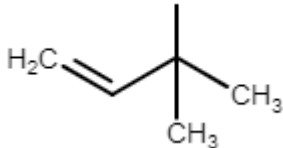
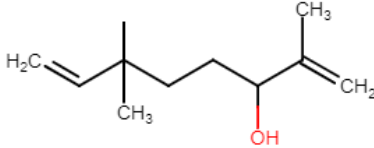
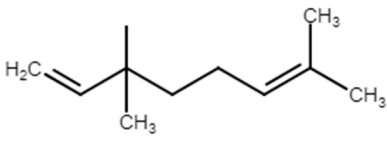
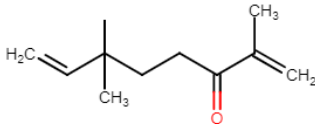
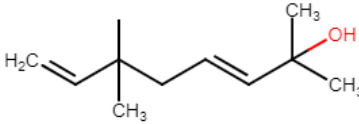
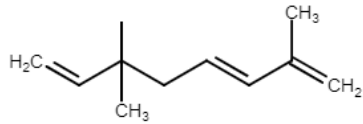
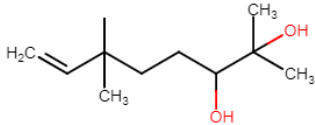
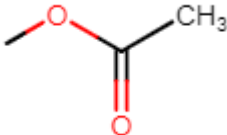
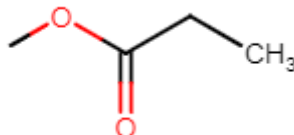
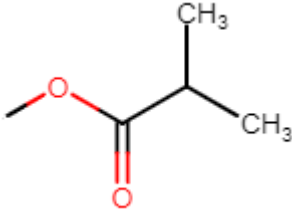
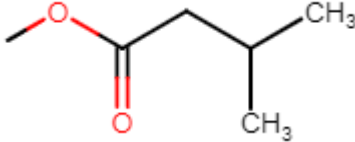
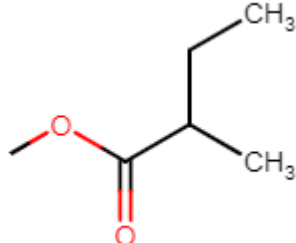
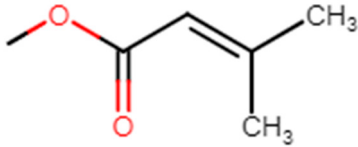
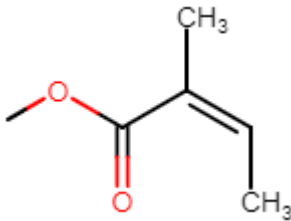
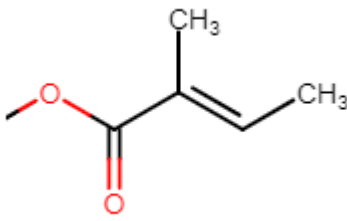
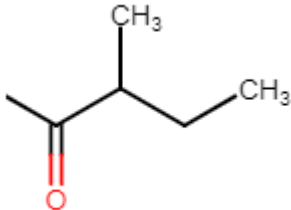
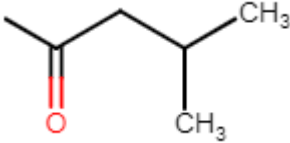
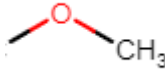


Supplementary Materials:

Table S1. Substituents of pyranocoumarins.

		
2-methylbut-3-en-2-yl	6-hydroxy-3,7-dimethylocta-1,7-dien-3-yl	3,7-dimethylocta-1,6-dien-3-yl
		
1-ethenyl-1,5-dimethyl-4-oxohex-5-en-1-yl	7-hydroxy-3,7-dimethylocta-1,5-dien-3-yl	3,7-dimethylocta-1,5,7-trien-3-yl
		
6,7-dihydroxy-3,7-dimethylocta-1-en-3-yl	acetyloxy	propionyloxy
		
isobutyryloxy (isobutyroyloxy)	isovaleryloxy (isovaleroyloxy)	2-methylbutyryloxy
		
seneciolyloxy	angeloyloxy	tigloyloxy
		
2-methyl-1-oxobutyl (2-methylbutyroyl?)	3-methyl-1-oxobutyl (isovaleroyl?)	methoxy

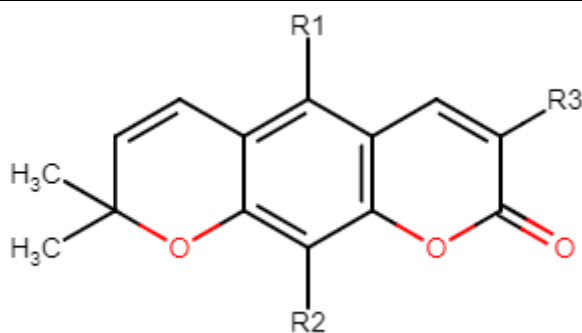
3-methyl-but-2-enyl	geranyl	isobutyryl
2-methylbutyryl	butanal	butoxy
3-(Methylthio)acrylic acid	benzoyloxy	3-methyl-but-1,3-dienyl
capryloyloxy		3-methyl-but-3-enyloxy
1,2-dihydroxy-3-methyl-but-3-enyl	2,3-dimethyloxirane-2-carboxylatyl	3-chloro-2-hydroxy-2-methylbutanoyl

Table S2. Structures of pyranocoumarins.

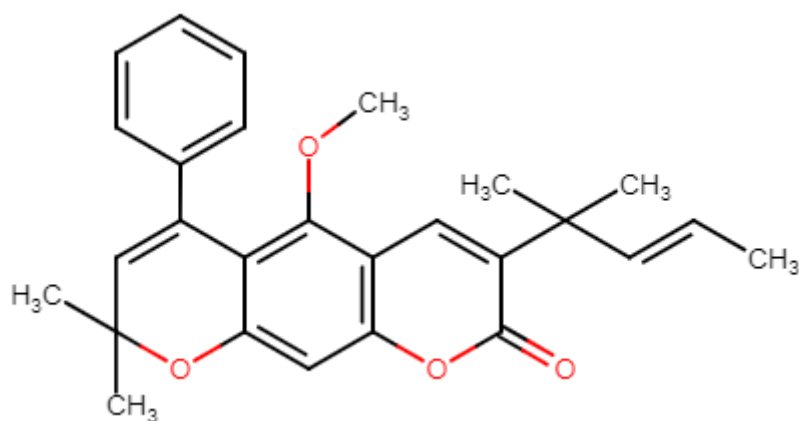
	R1	R2	R3	R4
Dihydroxanthyletin	H	H	H	H
(-)-3-(R)-Decursinol (Smirniol, Aegelinol)	H	H	H	R-OH
(+)-Decursinol ((-)-Smirniol)	H	H	H	S-OH
Decursidinol	H	H	OH	OH

(+)-trans-Decursidinol	H	H	R-OH	S-OH
(-)-cis-Decursidinol	H	H	S-OH	S-OH
Decursitin F	H	H	R-OH	S-acetoxy
4-Hydroxy Pd-C-III	H	H	R-OH	S- angeloyloxy
Pd-C-I	H	H	R-OH	S-seneciolyoxy
Benzoyl aegelinol	H	H	H	benzoyloxy
Clausenin	OH	H	O	H
Clausenidin	OH	2,2-dimethylbut-3-enyl	O	H
Clauemarmarin A	OH	3,7-dimethylocta-1,5,7-trien-3-yl	H	H
Clauemarmarin B	OH	6,7-dihydroxy-3,7-dimethylocta-1-en-3-yl	H	H
Clauemarmarin C	OH	(R)-6-hydroxy-3,7-dimethylocta-1,7-dien-3-yl	H	H
Clauemarmarin D	OH	(S)-6-hydroxy-3,7-dimethylocta-1,7-dien-3-yl	H	H
5-hydroxy-8,8-dimethyl-10-(7-hydroxy-3,7-dimethylocta-1,5-dien-3-yl)pyranocoumarin	OH	7-hydroxy-3,7-dimethylocta-1,5-dien-3-yl	H	H
5-hydroxy-8,8-dimethyl-10-(3',7'-dimethylocta-1',6'-dien-3'-yl)pyranocoumarin	OH	3,7-dimethylocta-1,6-dien-3-yl	H	H
Clauemarmarin K	OH	(S/R)-1-ethenyl-1,5-dimethyl-4-oxohex-5-en-1-yl	H	H
10-(7-Hydroxy-3,7-dimethylocta-1,5-dien-3-yl)-5-methoxy-8,8-dimethylpyranocoumarin	methoxy	7-hydroxy-3,7-dimethylocta-1,5-dien-3-yl	H	H
10-(3,7-Dimethylocta-1,6-dien-3-yl)-5-methoxy-8,8-dimethylpyranocoumarin	methoxy	3,7-dimethylocta-1,6-dien-3-yl	H	H
Dentatin	methoxy	2-methylbut-3-en-2-yl	H	H
Nordentain	OH	2-methylbut-3-en-2-yl		
Arnottianin	H	methoxy	H	OH
Decursin (Grandivitin)	H	H	H	S-seneciolyoxy
Decursinol angelate	H	H	H	angeloyloxy
Grandivittin	H	H	H	seneciolyoxy
Aegelinol benzoat	H	H	H	benzoyloxy
3'(R)-O-β-D-Glucopyranosyl-3',4'-dihydroxanthyletin	H	H	H	O-glucoside
Seseloside	H	OH	H	O-glucoside

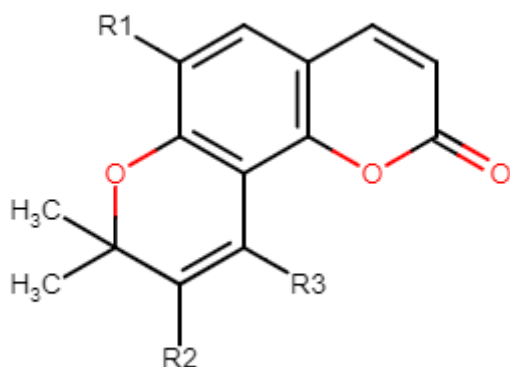
(-)-methyl-Decursidinol	H	H	S- methoxy	R-OH
Peuarin	H	H	methoxy	angeloyloxy
4'-Methoxy Pd-C-I	H	H	R-methoxy	S-seneciolyoxy
Pd-C-III	H	H	R-acetoxy	S-angeloyloxy
AD-I	H	H	R-isovaleryloxy	S-angeloyloxy
Pd-C-II	H	H	R-seneciolyoxy	S-OH
Pd-C-IV	H	H	R-seneciolyoxy	S-acetoxy
Decursidin	H	H	R-seneciolyoxy	S-seneciolyoxy
AD-II	H	H	R-seneciolyoxy	S- angeloyloxy
3'(S)-Acetoxy-4'(R)-angeloyloxy-3', 4'-dihydroxanthyletin	H	H	R-angeloyloxy	S-acetoxy
Decursitin D	H	H	R-angeloyloxy	S-OH
Pd-C-V	H	H	R-angeloyloxy	S-acetoxy
Decursitin C (Andelin)	H	H	R-angeloyloxy	S-seneciolyoxy
Decursitin B	H	H	R-angeloyloxy	S-angeloyloxy
Xanthalin	H	H	angeloyloxy	tigloyloxy
Peuarenarine	H	H	2,3-dimethyloxirane-2-carboxylatyl	tigloyloxy
Peuarenine	H	H	2,3-dimethyloxirane-2-carboxylatyl	2,3-dimethyloxirane-2-carboxylatyl
Peuchlorin	H	H	3-chloro-2-hydroxy-2-methylbutanoyl	angeloyloxy
Peuchlorinin butyroyl isohellaktone	H	H	3-chloro-2-hydroxy-2-methylbutanoyl	2,3-dimethyloxirane-2-carboxylatyl
Peuchloridin	H	H	3-chloro-2-hydroxy-2-methylbutanoyl	3-chloro-2-hydroxy-2-methylbutanoyl



	R1	R2	R3
Xanthyletin	H	H	H
Luvangetin	H	methoxy	H
Xanthoxyletin	methoxy	H	H
Agasyllin	H	H	angeloyloxy
Xanthyletin 3-(1,1-dimetylbut-3-enyl)	H	H	1,1-dimetylbut-3-enyl
Xanthyletin 3-(3-metylbut-2-enyl)	H	H	3-metylbut-2-enyl
Xanthyletin 3-(1,1-dimetylbut-3-enyl)-8-(3-metylbut-2-enyl)	H	3-metylbut-2-enyl	1,1-dimetylbut-3-enyl
Nordentatin	OH	1,1-dimetylbut-3-enyl	H
Clausarin	OH	1,1-dimetylbut-3-enyl	1,1-dimetylbut-3-enyl
Trachyphyllin	OH	3-methyl-but-2-enyl	H
Poncitrin	methoxy	1,1-dimetylbut-3-enyl	H



Phenyl derivative of pyranocoumarin (PDP)

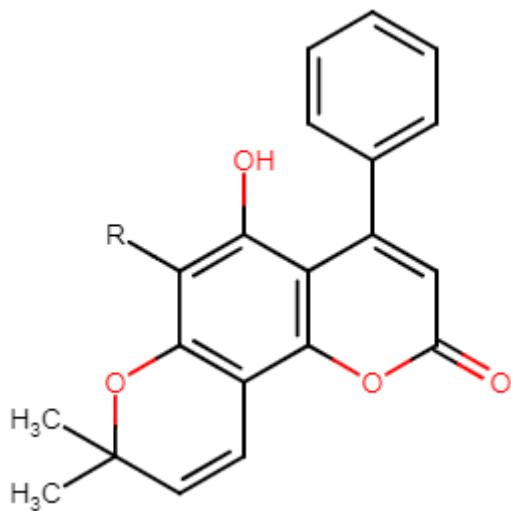


	R1	R2	R3
Seselin	H	H	H
Norbraylin	OH	H	H
Braylin	methoxy	H	H
Lomatin	H	OH	H
(-)-trans-Khellactone (cis-Khellactone; Visnagan)	H	OH	OH
trans-Khellactone / cis-Khellactone	H	R-OH	S-OH
(-)-cis-Ethylkhellactone	H	S-OH	S-ethoxy
(+)-trans-Ethylkhellactone	H	S-OH	R-ethoxy
Lomatin O-isovaleroyl ester	H	H	isovaleryloxy
Lomatin 2-methylbutyryl ester	H	H	2-methylbutyryloxy
Praeroside V	H	H	S-O- glucoside
Khellactone 4'-O-methyl ester	H	OH	methoxy
Khellactone 4'-O-acetyl ester	H	OH	acetyloxy
Qianhucoumarin C	H	S-OH	S-acetyloxy
Khellactone 4'-O-isobutyryl ester	H	OH	isobutyryloxy
Khellactone 4'-O-isovaleroyl ester	H	OH	isovaleryloxy
Khellactone 4'-O- 2-methylbutyryl ester	H	OH	2-methylbutyryloxy
Turgeniifolin C	H	OH	seneciolyloxy
Peujaponisinol B	H	S-OH	S-seneciolyloxy
d-Laserpitin (Peujaponisinol B, Isolehmannidin)	H	OH	angeloyloxy
(+)-Laserpitin	H	S-OH	S-angeloyloxy

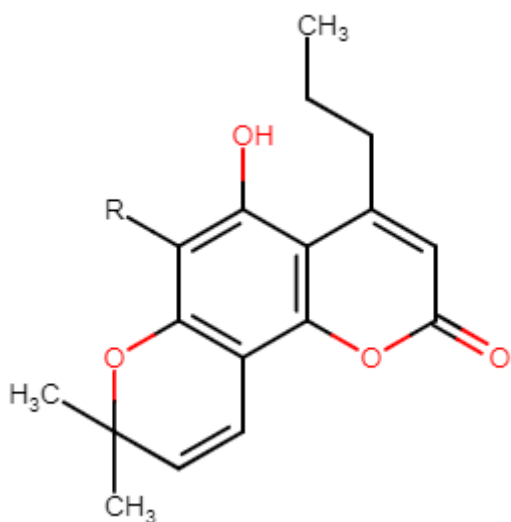
(±)-4'-Tigloylkhellactone	H	OH	tigloyloxy
Qianhucoumarin A	H	R-OH	R- tigloyloxy
Khellactone-4'-O-glucoside	H	OH	glucoside
Khellactone O-isobutyryl ester	H	OH / isobutyryloxy	isobutyryloxy / OH
Khellactone O-hexoside	H	OH / hexoside	hexoside / OH
Khellactone 3'-O-methyl ester	H	methoxy	OH
Qianhucoumarin B	H	S-acetyloxy	S-OH
3'-acetoxy-4'-metyl-3',4'-dihydroseselin	H	acetyloxy	metyloxy
Khellactone 3',4'-di-O-acetyl ester	H	acetyloxy	acetyloxy
Qianhucoumarin D	H	S-acetyloxy	S-acetyloxy
3'(R)-acetoxy-4'(S)- propionyloxy - 3',4'-dihydroseselin	H	R-acetyloxy	R-propionyloxy
Hyuganin D (Seravshanin, Isobocconin)	H	acetyloxy	isobutyryloxy
(3'S,4'R)-3'-acetyl-4'-isobutyrylkhellactone	H	S-acetyloxy	R-isobutyryloxy
Suksdorfin	H	acetyloxy	isovaleroyloxy
3'-acetyl-4'-isovalerylkhellactone	H	R-acetyloxy	R-isovaleroyloxy
Corymbocoumarin (+)- <i>cis</i> -3'-acetoxy-4'-(2-methylbutyroyloxy)-3',4'-dihydroseselin	H	acetyloxy	2-methylbutyroyloxy
Hyuganin C	H	acetyloxy	2-methyl-3-oxobutanoxo
Isosamidin	H	acetyloxy	seneciolyloxy
(-)- <i>trans</i> -3'-Acetyl-4'-seneciolykhellactone	H	acetyloxy	seneciolyloxy
Pteryxin	H	R-acetyloxy	R-angeloyloxy
Peucedanocoumarin II	H	S-acetyloxy	R-angeloyloxy
3'(R)-acetoxy-4'(S)-angeloyloxy-3',4'-dihydroseselin	H	R-acetyloxy	S-angeloyloxy
Longshengensin A	H	S-acetyloxy	S-angeloyloxy
(±)- <i>cis</i> -3'-Acetyl-4'-tigloylkhellactone	H	acetyloxy	tigloyloxy
(+)- <i>trans</i> -3'-Acetyl-4'-tigloylkhellactone	H	acetyloxy	tigloyloxy
(3'R,4'S)-3'-acetyl-4'-tigloylkhellactone	H	R-acetyloxy	S-tigloyloxy
Peucedanocoumarin III	H	S-acetyloxy	R- tigloyloxy
Quanhucoumarin I	H	S-acetyloxy	S- tigloyloxy
Khellactone 3'-O- isobutyryl ester	H	isobutyryloxy	H
Campestrol	H	isobutyryloxy	OH
<i>cis</i> -3'-isobutyryl-4'-acetylkhellactone	H	R-isobutyryloxy	R-acetyloxy
3'.4'-di-O-isobutyryl- <i>cis</i> -khellactone	H	isobutyryloxy	isobutyryloxy
Lomatin isovalerate	H	isovaleryloxy	H
Hystrixarin (Turgeniifolin B)	H	isovaleryloxy	OH
3'-Isovaleryl-4'-keto-khellactone (Petracoumarin)	H	isovaleryloxy	O
Dihydrosamidin	H	isovaleryloxy	acetyloxy
Peucedanocoumarin I	H	S-isovaleryloxy	R-acetyloxy
Khellactone 3'-O-isovaleroyl-4'-O isobuturoyl ester	H	isovaleryloxy	isobutyryloxy
Khellactone 3',4'-di-O-isovaleroyl	H	isovaleryloxy	isovaleroyloxy

3'(S), 4'(S)-diisovaleryloxy-3',4'-dihydroseselin	H	S-isovaleryloxy	S-isovaleroxyloxy
Khellactone isovaleroyl-2-methylbutyroyl ester	H	isovaleryloxy / 2-methylbutyroyloxy	2-methylbutyroyloxy / isovaleryloxy
Khellactone 3'-O-isovaleroyl-4'-O seneciroyl ester	H	isovaleryloxy	seneciroyloxy
cis-3'-isovaleryl-4'-seneciroylkhellactone	H	S-isovaleryloxy	S-seneciroyloxy
Khellactone 3'-O-isovaleroyl-4'-O angeloyl ester	H	isovaleryloxy	angeloyloxy
Visnadin	H	2-methylbutyroyloxy	acetyloxy
(-)-Visnadin	H	S-2-methylbutyroyloxy	S-acetyloxy
Khellactone 3'-O- 2-methylbutyroyl-4'-O isobutyroyl ester	H	2-methylbutyroyloxy	isobutyroyloxy
Khellactone 3',4'-di-O-2-methylbutyroyl ester	H	2-methylbutyroyloxy	2-methylbutyroyloxy
Khellactone 3'-O-2-methylbutyroyl-4'-O seneciroyl ester	H	2-methylbutyroyloxy	seneciroyloxy
Khellactone 3'-O-isovaleroyl-4'-O angeloyl ester	H	2-methylbutyroyloxy	angeloyloxy
Khellactone 3',4'-di-O-isobutyroyl ester	H	2-methylpropanoxy	isobutyroyloxy
Buchtarmine	H	seneciroyloxy	H
Isocampesol	H	seneciroyloxy	OH
Peujaponisinol A	H	S-seneciroyloxy	S-OH
3'(S)-seneciroyloxy-4' (S)-ethoxy-3',4'-dihydroseselin	H	S-seneciroyloxy	S-ethoxy
Samidin	H	seneciroyloxy	acetyloxy
(+)-Samidin	H	S-seneciroyloxy	S-acetyloxy
Khellactone 3'-O-seneciroyl-4'-O-isovaleroyl ester	H	seneciroyloxy	isovaleroxyloxy
Peujaponisin	H	S-seneciroyloxy	S-isovaleroxyloxy
Khellactone 3'-O-seneciroyl-4'-O-2-methylbutyroyl ester	H	seneciroyloxy	2-methylbutyroyloxy
cis-Khellactone disenecionate	H	seneciroyloxy	seneciroyloxy
3'(S),4'(S)-diseneciroyloxy-3',4'-dihydroseselin	H	S-seneciroyloxy	S-seneciroyloxy
Khellactone 3'-O-seneciroyl-4'-O angeloyl ester	H	seneciroyloxy	angeloyloxy
cis-3'-seneciroyl-4'-angeloylkhellactone	H	R-seneciroyloxy	R-angeloyloxy
Isocalypteryxin	H	seneciroyloxy	tigloyloxy
Jatamansin (Selinidin, Xanthogalin)	H	angeloyloxy	H
Isolaserpetin	H	angeloyloxy	OH
(3'R,4'S)-3'-angeloylkhellactone	H	R-angeloyloxy	S-OH
Turgeniifolin A (Pd-Ib)	H	R-angeloyloxy	O
3'-angeloyloxy-4'-butoxy-3',4'-dihydroseselin	H	angeloyloxy	butoxy
(±)-Praeruptorin A (Pd-Ia)	H	angeloyloxy	acetyloxy
3'-angeloyl-4'-propionylkhellactone	H	angeloyloxy	propionyloxy
Qianhucoumarin J	H	S-angeloyloxy	S-propionyloxy

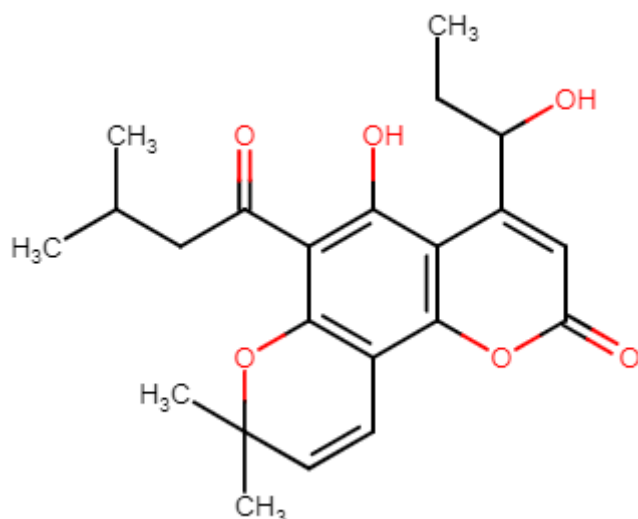
(-)-Praeruptorin A (Isopteryxin)	H	R-angeloyloxy	R-acetyloxy
(+)-Praeruptorin A	H	S-angeloyloxy	S-acetyloxy
Khellactone 3'-O-angeloyl-4'-O-isobutyryl ester	H	angeloyloxy	isobutyryloxy
Praeruptorin E	H	angeloyloxy	isovaleroyloxy
(+)-Praeruptorin E (Qianhuocoumarin H, Pd-III)	H	S- angeloyloxy	S-isovaleryloxy
Khellactone 3'-O- angeloyl-4'-O-2-methylbutyroyl ester	H	angeloyloxy	2-methylbutyroyloxy
Calypteryxin (Peuformosin)	H	angeloyloxy	seneciolyloxy
(±)-Praeruptorin B (Anomalin)	H	angeloyloxy	angeloyloxy
(+)-Praeruptorin B (Pd-II, ((+)-Anomalin, Praeruptorin C)	H	R- angeloyloxy	R- angeloyloxy
(-)-Praeruptorin B (Praeruptorin D, Anomalin)	H	S- angeloyloxy	S- angeloyloxy
Khellactone 3'-O-tigloyl ester	H	tigloyloxy	OH
Qianhuocoumarin E	H	R-tigloyloxy	O
(+)-trans-4'-Acetyl-3'-tigloylkhellactone	H	tigloyloxy	acetyloxy
Floroselin	H	tigloyloxy	3-(methylthio)acrylic acid
Campestrinol	H	geranyloxy	OH
Campestrinoside (Praeroside II)	H	O-glucoside	OH
Praeroside II	H	R-O-glucoside	R-OH
Praeroside IV	H	R-O-glucoside	H
Praeroside III	H	S-O-glucoside	R-OH
3'-Capryloyloxyxanthogalol (Octanoyllomatine)	H	capryloyloxy	H
Isofloroselin	H	3-(methylthio)acrylic acid	angeloyloxy



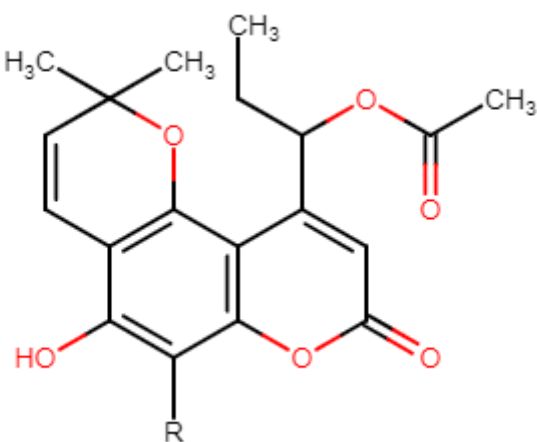
	R
mammea A/AA cyclo D	3-methyl-1-oxobutyl (isovaleryl?)
mammea A/AD cyclo D	isobutyryl
mammea A/AB cyclo D	2-methylbutyryl



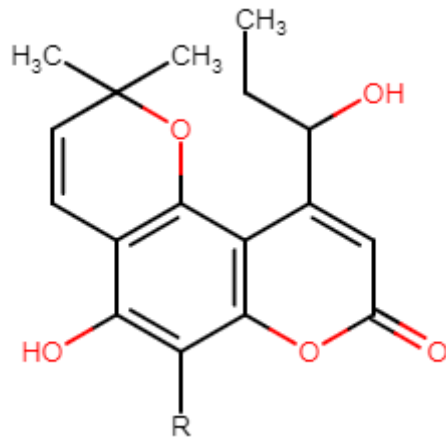
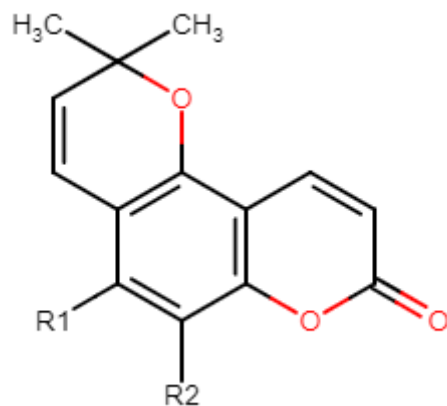

	R
mammea B/AB cyclo D	2-methyl-1-oxobutyl (2-methylbutyroyl?)
mammea B/AC cyclo D	butanal



Deacetylmammea E/AA cyclo D



	R
Mammea E/BC cyclo D	butanal
Mammea E/BD cyclo D	isobutyryl

		
	R	
Deacetylmammea E/BB cyclo D	2-methyl-1-oxobutyl (2-methylbutyroyl?)	
Deacetylmammea E/BC cyclo D	butanal	
		
	R1	R2
Alloxanthoxyletin	methoxy	H
Avicennin	methoxy	3-metyl-buta-1,3-dienyl
Avicennol	methoxy	3-metyl-buta-3-enyloxy
Dipetaline	methoxy	3-methyl-but-2-enyl
c-Avicennol	methoxy	1,2-dihydroxy-3-metyl-but-3-enyl
		
	R1	R2
8-hydroxy-5-methyl-7-(3-methyl-but-2-enyl)-9-(3-methyl-1-oxobutyl)-4,5-dihydropyrano[4,3,2-de]chromen-2-one	3-methyl-but-2-enyl	3-methyl-1-oxobutyl

8-hydroxy-5-methyl-7-(3-methyl-but-2-enyl)-9-(2-methyl-1-oxobutyl)-4,5-dihydropyrano[4,3,2- <i>de</i>]chromen-2-one	3-methyl-but-2-enyl	2-methyl-1-oxobutyl
8-hydroxy-5-methyl-7-(3,7-dimethylocta-2,6-dienyl)-9-(3-methyl-1-oxobutyl)-4,5-dihydropyrano[4,3,2- <i>de</i>]chromen-2-one	geranyl	3-methyl-1-oxobutyl
8-hydroxy-5-methyl-7-(3,7-dimethylocta-2,6-dienyl)-9-(2-methyl-1-oxobutyl)-4,5-dihydropyrano[4,3,2- <i>de</i>]chromen-2-one	geranyl	2-methyl-1-oxobutyl
Mammeasin C	geranyl	isobutyroyl
Mammeasin D	geranyl	butanal

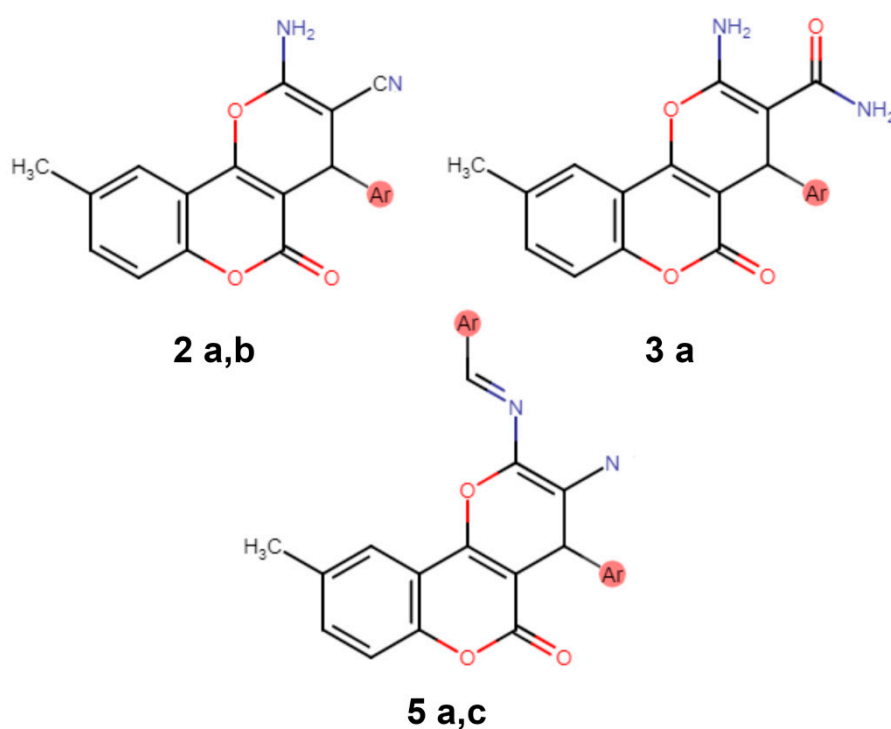


Figure S1. Structures of artificial pyranocoumarins [31]

Table S3. The content of pyranocoumarins in plants.

Compounds	Species <i>Umbelliferae</i> (<i>Apiaceae</i>)	Plant parts (yield, % dry mass)								References	
		Unkn own	Whole plant	Aerial parts					Roots		See- ds
				Flo- wers	Um- bels	Stems/ Twigs	Leav es	Bark			
Agasyllin (L*)	<i>Agasyllis latifolia</i> (M. Bieb.) Boiss.	+	?	?	?	?	?	–	?	?	[113]
Campestrinoside (Praeroside II) (Ad*)	<i>Ammi visnaga</i> (L.) Lam.	–	?	?	?	?	?	–	?	+	[114]
Visnadin (Ad)		–	?	?	+	?	?	–	?	0.46	[115-117]
Samidin (Ad)		–	?	?	+	?	?	–	+	0.08	[116-118]
Dihydrosamidin (Ad)		–	?	?	+	?	?	–	?	0.15	[116,117]
Decursin (Grandivitin) (L)		–	?			0.023		–	7.617	?	[119]
Seselin (Ad)		–	?			0.009		–	?	?	
(±)-Praeruptorin B (Anomalin) (Ad)		–	?			0.116		–	?	?	

(-)-Praeruptorin B (Praeruptorin D, Anomalin) (Ad)	<i>Angelica anomala</i> Ave-Lall.	+	?	?	?	?	?	-	?	?	[113]
Decursin (Grandivitin) (L)	<i>Angelica acutiloba</i>	+	?	?	?	?	?	-	?	?	[41]
Decursinol angelate (L)	(Siebold & Zucc.) Kitag.	+	?	?	?	?	?	-	?	?	
(-)-Praeruptorin B (Praeruptorin D, Anomalin) (Ad)	<i>Angelica adzharica</i> Pimenov	+	?	?	?	?	?	-	?	?	[113]
Decursitin C (Andelin) (L)	<i>Angelica decursiva</i> (Miq.)	+	?	?	?	?	?	-	?	?	[120,121]
(-)-3-(R)-Decursinol (Smirniol, Aegelinol) (L)	Franch. & Sav.	-	+	?	?	?	?	-	+	?	[121]
(+)-trans-Decursidinol (L)		-	+	?	?	?	?	-	?	?	
(-)-cis-Decursidinol (L)		-	?	?	?	?	?	-	+	?	
4-Hydroxy Pd-C-III (L)		-	+	?	?	?	?	-	?	?	
4'-Methoxy Pd-C-I (L)		-	+	?	?	?	?	-	?	?	
Pd-C-I (L)		-	+	?	?	?	?	-	?	?	
Pd-C-II (L)		-	+	?	?	?	?	-	?	?	
Pd-C-III (L)		-	+	?	?	?	?	-	?	?	
Pd-C-IV (L)		-	?	?	?	?	?	-	+	?	
Pd-C-V (L)		-	?	?	?	?	?	-	+	?	
Decursidin (L)		-	+	?	?	?	?	-	?	?	
Decursin (Grandivitin) (L)		-	?	?	?	?	?	-	+	?	
AD-I (L)		-	?	?	?	?	?	-	+	?	
AD-II (L)		-	?	?	?	?	?	-	+	?	
(-)-Methyl-Decursidinol (L)		-	?	?	?	?	?	-	+	?	
Decursitin B (L)		-	?	?	?	?	?	-	+	?	
Decursitin C (Andelin) (L)		-	?	?	?	?	?	-	+	?	
Decursitin D (L)		-	?	?	?	?	?	-	+	?	
Pteryxin (Ad)		-	+	?	?	?	?	-	?	?	
(3'R,4'S)-3'-acetyl-4'-Tigloylkhellactone (Ad)		-	+	?	?	?	?	-	?	?	
Jatamansin (Selinidin, Xanthogalin) (Ad)		-	?	?	?	?	?	-	+	?	
Peujaponisinol A (Ad)		-	?	?	?	?	?	-	+	?	
Peujaponisinol B (Ad)		-	?	?	?	?	?	-	+	?	
(-)-3-(R)-Decursinol (Smirniol, Aegelinol) (L)	<i>Angelica gigas</i> Nakai	-	?			+		-	?	?	[122]
(+)-Decursinol ((-)-Smirniol) (L)		-	?			+		-	?	?	
Agasyllin (L)		-	?			+		-	?	?	
Xanthyletin (L)		-	?			+		-	?	?	[123]
Decursin (Grandivitin) (L)		-	?	?	?	?	?	-	2.7-4.7	?	[124]
Decursinol angelate (L)		-	?	?	?	?	?	-	2.9-4.5	?	
Jatamansin (Selinidin, Xanthogalin) (Ad)	<i>Angelica purpurascens</i> (Ave-Lall.) Gilli	-	?	?	?	?	?	-	+	?	[125]
Xanthalin (L)		-	?	?	?	?	?	-	+	?	
Agasillin (L)		-	?	?	?	?	?	-	+	?	
(-)-Praeruptorin A (Isopteryxin) (Ad)	<i>Angelica sachalinensis</i> Maxim.	+	?	?	?	?	?	-	?	?	[113]
Decursin (Grandivitin) (L)	<i>Angelica sinensis</i>	+	?	?	?	?	?	-	?	?	[41]
Decursinol angelate (L)	(Oliv.) Diels	+	?	?	?	?	?	-	?	?	
(-)-Praeruptorin B (Praeruptorin D, Anomalin) (Ad)	<i>Angelica tatianae</i> Bordz.	+	?	?	?	?	?	-	?	?	[113]
Agasyllin (L)	<i>Eryngium campestre</i> L.	-	?	?	?	?	?	-	+	?	[126]
Decursin (Grandivitin) (L)		-	?	?	?	?	?	-	+	?	
Aegelinol benzoate (L)		-	?	?	?	?	?	-	+	?	
(-)-3-(R)-Decursinol (Smirniol, Aegelinol) (L)		-	?	?	?	?	?	-	+	?	
Grandivittin	<i>Ferulago campestris</i>	-	?	?	?	?	?	-	+	?	[33]

Agasyllin	(Besser) Grecescu	–	?	?	?	?	?	–	+	?	
Benzoyl aegelinol		–	?	?	?	?	?	–	+	?	
Grandivittin	<i>Ferulago macrocarpa</i> (Fenzl) Boiss.	–	?	?	?	?	?	–	?	+	[127]
Buchtarkin (Ad)	<i>Ferulopsis hystrix</i> (Bunge) Pimenov (<i>Phlojodicarpus turczaninowii</i> Sipliv.)	+	?	?	?	?	?	–	?	?	[113]
3',4'-di-O-Isobutyryl-cis-khellactone (Ad)	<i>Glehnia litoralis</i> F. Schmidt ex Miq.	–	+	?	?	?	?	–	?	?	[128]
Samidin (Ad)		–	+	?	?	?	?	–	?	?	
Dihydrosamidin (Ad)		–	+	?	?	?	?	–	?	?	
cis-Khellactone disenecionate		–	+	?	?	?	?	–	?	?	
Khellactone 3'-O-isovaleroyl-4'-O senecioyl ester (Ad)		–	+	?	?	?	?	–	?	?	
Khellactone 3',4'-di-O-isovaleroyl (Ad)		–	+	?	?	?	?	–	?	?	
Jatamansin (Selinidin, Xanthogalin) (Ad)	<i>Ligusticum lucidum</i> Mill. subsp. <i>cuneifolium</i>	–	?			+			?	?	[28]
(±)-Praeruptorin A (Pd-Ia) (Ad)	(Guss.) Tammaro	–	?			+			?	?	
Visnadin (Ad)		–	?			+			?	?	
(±)-Praeruptorin B (Anomalin) (Ad)	<i>Musineon divaricatum</i> (Pursh) Raf	–	+	?	?	?	?	–	?	?	[129]
d-Laserpitin (Peujaponisinol B, Isolehmannidin) (Ad)		–	+	?	?	?	?	–	?	?	
Isolaserpetin (Ad)		–	+	?	?	?	?	–	?	?	
Turgeniifolin C (Ad)		–	+	?	?	?	?	–	?	?	
Isocampesol (Ad)		–	+	?	?	?	?	–	?	?	
Pteryxin (Ad)		–	+	?	?	?	?	–	?	?	
Isosamidin (Ad)		–	+	?	?	?	?	–	?	?	
Suksdorfin (Ad)		–	+	?	?	?	?	–	?	?	
Khellactone 4'-O-isovaleroyl ester (Ad)		–	+	?	?	?	?	–	?	?	
Praeruptorin E (Ad)		–	+	?	?	?	?	–	?	?	
Khellactone-3'-O-isobutyryl ester (Ad)		–	+	?	?	?	?	–	?	?	
Khellactone 3'-O-angeloyl-4'-O isobutyryl ester (Ad)		–	+	?	?	?	?	–	?	?	
Khellactone 4'-O- 2-methylbutyroyl ester (Ad)		–	+	?	?	?	?	–	?	?	
Khellactone 3'-O-tigloyl ester (Ad)		–	+	?	?	?	?	–	?	?	
Calypteryxin (Peuformosin) (Ad)		–	+	?	?	?	?	–	?	?	
Khellactone 3'-O-senecioyl-4'-O angeloyl ester (Ad)		–	+	?	?	?	?	–	?	?	
Khellactone (Ad)		–	+	?	?	?	?	–	?	?	
Jatamansin (Selinidin, Xanthogalin) (Ad)		–	+	?	?	?	?	–	?	?	
(–)-Methyl-Decursidinol (L)	<i>Peucedanum arenarium</i>	–	?	?	?	?	?	–	+	?	[130]
Decursitin B (L)	Waldst. & Kit.	–	?	?	?	?	?	–	+	?	
Peuarenine (L)		–	?	?	?	?	?	–	+	?	
Peuarin (L)		–	?	?	?	?	?	–	+	?	
Peuarenarine (L)		–	?	?	?	?	?	–	+	?	
Peuchlorin (L)		–	?	?	?	?	?	–	+	?	
Peuchlorinin butyroyl isohellaktone (L)		–	?	?	?	?	?	–	+	?	
Peuchloridin (L)		–	?	?	?	?	?	–	+	?	

Decursidin (L)	<i>Peucedanum decursivum</i>	—	?	?	?	?	?	—	+	?	[131]
Pd-C-IV (L)	(Miq.) Maxim	—	?	?	?	?	?	—	+	?	
Pd-C-V (L)		—	?	?	?	?	?	—	+	?	
Decursitin C (Andelin) (L)		—	?	?	?	?	?	—	+	?	[130]
Dihydroxanthyletin (L)		—	?	?	?	?	?	—	+	?	[130]
(+)- <i>trans</i> -Decursidinol (L)		—	?	?	?	?	?	—	+	?	
3'(S)-Acetoxy-4'(R)-angeloyloxy-3', 4'-dihydroxanthyletin (L)		—	?	?	?	?	?	—	+	?	
Decursitin B (L)		—	?	?	?	?	?	—	+	?	
Decursitin (L)		—	?	?	?	?	?	—	+	?	
Decursitin D (L)		—	?	?	?	?	?	—	+	?	
Decursitin F (L)		—	?	?	?	?	?	—	+	?	
Pd-C-III (L)		—	?	?	?	?	?	—	+	?	
(-)-Praeruptorin B (Praeruptorin D, Anomalin) (Ad)	<i>Peucedanum delavayi</i> Franch.	—	?	?	?	?	?	—	+	?	[130]
3'(R)-O-β-D-Glucopyranosyl-3',4'-dihydroxanthyletin (L)	<i>Peucedanum dissolutum</i> (Diels) H. Wolff	—	?	?	?	?	?	—	+	?	[130]
(-)-Praeruptorin A (Isopteryxin) (Ad)		—	?	?	?	?	?	—	+	?	
(-)- <i>cis</i> -Khellactone (Ad)	<i>Peucedanum formosanum</i>	—	?	?	?	?	?	—	+	?	[130]
(-)-Praeruptorin B (Praeruptorin D, Anomalin) (Ad)	Hayata	—	?	?	?	?	?	—	+	?	
Isosamidin (Ad)		—	?	?	?	?	?	—	+	?	
Corymbocoumarin (Ad)		—	?	?	?	?	?	—	+	?	
Dihydroxanthyletin (L)	<i>Peucedanum harry-smithii</i>	—	?	?	?	?	?	—	+	?	[130]
Calypteryxin (Peuformosin) (Ad)	<i>var. subglabrum</i> (Shan & M.L. Sheh)	—	?	?	?	?	?	—	+	?	
(±)-Praeruptorin A (Pd-Ia) (Ad)	Shan & M.L. Sheh	—	?	?	?	?	?	—	+	?	
(-)-Praeruptorin B (Praeruptorin D, Anomalin) (Ad)		—	?	?	?	?	?	—	+	?	
Longshengensis A (Ad)	<i>Peucedanum longshengense</i> R. H. Shan & M. L. Sheh	—	?	?	?	?	?	—	+	?	[130]
(+)- <i>trans</i> -Khellactone (Ad)	<i>Peucedanum japonicum</i>	—	?			+		—	?	?	[132]
(+)- <i>trans</i> -4'-Acetyl-3'-tigloylkhellactone (Ad)	Thunb.	—	?			+		—	?	?	
(+)-Praeruptorin A (Ad)		—	?			+		—	?	?	
3'(S),'(S)-diisovaleryloxy-3',4'-dihydroseselin (Ad)		—	+			+		—	+	?	[130,133]
3'(S),4'(S)-diseneciyoxy-3',4'-dihydroseselin (Ad)		—	?	?	?	?	?	—	+	?	[133]
(+)-Samidin (Ad)		—	?	?	?	?	?	—	+	?	
Peujaponisin (Ad)		—	?	?	?	?	?	—	+	?	
(-)-Visnadin (Ad)		—	?	?	?	?	?	—	+	?	
(-)-Praeruptorin B (Praeruptorin D, Anomalin) (Ad)		—	?	?	?	?	?	—	+	?	
(-)- <i>cis</i> -Khellactone (Ad)		—	?	?	?	?	?	—	+	?	
(-)- <i>trans</i> -Khellactone (Ad)		—	?	?	?	?	?	—	+	?	
(-)- <i>cis</i> -Ethylkhellactone (Ad)		—	?	?	?	?	?	—	+	?	
(+)- <i>trans</i> -Ethylkhellactone (Ad)		—	?	?	?	?	?	—	+	?	
3'(S)-Sensciyoxy-4' (S)-ethoxy-3',4'-dihydroseselin (Ad)		—	?	?	?	?	?	—	+	?	
Peucedanocoumarin I (Ad)		—	?	?	?	?	?	—	+	?	
Peujaponisinol A (Ad)		—	?	?	?	?	?	—	+	?	[134]
Peujaponisinol B (Ad)		—	?	?	?	?	?	—	+	?	
(±)- <i>cis</i> -3'-Acetyl-4'-Tigloylkhellactone (Ad)		—	?			+		—	?	?	[130]
(-)- <i>trans</i> -3'-Acetyl-4'-		—	?			+		—	?	?	

seneciolykhellactone (Ad)									
<i>cis</i> -3'-isovaleryl-4'	–	?			+		–	?	?
-seneciolykhellactone (Ad)									
Peucedanocoumarin III (Ad)	–	?	?	?	?	?	–	+	?
(±)-Praeruptorin A (Pd-Ia) (Ad)	–	?	?	?	?	?	–	+	?
Pteryxin (Ad)	–	?	?	?	?	?	–	+	?
Jatamansin (Selinidin,	–	?	?	?	?	?	–	+	?
Xanthogalin) (Ad)									
(±)-4'-Tigloylkhellactone (Ad)	–	?	?	?	?	?	–	+	?
Praeroside II (Ad)	–	?	?	?	?	+	–	?	?
Praeroside III (Ad)	–	?	?	?	?	+	–	?	?
Praeroside IV (Ad)	–	?	?	?	?	+	–	?	?
Praeroside V (Ad)	–	?	?	?	?	+	–	?	?
Peucedanocoumarin III (Ad)	<i>Peucedanum medium var. gracile</i> Dunn ex Shan et Sheh	–	?	?	?	?	–	+	?
Peucedanocoumarin III (Ad)	<i>Peucedanum ostruthium</i> (L.) W.D.J. Koch—Masterwort	–	?	?	?	?	–	+	?
(±)-Praeruptorin A (Pd-Ia) (Ad)	<i>Peucedanum praeruptorum</i>	–	?	?	?	?	–	+	?
(±)-Praeruptorin B (Anomalin) (Ad)	Dunn	–	?	?	?	?	–	+	?
Jatamansin (Selinidin,		–	?	?	?	?	–	+	?
Xanthogalin) (Ad)									
3'(S),'(S)-diisovaleryloxy-3',4'-dihydroseselin (Ad)		–	?	?	?	?	–	+	?
Calyptryxin (Peuformosin) (Ad)		–	?	?	?	?	–	+	?
(+)-Praeruptorin A (Ad)		–	?	?	?	?	–	+	?
(+)-Praeruptorin B (Pd-II, ((+)-Anomalin, Praeruptorin C) (Ad)		–	?	?	?	?	–	+	?
(–)-Praeruptorin A (Isopteryxin) (Ad)		–	?	?	?	?	–	+	?
(–)-Praeruptorin B (Praeruptorin D, Anomalin) (Ad)		–	?	?	?	?	–	+	?
(+)-Praeruptorin E (Pd-III) (Ad)		–	?	?	?	?	–	+	?
Turgeniifolin A (Pd-Ib) (Ad)		–	?	?	?	?	–	+	?
Quanhuocoumarin I (Ad)		–	?	?	?	?	–	+	?
(3'R,4'S)-3'-acetyl-4'-Tigloylkhellactone (Ad)		–	?	?	?	?	–	+	?
Pteryxin (Ad)		–	?	?	?	?	–	+	?
(3'S,4'R)-3'-acetyl-4'-Isobutyrylkhellactone (Ad)		–	?	?	?	?	–	+	?
Peucedanocoumarin I (Ad)		–	?	?	?	?	–	+	?
Peucedanocoumarin II (Ad)		–	?	?	?	?	–	+	?
Peucedanocoumarin III (Ad)		–	?	?	?	?	–	+	?
(+)-Praeruptorin E		–	?	?	?	?	–	+	?
(Qianhuocoumarin H, Pd-III) (Ad)									
(3'R,4'S)-3'-angeloylkhellactone (Ad)		–	?	?	?	?	–	+	?
Qianhuocoumarin A (Ad)		–	?	?	?	?	–	+	?
Qianhuocoumarin B (Ad)		–	?	?	?	?	–	+	?
Qianhuocoumarin C (Ad)		–	?	?	?	?	–	+	?
Qianhuocoumarin D (Ad)		–	?	?	?	?	–	+	?
Qianhuocoumarin E (Ad)		–	?	?	?	?	–	+	?
(+)-Laserpitin (Ad)		–	?	?	?	?	–	+	?
Qianhuocoumarin J (Ad)		–	?	?	?	?	–	+	?
<i>cis</i> -Khellactone disenecionate (Ad)		–	?	?	?	?	–	+	?

Hyuganin D (Seravshanin, Isobocconin) (Ad)		–	?	?	?	?	?	–	+	?	
<i>trans</i> -Khellactone (Ad)		–	?	?	?	?	?	–	+	?	
<i>cis</i> -Khellactone (Ad)		–	?	?	?	?	?	–	+	?	
3'-Acetyl-4'-isovalerylkhellactone (Ad)		–	?	?	?	?	?	–	+	?	
<i>cis</i> -3'-Senecieryl-4'-angeloylkhellactone (Ad)		–	?	?	?	?	?	–	+	?	
Khellactone 3',4'-di- <i>O</i> -isovaleroyl (Ad)		–	?	?	?	?	?	–	+	?	
3'-Isovaleryl-4'-keto-khellactone (Petracoumarin) (Ad)		–	?	?	?	?	?	–	+	?	
3'-Angeloyl-4'-Propionylkhellactone (Ad)		–	?	?	?	?	?	–	+	?	
Praeroside II (Ad)		–	?	?	?	?	?	–	+	?	
Praeroside III (Ad)		–	?	?	?	?	?	–	+	?	
Praeroside IV (Ad)		–	?	?	?	?	?	–	+	?	
Praeroside V (Ad)		–	?	?	?	?	?	–	+	?	
<i>cis</i> -3'-Isovaleryl-4'-seneciylkhellactone (Ad)		–	?	?	?	?	?	–	+	?	
<i>cis</i> -3'-Isobutyryl-4'-acetylkhellactone (Ad)		–	?	?	?	?	?	–	+	?	
Decursin (Grandivitin) (L)	<i>Peucedanum terebinthaceum</i>	–	?	?	?	?	?	–	+	?	[130]
Pteryxin (Ad)	<i>var. deltoideum</i> (Makino ex K.Yabe) Makino	–	?	?	?	?	?	–	+	?	
Turgeniifolin A (Pd-Ib) (Ad)	<i>Peucedanum turgeniifolium</i>	–	+	?	?	?	?	–	?	?	[130]
Hystrixarin (Turgeniifolin B) (Ad)	H. Wolff	–	+	?	?	?	?	–	?	?	
Turgeniifolin C (Ad)		–	+	?	?	?	?	–	?	?	
3'(S)-Acetoxy-4'(R)-angeloyloxy-3', 4'-dihydroxanthyletin (L)	<i>Peucedanum wawrii</i> (Wolff) Su By	–	?	?	?	?	?	–	+	?	[137]
3'(R)-Acetoxy-4'(S)-angeloyloxy-3',4'-dihydroseselin (Ad)		–	?	?	?	?	?	–	+	?	
(+)-Decursinol ((–)-Smirniol) (L)	<i>Peucedanum wulongense</i> R.	–	?	?	?	?	?	–	+	?	[130]
(+)- <i>trans</i> -Khellactone (Ad)	H. Shan & M. L. Sheh	–	?	?	?	?	?	–	+	?	
3'(S),4'(S)-Diseneciyoxy-3',4'-dihydroseselin (Ad)		–	?	?	?	?	?	–	+	?	
(–)-Praeruptorin B (Praeruptorin D, Anomalin) (Ad)		–	?	?	?	?	?	–	+	?	
Praeruptorin E (Ad)	<i>Peucedanum zenkeri</i> L.	–	?	?	?	?	?	–	?	+	[130]
Dihydrosamidin (Ad)	<i>Phlojodicarpus villosus</i> (Turcz. ex Fisch. et C.A. Mey.) Ledeb	–	?	?	?	?	?	–	2	?	[138]
Decursin (Grandivitin) (L)		+	?	?	?	?	?	–	?	?	[113]
(–)-Decursinol (Smirniol, Aegelinol) (L)		+	?	?	?	?	?	–	?	?	
Visnadin (Ad)		+	?	?	?	?	?	–	?	?	
Khellactone (Visnagan) (Ad)	<i>Phlojodicarpus sibiricus</i>	–	?	?	?	?	?	–	+	?	[51,139]
Khellactone 4'- <i>O</i> -methyl ester (Ad)	(Steph. ex Spreng.) K.-Pol.	–	?	?	?		+	–	?	+	
Khellactone 4'- <i>O</i> -isovaleroyl ester / khellactone 4'- <i>O</i> -2-methylbutyryl ester (Ad)		–	?	?	?	?	?	–	+	?	
Khellactone 4'- <i>O</i> -acetyl ester (Ad)		–	?	?	?		+	–	?	+	
Lomatin <i>O</i> -isovaleroyl ester / lomatin 2-methylbutyryl ester (Ad)		–	?	?	?	?	?	–	+	?	

Khellactone 3',4'-di-O-acetyl ester (Ad)	–	?	+	?	+	–	0.252	+
Khellactone 4'-O-isobutyroyl ester (Ad)	–	?	?	?	?	–	+	?
<i>d</i> -Laserpitin (Peujaponisinol B, Isolehmannidin) (Ad)	–	?	?	?	0.1251	–	0.47	0.214
Hyuganin D (Seravshanin, Isobocconin) (Ad)	–	?	+	?	+	–	0.149	0.01
Pteryxin (Ad)	–	?	?	?	?	–	+	?
Dihydrosamidin (Ad)	–	?	+	?	1.085	–	8.014	1.228
Suksdorfin (Ad)	–	?	?	?	?	–	+	?
Hyuganin C (Ad)	–	?	?	?	+	–	0.053	+
<i>cis</i> -Khellactone disenecionate (Ad)	–	?	?	?	?	–	+	?
(–)-Praeruptorin B (Praeruptorin D, Anomalin) (Ad)	–	?	+	?	?	–	+	?
Khellactone 3'-O-isovaleroyl-4'-O-seneciroyl ester / Khellactone 3'-O-2-methylbutyroyl-4'-O-seneciroyl ester /	–	?	?	?	?	–	+	?
Khellactone 3'-O-isovaleroyl-4'-O-angeloyl ester /								
Khellactone 3'-O-isovaleroyl-4'-O-angeloyl ester (Ad)								
Khellactone 3'-O-isovaleroyl-4'-O-isobuturoyl ester /	–	?	?	?	?	–	+	?
Khellactone 3'-O-2-methylbutyroyl-4'-O-isobuturoyl ester (Ad)								
Khellactone 3'-O-seneciroyl-4'-O-isovaleroyl ester /	–	?	?	?	?	–	+	?
Khellactone 3'-O-seneciroyl-4'-O-2-methylbutyroyl ester /								
Praeruptorin E /								
Khellactone 3'-O-angeloyl-4'-O-2-methylbutyroyl ester (Ad)								
Khellactone 3',4'-di-O-isovaleroyl / Khellactone 3',4'-di-O-2-methylbutyroyl ester /	–	?	?	?	?	–	+	?
Khellactone isovaleroyl-2-methylbutyroyl ester (Ad)								
Khellactone 3',4'-di-O-isobutyroyl ester (Ad)	–	?	?	?	?	–	+	?
Khellactone-4'-O-glucoside	–	?	?	?	+	–	+	?
Campestrinoside (Praeroside II) (Ad)	–	?	+	?	1.059	–	0.139	0.046
Khellactone O-isobutyryl Ester (Ad)	–	?	?	?	+	–	?	?
Khellactone O-hexoside (Ad)	–	?	?	?	+	–	?	?
Khellactone 3'-O-methyl Ester (Ad)	–	?	?	?	+	–	?	?
3',4'-Di-O-isobutyryl- <i>cis</i> -khellactone (Ad)	–	?	+	?	?	–	?	?

3'(R)-Acetoxy-4'(S)- propionyloxy -3',4'-dihydroseselin (Ad)	<i>Prionosciadium watsonii</i> J.M. Coult. & Rose	+	?	?	?	?	?	—	?	?	[140]
Khellactone 4'-O-isobutyroyl ester (Ad)		+	?	?	?	?	?	—	?	?	
Isolaserpetin (Ad)		+	?	?	?	?	?	—	?	?	
Hyuganin D (Seravshanin, Isobocconin) (Ad)		+	?	?	?	?	?	—	?	?	
Khellactone 3',4'-di-O-acetyl ester (Ad)		+	?	?	?	?	?	—	?	?	
(-)-trans-Khellactone (cis- Khellactone; Visnagan) (Ad)		+	?	?	?	?	?	—	?	?	
Khellactone 4'-O-methyl ester (Ad)		+	?	?	?	?	?	—	?	?	
Jatamansin (Selinidin, Xanthogalin) (Ad)		+	?	?	?	?	?	—	?	?	
Khellactone 3'-O- isobutyryl ester (Ad)		+	?	?	?	?	?	—	?	?	
Lomatin (Ad)		+	?	?	?	?	?	—	?	?	
(+)-Decursinol ((-)-Smirniol)	<i>Saposhnikovia divaricata</i>	—	?	?	?	?	?	—	+	?	[43]
(-)-Praeruptorin B (Praeruptorin D, Anomalin)	(Turcz.) Schischk.	—	?	?	?	?	?	—	+	?	
Calypteryxin (Peuformosin) (Ad)	<i>Seseli arenarium</i> M. Bieb.	—	?	?	?	?	?	—	+	?	[141]
Isosamidin (Ad)	(<i>Seseli campestre</i> Bess.)	—	?	?	?	?	?	—	+	?	
Campestrinoside (Praeroside II) (Ad)		—	?	?	?	?	?	—	+	?	[142]
(-)-trans-Khellactone (Ad)		—	?	?	?	?	?	—	+	?	
Campestrol (Ad)		—	?	?	?	?	?	—	+	?	
Campestrinol (Ad)		—	?	?	?	?	?	—	+	?	
Isocampesol (Ad)		—	?	?	?	?	?	—	+	?	
Isocalypteryxin (Ad)		—	?	?	?	?	?	—	+	?	
Isolaserpetin (Ad)		—	?	?	?	?	?	—	+	?	
3'-Acetoxy-4'-metyl-3',4'- dihydroseselin (Ad)		—	?	?	?	?	?	—	+	?	
(-)-Praeruptorin B (Ad)		+	?	?	?	?	?	—	?	?	[113]
(-)-Praeruptorin B (Ad)	<i>Seseli asperulum</i> (Trautv.) Schischk.	+	?	?	?	?	?	—	?	?	[113]
Pteryxin (Ad)	<i>Seseli condensatum</i> (L.) Rchb. f. (<i>Libanotis</i> <i>condensata</i> ssp. <i>arctica</i> (Rupr.) V.G. Sergienko)	+	?	?	?	?	?	—	?	?	[143]
Isofloroselin (Ad)	<i>Seseli coronatum</i> Ledeb.	+	?	?	?	?	?	—	?	?	[144]
(-)-Praeruptorin B (Ad)		+	?	?	?	?	?	—	?	?	[113]
cis-Khellactone (Ad)	<i>Seseli devenyense</i> Simonk.	—	?	?	?	?	?	—	?	+	[60]
d-Laserpitin (Peujaponisinol B, Isolehmannidin) (Ad)		—	?	?	?	?	?	—	?	+	
Isolaserpetin (Ad)		—	?	?	?	?	?	—	?	+	
3'-Capryloyloxyxanthogalol (Octanoyllomatin) (Ad)		—	?	?	?	?	?	—	?	+	
(-)-Praeruptorin B (Ad)	<i>Seseli dichotomum</i> Pall. ex M.Bieb.	+	?	?	?	?	?	—	?	?	[113]
(-)-Praeruptorin B (Ad)	<i>Seseli incanum</i> (Stephan ex Willd.) B. Fedtsch.	+	?	?	?	?	?	—	?	?	[113]
cis-Khellactone disenecionate (Ad)		+	?	?	?	?	?	—	?	?	
(-)-Praeruptorin B (Ad)	<i>Seseli iliense</i> Lipsky	+	?	?	?	?	?	—	?	?	[113]
Pteryxin (Ad)	<i>Seseli jomuticum</i> Schischk.	+	?	?	?	?	?	—	?	?	[143]
Decursin (Grandivitin) (L)	<i>Seseli grandivittatum</i>	+	?	?	?	?	?	—	?	?	[113]

(-)-3-(R)-Decursinol (L)	(Sommier & Levier)	+	?	?	?	?	?	—	?	?	
Decursinol angelate (L)	Schischk.	+	?	?	?	?	?	—	?	?	
(-)-Praeruptorin B (Praeruptorin D, Anomalin) (Ad)		+	?	?	?	?	?	—	?	?	
Corymbocoumarin (Ad)	<i>Seseli gummiferum</i> Pall. ex Sm. subsp. <i>corymbosum</i> (Boiss. & Heldr.) P.H. Davis	+	?	?	?	?	?	—	?	?	[26]
Pteryxin (Ad)	<i>Seseli mucronatum</i> (Schrenk) Pimenov & Sdobnina	+	?	?	?	?	?	—	?	?	[143]
Pteryxin (Ad)	<i>Seseli nemorosum</i> Pimenov	+	?	?	?	?	?	—	?	?	[143]
<i>d</i> -Laserpitin (Peujaponisinol B, Isolehmannidin) (Ad)	<i>Seseli lehmannianum</i> (Bunge) Boiss. (<i>Libanotis lehmanniana</i> Bunge)	+	?	?	?	?	?	—	?	?	[113]
<i>cis</i> -Khellactone (Ad)		+	?	?	?	?	?	—	?	?	
Lomatin (Ad)		+	?	?	?	?	?	—	?	?	
3'-Capryloyloxyxanthogalol (Octanoyllomatin) (Ad)		+	?	?	?	?	?	—	?	?	
3'-Angeloyloxy-4'-butoxy-3',4'-dihydroseselin (Ad)		+	?	?	?	?	?	—	?	?	
Pteryxin (Ad)		+	?	?	?	?	?	—	?	?	[143]
3'-Isovaleryl-4'-keto-khellactone (Petracoumarin) (Ad)	<i>Seseli petraeum</i> M. Bieb.	—	?			+		—	?	[61]	
3'-Capryloyloxyxanthogalol (Octanoyllomatin) (Ad)		—	?			+		—	?		
Jatamansin (Selinidin, Xanthogalin) (Ad)		—	?			+		—	?		
(-)-Praeruptorin B (Praeruptorin D, Anomalin) (Ad)		—	?			+		—	?		
Khellactone 3'-O- isobutyryl ester (Ad)		—	?			+		—	?		
Praeruptorin E (Ad)		—	?			+		—	?		
Khellactone 3'-O-isovaleroyl-4'-O angeloyl ester		—	?			+		—	?		
Khellactone 3'-O-seneciroyl-4'-O angeloyl ester		—	?			+		—	?		
Samidin		—	?			+		—	?		
Peujaponisinol B		—	?			+		—	?		
Peujaponisinol A		—	?			+		—	?		
<i>cis</i> -Khellactone		—	?			+		—	?		
Seseloside (L)	<i>Seseli peucedanoides</i> (M. Bieb.) Koso-Pol.	+	?	?	?	?	?	—	?	?	[145]
(-)-Praeruptorin B (Praeruptorin D, Anomalin) (Ad)	<i>Seseli sessiliflorum</i> Schrenk (<i>Seseli tschuense</i> E. Nikit.)	+	?	?	?	?	?	—	?	?	[113]
(-)-Praeruptorin B (Praeruptorin D, Anomalin) (Ad)		+	?	?	?	?	?	—	?	?	
Floroselin (Ad)		+	?	?	?	?	?	—	?	?	[143]
Khellactone 3'-O-isovaleroyl-4'-O angeloyl ester (Ad)	<i>Seseli talassicum</i> Pimenov & Sdobnina	+	?	?	?	?	?	—	?	?	[113]
Praeruptorin C (Ad)	<i>Seseli tenuisectum</i> Regel & Schmalh.	+	?	?	?	?	?	—	?	?	[113]
(-)-Praeruptorin B (Ad)		+	?	?	?	?	?	—	?	?	
Agasyllin (L)		+	?	?	?	?	?	—	?	?	
<i>cis</i> -Khellactone (Ad)		+	?	?	?	?	?	—	?	?	
<i>trans</i> -Khellactone (Ad)		+	?	?	?	?	?	—	?	?	
Pteryxin (Ad)	<i>Seseli valentinae</i> Popov	+	?	?	?	?	?	—	?	?	[143]
(-)-3-(R)-Decursinol (Smirniol,	<i>Smyrniopsis aucheri</i> Boiss.	+	?	?	?	?	?	—	?	?	[143]

Aegelinol) (L)												
(-)-3-(R)-Decursinol	(Smirniol,	<i>Zosima absinthifolia</i> (Vent)	+	?	?	?	?	?	-	?	?	[146]
Aegelinol) (L)		Link										
Agasyllin (L)			+	?	?	?	?	?	-	?	?	
Agasyllin (L)		<i>Zosima korovinii</i> Pimenov	+	?	?	?	?	?	-	?	?	[147]
<i>Rutaceae</i>												
Decursinol (L)		<i>Aegle marmelos</i> L.	+	?	?	?	?	?	?	?	?	[148]
Xanthyletin (L)		<i>Afreagle paniculata</i>	+	?	?	?	?	?	?	?	?	[148]
Xanthoxyletin (L)		(Schumach. & Thonn.) Engl.	+	?	?	?	?	?	?	?	?	
Seselin (Ad)		<i>Atalantia buxifolia</i> (Poir.) Oliv. ex Benth. (<i>Severinia buxifolia</i> Ten.)	+	?	?	?	?	?	?	?	?	[148]
Xanthyletin 3-(3-metylbut-2-enyl) (L)		<i>Atalantia simplicifolia</i> (Roxb.) Engl. (<i>Amyris simplicifolia</i> Roxb.)	-	?	?	?	?	+	?	?	?	[148]
Xanthyletin (L)		<i>Atalantia monophylla</i> (Roxb.) A. DC.	-	?	?	?	?	?	?	+	?	[148]
Xanthyletin (L)		<i>Boenninghausenia albiflora</i>	+	?	?	?	?	?	?	?	?	[148]
Xanthyletin 3-(1,1-dimetylbut-3-enyl) (L)		(Hook.) Rchb. ex Meisn.	+	?	?	?	?	?	?	?	?	
Xanthyletin (L)		<i>Citrus aurantiifolia</i> (Christm.) Swingle, (<i>Citrus acida</i> Roxb.)	+	?	?	?	?	?	?	?	?	[148]
Xanthyletin (L)		<i>Citrus aurantium</i> L.	+	?	?	?	?	?	?	?	?	[148]
Seselin (Ad)			+	?	?	?	?	?	?	?	?	
Poncitrin (L)			+	?	?	?	?	?	?	?	?	
Hystrixarin (Turgeniifolin B) (Ad)		<i>Citrus hystrix</i> D.C.	-	?	?	?	?	?	?	+	?	[149]
Decursidinol (L)			-	?	?	?	?	?	?	+	?	
Xanthyletin (L)			-	?	?	?	?	?	?	+	?	
Seselin (Ad)			-	?	?	?	?	?	?	+	?	
Seselin (Ad)		<i>Citrus limetta</i> Risso	+	?	?	?	?	?	?	?	?	[148]
Xanthyletin (L)		<i>Citrus limettiioides</i> Tanaka	+	?	?	?	?	?	?	?	?	[148]
Xanthyletin (L)		<i>Citrus limon</i> (L.) Osbeck	+	?	?	?	?	?	?	+	?	[148,150]
Xanthoxyletin (L)			-	?	?	?	?	?	?	+	?	[150]
Xanthyletin (L)		<i>Citrus medica</i> L.	-	?	?	?	?	?	?	+	?	[148]
Nordentatin (L)			-	?	?	?	?	?	?	+	?	
Xanthyletin (L)		<i>Citrus nobilis v. sunkii</i> Lour.	+	?	?	?	?	?	?	?	?	[148]
Xanthyletin (L)		<i>Citrus paradisi</i> Macfad.	+	?	?	?	?	?	?	?	?	[148]
Seselin			+	?	?	?	?	?	?	?	?	
Xanthyletin (L)		<i>Citrus sinensis</i> (L.) Osbeck.	+	?	?	?	+	+	?	?	?	[148,150]
Xanthoxyletin (L)			-	?	?	?	+	?	?	?	?	[150]
Xanthyletin (L)		<i>Citrus tankan</i> Hayata	+	?	?	?	?	?	?	?	?	[148]
Xanthyletin (L)		<i>Chloroxylon swietenia</i> DC.	+	?	?	?	?	?	?	?	?	[148]
Xanthoxyletin (L)			+	?	?	?	?	?	?	?	?	
Luvangetin (L)			+	?	?	?	?	?	?	?	?	
Alloxanthoxyletin (Au)			+	?	?	?	?	?	?	?	?	
Xanthyletin (L)		<i>Choisya arizonica</i> Standl.	-	?	?	?	+	?	?	?	?	[148]
Xanthyletin (L)		<i>Choisya mollis</i> Standl.	-	?	?	?	+	?	?	?	?	[148]
Xanthyletin (L)		<i>Choisya ternata</i> Kunth.	+	?	?	?	?	?	?	?	?	[148]
Xanthoxyletin (L)		<i>Clausena anisata</i>	-	?	?	?	?	?	?	+	?	[148]
Xanthyletin 3-(1,1-dimetylbut-3-		(Willd.) Hook.f. ex Benth.	-	?	?	?	?	?	?	+	?	

[illegible]

		Stschegl.										
Xanthyletin (L)		<i>Haplophyllum multicaule</i>	+	?	?	?	?	?	?	?	?	[144]
Seselin (Ad)		Vved.	+	?	?	?	?	?	?	?	?	[148]
Seselin (Ad)		<i>Haplophyllum schelkovnikovii</i> Grossh.	—	?			+			?	?	[153]
Lomatin isovalerate (Ad)		<i>Haplophyllum tenue</i> Boiss.	+	?	?	?	?	?	?	?	?	[114]
Seselin (Ad)		<i>Haplophyllum thesioides</i> (Fisch. ex DC.) G.Don	—	?			+			?	?	[154]
Luvangetin (L)		<i>Hesperathusa crenulata</i> Roem.	—	?	?	?	?	+	?	?	?	[148]
Xanthyletin (L)		<i>Hortia arborea</i> Engl.	—	?	?	?	?	?	?	+	?	[148]
Xanthyletin 3-(1,1-dimetylbut-3-enyl) (L)			—	?	?	?	?	?	?	+	?	[148]
Xanthoxyletin (L)		<i>Luvunga eleutherandra</i> Dalz.	—	?	?	?	+	?	?	?	?	[148]
Xanthoxyletin (L)		<i>Luvunga scandens</i> (Roxb.)	—	?	?	?	?	?	?	?	+	[148]
Luvangetin (L)		Buch. Ham.	—	?	?	?	?	?	?	?	+	[148]
Xanthoxyletin (L)		<i>Melicope mantellii</i> Buch.	—	?	?	?	?	?	+	?	?	[148]
Xanthoxyletin (L)		<i>Melicope ternata</i> Forst.	—	?	?	?	?	?	+	?	?	[148]
Braylin (Ad)		<i>Pitavia punctata</i> Mol.	—	?	?	?	+	+	?	?	?	[148]
Seselin (Ad)		<i>Phebalium squamulosum</i> Vent.(<i>Phebalium argenteum</i>)	—	?	?	?	?	+	?	?	?	[148]
Avicennin (Au*)		<i>Philotheca coccinea</i> (C.A.Gardner) Paul G.Wilson (<i>Eriostemon coccineus</i> C.A.Gardner)	—	?	?	?	+	?	?	?	?	[148]
Xanthoxyletin (L)		<i>Philotheca obovalis</i> (Cunn.) Paul G.Wilson (<i>Eriostemon obovalis</i> A.Cunn.)	+	?	?	?	?	?	?	?	?	[148]
Xanthoxyletin (L)		<i>Philotheca trachyphylla</i> (F.Muell.) Paul G.Wilson	+	?	?	?	?	?	?	?	?	[148]
Trachyphyllin (L)		(<i>Eriostemon trachyphyllus</i> F.Muell.)										
Poncitrin (L)		<i>Poncirus trifoliata</i> (L.) Raf.	+	?	?	?	?	?	?	?	?	[148]
Seselin (Ad)			+	?	?	?	?	?	?	?	?	
Xanthoxyletin (L)		<i>Ruta graveolens</i> L.	+	?	?	?	?	?	?	?	?	[148]
Xanthyletin 3-(1,1-dimetylbut-3-enyl)-8-(3-metylbut-2-enyl) (L)			+	?	?	?	?	?	?	?	?	
Xanthoxyletin (L)		<i>Ruta microcapra</i> Svent.	—	?	?	?	?	+	?	?	?	[148]
Luvangetin (L)			—	?	?	?	?	+	?	?	?	
Xanthoxyletin (L)		<i>Ruta oreojasme</i> Webb.	+	?	?	?	?	?	?	?	?	[148]
Luvangetin (L)			+	?	?	?	?	?	?	?	?	
Seselin (Ad)			+	?	?	?	?	?	?	?	?	
Xanthoxyletin (L)		<i>Ruta pinnata</i> L. fil.	+	?	?	?	?	?	?	?	?	[148]
Luvangetin (L)			+	?	?	?	?	?	?	?	?	
Seselin (Ad)			+	?	?	?	?	?	?	?	?	
Seselin (Ad)		<i>Scimmia repens</i> Nakai	—	?	?	?	+	?	?	?	?	[148]
Jatamansin (Selinidin,		<i>Xanthogallum purpurascens</i> Lallem.	—	?	?	?	?	?	?	+	?	[113,155]
Xanthogalin (Ad)												
Lomatin (Ad)			+	?	?	?	?	?	?	?	?	[144]
Xanthyletin (L)		<i>Zanthoxylum ailanthoides</i> Siebold & Zucc.	+	?	?	?	?	?	?	?	?	[148]
Xanthyletin (L)		<i>Zanthoxylum americanum</i>	—	?	?	?	?	?	?	+	?	[148]
Xanthoxyletin (L)		Mill.	—	?	?	?	?	?	?	+	?	
Arnottianin		<i>Zanthoxylum arnottianum</i>	+	?	?	?	?	?	?	?	?	[148]

Xanthyletin (L)	Maxim.	+	?	?	?	?	?	?	?	?		
Avicennin (Au)	<i>Zanthoxylum avicennae</i>	–	?	?	?	?	?	?	?	+	?	[148]
Avicennol (Au)	Lam.	–	?	?	?	?	?	?	?	+	?	
Luvangetin (L)	<i>Zanthoxylum asiaticum</i>	+	?	?	?	?	?	?	?	?	?	[148]
Norbraylin (Ad)	(L.) Appelhans, Groppo & J.Wen (<i>Toddalia aculeata</i> Pers.)	+	?	?	?	?	?	?	?	?	?	
Xanthoxyletin (L)	<i>Zanthoxylum dipetalum</i> H.	–	?	?	?	?	?	?	?	+	?	[148]
Dipetaline (Au)	Mann	–	?	?	?	?	?	?	?	+	?	
Avicennol (Au)		–	?	?	?	?	?	?	?	+	?	
Xanthoxyletin (L)	<i>Zanthoxylum elephantiasis</i>	+	?	?	?	?	?	?	?	?	?	[148]
Avicennin (Au)	Macfad.	+	?	?	?	?	?	?	?	?	?	
Avicennol (Au)		+	?	?	?	?	?	?	?	?	?	
c-Avicennol (Au)		+	?	?	?	?	?	?	?	?	?	
Xanthyletin (L)	<i>Zanthoxylum faurei</i> Ohwi	–	?	?	?	?	?	?	?	+	?	[148]
Xanthyletin (L)	<i>Zanthoxylum pluviatile</i> Hartley	–	?	?	?	?	+	?	?	?	?	[148]
<i>Calophyllaceae</i>												
	<i>Mammea siamensis</i> T.	–	?	+	?	+	?	?	?	?	?	[18,67]
Mammea A/AD cyclo D (Ad)	Anders.											
Mammea A/AA cyclo D (Ad)		–	?	?	?	+	?	?	?	?	?	
		–	?	+	?	+	?	?	?	?	?	
Mammea A/AB cyclo D (Ad)												
		–	?	+	?	+	?	?	?	?	?	
8-hydroxy-5-methyl-7-(3-methyl-but-2-enyl)-9-(3-methyl-1-oxobutyl)-4,5-dihydropyrano[4,3,2-de]chromen-2-one (C)												
8-hydroxy-5-methyl-7-(3,7-dimethyl-octa-2,6-dienyl)-9-(3-methyl-1-oxobutyl)-4,5-dihydropyrano[4,3,2-de]chromen-2-one (C)		–	?	?	?	+	?	?	?	?	?	
8-hydroxy-5-methyl-7-(3-methyl-but-2-enyl)-9-(2-methyl-1-oxobutyl)-4,5-dihydropyrano[4,3,2-de]chromen-2-one (C)		–	?	+	?	+	?	?	?	?	?	[18,67]
8-hydroxy-5-methyl-7-(3,7-dimethyl-octa-2,6-dienyl)-9-(2-methyl-1-oxobutyl)-4,5-dihydropyrano[4,3,2-de]chromen-2-one (C)		–	?	?	?	+	?	?	?	?	?	[18]
Mammeasin C (C)		–	?	+	?	?	?	?	?	?	?	[67]
Mammeasin D (C)		–	?	+	?	?	?	?	?	?	?	
Mammea B/AB cyclo D (Ad)		–	?	+	?	?	?	?	?	?	?	
Mammea B/AC cyclo D (Ad)		–	?	+	?	?	?	?	?	?	?	
Mammea E/BC cyclo D (Au)		–	?	+	?	?	?	?	?	?	?	
Mammea E/BD cyclo D (Au)		–	?	+	?	?	?	?	?	?	?	
Mammea E/AA cyclo D (Ad)		–	?	+	?	?	?	?	?	?	?	
Mammea E/BB cyclo D (Au)		–	?	+	?	?	?	?	?	?	?	
Mammea E/BC cyclo D (Au)		–	?	+	?	?	?	?	?	?	?	
<i>Cornaceae</i>												

Decursitin C (Andelin) (L)	<i>Camptotheca</i>	<i>acuminata</i>	–	?	?	?	?	?	?	+	?	[156]
	Decne.											
	<i>Fabaceae</i>											
Phenyl derivative of pyranocoumarin (PDP) (L)	<i>Psoralea corylifolia</i> L.		–	?	?	?	?	?	?	?	+	[21]
	<i>Ranunculaceae</i>											
Luvangetin (L)	<i>Eranthis</i>	<i>longistipitata</i>	–	+	?	?	?	?	–	?	?	[157]
	Regel.											

*Ad –angular 7,8-pyranocoumarin; L – linear 6,7-pyranocoumarin; Au – angular 5,6-pyranocoumarin; C – condensed 4,5-pyranocoumarin.