.</i> , 2017, <b>80</b> ,2644

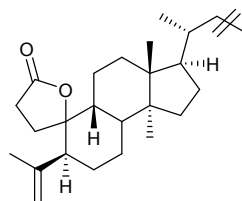




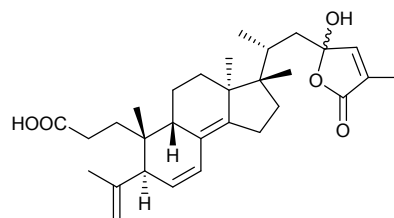
Compound		Source	Reference
Kadsuracoccinic acid A		<i>Kadsura coccinea</i>	<i>J. Nat. Prod.</i> , 2008, <b>71</b> , 739



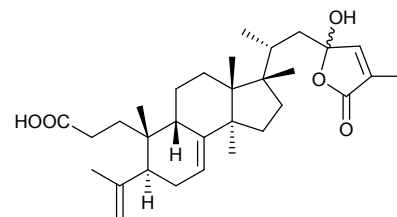
Compound		Source	Reference
Abiferine D		<i>Abies fargesii</i>	<i>Phytochemistry</i> , 2016, <b>130</b> , 301



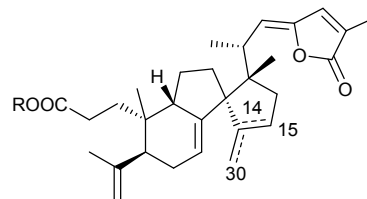
Compound	R	Source	Reference
Sablacaurin A		<i>Sabal causarium</i>	<i>Phytochemistry</i> , 2004, <b>65</b> , 1153
Sablacaurin B		<i>Sabal blackburniana</i>	<i>Phytochemistry</i> , 2004, <b>65</b> , 1153



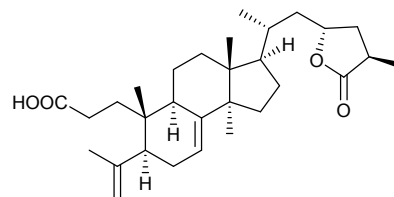
Compound	Source	Reference
Abiesanolide E	<i>Abies sachalinensis</i>	<i>Chem. Pharm. Bull</i> , 2008, <b>56</b> , 554



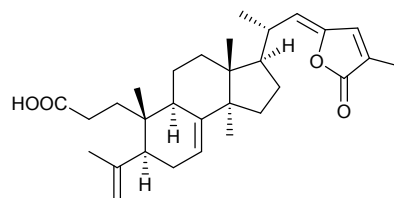
Compound		Source	Reference
Abiesanolide F		<i>Abies sachalinensis</i>	<i>Chem. Pharm. Bull.</i> , 2008, <b>56</b> , 554



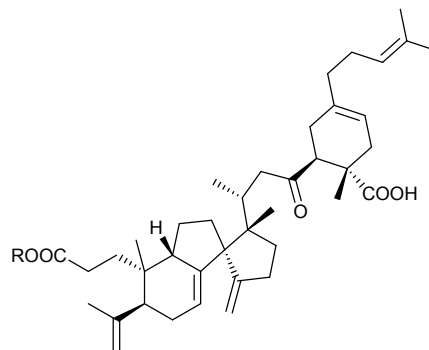
Compound	R	$\Delta$	Source	Reference
Abiesole A	H	14(30)	<i>Abies sachalinensis</i>	<i>Chem. Pharm. Bull.</i> , 2000, <b>48</b> , 1917
Abiesole B	Me	14(30)	<i>Abies sachalinensis</i>	<i>Chem. Pharm. Bull.</i> , 2000, <b>48</b> , 1917
Abiesole C	H	14,15	<i>Abies sachalinensis</i>	<i>Chem. Pharm. Bull.</i> , 2000, <b>48</b> , 1917
Abiesole E	Me	14,15	<i>Abies sachalinensis</i>	<i>Chem. Pharm. Bull.</i> , 2000, <b>48</b> , 1917



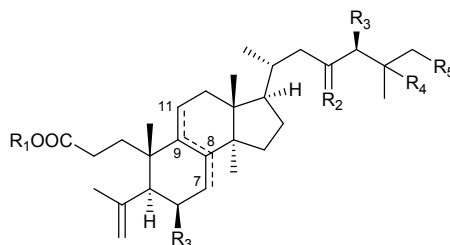
Compound		Source	Reference
Abiesolidic acid A		<i>Abies faxoniana</i>	<i>Phytchemistry</i> , 2015, <b>116</b> , 221



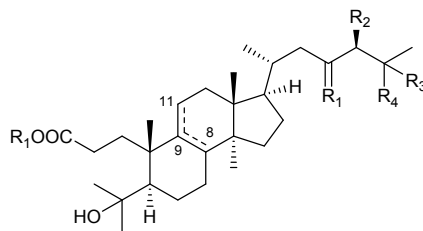
Compound		Source	Reference
halophylla		<i>Abies halophylla</i>	<i>Phytchemistry</i> , 2012, <b>74</b> , 178



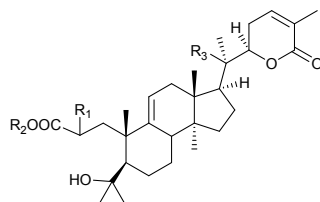
Compound	R	Source	Reference
Abibalsamin A	H	<i>Abies balsamea</i>	<i>Org. Lett.</i> , 2012, <b>14</b> , 1504
Abibalsamin B	Me	<i>Abies balsamea</i>	<i>Org. Lett.</i> , 2012, <b>14</b> , 1504



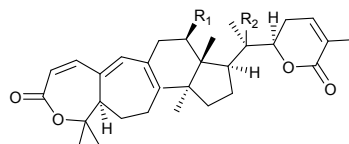
Compound	R <sub>1</sub>	R <sub>2a,b</sub>	R <sub>3</sub>	R <sub>4</sub>	R <sub>5</sub>	Δ	Source	Reference
Secococcinic acid A	H	=O	H	H	H	7,8	<i>Kadsura coccinea</i>	<i>J. Nat. Prod.</i> , 2008, <b>71</b> , 990
Secococcinic acid C	H	=O	OH	OH	H	7,8	<i>Kadsura coccinea</i>	<i>J. Nat. Prod.</i> , 2008, <b>71</b> , 990
Secococcinic acid I	H	H,H	OH	OH	H	7,8	<i>Kadsura coccinea</i>	<i>Planta Med.</i> , 2012, <b>78</b> , 1661
Secococcininc acid D	H	Δ(E)		OH	H	7,8	<i>Kadsura coccinea</i>	<i>J. Nat. Prod.</i> , 2008, <b>71</b> , 990
Secococcininc acid E	H	H,H	OH	Δ		7,8	<i>Kadsura coccinea</i>	<i>J. Nat. Prod.</i> , 2008, <b>71</b> , 990
Secococcinic acid K	Me	=O	H	H	H	9(11)	<i>Kadsura coccinea</i>	<i>Planta Med.</i> , 2012, <b>78</b> , 1661



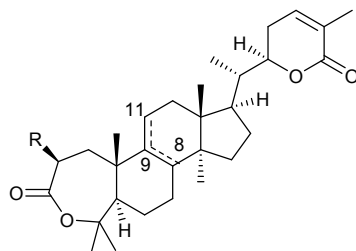
Compound	R <sub>1</sub>	R <sub>2</sub>	R <sub>3</sub>	R <sub>4</sub>	Δ	Source	Reference
Secococcinic acid J	=O	H	H	H	9(11)	<i>Kadsura coccinea</i>	<i>Planta Med.</i> , 2012, <b>78</b> , 1661
Kadnanosic acid A	H,H	Δ (Z)		COOH	8,9	<i>Kadsura ananosma</i>	<i>Tetrahedron</i> , 2010, <b>66</b> , 8880



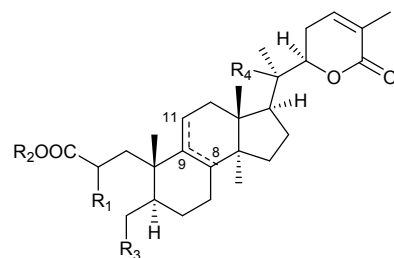
Compound	R <sub>1</sub>	R <sub>2</sub>	R <sub>3</sub>	Source	Reference
Schisphentin A	H	H	H	<i>Schisandra sphenanthera</i>	<i>Fitoterapia</i> , 2017, <b>116</b> , 10
Schisphentin B	H	H	OH	<i>Schisandra sphenanthera</i>	<i>Fitoterapia</i> , 2017, <b>116</b> , 10
Schiglausins C	OH	Me	H	<i>Schisandra sphenanthera</i>	<i>Fitoterapia</i> , 2017, <b>116</b> , 10
Schisanlactone H	H	Me	H	<i>Schisandra sphenanthera</i>	<i>Fitoterapia</i> , 2017, <b>116</b> , 10



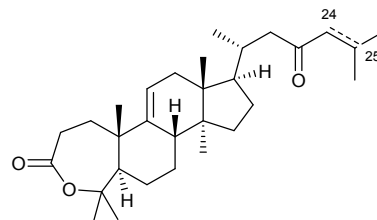
Compound	R <sub>1</sub>	R <sub>2</sub>	Source	Reference
Schisphentin C	OH	H	<i>Schisandra sphenanthera</i>	<i>Fitoterapia</i> , 2017, <b>116</b> , 10
Schisanlactone H	H	OH	<i>Schisandra sphenanthera</i>	<i>Fitoterapia</i> , 2017, <b>116</b> , 10



Compound	R	$\Delta$	Source	Reference
Kadnanolactone C	H	8,9	<i>Kadsura anamosma</i>	<i>Tetrahedron.</i> , 2010, <b>66</b> , 8880
Schiglausin A	H	9(11)	<i>Schisandra glaucescens</i>	<i>Planta Med.</i> , 2012, <b>78</b> , 472
Schiglausin B	OH	9(11)	<i>Schisandra glaucescens</i>	<i>Planta Med.</i> , 2012, <b>78</b> , 472

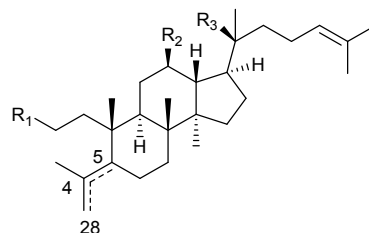


Compound	R <sub>1</sub>	R <sub>2</sub>	R <sub>3</sub>	R <sub>4</sub>	$\Delta$	Source	Reference
Schigalusin C	OH	Me	-C(Me) <sub>2</sub> OH	H	9(11)	<i>Schisandra glaucescens</i>	<i>Planta Med.</i> , 2012, <b>78</b> , 472
Schisanlactone H	H	Me	-C(Me) <sub>2</sub> OH	H	9(11)	<i>Schisandra sphenanthera</i>	<i>Asian Nat. Prod. Res.</i> , 2009, <b>11</b> , 861
Cadcoccolactone R	H	H	-C(Me) <sub>2</sub> OH	H	8,9	<i>Kadsura coccinea</i>	<i>Tetrahedron</i> , 2008, <b>64</b> , 11673
Kadnanolactone D	H	Me	-C(Me) <sub>2</sub> OH	H	8,9	<i>Kadsura ananosma</i>	<i>Tetrahedron</i> , 2010, <b>66</b> , 8880
Schisanlactone G	H	Me	-C(Me)=CH <sub>2</sub>	H	9(11)	<i>Schisandra sphenanthera</i>	<i>Chin. Chem.Lett.</i> 2009, <b>20</b> , 601
Schisphentin A	H	H	-C(Me) <sub>2</sub> OH	H	9(11)	<i>Schisandra sphenanthera</i>	<i>Fitoterapia</i> , 2017, <b>116</b> , 10



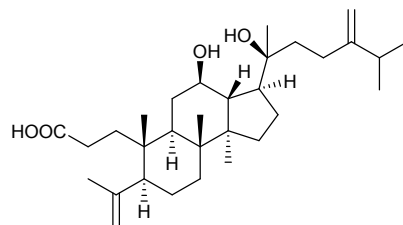
Compound	$\Delta^{24,25}$	Source	Reference
Coccinilactone B	+	<i>Kadsura coccinea</i>	<i>Helv. Chim. Acta</i> , 2009, <b>92</b> , 1413
Coccinilatone A	-	<i>Kadsura coccinea</i>	<i>J. Nat. Prod.</i> , 2008, <b>71</b> , 990

**Table S3: 3,4-seco-Dammaranes**

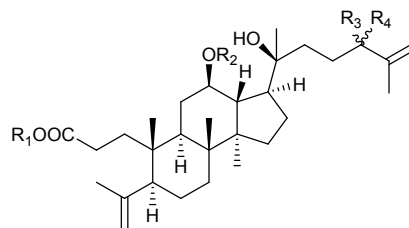


Compound	R <sub>1</sub>	R <sub>2</sub>	R <sub>3</sub>	$\Delta$	Source	Reference
Dammarenolic acid	COOH	H	OH	4(28)	Dammar resin <i>Alaia ignea</i> <i>Quercus robur</i> <i>Cabralea eichleriana</i>	<i>Proc. Chem. Soc.</i> , 1959, 306 <i>Phytomedicine</i> , 2010, <b>17</b> , 540 <i>Phytochemistry</i> , 1973, <b>12</b> , 946 <i>Tetrahedron</i> , 1975, <b>31</b> , 333
Cyclocariol G	COOMe	OH	H	4(28)	<i>Cyclocarya paliurus</i>	<i>Phytochemistry</i> 2018, <b>145</b> , 85
3-acetoxy-3,4-seco-dammara-4,21-diene	CH <sub>2</sub> OAc	H	H	4,5	<i>Abrotanella forsterioides</i>	<i>Phytochemistry</i> , 1983, <b>22</b> , 2085

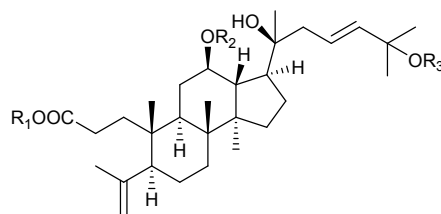




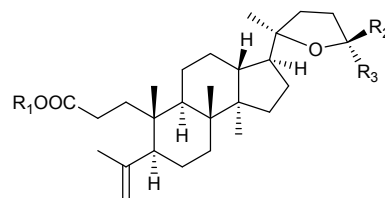
Compound	R	Source	Reference
Alnustic acid	H	<i>Alnus sieboldiana</i>	<i>Bull. Chem. Soc. Jpn.</i> , 1979, <b>52</b> , 1698



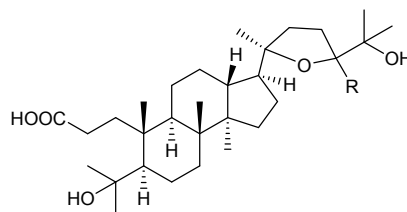
Compound	R <sub>1</sub>	R <sub>2</sub>	R <sub>3</sub>	R <sub>4</sub>	Source	Reference
Cyclocariol A	Me	OH	OH	H	<i>Cyclocaria paliurus</i>	<i>Phytochemistry</i> , 2018, <b>145</b> , 85
Cyclocariol B	Me	OH	H	OH	<i>Cyclocaria paliurus</i>	<i>Phytochemistry</i> , 2018, <b>145</b> , 85
Cyclocariol C	H	OH	OH	H	<i>Cyclocaria paliurus</i>	<i>Phytochemistry</i> , 2018, <b>145</b> , 85
Cyclocariol D	H	OH	H	OH	<i>Cyclocaria paliurus</i>	<i>Phytochemistry</i> , 2018, <b>145</b> , 85
Cyclocariol H	Me	<i>L</i> - $\alpha$ -arabinose	OH	H	<i>Cyclocaria paliurus</i>	<i>Phytochemistry</i> , 2018, <b>145</b> , 85



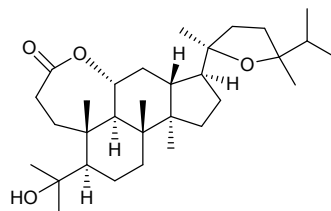
Compound	R <sub>1</sub>	R <sub>2</sub>	R <sub>3</sub>	Source	Reference
Cyclocariol E	Me	H	H	<i>Cyclocaria paliurus</i>	<i>Phytochemistry</i> , 2018, <b>145</b> , 85
Cyclocariol F	Me	H	Me	<i>Cyclocaria paliurus</i>	<i>Phytochemistry</i> , 2018, <b>145</b> , 85
Cyclocarioside D	H	<i>D</i> -β-quinoviose	Me	<i>Cyclocaria paliurus</i>	<i>Planta Med.</i> , 2012, <b>78</b> , 290
Cyclocarioside E	Et	<i>D</i> -β-quinoviose	Me	<i>Cyclocaria paliurus</i>	<i>Planta Med.</i> , 2012, <b>78</b> , 290
Cyclocarioside F	H	<i>L</i> -α-arabinose	Me	<i>Cyclocaria paliurus</i>	<i>Planta Med.</i> , 2012, <b>78</b> , 290
Cyclocarioside G	Et	<i>L</i> -α-arabinose	Me	<i>Cyclocaria paliurus</i>	<i>Planta Med.</i> , 2012, <b>78</b> , 290



Compound	R <sub>1</sub>	R <sub>2</sub>	R <sub>3</sub>	Source	Reference
Shoreic acid	H	-CMe <sub>2</sub> OH	H	<i>Shorea spp. vv.</i>	<i>Proc. Chem. Soc.</i> , 1959, 306
Methyl shoreate	Me	-CMe <sub>2</sub> OH	H	<i>Cabralea eichleriana</i>	<i>Tetrahedron</i> , 1975, <b>31</b> , 333
Eichlerianic acid	H	H	-CMe <sub>2</sub> OH	<i>Cabralea eichleriana</i>	<i>Tetrahedron</i> , 1975, <b>31</b> , 333
Eichlereia lactone	H	=O		<i>Cabralea eichleriana</i>	<i>Tetrahedron</i> , 1975, <b>31</b> , 333
Alnuseric acid	H	Me	-CHMe <sub>2</sub>	<i>Alnus serratuloides</i>	<i>Bull. Chem. Soc. Jpn.</i> , 1979, <b>52</b> , 1698
Aglinin A	H	OH, -CMe <sub>2</sub> OH		<i>Aglaia lawii</i>	<i>Phytochemistry</i> , 1999, <b>51</b> , 1031

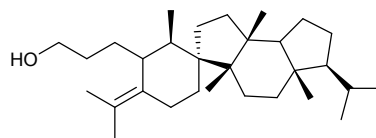


Compound	R	Source	Reference
Aglinin B	OH	<i>Aglaia lawii</i>	<i>Phytochemistry</i> , 1999, <b>51</b> , 1031
Foveolin A	H	<i>Aglaia foveolata</i>	<i>Phytochemistry</i> , 1999, <b>51</b> , 1031



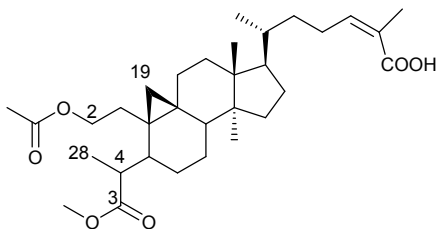
Compound	Source	Reference
Alnuside	<i>Alnus serratuloides</i>	<i>Bull. Chem. Soc. Jpn.</i> , 1979, <b>52</b> , 1698

**Table S4: 3,4-*seco*-Orysatinol**



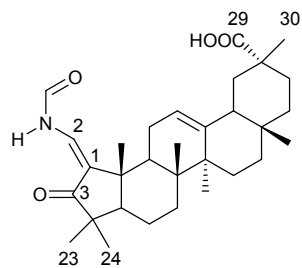
Compound	Source	Reference
Oryspaspirol	<i>Oryza sativa</i>	<i>New Phytol.</i> , 2018, <b>218</b> , 1076

**Table S5: 2,3-*seco*-Cycloartenol**

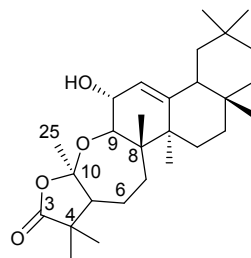


Compound		Source	Reference
Sinocalyanchinensin F		<i>Calycanthus chinensis</i>	<i>Bioorg. Med. Chem.</i> , 2011, <b>19</b> , 2790

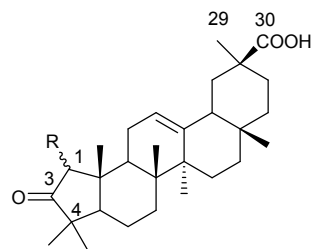
**Table S6: 2,3-seco-Oleananes**



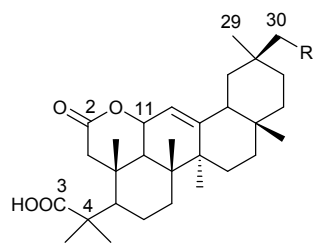
Compound		Source	Reference
Dysoxyhainanin A		<i>Dysoxylum hainanense</i>	<i>Org. Lett.</i> , 2008, <b>10</b> , 4327



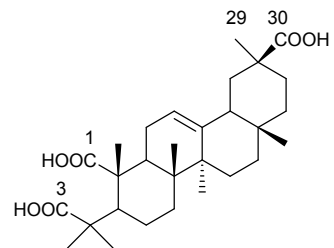
Compound		Source	Reference
Dysoxyhainanin B		<i>Dysoxylum hainanense</i>	<i>Org. Lett.</i> , 2008, <b>10</b> , 4327



Compound	R	Source	Reference
Dysoxyhainic acid B	$\alpha$ -OH	<i>Dysoxylum hainanense</i>	<i>Eur. J. Org. Chem.</i> , 2009, 4818
Dysoxyhainic acid C	$\beta$ -OH	<i>Dysoxylum hainanense</i>	<i>Eur. J. Org. Chem.</i> , 2009, 4818

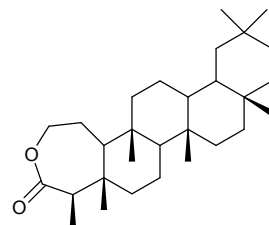


Compound	R	Source	Reference
Dysoxyhainic acid D	H	<i>Dysoxylum hainanense</i>	<i>Eur. J. Org. Chem.</i> , 2009, 4818
Dysoxyhainic acid E	OAc	<i>Dysoxylum hainanense</i>	<i>Eur. J. Org. Chem.</i> , 2009, 4818



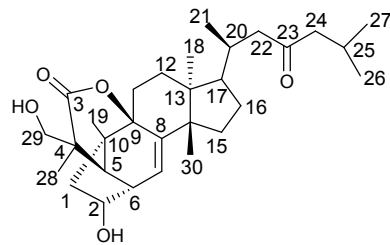
Compound	Source	Reference
Dysoxyhainic acid F	<i>Dysoxylum hainanense</i>	<i>Bioorg. Med. Chem.</i> , 2011, <b>21</b> , 125

**Table S7: 2,3-*seco*-Friedelin**

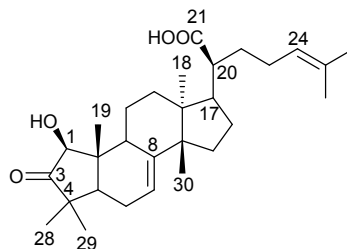


Compound	Source	Reference
Lithocarpic lactone	<i>Lithocarpus irwinii</i>	<i>J. Chem. Soc. Perkin Trans.</i> , 1975, <b>1</b> , 617

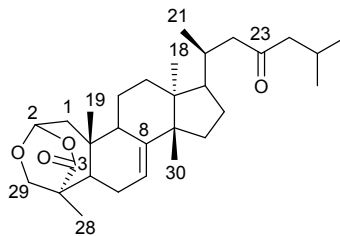
**Table S8: 2,3-*seco*-Tirucallanes**



Compound	Source	Reference
Aphanamgrandiol A	<i>Aphanamixis grandifolia</i>	<i>Fitoterapia</i> , 2013, <b>86</b> , 217-221

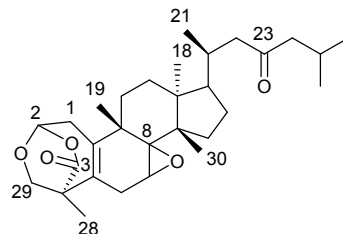


Compound	Source	Reference
Dysoxyhainic acid A	<i>Dysoxylum hainanense</i>	<i>Eur. J. Org. Chem.</i> , 2009, 4818

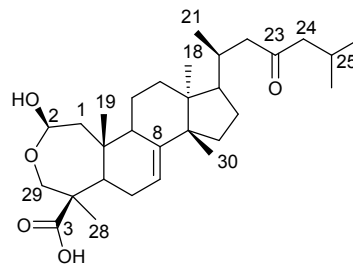


Compound	Source	Reference

Aphanamgrandin A	<i>Aphanamixis grandifolia</i>	<i>Phytochemistry</i> , 2012, <b>80</b> , 148 <i>Nat. Prod. Bioprospect.</i> , 2012, <b>2</b> , 222
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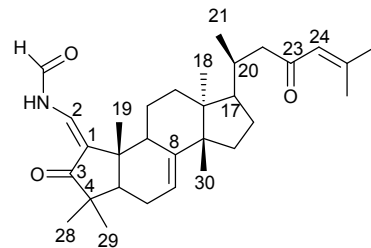


Compound	Source	Reference
Aphanamgrandin B	<i>Aphanamixis grandifolia</i>	<i>Phytochemistry</i> , 2012, <b>80</b> , 148

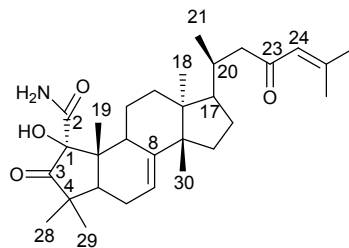


Compound	$\Delta$	Source	Reference
Aphanamgrandin C	-	<i>Aphanamixis grandifolia</i>	<i>Phytochemistry</i> , 2012, <b>80</b> , 148
Aphanamgrandin D	24(25)	<i>Aphanamixis grandifolia</i>	<i>Phytochemistry</i> , 2012, <b>80</b> , 148

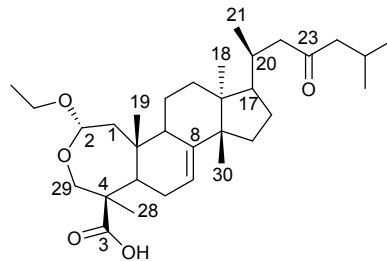




Compound	Source	Reference
Aphanamgrandin E	<i>Aphanamixis grandifolia</i>	<i>Phytochemistry</i> , 2012, <b>80</b> , 148

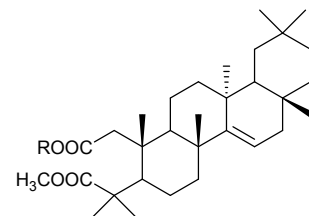


Compound	Source	Reference
Aphanamgrandin F	<i>Aphanamixis grandifolia</i>	<i>Phytochemistry</i> , 2012, <b>80</b> , 148-155



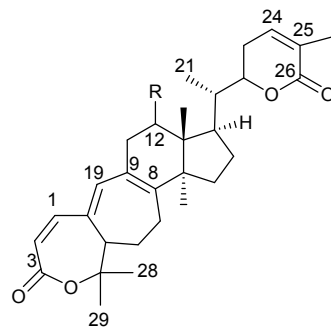
Compound	Source	Reference

	Source	
2 $\alpha$ -ethoxy-aphanamgrandin C	<i>Aphanamixis grandifolia</i>	<i>Nat. Prod. Bioprospect.</i> ,2012, <b>2</b> , 222

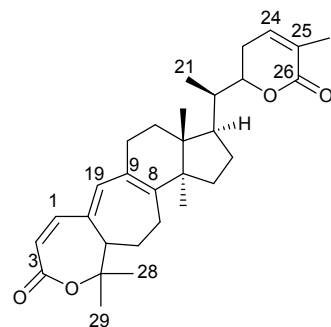


Compound	R	Source	Reference
2,3-seco-taraxer-14-ene-2,3,28-trioic acid 3-methyl ester	H	<i>Elateriospermum tapos</i>	<i>J. Nat. Prod.</i> , <b>2008</b> , 71, 292
2,3-seco-taraxer-14-ene-2,3,28-trioic acid 2,3-dimethyl ester	CH <sub>3</sub>	<i>Elateriospermum tapos</i>	<i>J. Nat. Prod.</i> , <b>2008</b> , 71, 292

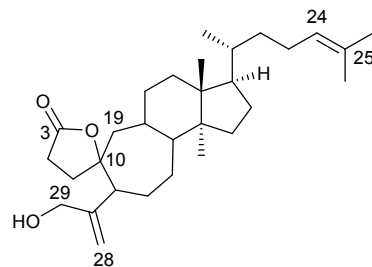
**Table S9: 3,4;9,10-*seco*-triterpenoids**



Compound	R	Source	Reference
Schisanlactone A	H	<i>Schisandra spp</i>	<i>Tetrahedron Lett.</i> , 1983, <b>24</b> , 2351
Schisphenthin C	OH	<i>Schisandra sphenanthera</i>	<i>Fitoterapia</i> , 2017, <b>116</b> , 10

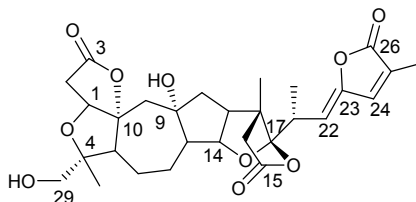


Compound	Source	Reference
Schisanlactone B	<i>Schisandra spp</i>	<i>Tetrahedron Lett.</i> , 1983, <b>24</b> , 2355

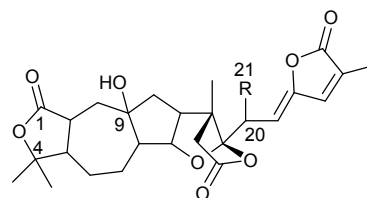


Compound	Source	Reference
Gardheptactone	<i>Gardenia urvillei</i>	<i>Phytochemistry</i> , 2016, <b>122</b> , 193

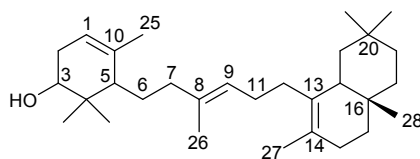
**Table S10: 3,4;9,10;14,15;15,17-seco-Cycloartane**



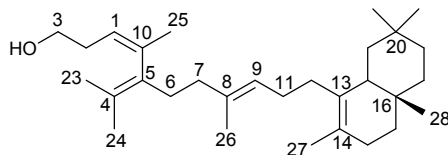
Compound	Source	Reference
Schilancitrilactone A	<i>Schisandra lancifolia</i>	<i>Org. Lett.</i> , 2012, <b>14</b> , 1286



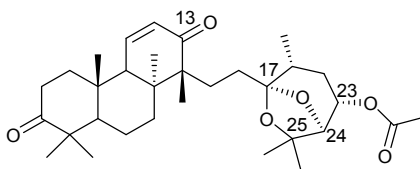
Compound	R <sub>1</sub>	R <sub>2</sub>	Source	Reference
Schilancitrilactone B	<i>alfa</i> -Me		<i>Schisandra lancifolia</i>	<i>Org. Lett.</i> , 2012, <b>14</b> , 1286
Schilancitrilactone C	<i>beta</i> Me		<i>Schisandra lancifolia</i>	<i>Org. Lett.</i> , 2012, <b>14</b> , 1286

**Table S11: Poly-*seco*-triterpenoid**

Compound	Source	Reference
Camelliol A	<i>Camellia sasanqua</i>	<i>J. Nat. Prod.</i> , 1999, <b>62</b> , 265

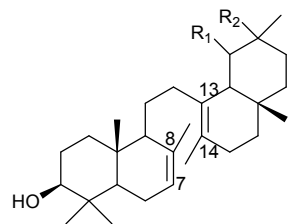


Compound	Source	Reference
Camelliol B	<i>Camellia sasanqua</i>	<i>J. Nat. Prod.</i> , 1999, <b>62</b> , 265

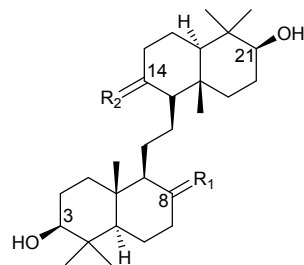
**Table S12: 13,17-*seco*-Dammarane**

Compound	Source	Reference
Alismanin C	<i>Alisma orientale</i>	<i>Org. Lett.</i> , 2017, <b>19</b> , 5645

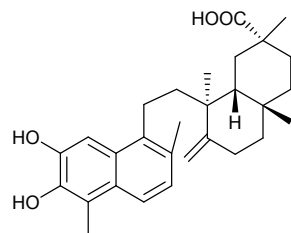
**Table S13: 8,14-Bond-missing Triterpenoids**



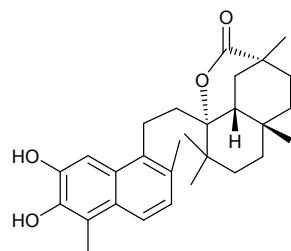
Compound	R <sub>1</sub>	R <sub>2</sub>	Source	Reference
β-seco-amiryn	H	Me	<i>Arabidopsis thaliana (in vitro)</i>	<i>J. Am. Chem. Soc.</i> , 2007, <b>129</b> , 1450-1455
α-seco-amiryn	Me	H	<i>Arabidopsis thaliana (in vitro)</i>	<i>J. Am. Chem. Soc.</i> , 2007, <b>129</b> , 1450-1455



Compound	R <sub>1</sub>	R <sub>2</sub>	Source	Reference
α-Onocerin	CH <sub>2</sub>	CH <sub>2</sub>	<i>Ononis spinosa</i>	<i>J. Chem. Soc.</i> , 1955, 2639
Lyclavatol	O	O	<i>Lycopodium clavatum</i>	<i>Chem. Pharm. Bull.</i> , 1962, <b>10</b> , 637

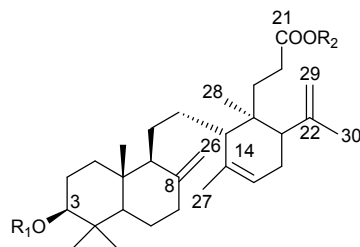


Compound	Source	Reference
25(9->8)abeo-24-nor-8,14-seco-friedelan-2,3-dihydroxy-1,3,5(10),6,8,14(27)-hexa-en-29-oic acid	<i>Celastrus orbiculatus</i>	<i>Phytochemistry</i> , 2012, <b>75</b> , 159



Compound	Source	Reference
25(9->8),26(13->14)abeo-24-nor-8,14-seco-friedelan-2,3-dihydroxy-1,3,5(10),6,8-pentaen-29(13)-olide	<i>Celastrus orbiculatus</i>	<i>Phytochemistry</i> , 2012, <b>75</b> , 159

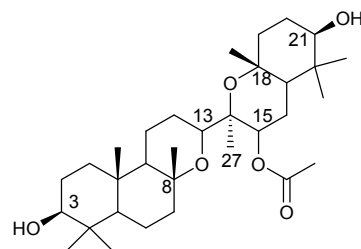
**Table S14: 8,14;21,22-Bond-missing triterpenoids**



Compound	R <sub>1</sub>	R <sub>2</sub>	Source	Reference
Lansiolic acid	H	H	<i>Lansium domesticum</i>	<i>J. Org. Chem.</i> , 1983, <b>48</b> , 4462

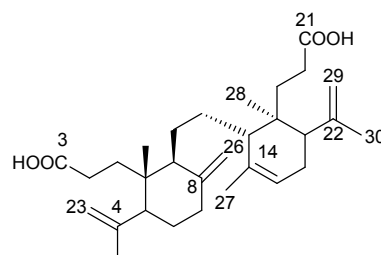
Lansioside A	<i>N</i> -acetyl-B-D-glucosamine	H	<i>Lansium domesticum</i>	<i>J. Org. Chem.</i> , 1983, <b>48</b> , 4462
Lansioside B	D- $\beta$ -glucose	H	<i>Lansium domesticum</i>	<i>J. Org. Chem.</i> , 1983, <b>48</b> , 4462
Lansioside C	D- $\beta$ -xylose	H	<i>Lansium domesticum</i>	<i>J. Org. Chem.</i> , 1983, <b>48</b> , 4462
Lansioside D	D- $\beta$ -xylose	Me	<i>Lansium domesticum</i>	<i>J. Pharmacogn. Phytochem.</i> , 2015, <b>3</b> , 140

**Table S15: 8,14;13,18-*seco*-Triterpenoids**



Compound	Source	Reference
Phyteumoside A	<i>Phyteuma orbiculare</i>	<i>Org. Lett.</i> , 2011, <b>13</b> , 1354

**Table S16: 3,4;8,14;21,22-Bond-missing triterpenoids**

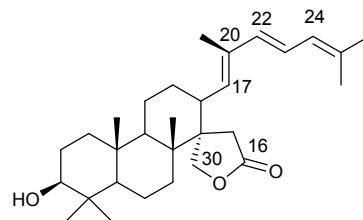


Compound	Source	Reference
Lansic acid	<i>Lansium domesticum</i>	<i>Tetrahedron Lett.</i> , 1967, <b>8</b> , 3571

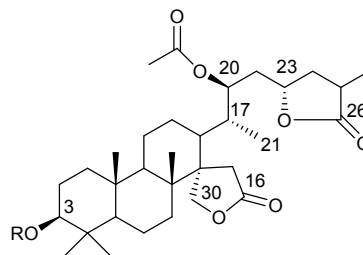




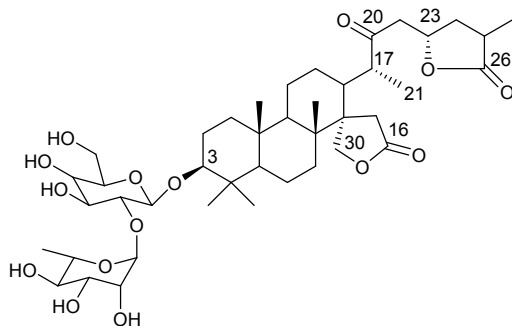
**Table S17: 16,17-seco-Dammaranes**



Compound	Source	Reference
Ebelin lactone	<i>Zizyphus jujuba</i>	<i>Phytochemistry</i> , 1974, <b>13</b> , 2829

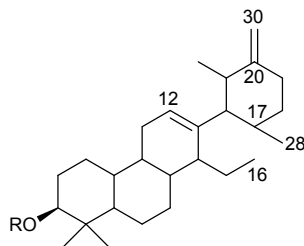


Compound	R	$\Delta$	Source	Reference
Hovenidulcioside A1	L- $\alpha$ -rhamnose-(1->2)-D- $\beta$ -glucose	24(25)	<i>Hovenia dulcis</i>	<i>Chem. Pharm. Bull.</i> , 1996, <b>44</b> , 1736
Hovenidulcioside A2	D- $\beta$ -glucosyl	24(25)	<i>Hovenia dulcis</i>	<i>Chem. Pharm. Bull.</i> , 1996, <b>44</b> , 1736
Hovenidulcioside B1	L- $\alpha$ -rhamnose-(1->2)-D- $\beta$ -glucose	-	<i>Hovenia dulcis</i>	<i>Chem. Pharm. Bull.</i> , 1996, <b>44</b> , 1736
Hovenidulcioside B2	D- $\beta$ -glucose	-	<i>Hovenia dulcis</i>	<i>Chem. Pharm. Bull.</i> , 1996, <b>44</b> , 1736



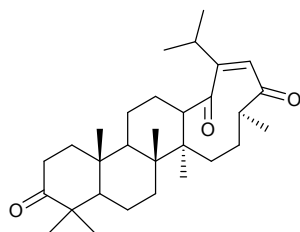
Compound	$\Delta$	Source	Reference
3B-O- $\alpha$ -L-rhamnopyranosyl-(1->2)- $\beta$ -D-glucopyranosyloxy-20-oxo-16,17-seco-21(20->17)-abeo-dammar-24-ene-16,18:26,23-diolide	24(25)	<i>Alphitonia xerocarpus</i>	<i>Phytochemistry</i> , 2016, <b>129</b> , 45
<b>(25S)</b> 3B-O- $\alpha$ -L-rhamnopyranosyl-(1->2)- $\beta$ -D-glucopyranosyloxy-20-oxo-16,17-seco-21(20->17)-abeo-dammar-16,18:26,23-diolide	-	<i>Alphitonia xerocarpus</i>	<i>Phytochemistry</i> , 2016, <b>129</b> , 45
<b>(25R)</b> 3B-O- $\alpha$ -L-rhamnopyranosyl-(1->2)- $\beta$ -D-glucopyranosyloxy-20-oxo-16,17-seco-21(20->17)-abeo-dammar-16,18:26,23-diolide	-	<i>Alphitonia xerocarpus</i>	<i>Phytochemistry</i> , 2016, <b>129</b> , 45

**Table S18: 16,17-seco-Ursanes**



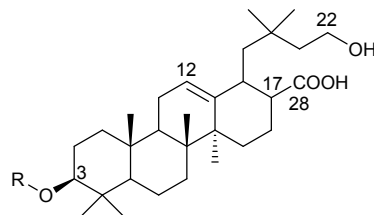
Compound	R	Source	Reference
16(17)-seco-urs-12,20(30) dien-18- $\alpha$ -H-3- $\beta$ -diol	H	<i>Hemidesmus indicus</i>	<i>Pharmazie</i> , 2001, <b>56</b> , 244
16(17)-seco-urs-12,20(30)-dien-18- $\alpha$ -H-3- $\beta$ yl acetate	Ac	<i>Hemidesmus indicus</i>	<i>Pharmazie</i> , 2001, <b>56</b> , 244

**Table S19: 17,18-*seco*-Lupane**



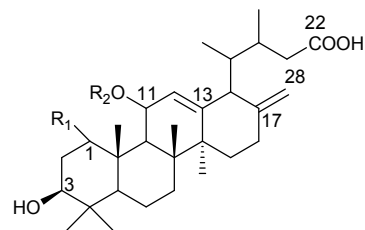
Compound	Source	Reference
Officinatrione	<i>Taraxacum officinale</i>	<i>Tetrahedron</i> , 2013, <b>69</b> , 1583

**Table S20: 17,22-*seco*-Oleanane**



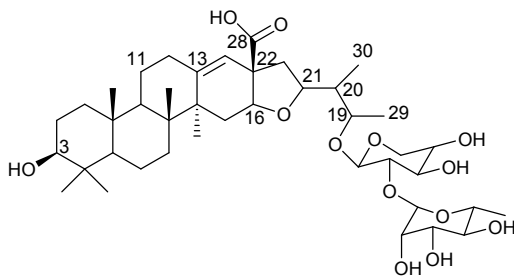
Compound	R	Source	Reference
Steganogenin	H	<i>Steganotaenia araliacea</i>	<i>Phytochemistry</i> , 1992, <b>31</b> , 3177
3-O-[[β-D-glucopyranosyl(1->2)-(β-D-glucopyranosyl(1->3))-(α-L-rhamnopyranosyl(1->4))-β-D-glucopyranosyl]-steganogenin	D-β-glc-(1->2)-(D-β-glc (1->3))-(L-α-rha(1->4))-D-β-glc	<i>Steganotaenia araliacea</i>	<i>Phytochemistry</i> , 1992, <b>31</b> , 3177

**Table S21: 17,22-*seco*-Ursane**

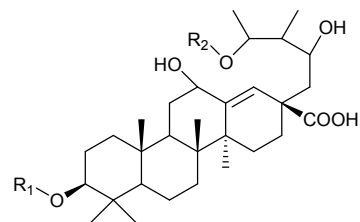


Compound	R <sub>1</sub>	R <sub>2</sub>	Source	Reference
3β,11α-dihydroxy-17,22- <i>seco</i> -17(28),12-ursadien-22-oic acid	H	H	<i>Salvia palaestina</i> <i>Salvia syriaca</i>	<i>J. Asian Nat. Prod. Res.</i> , 2012, <b>14</b> , 618
1β,3β,11α-trihydroxy-17,22- <i>seco</i> -17(28),12-ursadien-22-oic acid	OH	H	<i>Salvia syriaca</i>	<i>Nat. Prod. Res.</i> , 2015, <b>29</b> , 102
3β-hydroxy-11α-methoxy-17,22- <i>seco</i> -17(28),12-ursadien-22-oic acid	H	Me	<i>Salvia syriaca</i>	<i>Nat. Prod. Res.</i> , 2015, <b>29</b> , 102
1β,3β-dihydroxy-11α-methoxy-17,22- <i>seco</i> -17(28),12-ursadien-22-oic acid	OH	Me	<i>Salvia syriaca</i>	<i>Nat. Prod. Res.</i> , 2015, <b>29</b> , 102

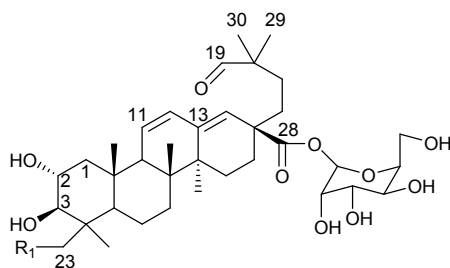
**Table S22: 18,19-*seco*-Ursanes**



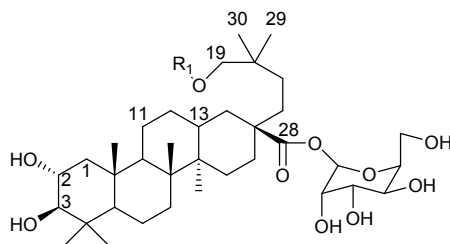
Compound	Source	Reference
Aculeoside I	<i>Ilex aculeolata</i>	<i>Nat. Prod. Lett.</i> , 2010, <b>16</b> , 137



Compound	R <sub>1</sub>	R <sub>2</sub>	Source	Reference
Bodinoside F	D-β-glucose	D-β-glucose	<i>Elsholtzia bodinieri</i>	<i>Phytochem. Lett.</i> , 2015, <b>12</b> , 308
Cornutaoside B	D-β-glc-(1->2)-L-α-ara	H	<i>Ilex cornuta</i>	<i>Food Chem.</i> , 2008, <b>111</b> , 78

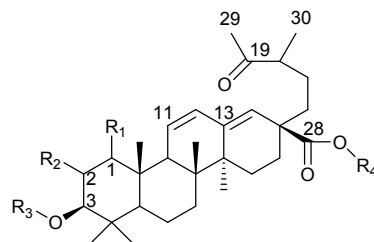


Compound	R <sub>1</sub>	Source	Reference
Arjunaside A	H	<i>Terminalia arjuna</i>	<i>Planta Med.</i> , 2010, <b>76</b> , 903
Arjunaside B	OH	<i>Terminalia arjuna</i>	<i>Planta Med.</i> , 2010, <b>76</b> , 903

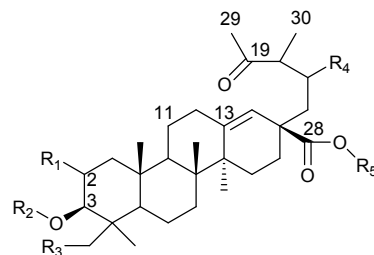


Compound	R <sub>1</sub>	Δ	Source	Reference
Arjunaside C	H	11(12),13(18)	<i>Terminalia arjuna</i>	<i>Planta Med.</i> , 2010, <b>76</b> , 903

Arjunaside D	H	13(18)	<i>Terminalia arjuna</i>	<i>Planta Med.</i> , 2010, <b>76</b> , 903
Arjunaside E	Me	11(12),13(18)	<i>Terminalia arjuna</i>	<i>Planta Med.</i> , 2010, <b>76</b> , 903



Compound	R <sub>1</sub>	R <sub>2</sub>	R <sub>3</sub>	R <sub>4</sub>	Source	Reference
18,19-seco-1b,2a,3a-trihydroxy-19-oxo-urs-11,13(18)-dien-28-oic acid	OH	OH	H	H	<i>Rubus innominatus</i>	<i>Phytochemistry</i> , 2015, <b>116</b> , 329
18,19-seco-2a,3a-dihydroxyl-19-oxo-urs-11,13(18)-dien-28-oic acid	H	OH	H	H	<i>Toddalia asiatica</i>	<i>Nat. Prod. Res. Dev.</i> , 2005, <b>17</b> , 404
llexoside A	H	H	L- $\alpha$ -arabinose	H	<i>Ilex crenata</i>	<i>Tetrahedron Lett.</i> , 1991, <b>32</b> , 3535
llexoside B	H	H	D- $\beta$ -glucose-(1->3)-L- $\alpha$ -arabinose	H	<i>Ilex crenata</i>	<i>Tetrahedron Lett.</i> , 1991, <b>32</b> , 3535
llexoside C	H	H	H	D- $\beta$ -xylose-(1->6)-D- $\beta$ -glucose	<i>Ilex crenata</i>	<i>Tetrahedron Lett.</i> , 1991, <b>32</b> , 3535
llexoside D	H	H	L- $\alpha$ -arabinose	D- $\beta$ -xylose-(1->6)-D- $\beta$ -glucose	<i>Ilex crenata</i>	<i>Tetrahedron Lett.</i> , 1991, <b>32</b> , 3535
llexoside E	H	H	L- $\alpha$ -arabinose	L- $\alpha$ -rhamnose-(1->2)-D- $\beta$ -xylose-(1->6)-D- $\beta$ -glucose	<i>Ilex crenata</i>	<i>Tetrahedron</i> , 1991, 47, 7219
llexoside F	H	H	D- $\beta$ -glucose-(1->3)-L- $\alpha$ -arabinose	L- $\alpha$ -rhamnose-(1->2)-D- $\beta$ -xylose-(1->6)-D- $\beta$ -glucose	<i>Ilex crenata</i>	<i>Tetrahedron</i> , 1991, 47, 7219



Compound	R <sub>1</sub>	R <sub>2</sub>	R <sub>3</sub>	R <sub>4</sub>	R <sub>5</sub>	Source	Reference
Ilexoside G	H	L- $\alpha$ -arabinose	H	H	H	<i>Ilex crenata</i>	<i>Tetrahedron</i> , 1991, <b>47</b> , 7219
Ilexoside H	H	D- $\beta$ -glucose-(1- $\rightarrow$ 3)- L- $\alpha$ -arabinose	H	H	H	<i>Ilex crenata</i>	<i>Tetrahedron</i> , 1991, <b>47</b> , 7219
Ilexoside I	H	D- $\beta$ -glucose-(1- $\rightarrow$ 3)- L- $\alpha$ -arabinose	H	H	D- $\beta$ -glucose	<i>Ilex crenata</i>	<i>Tetrahedron</i> , 1991, <b>47</b> , 7219
Bodinoside A	OH	D- $\beta$ -glucose	H	OH	H	<i>Elsholtzia bodinieri</i>	<i>Helv. Chim. Acta</i> , 2005, <b>88</b> , 252
Bodinoside B	H	D- $\beta$ -glucose	H	OH	H	<i>Elsholtzia bodinieri</i>	<i>Helv. Chim. Acta</i> , 2005, <b>88</b> , 252
Bodinoside E	OH	D- $\beta$ -glucose	OH	H	D- $\beta$ -glucose	<i>Elsholtzia bodinieri</i>	<i>Helv. Chim. Acta</i> , 2005, <b>88</b> , 252
Bodinoside G	OH	D- $\beta$ -glucose	H	OH	H	<i>Elsholtzia bodinieri</i>	<i>Helv. Chim. Acta</i> , 2005, <b>88</b> , 252
Cornutaoside A	H	D- $\beta$ -glucose-(1- $\rightarrow$ 3)- L- $\alpha$ -arabinose	H	OH	H	<i>Ilex cornuta</i>	<i>Food Chem.</i> , 2008, <b>111</b> , 78