Supporting Information

Balanophora dioica ethanol extract ameliorates isoproterenol-induced myocardial injury by suppressing fibrosis, inflammation and apoptosis by regulating TLR4/MyD88/NF-κB signaling pathway

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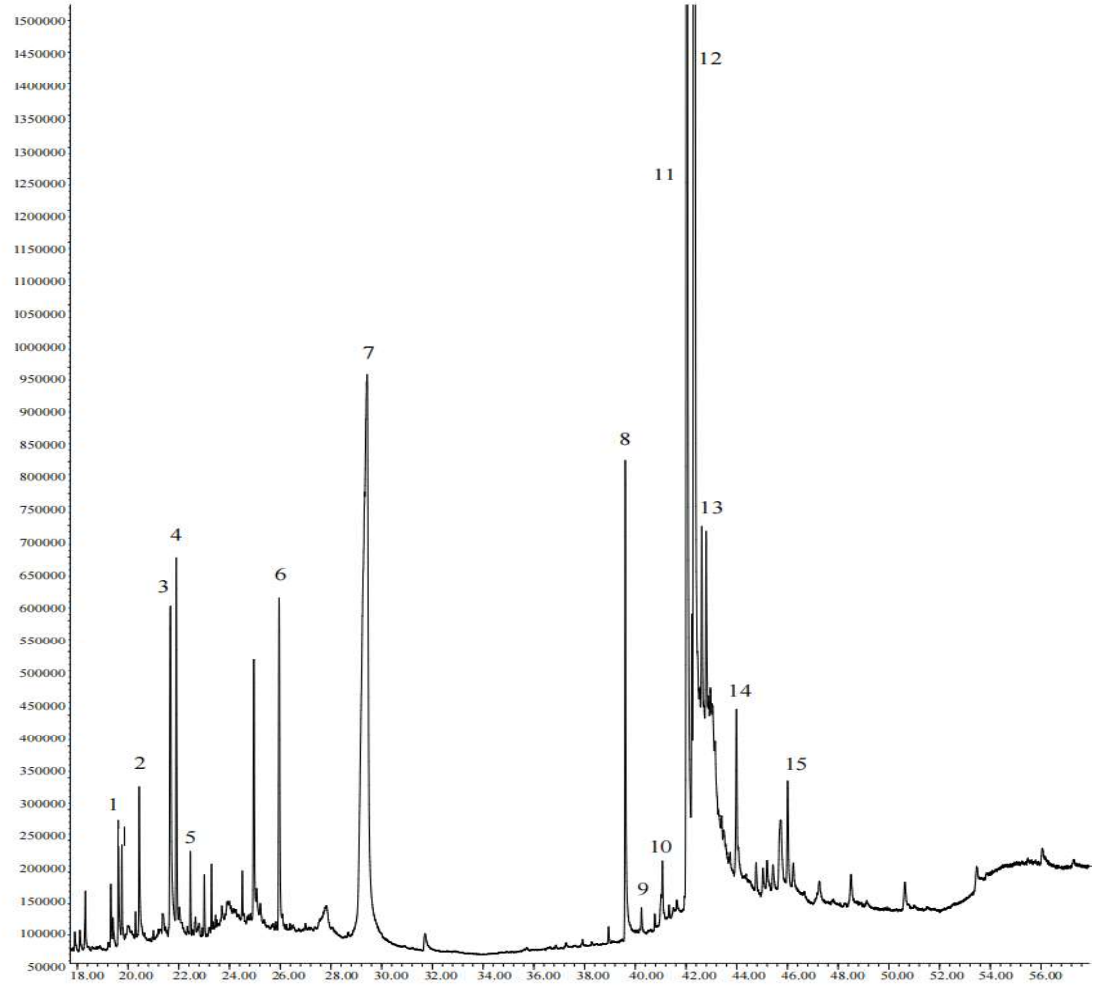
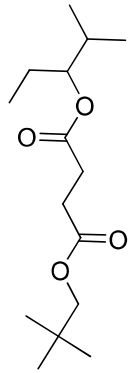
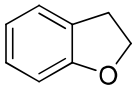
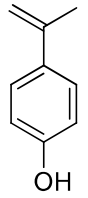
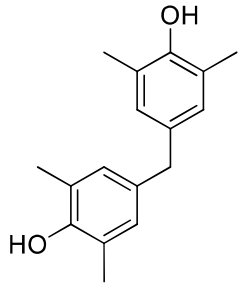
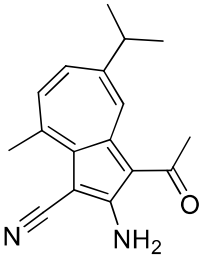
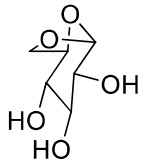
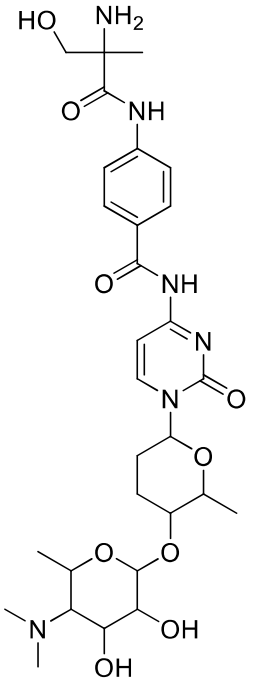
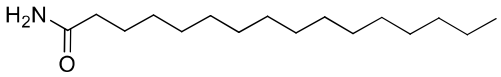
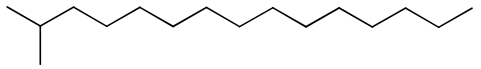


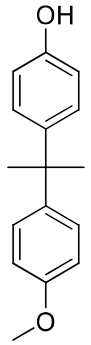
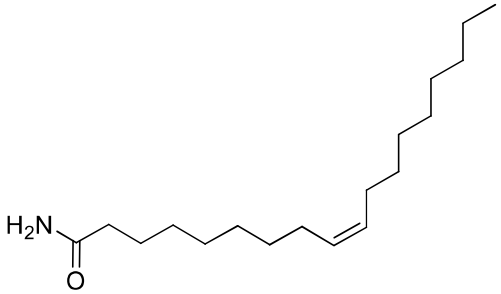
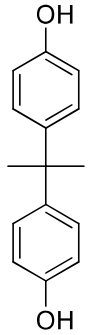
Figure S1. GC-MS spectrum of BDEE.

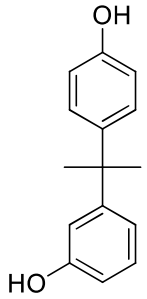
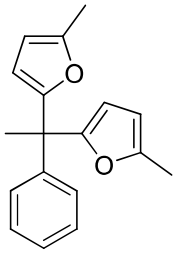
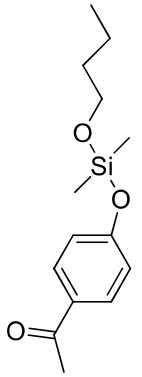
Table S1. Compounds in BDEE identified by GC-MS.

No.	t_R(min)	Compound	Formula	Molecular Weight	matching rate	Molecular Structure
1	19.757	Succinic Acid, 2-Methylpent-3-Yl Neopentyl Ester	$C_{15}H_{28}O_4$	272.38	78	
2	20.444	Benzofuran, 2,3-dihydro-	C_8H_8O	120.15	83	
3	21.686	p-Isopropenylphenol	$C_9H_{10}O$	134.17	93	

4	21.906	Phenol, 4,4'-methylenebis [2,6-dimethyl-	$C_{17}H_{20}O_2$	256.34	72	
5	22.455	1-Acetyl-2-amino-3-cyano-7-isopropyl-4-methylazulene	$C_{17}H_{18}N_2O$	266.34	59	
6	25.978	*β*-D-Glucopyranose, 1,6-anhydro-	$C_6H_{10}O_5$	162.14	94	

7	29.392	Allomycin	$C_{29}H_{42}N_6O_9$	618.7	45	
8	39.605	Hexadecanamide	$C_{16}H_{33}NO$	255.44	98	
9	40.234	Pentadecane, 2-methyl-	$C_{16}H_{34}$	226.44	86	

10	41.084	2-(4'-Hydroxyphenyl)-2-(4'-methoxyphenyl) propane	$C_{16}H_{18}O_2$	242.31	94	
11	42.054	9-Octadecenamide, (Z)-	$C_{18}H_{35}NO$	281.5	99	
12	42.326	4,4'-(1-methylethylidene) bis-Phenol	$C_{15}H_{16}O_2$	228.29	98	

13	42.793	3,4'-Isopropylidenediphenol	$C_{15}H_{16}O_2$	228.29	87	
14	43.983	2,2'-(α-methylbenzylidene) bis (5-methylfuran)	$C_{18}H_{18}O_2$	266.3	86	
15	45.994	Silane, dimethyl(4-acetylphenoxy) butoxy-	$C_{14}H_{22}O_3Si$	266.41	83	

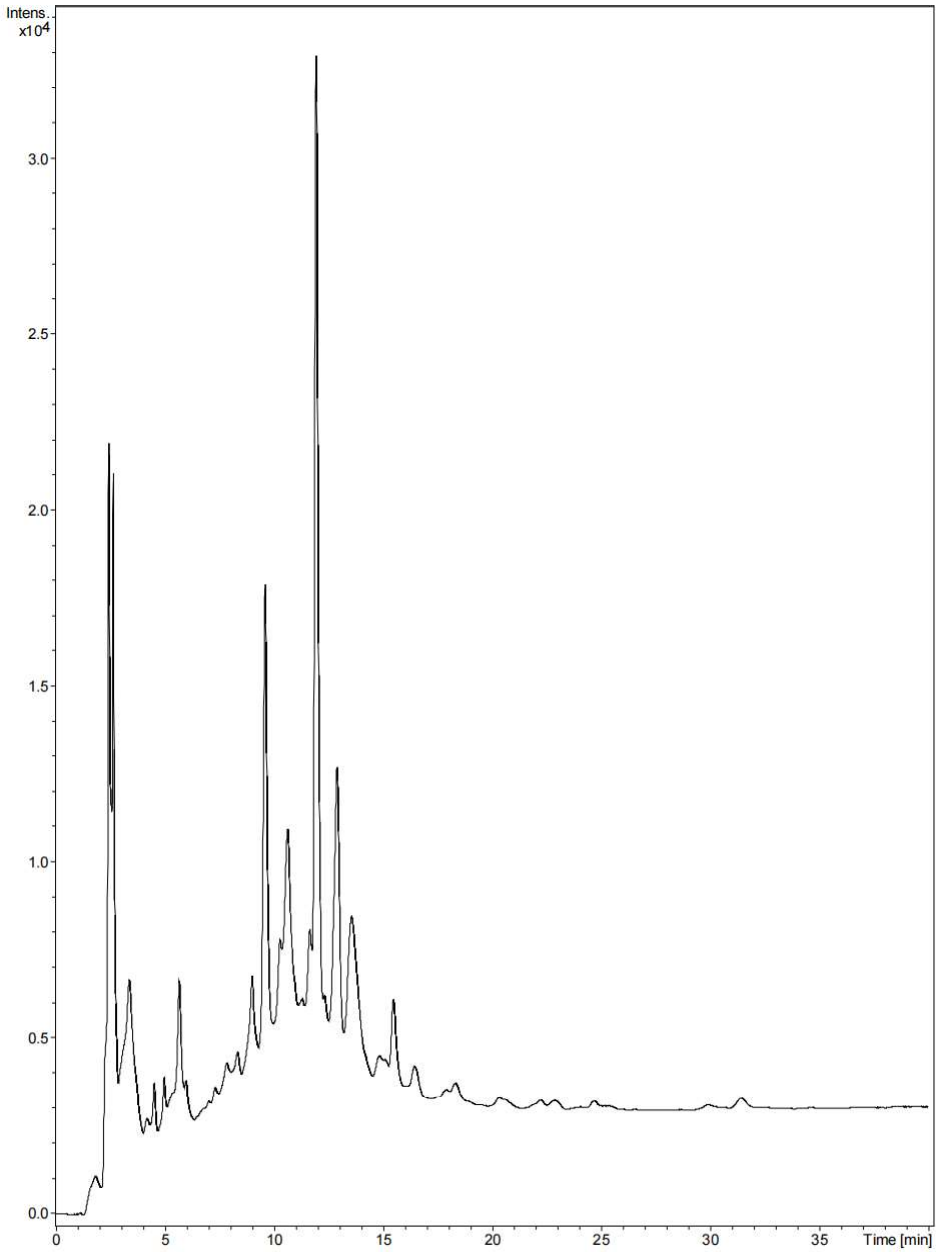


Figure S2. Liquid phase spectrogram of BDEE.

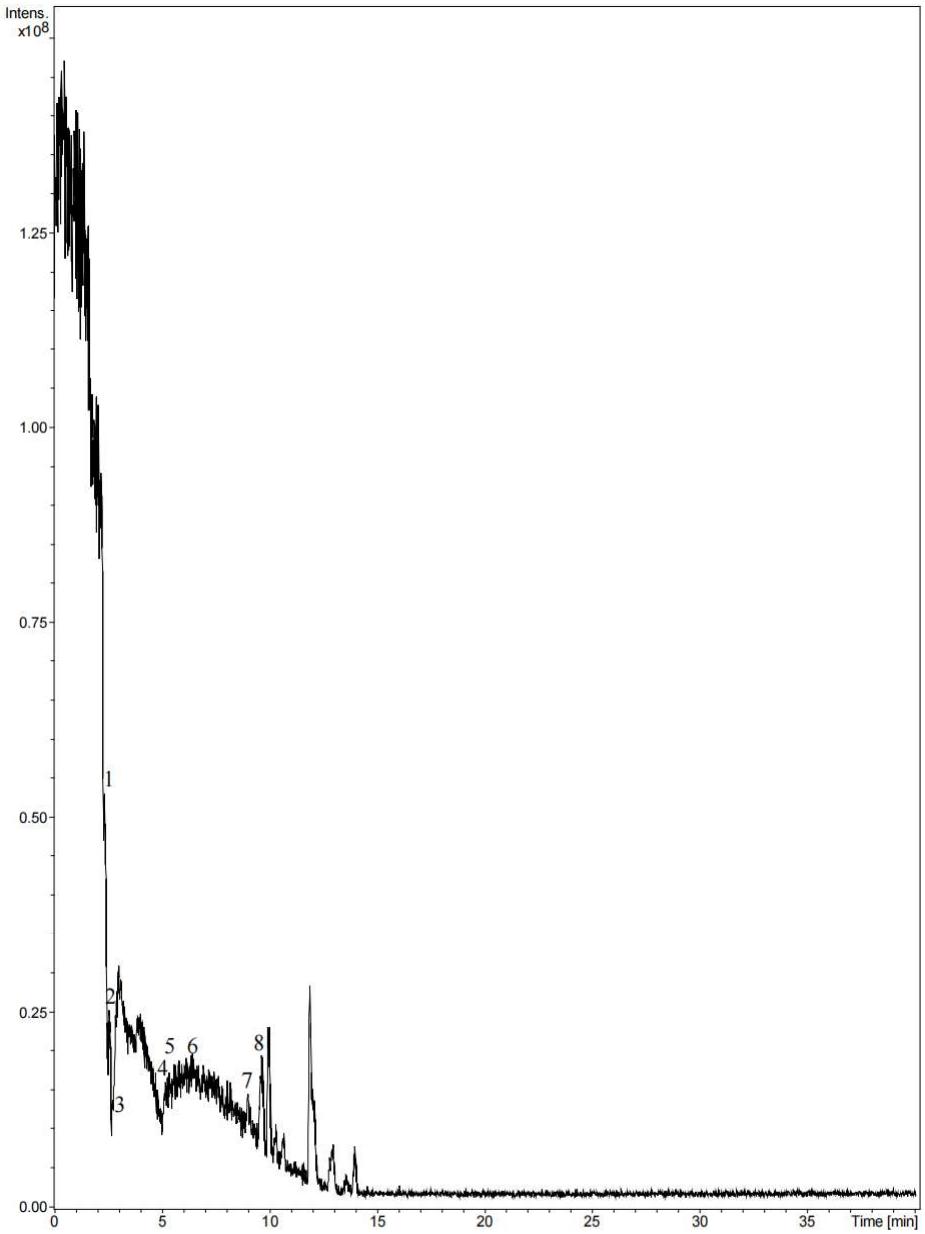
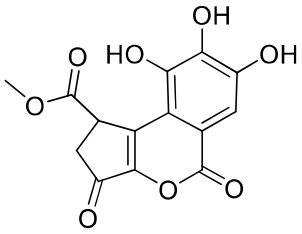
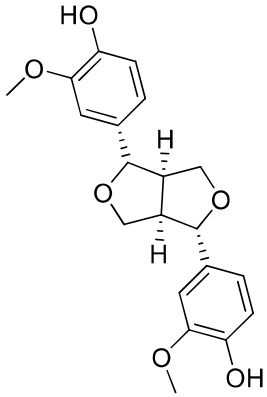
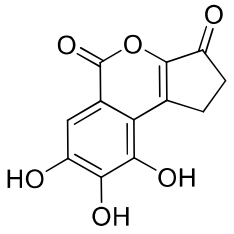
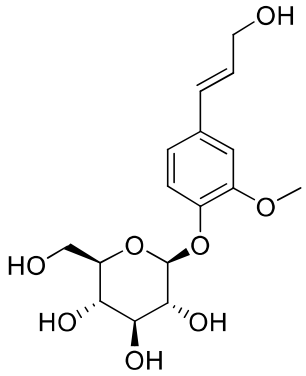
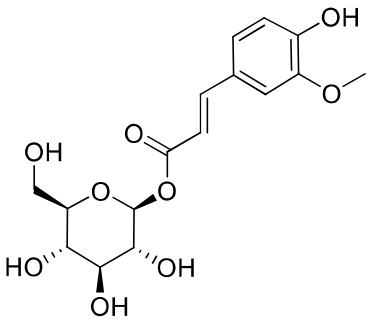
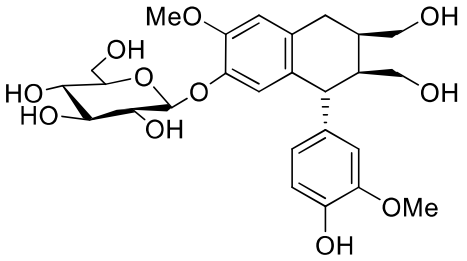
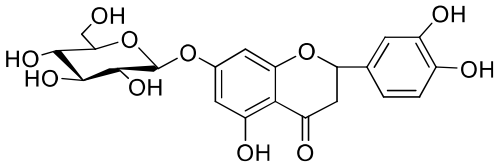
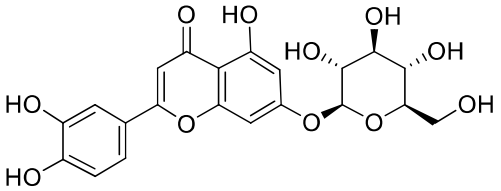


Figure S3. Positive ion mode mass spectrometry of BDEE.

Table S2. The compounds of BDEE detected in positive ion mode.

No.	t_R/min	m/z	Formula	Proposed compounds	Structure	References
1	2.29	329.0273 $[M+Na]^+$	$C_{14}H_{10}O_8$	methyl brevifolincarboxylate		[1] [4] [12]
2	2.66	359.1495 $[M+H]^+$	$C_{20}H_{22}O_6$	pinoresinol		[2] [5] [6]
3	2.72	249.0393 $[M+H]^+$	$C_{12}H_8O_6$	brevifolin		[1] [12]

4	5.08	365.1212 $[M+Na]^+$	$C_{16}H_{22}O_8$	coniferin		[2] [4] [6]
5	5.72	379.1005 $[M+Na]^+$	$C_{16}H_{20}O_9$	4'-hydroxy-3'-methoxycinnamoyl-β-D-glucopyranose		[12]
6	6.29	545.1999 $[M+Na]^+$	$C_{26}H_{34}O_{11}$	(8S, 7′R, 8′R)-isolariciresinol 4-O-β-D-glucopyranoside		[6]

7	9.21	473.1060 $[M+Na]^+$	$C_{21}H_{22}O_{11}$	Naringenin-7-O-*β*-D-glucopyranoside	
8	9.65	449.1700 $[M+H]^+$	$C_{21}H_{20}O_{11}$	luteolin-7-O-*β*-D-glucoside	

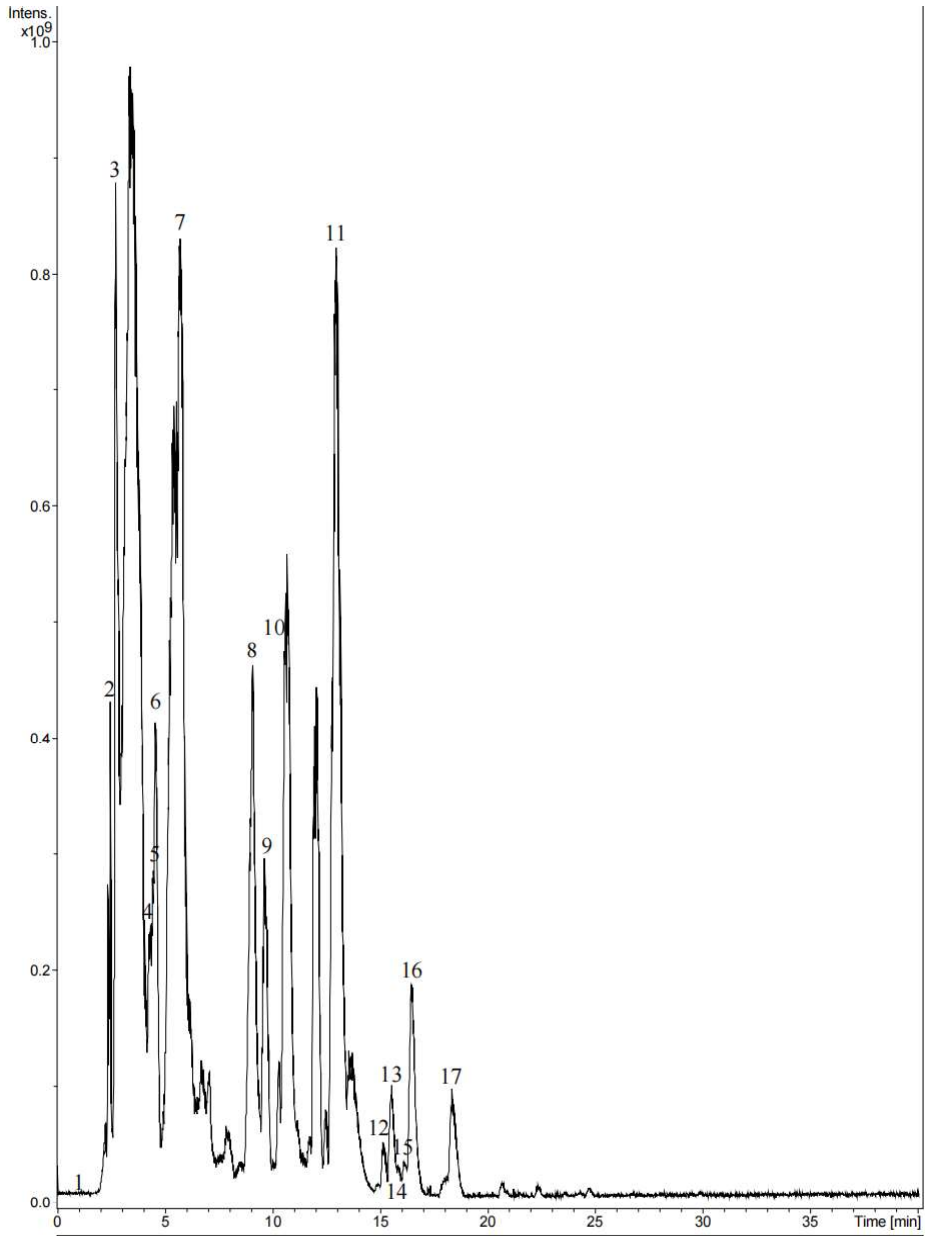
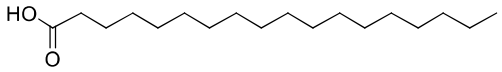
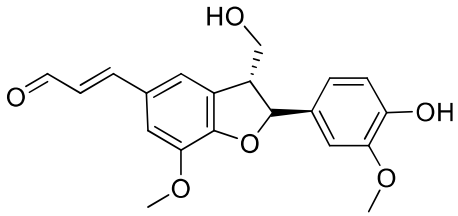
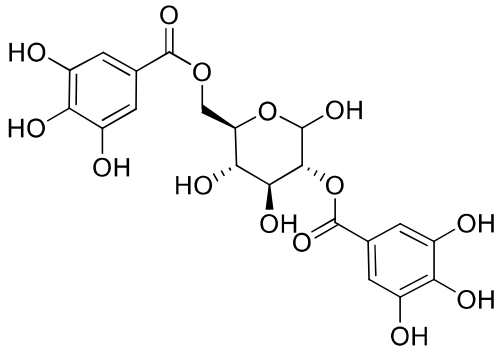
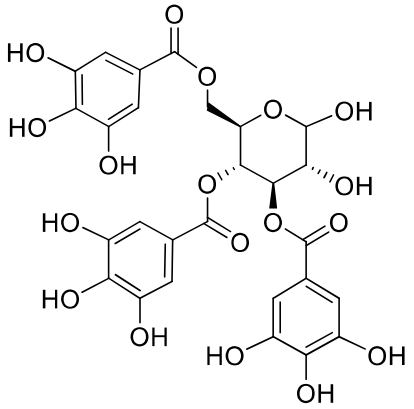
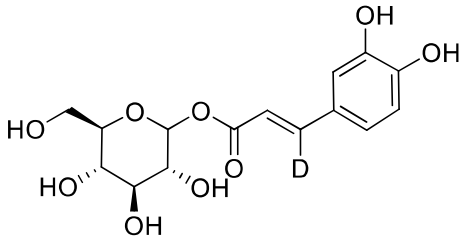
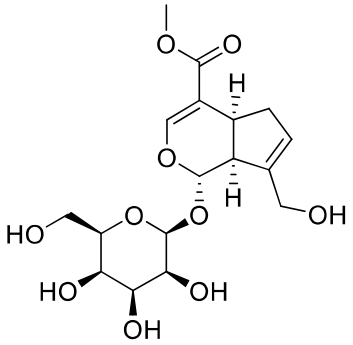
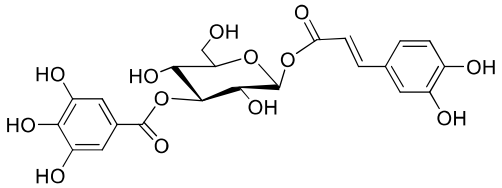
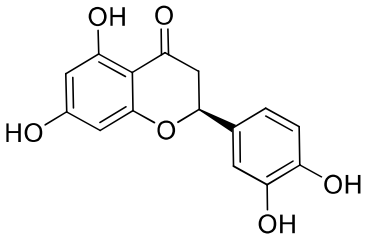
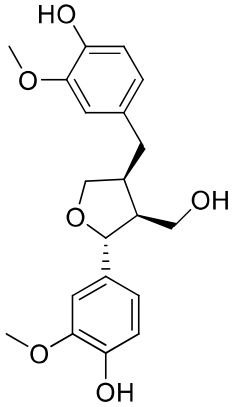


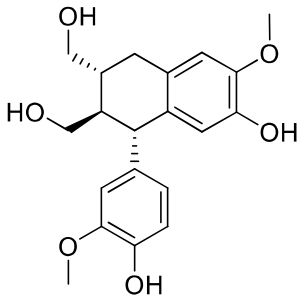
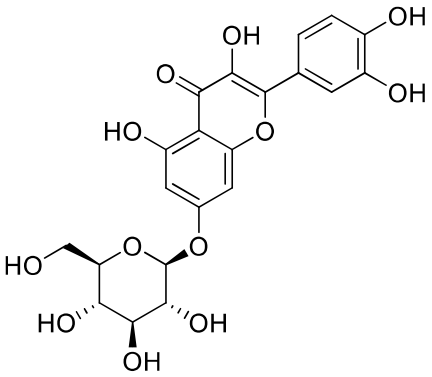
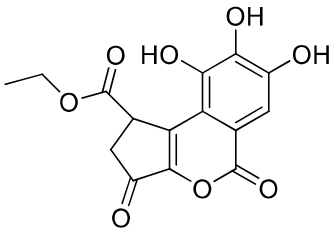
Figure S4. Negative ion mode mass spectrometry of BDEE.

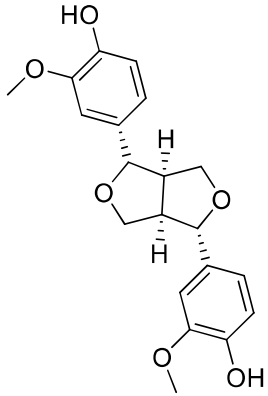
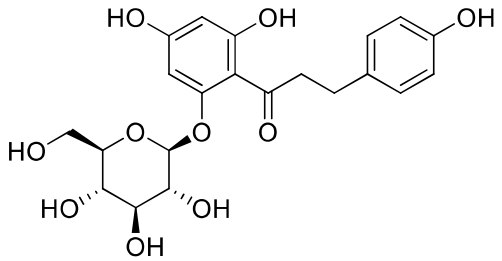
Table S3. The compounds of BDEE detected in negative ion mode.

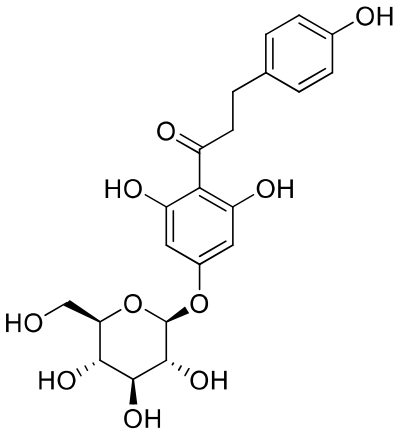
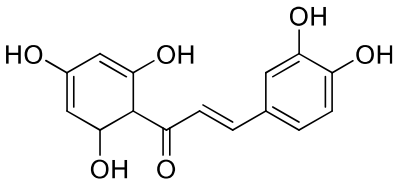
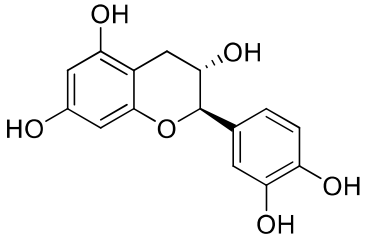
No.	t_R/min	m/z	Formula	Proposed compounds	Structure	References
1	0.81	283.2637 $[M-H]^-$	$C_{18}H_{36}O_2$	stearic acid		[13]
2	2.61	355.1182 $[M-H]^-$	$C_{20}H_{20}O_6$	balanophonin		[12]
3	2.90	483.0775 $[M-H]^-$	$C_{20}H_{20}O_{14}$	2,6-di-O-galloyl-D-glucopyranose		[11] [12]

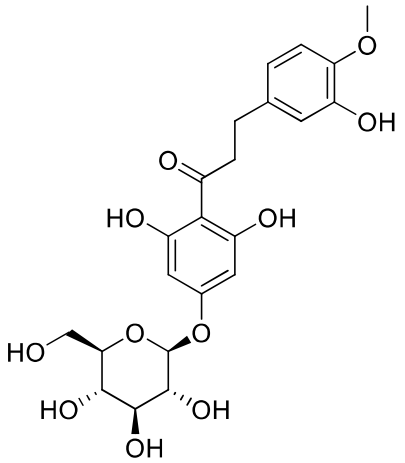
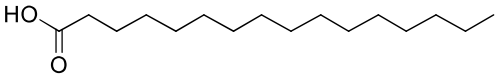
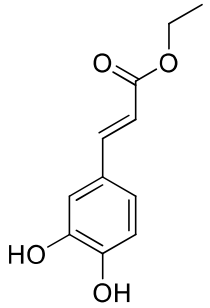
4	4.56	635.0884 $[M-H]^-$	$C_{27}H_{24}O_{18}$	3,4,6-tri-O-galloyl-D-glucopyranose		[11] [12]
5	4.69	342.0934 $[M-H]^-$	$C_{15}H_{17}DO_9$	1-O-(E)-caffeoyl-*β*- D -glucopyranose		[8] [11] [12]
6	4.84	387.1291 $[M-H]^-$	$C_{17}H_{24}O_{10}$	geniposide		[12]

7	5.56	493.0982 $[M-H]^-$	$C_{22}H_{22}O_{13}$	1-O-(E)-caffeoyl-3-O-galloyl-*β*-D-glucopyranose		[9] [11] [12]
8	9.68	287.0556 $[M-H]^-$	$C_{15}H_{12}O_6$	eriodictyol		[4]
9	9.97	359.1495 $[M-H]^-$	$C_{20}H_{24}O_6$	(-)-lariciresinol		[2] [12]

				isolariciresinol		[1] [12]
10	10.49	463.0877 $[M-H]^-$	$C_{21}H_{20}O_{12}$	quercimeritrin		[12]
11	13.25	319.0454 $[M-H]^-$	$C_{15}H_{12}O_8$	ethyl brevifolin carboxylate		[1]

12	15.29	375.1338 $[M-H]^-$	$C_{20}H_{22}O_6$	pinoresinol		[2] [5] [6]
13	15.57	435.1291 $[M-H]^-$	$C_{21}H_{24}O_{10}$	phloridzin		[4] [12]

				trilobatin		[13]
				3,4,2',4',6'-pentahydroxy dihydrochalcon		[13]
14	16.14	289.0712 $[M-H]^-$	$C_{15}H_{14}O_6$	catechin		[4] [12]

15	16.23	465.1397 $[M-H]^-$	$C_{22}H_{26}O_{11}$	hesperetin dihydrochalcone 4'-*β*-D-glucoside		[12]
16	16.73	255.2324 $[M-H]^-$	$C_{16}H_{32}O_2$	palmitic acid		[12]
17	18.47	207.0657 $[M-H]^-$	$C_{11}H_{12}O_4$	balanophorin B		[3] [7] [10] [12]

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