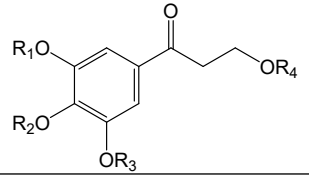
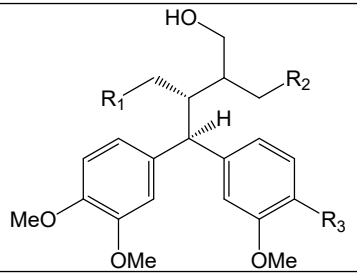
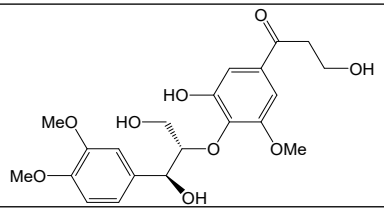
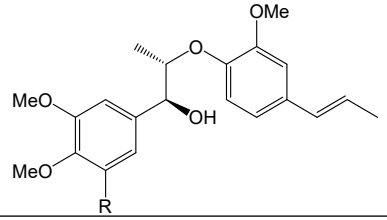
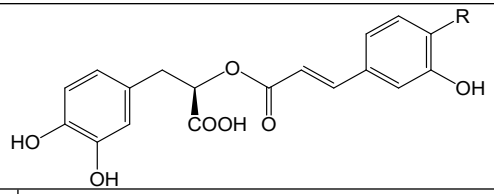
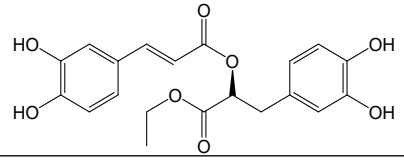
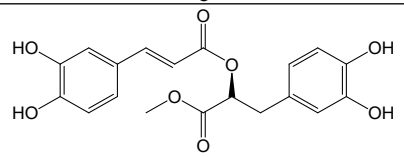
Electronic Supplementary Material (ESI) for RSC Advances.

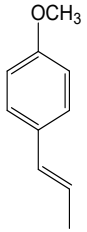
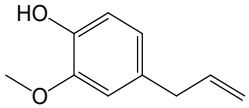
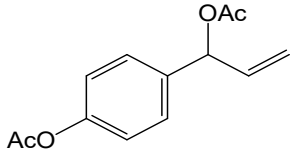
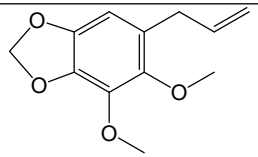
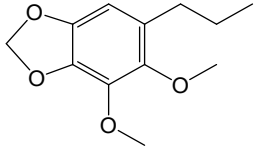
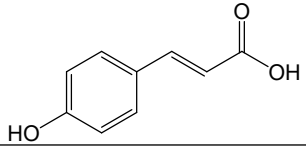
Supplementary Material

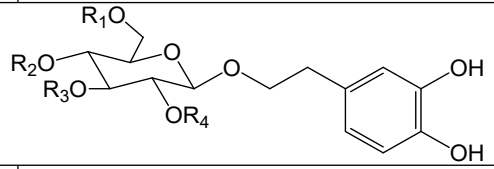
Table S1: A list of plant-derived phenylethanoids and phenylpropanoids with anti-viral and anti-protozoal activities

No.	Compound	Source	Structure	Activity	Ref.
					
1	Feddeiketone A	*Daphne feddei* F. Thymelaeaceae	$R_1 = R_2 = Me$; $R_3 = H$; $R_4 = Ac$	Activity against HIV-1 EC_{50} 3.96 µg/mL CC_{50} 64.5 µg/mL TI 16.3	(Lu et al., 2012)
2	Feddeiketone B	*Daphne feddei* F. Thymelaeaceae	$R_1 = R_2 = Me$; $R_3 = R_4 = H$	Activity against HIV-1 EC_{50} 3.16 µg/mL CC_{50} 96.3 µg/mL TI 30.5	(Lu et al., 2012)
3	Feddeiketone C	*Daphne feddei* F. Thymelaeaceae	$R_1 = Me$; $R_2 = R_3 = CH_2$; $R_4 = H$	Activity against HIV-1 EC_{50} 2.47 µg/mL CC_{50} 43.4 µg/mL TI 17.6	(Lu et al., 2012)
					
4	Feddeiphenol A	*Daphne feddei* F. Thymelaeaceae	$R_1 = R_2 = OH$; $R_3 = OMe$	Activity against HIV-1 EC_{50} 4.08 µg/mL CC_{50} 128.2 µg/mL TI 31.4	(Hu et al., 2011)

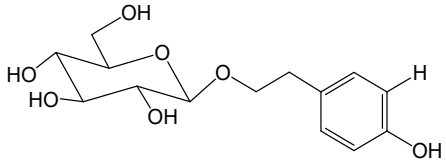
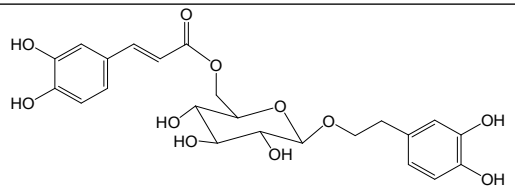
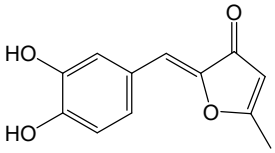
5	Feddeiphenol B	*Daphne feddei* F. Thymelaeaceae	$R_1 = R_2 = R_3 = OH$	Activity against HIV-1 EC_{50} 3.24 µg/mL CC_{50} 132.4 µg/mL TI 40.9	(Hu et al., 2011)
6	Kadangustin J	*Daphne feddei* F. Thymelaeaceae	$R_1 = R_2 = H$; $R_3 = OMe$	Activity against HIV-1 EC_{50} 40.5 µg/ mL CC_{50} 268.2 µg/mL TI 6.6	(Hu et al., 2011)
7	Feddeiphenol C	*Daphne feddei* F. Thymelaeaceae		Activity against HIV-1 EC_{50} 3.58 µg/mL CC_{50} 244.7 µg/mL TI 68.4	(Hu et al., 2011)
					
8	(−)-Surinamensin	*Daphne feddei* F. Thymelaeaceae	R = OMe	Activity against HIV-1 EC_{50} 18.2 µg/mL, CC_{50} 186.5 µg/mL TI 10.3	(Hu et al., 2011)
				Activity against *Plasmodium falciparum*	(Rye and Barker, 2013)
9	Virolin	*Daphne feddei* F. Thymelaeaceae	R = H	Activity against HIV-1 EC_{50} 15.2 µg/mL CC_{50} 225.3 µg/mL TI 14.8	(Hu et al., 2011)
				Activity against *Leishmania donovani* and *Plasmodium falciparum*	(Rye and Barker, 2013)

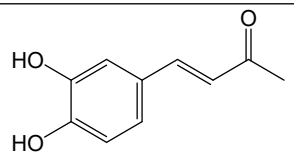
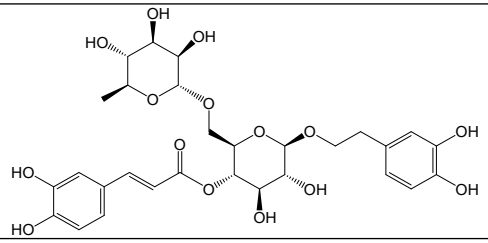
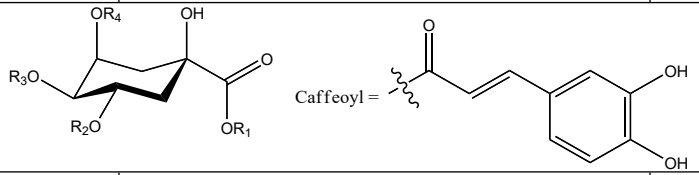
					
10	Rosmarinic acid	*Daphne feddei* (Thymelaeaceae)	R = OH	Activity against HIV-1 EC_{50} 5.82 µg/mL, CC_{50} > 300 µg/mL TI > 51.5	(Hu et al., 2011)
		Salvia prattii F. Lamiaceae		Activity against HBV	(Dang et al., 2016);(Tsukamoto et al., 2018); (Liu et al., 2020)
		Rosmarinus officinalis F. Lamiaceae *Melissa officinalis* F. Lamiaceae		Activity against DENV	(Panchal et al., 2022)
				Activity against *Plasmodium falciparum* IC_{50} 103.59 µg/ml	(Fordjour et al., 2020)
11	Clinopodic acid A	*Daphne feddei* F. Thymelaeaceae	R = H	Activity against HIV-1 EC_{50} 7.47 µg/mL CC_{50} 146.5 µg/mL TI 19.6	(Hu et al., 2011)
12	Ethyl rosmarinate	*Salvia prattii* F. Lamiaceae		Activity against HBV activity	(Dang et al., 2016)
13	Methyl rosmarinate	*Salvia prattii* F. Lamiaceae		Activity against HBV	(Dang et al., 2016)
		Salvia plebeia F. Lamiaceae		Activity against H1N1 neuraminidase IC_{50} 16.65 ± 0.91 µM	(Omrani et al., 2021)

14	*Trans*-anethole	*Illicium verum* F. Illiciaceae *Pimpinella anisum* F. Apiaceae *Foeniculum vulgare* F. Apiaceae		Activity against HSV-1 IC_{50} 20 ± 1.1 µg/mL	(Astani et al., 2011); (Ilijeva and Buchbauer, 2016)
15	Eugenol (4-allyl-2-methoxyphenol)	*Pimenta racemosa* F. Myrtaceae, *Cinnamomum verum* F. Lauraceae & *Syzygium aromaticum* F. Myrtaceae		Growth inhibition of *Trypanosoma cruzi*, *Giardia lamblia*, and *Leishmania donovani*	(Morais et al., 2014)
16	1′-Acetoxychavicol acetate	*Languas galanga* (*Alipinia galanga*) F. Zingiberaceae		Activity against HIV	(Misawa et al., 2008); (Ilijeva and Buchbauer, 2016)
17	Dillapiole	*Piper aduncum* F. Piperaceae		Inhibitory activity against *Leishmania amazonensis* and *L. brasiliensis* IC_{50} 69.3 and 59.4 µM, respectively	(Parise-Filho et al., 2012)
18	Dihydrodillapiole	*Piper aduncum* F. Piperaceae		Inhibitory activity against *Leishmania amazonensis* and *L. braziliensis* IC_{50} 99.9 µM for IC_{50} 90.5 µM for	(Parise-Filho et al., 2012)
19	*p*-Coumaric acid	*Stereospermum acuminatissimum* F. Bignoniaceae		In-vitro and in-vivo activities against *Leishmaniasis amazonensis* with	(Monzote et al., 2016)

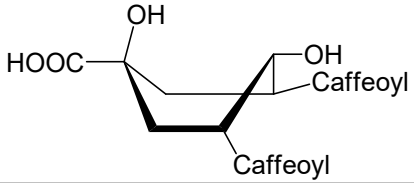
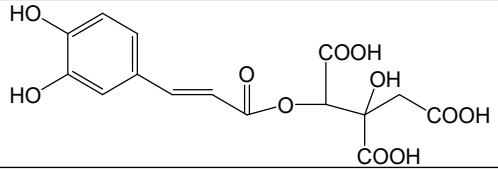
				IC_{50} ± SD 1.5 ± 0.5 - 9.0 ± 1.7 µg/mL-µM/L for amastigotes and $CC5_0$ ± SD 22.5 ± 0.7 - 136.8 ± 0.4 µg/mL-µM/L for macrophages.	
					
20	Verbascoside (Acteoside)	*Markhamia lutea* F. Bignoniaceae	R_1 = H; R_2 = Caf; R_3 = Rha; R_4 = H	Activity against RSV EC_{50} 0.80 µg/mL IC_{50} 76.9 µg/mL	(Kernan et al., 1998);(Perez G., 2003); (Jansi et al., 2021)
		Scrophularia scorodonia Scrophulariaceae		Activity against VSV Inhibition percentage of cytopathic effect of 53.6% at 500 µ g/mL	(Bermejo et al., 2002)
		Tecoma mollis F. Bignoniaceae		In vitro activity against *Leishmania donovani* with percentage of inhibition 83% (IC_{50} 30.08)	(Abdel-Mageed et al., 2012)
21	Isoverbascoside (Isoacteoside)	*Markhamia lutea* F. Bignoniaceae	R_1 = Caf; R_2 = H; R_3 = Rha; R_4 = H	Activity against RSV EC_{50} 0.62 µg/mL IC_{50} 51.4 µg/mL	(Kernan et al., 1998);(Perez G., 2003);(Jansi et al., 2021)
		Tecoma mollis F. Bignoniaceae		In vitro activity against *Leishmania donovani* with percentage of inhibition 78% (IC_{50} > 40)	(Abdel-Mageed et al., 2012)

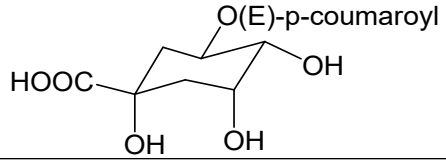
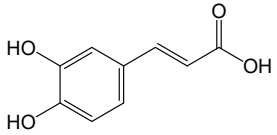
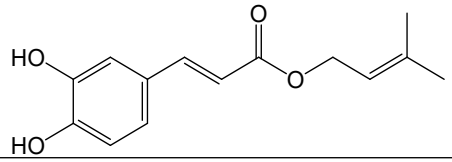
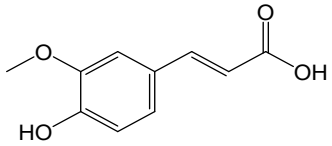
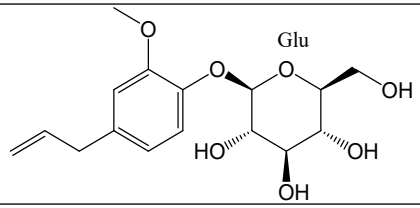
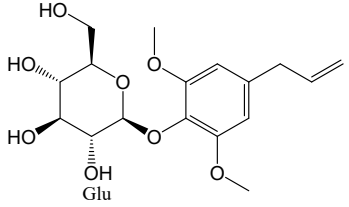
22	Echinacoside	*Echinacea purpurea* F. Asteraceae	R_1 = Glu; R_2 = Caf; R_3 = Rha; R_4 = H	Activity against VSV	
23	Luteoside A	*Markhamia lutea* F. Bignoniaceae	R_1 = Ac; R_2 = Caf; R_3 = Rha; R_4 = Api	Activity against RSV EC_{50} 0.87 µg/mL IC_{50} 77 µg/mL	(Kernan et al., 1998);(Perez G., 2003); (Jansi et al., 2021)
		Tecoma mollis F. Bignoniaceae		Moderate antimalarial activity (45% inhibition) against chloroquine sensitive (D6) clones of *Plasmodium falciparum*	(Abdel-Mageed et al., 2012)
				In vitro activity against *Leishmania donovani* with percentage of inhibition 92% (IC_{50} 15.07)	
24	Luteoside B	*Markhamia lutea* F. Bignoniaceae	R_1 = Caf; R_2 = H; R_3 = Rha; R_4 = Api	Activity against RSV EC_{50} 3.4 µg/mL IC_{50} > 67µg/mL	(Kernan et al., 1998);(Perez G., 2003); (Jansi et al., 2021)
		Tecoma mollis F. Bignoniaceae		High antileishmanial activity against *Leishmania donovani* with percentage of inhibition 92% (IC_{50} 6.71)	(Abdel-Mageed et al., 2012)
25	Luteoside C	*Markhamia lutea* F. Bignoniaceae	R_1 = Fer; R_2 = H; R_3 = Rha; R_4 = Api	Activity against RSV EC_{50} 15.5 µg/mL IC_{50} 189 µg/mL	(Kernan et al., 1998); (Perez G., 2003)

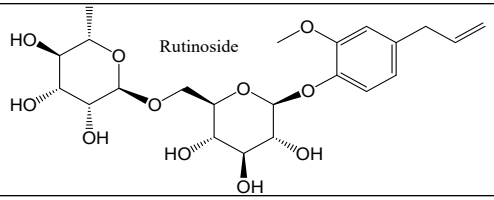
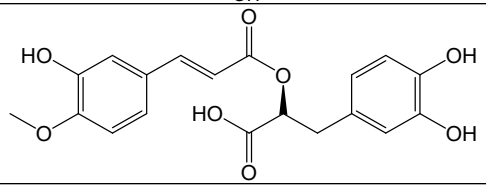
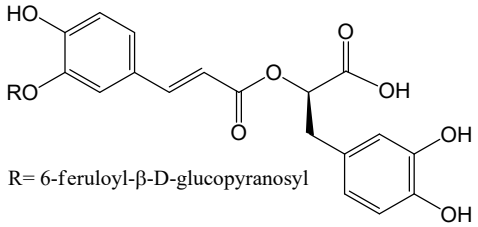
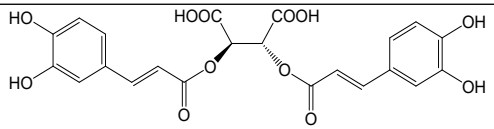
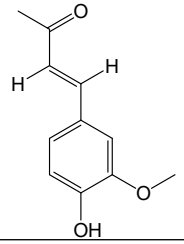
26	Salidroside	*Phillyrea latifolia* F. Oleaceae		Growth inhibitory effect against the promastigotes of Sodium stibogluconate (SSG) sensitive and resistant strains of *L. donovani.* IC_{50} of 15.54 ± 1.53 and 38.16 ± 0.86 µg/mL, respectively.	(Chauhan et al., 2019)
27	Calceolarioside B	*Digitalis purpurea* F. Scrophulariaceae		*In vitro* antileishmanial activity (IC_{50} = 20 µg/mL). Its *in vivo* efficacy was noted at 20 mg/kg body weight when it reduced the hepatic and splenic parasite burden by 79 and 84 %, respectively, in an established model of *L. donovani* Ag83 infected golden hamster. Furthermore, synergistic potentiations of it at 20 mg/kg body weight and SAG at 5 mg/kg body weight showed a significant reduction of hepatic and splenic parasite burden.	(Poddar et al., 2008)
28	Inotilone	*Phellinus linteus* F. Hymenochaetaceae		Inhibited H1N1 neuraminidase activity with IC_{50} value of 29.1 µM and active against IAV/WS/33	(Hwang et al., 2018); (Chen et al., 2019); (Omrani et al., 2021)

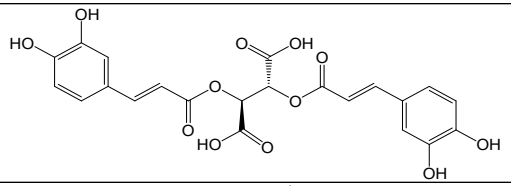
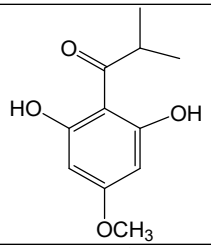
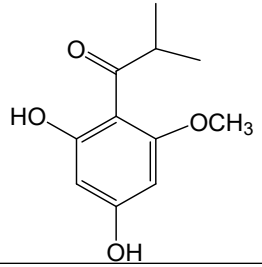
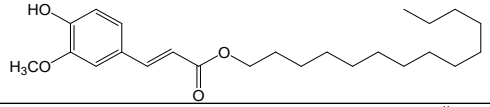
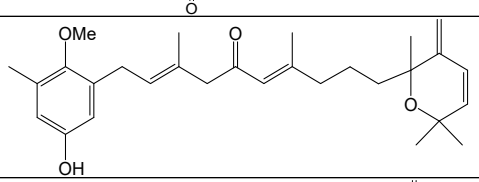
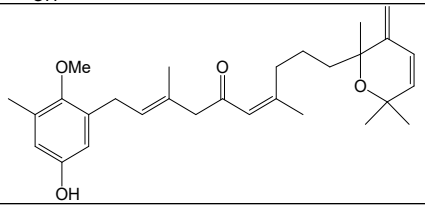
				virus	
29	4-(3,4-Dihydroxyphenyl)-3-buten-2-one	*Phellinus linteus* F. Hymenochaetaceae		Inhibited H1N1 neuraminidase activity with IC_{50} value of 125.6 µM and active against IAV/WS/33 virus	(Hwang et al., 2018); (Chen et al., 2019); (Omrani et al., 2021)
30	Forsythoside A	*Forsythia suspensa* F. Oleaceae		Activity against IAV	(Omrani et al., 2021)
					
31	Chlorogenic acid (3-*O*-Caffeoyl-quinic acid)	*Coffea arabica* F. Rubiaceae	$R_1 = R_3 = R_4 = H$, R_2 = Caffeoyl	Activity against HBV	(Wu, 2016)
				Activity against poliovirus	(Perez G., 2003); (Jansi et al., 2021)
		Artemisia capillaris F. Asteraceae		Activity against HBV DNA replication IC_{50} 5.5 µM (SI >115.0)	(Zhao et al., 2014)
		Lonicera japonica F. Caprifoliaceae		It inhibits the secretion of HBsAg, HBeAg, and the replication of HBV-DNA on Hep G 2.2.15 cells at the concentration of 100 µg/mL.	(Liu et al., 2020)

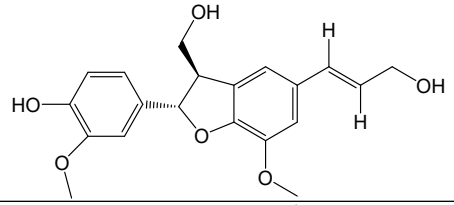
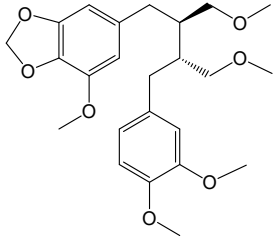
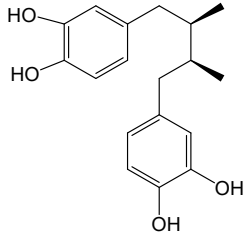
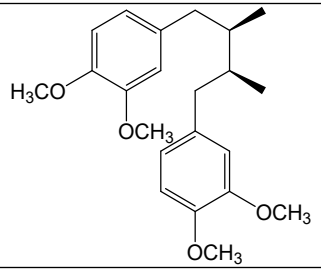
				Moderate activity against *Plasmodium falciparum* IC_{50} 105 µg/ml	(Fordjour et al., 2020)
32	Chlorogenic acid methyl ester	*Artemisia capillaris* F. Asteraceae	R_1 = Me; R_2 = Caffeoyl; R_3 = R_4 = H	Activity against HBV DNA replication IC_{50} 272.3 µM (SI > 6.2)	(Zhao et al., 2014)
33	Cryptochlorogenic acid	*Lonicera japonica* F. Caprifoliaceae	R_1 = R_2 =R_4 = H, R_3 = Caffeoyl	Anti-HBV activity	(Liu et al., 2020)
		Artemisia capillaris F. Asteraceae		Potent activity against HBV DNA replication IC_{50} 13.7 µM (SI > 115.0	
34	Cryptochlorogenic acid methyl ester	*Artemisia capillaris* F. Asteraceae	R_1 = Me; R_2 =R_4 = H; R_3 = Caffeoyl	Activity against HBV DNA replication IC_{50} 175.3 µM (SI > 11.2)	(Zhao et al., 2014)
35	Neochlorogenic acid	*Lonicera japonica* F. Caprifoliaceae	R_1 = R_2 =R_3 = H; R_4 = Caffeoyl	Activity against HBV	(Liu et al., 2020)
		Artemisia capillaris F. Asteraceae		Activity against HBV DNA replication IC_{50} 7.3 µM (SI > 249.9)	(Zhao et al., 2014)
36	Neochlorogenic acid methyl ester	*Artemisia capillaris* F. Asteraceae	R_1 = Me; R_2 =R_3 = H; R_4 = Caffeoyl	Activity against HBV DNA replication IC_{50} 144.7 µM (SI > 20.2)	(Zhao et al., 2014)
37	3,5-Di-*O*-caffeoylquinic acid	*Lactuca indica* F. Asteraceae	R_1 = R_3 = H; R_2 = R_4 = Caffeoyl	Anti-HBV activity	(Wu, 2016)
		Lonicera japonica F. Caprifoliaceae		Activity against the secretions of HBsAg and HBeAg	(Liu et al., 2020)
		Artemisia capillaris F. Asteraceae		Inhibited HBV DNA replication IC_{50} 6.4 µM (SI > 256.1). Activity against the secretions of HBsAg and HBeAg	(Zhao et al., 2014)

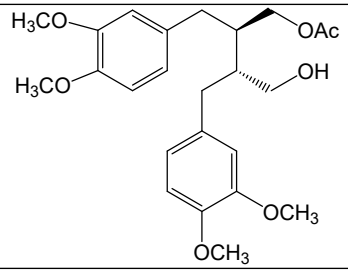
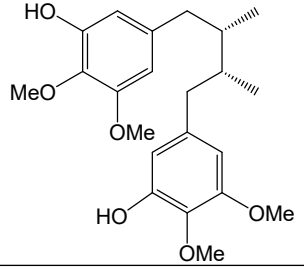
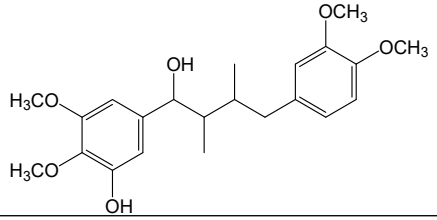
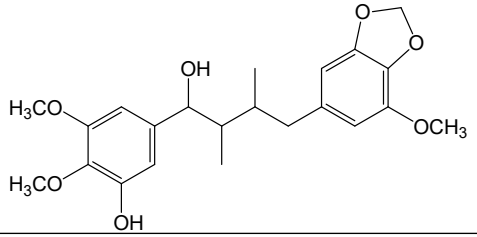
38	4,5-*O*-Dicaffeoylquinic acid	*Lonicera japonica* F. Caprifoliaceae	$R_1 = R_2 = H$; $R_3 = R_4$ = Caffeoyl	Activity against HBV and secretions of HBsAg and HBeAg	(Liu et al., 2020)
		Artemisia capillaris F. Asteraceae		Inhibited HBV DNA replication IC_{50} 9.8 µM (SI > 184.8). Moderate activity against the secretions of HBsAg and HBeAg	(Zhao et al., 2014)
39	3,4-Di-*O*-caffeoylquinic acid	*Lactuca indica* F. Asteraceae	$R_1 = R_4 = H$; $R_2 = R_3$ = Caffeoyl	Anti-HBV activity	(Wu, 2016)
		Lonicera japonica F. Caprifoliaceae		Potent activity against HBV-DNA replication IC_{50} 5:5±0:9-13:7±1:3 µM	(Liu et al., 2020)
		Artemisia capillaris F. Asteraceae		inhibited HBV DNA replication IC_{50} 6.1 µM (SI > 184.8). Activity against the secretions of HBsAg and HBeAg	(Zhao et al., 2014)
40	3,4,5-Tri-*O*-caffeoylquinic acid	*Securidata longipedunculata* F. Polygalaceae	$R_1 = H$; $R_2 = R_3 = R_4$ = Caffeoyl	Anti- HIV activity	(Perez G., 2003)
41	3,5-Di-*O*-caffeoyl-muco-quinic acid	*Lactuca indica* F. Asteraceae		Activity against HBV	(Wu, 2016)
42	2-*O*-Caffeoyl-(+)-allohydroxy-citric acid	*Spondias mombin* F. Anacardiaceae		Activity against Coxsackie and HSV	(Perez G., 2003); (Jansi et al., 2021)

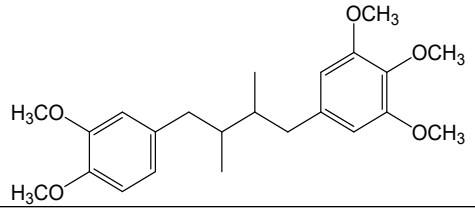
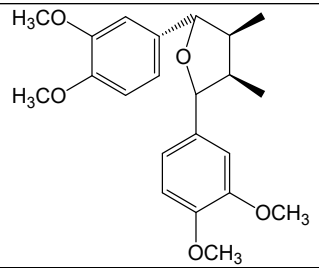
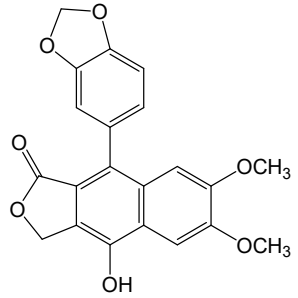
43	5-*O*-(*E*)-*p*-Coumaroylquinic acid	*Lactuca indica* F. Asteraceae		Anti-HBV activity	(Wu, 2016)
44	Caffeic acid	*Coffea arabica* F. Rubiaceae		Activity against HBV	(Wu, 2016)
				Activity against HSV, influenza, vaccinia, and polio viruses	(Jansi et al., 2021); (Perez G., 2003)
		Salvia prattii F. Lamiaceae		Activity against HBV	(Dang et al., 2016)
45	3-Methyl-but-2-enyl caffeate	*Populus nigra* F. Salicaceae		Activity against HSV-1	(Jansi et al., 2021);(Perez G., 2003)
46	Ferulic acid	*Eleutherococcus senticosus* F. Araliaceae; *Populus balsamifera* F. Salicaceae		Moderate activity against *Plasmodium falciparum* IC_{50} 93.36 µg/ml	(Fordjour et al., 2020)
47	Eugenyl-*O*-β-D-glucoside	*Salvia prattii* F. Lamiaceae		Activity against HBV	(Dang et al., 2016)
48	Erigeside II	*Salvia prattii* F. Lamiaceae		Activity against HBV	(Dang et al., 2016)

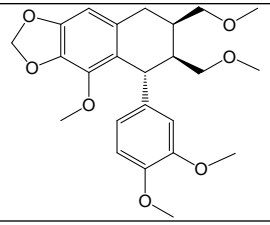
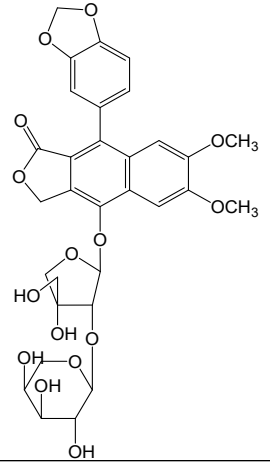
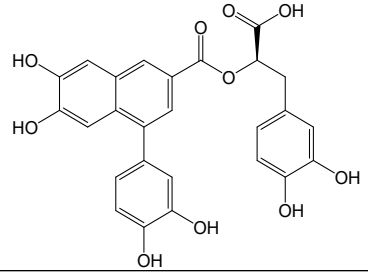
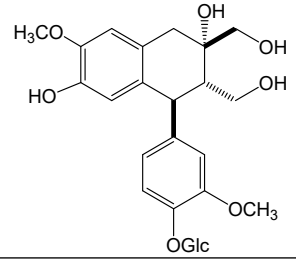
49	Eugenyl-β-rutinoside	*Salvia prattii* F. Lamiaceae		Activity against HBV	(Dang et al., 2016)
50	Shimobashiric acid B	*Salvia prattii* F. Lamiaceae		Activity against HBV	(Dang et al., 2016)
51	3- (6-Feruloyl-β-*D*-glucopyranosyl)-rosmarinic acid	*Salvia prattii* F. Lamiaceae		Activity against HBV	(Dang et al., 2016)
52	L-Chicoric acid (also known as cichoric acid; dicaffeoyltartaric acid)	*Chicorium intybus* F. Asteraceae *Echinacea purpurea* F. Asteraceae		Activity against HIV-1	(Pluymers et al., 2001);(Lee and Scagel, 2013); (Liu et al., 2020)
		Echinacea pallida F. Asteraceae		Anti-VSV activity	(Pan et al., 2003)
53	Dehydrozingerone	*Swertia patens* F. Gentianaceae		Activity against HBV	(Liu et al., 2020)

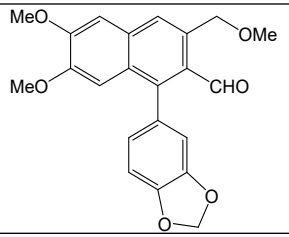
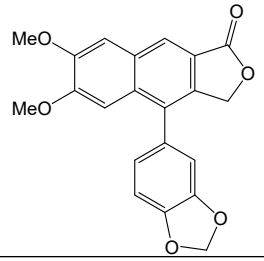
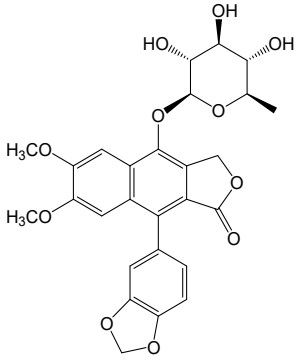
54	Di-*E*-caffeoyl-*meso*-tartaric acid	*Lactuca indica* F. Asteraceae		Activity against HBV	(Kim et al., 2010)
55	2,6-Dihydroxy-methoxyisobutylro-phenone	*Kunzea sinclairii* F. Myrtaceae		Activity against HSV-1 and PV-1	(Bloor, 1992)
56	4,6-Dihydrox-ymethoxyisobutylr ophenone	*Kunzea sinclairii* F. Myrtaceae		Activity against HSV-1 and PV-1	(Bloor, 1992)
57	Tetradecyl ferulate	*Ocimum sanctum* F. Lamiaceae		Anti-HIV-1 activity	(Neelam et al., 2020)
58	Usneoidone E	*Cystoseira usneoides* F. Phaeophyceae		Antiviral activity	(Jansi et al., 2021); (Perez G., 2003)
59	Usneoidone Z	*Cystoseira usneoides* F. Phaeophyceae		Antiviral activity	(Jansi et al., 2021); (Perez G., 2003)

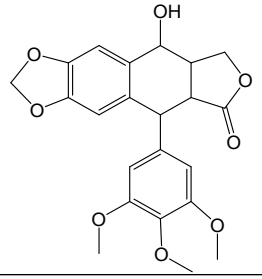
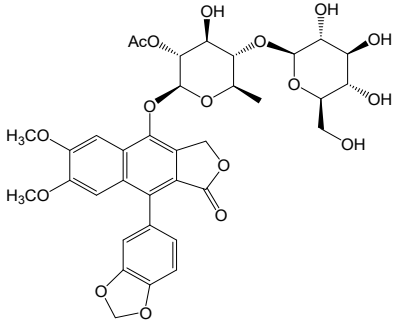
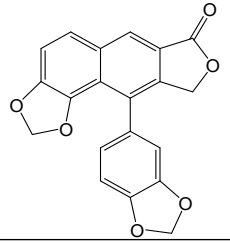
60	(+)-Dehydro-diconiferyl alcohol	*Swertia patens* F. Gentianaceae		Activity against HBV	(Liu et al., 2020)
61	Niranthin	*Phyllanthus niruri* F. Euphorbiaceae		Inhibited HBV antigen secretion in HepG2.2.15 cells IC_{50} 15.6 µmol/L for HBsAg IC_{50} 25.1 µmol/L for HBeAg	(Wu, 2016); (Cui et al., 2020); (Liu et al., 2020)
		Phyllanthus amarus F. Euphorbiaceae		Potent activity against *Leishmania donovani*	(Chowdhury et al., 2012)
62	Nordihydroguaiaretic Acid (NDGA)	*Larrea tridentata* F. Zygophyllaceae		Anti- DENV, HCV, WNV and ZIKV, IAV, suppress the replication of IAV	(Cui et al., 2020); (Xu et al., 2022)
				Active against *Trypanosoma brucei rhodesiense*, *T. cruzi*, *Leishmania donovani* and *Plasmodium falciparum* IC_{50} 4.5, 33.1, 12.0 and 7.7 µM, respectively	(Schmidt et al., 2012)
63	Tetra-*O*-methyl nordihydroguaiaretic acid (TMP)	*Larrea tridentata* F. Zygophyllaceae		It inhibited the infection of WNV and ZIKA, Poxvirus growth and it has antiviral activity against HSV and HIV.	(Cui et al., 2020)

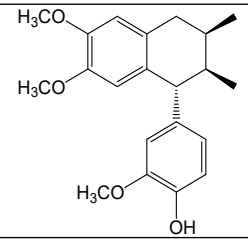
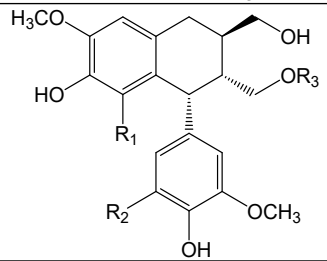
		Schisandra propinqua F. Schisandraceae		Anti-HIV-1 with EC_{50} 14.8 µM	(Xu et al., 2022)
64	Secoisolariciresinol dimethyl ether acetate	*Justicia patentiflora* F. Acanthaceae		Anti-HIV-1 activity with an IC_{50} value of 5.27 µmol/L and SI value of 2.2	(Xu et al., 2019)
65	3,3′-Dihydroxy-4,4′,5,5′-tetramethoxylignan	*Schisandra rubriflora* F. Schisandraceae		Anti- HIV-1IIIB induced syncytium formation with an EC_{50} 5.8 µM TI 4.46	(Xu et al., 2022)
66	Kadangustin H	*Kadsura angustifolia* F. Schisandraceae		Anti-HIV-1 EC_{50} 27.0 µM	(Gao et al., 2008); (Xu et al., 2022)
67	Kadangustin I	*Kadsura angustifolia* F. Schisandraceae		Anti-HIV-1 EC_{50} 21.5 µM	(Gao et al., 2008); (Xu et al., 2022)

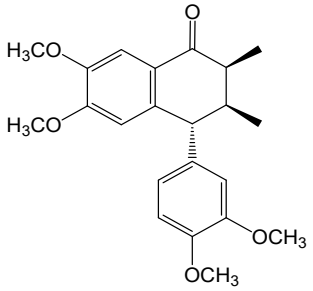
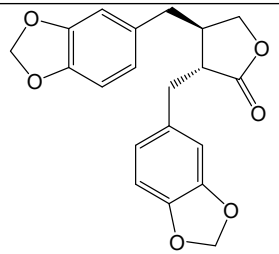
68	Tiegusanin N	*Schisandra propinqua* F. Schisandraceae		Anti-HIV-1 EC_{50} 9.4 μM	(Li et al., 2009); (Xu et al., 2022)
69	Ganschisdandrine	*Schisandra sphenanthera* F. Schisandraceae		Active against HSV-2 and adenovirus (SI = 16.93)	(Song et al., 2013)
70	Diphyllin	*Justicia patentiflora* F. Acanthaceae		Active against VSV, influenza virus and HIV-1 IC_{50} 0.38 μmol/L (SI = 5.3)	(Xu et al., 2019) (Xu et al., 2022)
		Haplophyllum alberti-regelii and *H. perforatum* F. Rutaceae		It has broad-spectrum antiviral activity e.g. it blocked ZIKAV infection in HT1080 cells IC_{50} ~0.06 μM	(Cui et al., 2020)
				Antiviral activity with MIC 0.66 μM against VSV and v-ATPase blocker against inflluenza virus with IC_{50} 0.04–0.49 μM	(Xu et al., 2022)
		Haplophyllum bucharicum F. Rutaceae		In vitro activity against *Leishmania infantum* activity IC_{50} = 14.4 μM	(Di Giorgio et al., 2005)

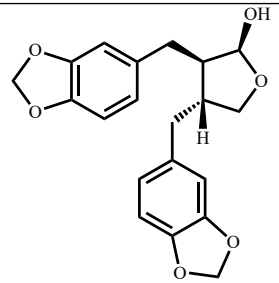
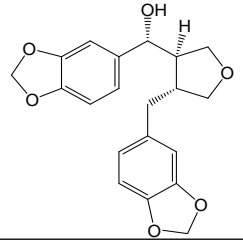
71	Nirtetralin B	*Phyllanthus niruri* F. Euphorbiaceae		Inhibited HBV antigen secretion in HepG2.2.15 cells with IC_{50} 17.4 and 63.9 μmol/L for HBsAg and HBeAg, respectively	(Wu, 2016)
72	Procumbenoside A	*Justicia patentiflora* F. Acanthaceae		Inhibitory activity against HIV-1 with IC_{50} values of 4.95 0.38 μmol/L (SI > 6.2)	(Xu et al., 2019)
73	Globoidnan A	*Eucalyptus globoidea* F. Myrtaceae		Active against HIV integrase EC_{50} 0.64 μM	(Xu et al., 2022)
74	(+)-Cycloolivil-4′-O-β-*D*-glucopyranoside	*Swertia chirayita* F. Gentianaceae		Anti-HBV	(Liu et al., 2020)
				Inhibitory effect on the HBsAg and HBeAg secretion IC_{50} 0.31 ± 0.045 mmol/L (SI = 4.29) and 0.77 ± 0.076 mmol/L	(Wu, 2016)

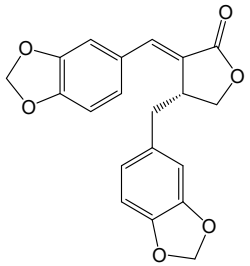
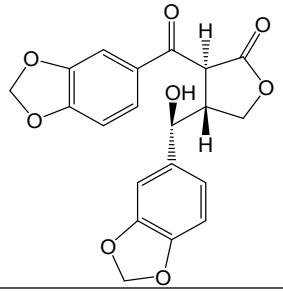
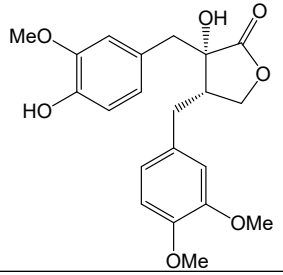
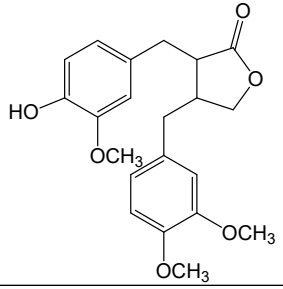
				(SI = 1.75), respectively. Also, it inhibits the replication of HBV DNA IC_{50} 0.29 ± 0.034 mmol/L (SI = 4.66)	
75	Phyllamycin B	*Phyllanthus myrtifolius* F. Euphorbiaceae		Active against HIV-1 EC_{50} 3.5 µM	(Xu et al., 2022)
76	Retrojusticidin B	*Phyllanthus myrtifolius* F. Euphorbiaceae		Active against HIV-1 EC_{50} 5.5 µM	(Xu et al., 2022)
77	6-Deoxyglucose-diphyllin (DGP) also known as Patentiflorin A	*Justicia gendarussa* F. Acanthaceae		Potently inhibits a broad spectrum of HIV-1 strains including some resistant strains EC_{50} 15–37 nM (AZT: 77–95 nM) and mosquito-borne flavivirus such as ZIKV, DENV1, TBEV, WNV, JEV and EBV EC_{50} 0.12–1.0 nM	(Zhang et al., 2017b) ;(Cui et al., 2020); (Xu et al., 2022)

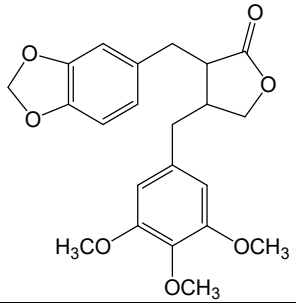
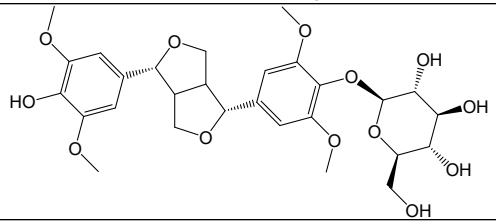
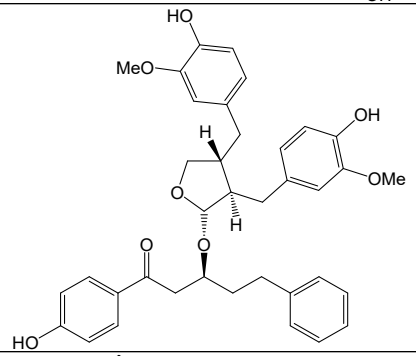
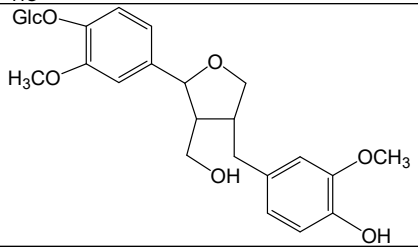
78	Podophyllotoxin	*Podophyllum versipelle* & *P. peltatum* F. Berberidaceae		It is used as topical treatment for venereal warts (*Condyloma acuminatum*), which is caused by *Papilloma* virus.	(Cui et al., 2020)
79	Justiprocumin B	*Justicia gendarussa* F. Acanthaceae		Potent activity against a broad spectrum of HIV strains IC_{50} 15-21 nM (AZT, IC_{50} 77-95 nM). Also, it displayed potent inhibitory activity against the NRTI (nucleoside reverse transcriptase inhibitor)-resistant isolate (HIV-1_{1617-1}) of the analogue (AZT) as well as the NNRTI (non-nucleoside reverse transcriptase inhibitor)-resistant isolate (HIV-1_{N119}) of the analogue (nevaripine)	(Zhang et al., 2017a)
				Drug-resistant HIV-1 EC_{50} 47–495 nM	(Xu et al., 2022)
80	Helioxanthin (HE-145)	*Taiwania cryptomerioides* F. Taxodiaceae		Inhibits the gene expression and replication of HBV in HCC cells	(Wu, 2016)

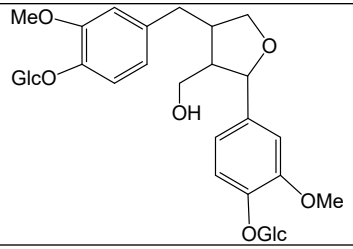
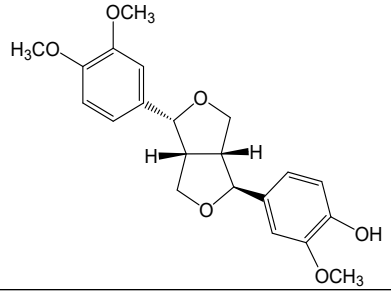
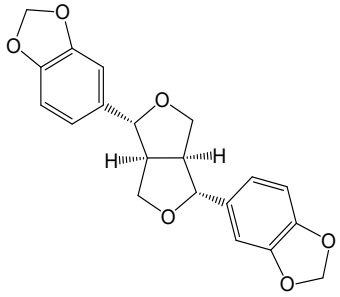
				Active against HBV EC_{50} 1 µM	(Xu et al., 2022)
81	Sinensisin A	*Schisandra propinqua* F. Schisandraceae		Active against HIV-1 EC_{50} 4.5 µM TI 6.7	(Xu et al., 2022)
					
82	(-)-Isolariciresinol	*Streblus asper* F. Moraceae	$R_1 = R_2 = R_3 = H$	Active against HBV IC_{50} 3.67 and 14.67 µM, for HBsAg and HBeAg, respectively with no cytotoxicity	(Li et al., 2012) ;(Wu, 2016) ;(Liu et al., 2020); (Xu et al., 2022)
83	9-β-Xylopyranosyl-(-)-isolariciresinol	*Streblus asper* F. Moraceae	$R_1 = R_2 = H$; $R_3 = Xyl$	Anti-HBsAg EC_{50} 6.98 µM, anti-HBeAg EC_{50} 26.74 µM. It inhibited the expression of HBsAg and HBeAg with EC_{50} values of 6.58 µM for HBsAg (TI >2) and 24.86 µM (TI = 8.06) for HBeAg	(Wu, 2016) (Xu et al., 2022)

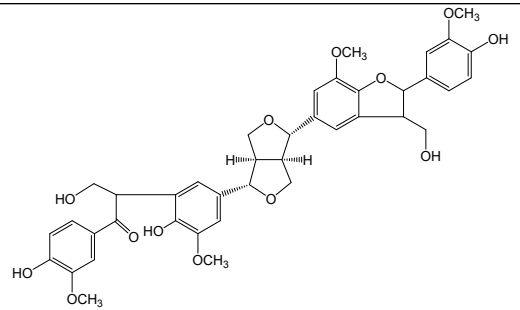
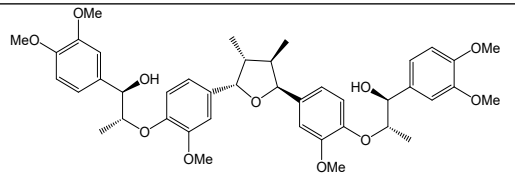
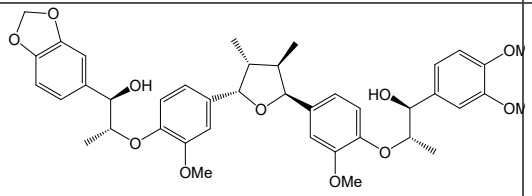
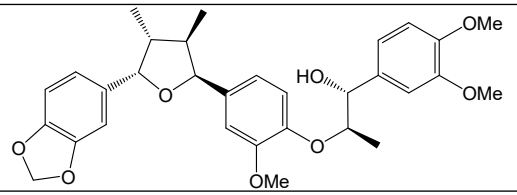
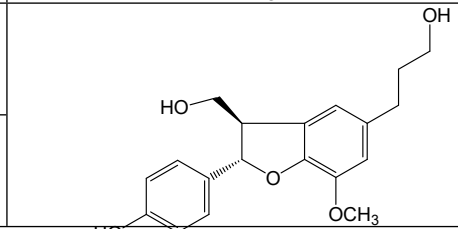
84	5-methoxy-9-β-xylopyranosyl-(-)-isolariciresinol	*Streblus asper* F. Moraceae	R_1 = H; R_2 = OCH_3; R_3 = Xyl	It inhibited the expression of HBsAg and HBeAg with EC_{50} values of 39.56 µM for HBsAg (TI >2) and 61.23 µM (TI = 1.75) for HBeAg	(Xu et al., 2022)
85	(−)-8*epi*-aristoligone (7′R,8S,8′S)-3′,4,4′,5-Tetramethoxy-2,7′-cyclolignan-7-one	*Schisandra sphenanthera* F. Schisandraceae		It has moderate inhibition of HSV-2 and adenovirus	(Song et al., 2013)
		Holostylis reniformis (Aristolochiaceae)		Activity against *Plasmodium falciparum* parasites (isolate BHz 26/86; chloroquine IC_{50} (µM) 0.63 ± 0.20 C_{90} (µM) 2.61 ± 0.06	(Andrade-neto et al., 2007)
86	Hinokinin	*Chamecyparis obtuse* F. Cupressaceae, *Phyllanthus* spp. F. Euphobiaceae, *Aristolochia* F. Aristolochiaceae, *Piper* spp. F. Piperaceae, *Virola* spp. F. Myristicaceae F. Linaceae		Antiviral Anti-HBV, HIV, SARS-virus and (HCMV). Anti-SARS-CoV replication with EC_{50} >10 µM	(Cui et al., 2020) (Xu et al., 2022)
				Activity against *Trypanosoma cruzi*	(Esperandim et al., 2013)
		Piper cubeba F. Piperaceae		In vitro anthelmintic activity against gastrointestinal nematodes in sheep EC_{50} 68.38 µg/mL for ovicidal activity	(Carlis et al., 2019)

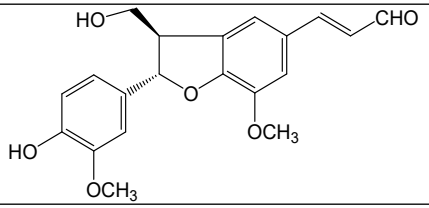
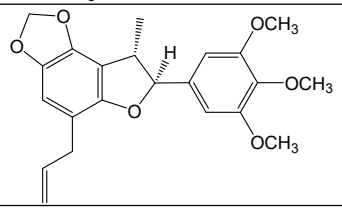
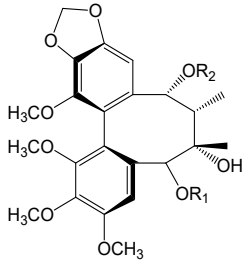
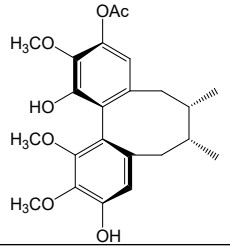
				In the LDT, it inhibited 100% the larval development at all concentrations EC_{50} 0.89 µg/mL for L3 migration inhibition test (LMT)	
87	Cubebin	*Piper cubeba* F. Piperaceae		Activity against *Trypanosoma cruzi*	(Esperandim et al., 2013)
				In vitro anthelmintic activity against gastrointestinal nematodes in sheep EC_{50} 150.00 µg/mL for ovicidal activity EC_{50} of 14.89 µg/ mL for larval development test (LDT) EC_{50} 0.34 µg/mL for L3 migration inhibition test (LMT)	(Carlis et al., 2019)
88	Isocubebin	*Daphne feddei* F. Thymelaeaceae		Activity against HIV-1 EC_{50} 8.27 µg/ mL CC_{50} 173.4 µg/mL TI 21.0	(Hu et al., 2011)

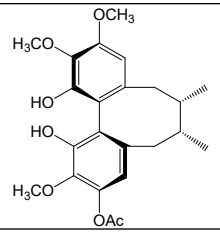
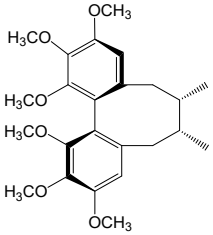
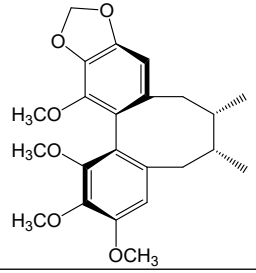
89	Savinin	*Chamaecyparis obtusa* F. Cupressaceae		Active against SARS-CoV replication EC_{50} 1.13 µM	(Xu et al., 2022)
90	Sanguinolignan A	*Piper sanguineispicum* F. Piperaceae		Active against axenic amastigote forms of *Leishmania amazonensis* IC_{50} 36.7±.3.08µg cm^{-3}	(Teponno et al., 2016)
91	Trachelogenin	*Trachelospermum jasminoides* F. Apocynaceae		Anti-HCV EC_{50} 0.87 µM and 0.69 µM for HCVcc model and HCVpp model, respectively	(Xu et al., 2022)
92	Arctigenin (ATG)	*Arctium lappa* F. Asteraceae		It induces the production of interferon and inhibits the expression of protein P17 and P24 of the HIV-1 virus	(Cui et al., 2020)

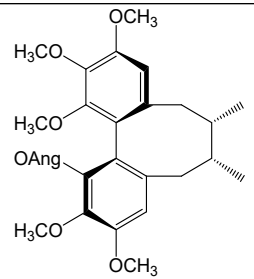
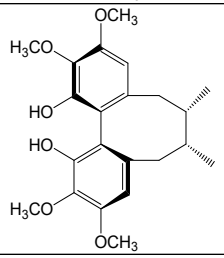
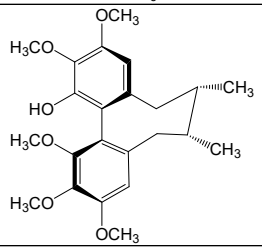
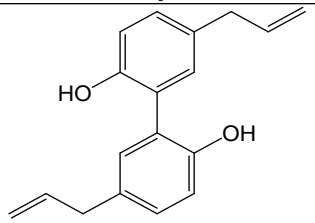
93	Yatein	*Chamaecyparis obtuse* F. Cupressaceae		It inhibits HSV-1 alpha gene expression, including expression of the ICP0 and ICP4 genes, and by arresting HSV-1 DNA synthesis and structural protein expression in HeLa cells	(Cui et al., 2020)
94	Syringaresinol 4″-*O*-*β*-D-glucopyranoside	*Swertia chirayita* F. Gentianaceae		Active against HBV	(Liu et al., 2020)
95	Daphnenin	*Daphne acutiloba* F. Thymelaeceae		Active against HIV EC_{50} 0.64 μM	(Xu et al., 2022)
96	Lariciresinol-4-*O*-β-D-glucopyranoside	*Isatis indigotica* F. Cruciferae		It inhibits the IAV-induced pro-inflammatory response	(Cui et al., 2020)

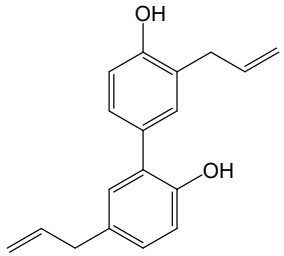
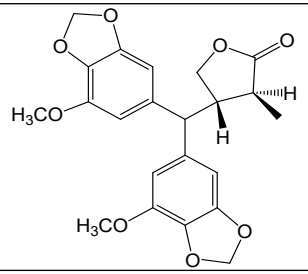
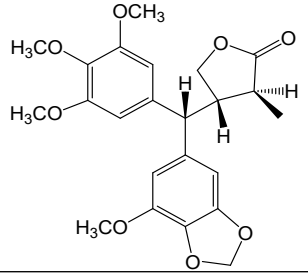
97	Clemastanin B (7S,8R,8′R-(−)-lariciresinol-4,4′ -bis-*O*-β-D-glucopyranoside)	*Isatis indigotica* F. Cruciferae		Active against subtypes of human IAVs (H1N1, H3N2, and influenza B)	(Cui et al., 2020)
98	Phillygenin	*Forsythia suspensa* F. Oleaceae		Good protector against influenza A virus (IAV)	(Cui et al., 2020)
99	Sesamin	*Sesamum indicum* F. Pedaliaceae		It inhibits influenza type A H1N1 infection *via* reduced IL-1β and TNF-α levels leading to inhibition of the cytokine storm and increased IL-2 levels leading to a stimulation of immune response	(Fanhchaksai et al., 2016); (Cui et al., 2020)
		Artemisia gorgonum F. Asteraceae		Active against chloroquine-resistant *Plasmodium falciparum* (FcB1 strain) IC_{50} 3.37 µg/ml	(Ortet et al., 2011)

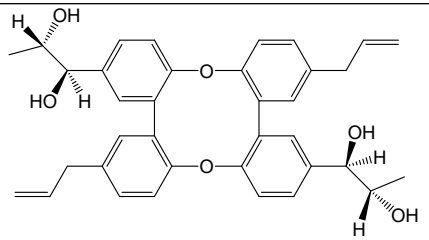
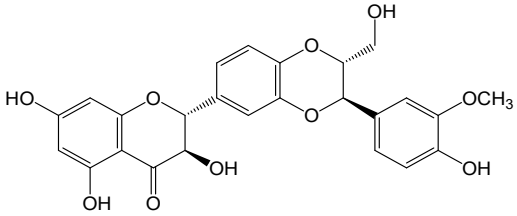
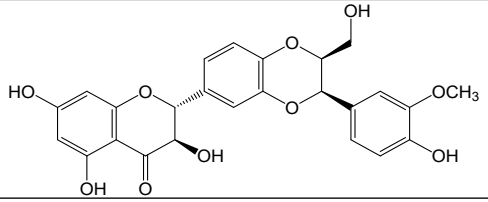
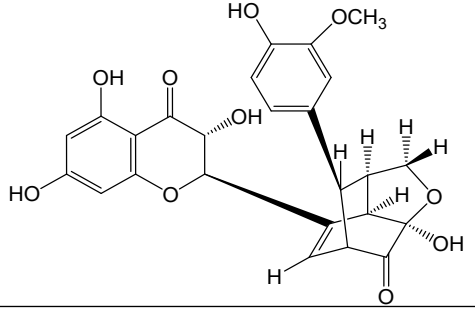
100	Herpetetrone	*Herpetospermum caudigerum* F. Cucurbitaceae		Inhibitory effects on HBsAg secretion with IC_{50} values of 4.89 μmol/L, and on HBeAg secretion with IC_{50} values of 8.02 μmol/L	(Wu, 2016)
101	Manassantin A	*Saururus chinensis* F. Saururaceae		HIV-1-induced cytopathic effects with EC_{100} 1.0 μM. It inhibits EBV lytic DNA replication in P3HR-1 cells with EC_{50} 3.42 μM	(Xu et al., 2022)
102	Manassantin B	*Saururus chinensis* F. Saururaceae		HIV-1-induced cytopathic effects with EC_{100} 1.0 μM. It inhibits EBV lytic DNA replication in P3HR-1 cells with EC_{50} 1.72 μM	(Xu et al., 2022)
103	Saucerneol D	*Saururus chinensis* F. Saururaceae		It inhibits EBV lytic DNA replication in P3HR-1 cells with EC_{50} 1.09 μM	(Xu et al., 2022)
104	Vladinol F	*Daphne feddei* F. Thymelaeaceae		Anti-HIV-1 activity with EC_{50} 3.28 μg/mL, CC_{50} 102.5 μg/mL and TI 31.3	(Hu et al., 2011)
		Schisandra micrantha F. Schisandraceae		Anti-HIV-1 activity with an EC_{50} value of 9.75 μM and TI value of 27.45	(Xu et al., 2022)

		Drybalanops oblongifolia F. Dipterocarpaceae		Active against *Plasmodium falciparum* 3D7 IC_{50} 3.51 µg/mL.	(Indriani et al., 2021)
105	Balaphonin	*Schisandra lancifolia* F. Schisandraceae		Anti-HIV-1 effects with an EC_{50} value of 8.43 µM and TI value of 4.3	(Xu et al., 2022)
106	Ococymosin	*Ocotea cymosa* F. Lauraceae		Antiparasitic activity against the Dd2 strain of *Plasmodium falciparum* IC_{50} 0.45 µM	(Teponno et al., 2016)
107	Tiegusanin G	*Schisandra propinqua* F. Schisandraceae	 R_1 = Ang, R_2 = t-Cin	Anti-HIV-1 activity with an EC_{50} value of 8 µM and TI of more than 25	(Teponno et al., 2016)
108	Neglectalignan A	*Schisandra neglecta* F. Schisandraceae		It showed moderate anti-HIV-1 activities with TI value above 62	(Teponno et al., 2016)

109	Neglectalignan B	*Schisandra neglecta* F. Schisandraceae		It showed moderate anti-HIV-1 activity with TI value above 23	(Teponno et al., 2016)
110	Deoxyschizandrin (Schisandrin A)	*Schisandra Chinensis* F. Schisandraceae		It can inhibit the replication of DENV in a concentration- and time-dependent manner, with 50% (EC_{50}) value of 28.1 ± 0.42 μM against DENV serotype type 2 without significant cytotoxicity	(Yu et al., 2017)
		Schisandra wilsoniana F. Schisandraceae		Anti-HBV effects. It inhibited the RT-associated RDDP activity in the micromolar range IC_{50} ~30 μM	(Wu, 2016); (Xu et al., 2015)
111	Schisandrin B	*Schisandra Chinensis* F. Schisandraceae		It inhibited the HIV-1 RT-associated DNA polymerase activity. It inhibited the RT-associated RDDP activity in the micromolar range (IC_{50} ~30 μM	(Xu et al., 2015)

112	Schinlignan G	*Schisandra chinensis* F. Schisandraceae		Active against HBV DNA replication IC_{50} 5 µg/mL	(Teponno et al., 2016)
113	Rubrifloralignan A	*Schisandra rubriflora* F. Schisandraceae		Active against HIV EC_{50} 11.3 µM TI 5.7	(Chen et al., 2006); (Cui et al., 2020)
114	Schisanhenol	*Schisandra rubriflora* F. Schisandraceae		Active against HIV EC_{50} 5.7 µM TI 7.4	(Chen et al., 2006)
115	Magnolol	*Magnolia officinalis* F. Magnoliaceae		Inhibitor of Epstein-Barr virus early antigen (EBV-EA)	(Perez G., 2003); (Jansi et al., 2021)
		Streblus asper F. Moraceae		Active against HBV IC_{50} 2.03 and 3.76 µM, for HBsAg and HBeAg with no cytotoxicity. It inhibits the replication of HBV DNA IC_{50} 8.67 µM	(Li et al., 2012);(Wu, 2016); (Liu et al., 2020)
		Magnolia grandiflora F.		Antiplasmodial activity IC_{50} 3.4 ± 0.08 μM	(Latif et al., 2017)

		Magnoliaceae			
116	Honokiol	*Magnolia officinalis* F. Magnoliaceae		Inhibitor of Epstein-Barr virus early antigen (EBV-EA)	(Perez G., 2003); (Jansi et al., 2021)
		Streblus asper F. Moraceae		Active against HBV IC_{50} 3.14 µmol/L (SI = 21.47) and 4.74 µmol/L (SI = 14.22) for HBsAg and HbeAg, respectively	(Wu, 2016); (Liu et al., 2020)
		Magnolia grandiflora F. Magnoliaceae		Activity against *Plasmodium falciparum* IC_{50} 16.5 ± 0.2 µM	(Latif et al., 2017)
117	Peperomin A	*Peperomia pellucida* F. Piperaceae		It has inhibitory effects on HIV-1 IIIB growth in C8166 cells EC_{50} ~5 µM	(Cui et al., 2020)
118	Peperomin B	*Peperomia pellucida* F. Piperaceae		It has inhibitory effect on HIV-1 IIIB growth in C8166 cells, EC_{50} ~5 µM	(Cui et al., 2020)

119	(7′R,8′S,7″R,8″S)-*erythro*-Streblusligna nol G	*Streblus asper* F. Moraceae		It exhibited significant anti-HBV activity in the secretion of HBsAg and HBeAg IC_{50} 1.58 and 3.24 μM, respectively. Also, it showed significant anti-HBV activity to inhibit the replication of HBV DNA IC_{50} 9.02 μM	(Li et al., 2012); (Cui et al., 2020)
120	Silybin A	*Silybum marianum* F. Asteraceae		Anti-HCV and other viruses; it inhibited the replication of IAV and other viruses, such as DENV, Chikungunya virus, Mayaro virus, HIV, and HBV	(Cui et al., 2020); (Antika and Dewi, 2021)
121	Silybin B	*Silybum marianum* F. Asteraceae		Antiviral activity against HCV, HBV, DENV, enterovirus family, Mayaro virus, and chikungunya virus	(Antika and Dewi, 2021)
122	Silydianin	*Silybum marianum* F. Asteraceae		Antiviral activity against HCV, HBV, DENV, enterovirus family, Mayaro virus, and chikungunya virus	(Antika and Dewi, 2021)

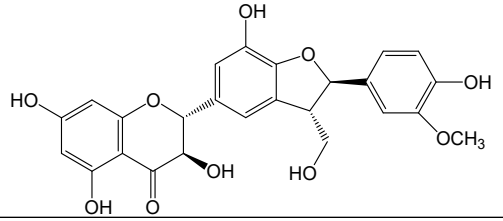
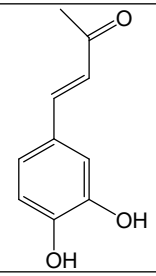
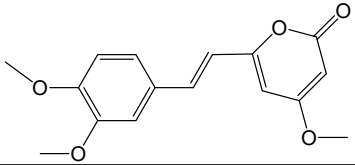
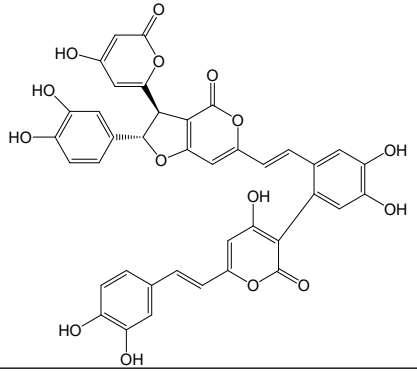
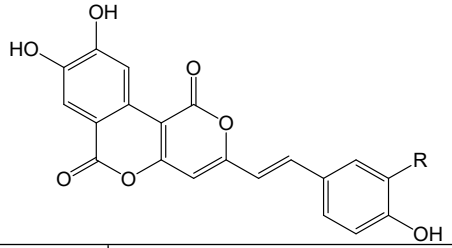
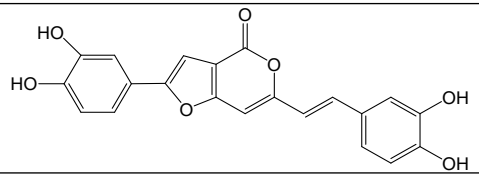
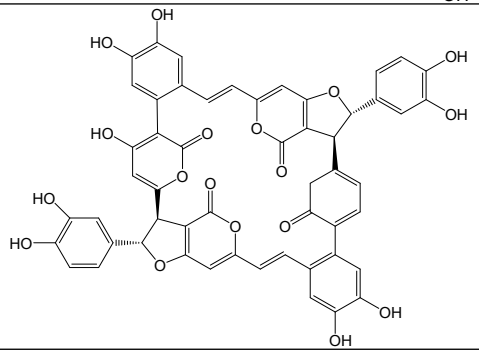
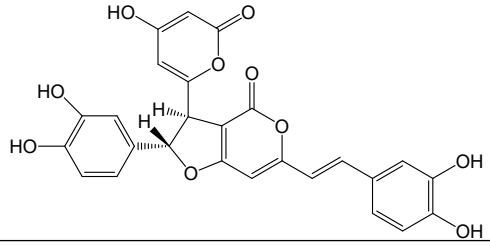
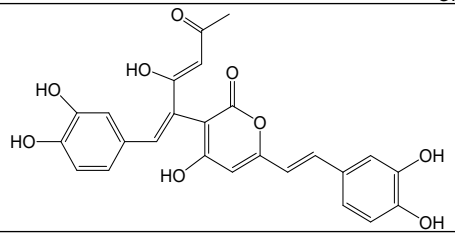
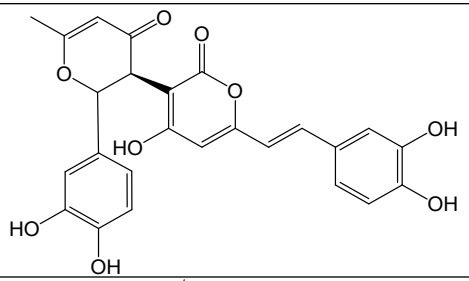
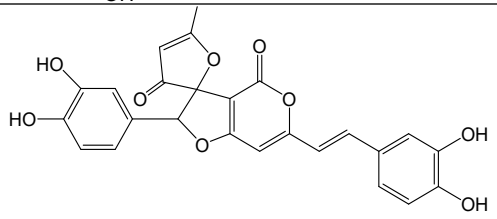
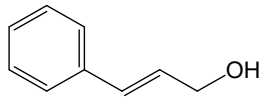
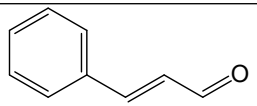
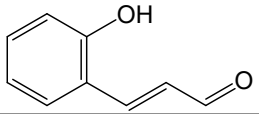
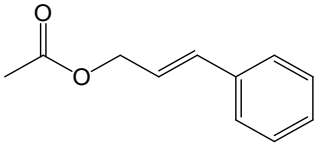
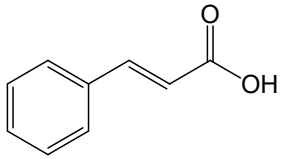
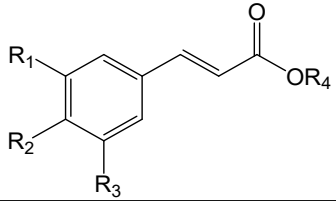
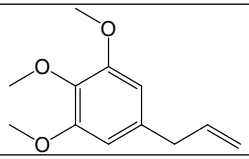
123	Silychristin	*Silybum marianum* F. Asteraceae		Antiviral activity against HCV, HBV, DENV, enterovirus family, Mayaro virus, and chikungunya virus	(Antika and Dewi, 2021)

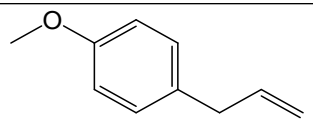
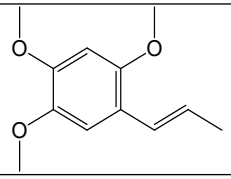
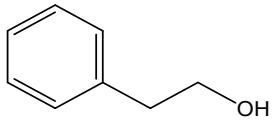
Table S2: A list of plant-derived phenylethanoids and phenylpropanoids with other biological activities

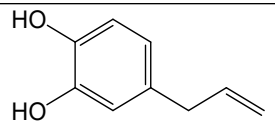
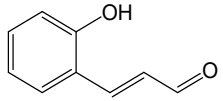
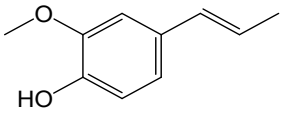
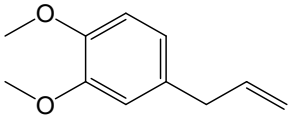
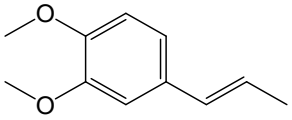
No.	Compound	Source	Structure	Biological activity	Ref.
1	3,4-Dihydroxybenzal-acetone	*Phellinus linteus* F. Hymenochaetaceae		Anti-inflammatory, antitumor	(Chen et al., 2019)
2	Hispidin	*Phellinus linteus* F. Hymenochaetaceae		Antioxidative, antitumor, antidiabetic, cardioprotective	(Chen et al., 2019)
3	Phellinstatin	*Phellinus linteus* F. Hymenochaetaceae		Antimicrobial	(Chen et al., 2019)
					
4	Meshimakobnol A	*Phellinus linteus* F. Hymenochaetaceae	R = OH	Antitumor	(Chen et al., 2019)

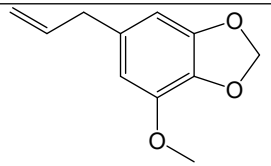
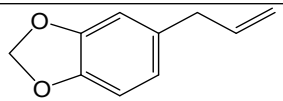
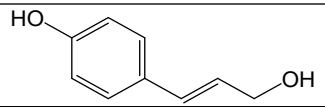
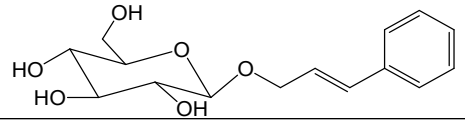
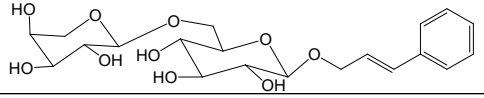
5	Meshimakobnol B	*Phellinus linteus* F. Hymenochaetaceae	R = H	Antitumor	(Chen et al., 2019)
6	Phellifuropyranone A	*Phellinus linteus* F. Hymenochaetaceae		Antitumor	(Chen et al., 2019)
7	Phelligridimer A	*Phellinus linteus* F. Hymenochaetaceae		Antidiabetic	(Chen et al., 2019)
8	Hypholomine B	*Phellinus linteus* F. Hymenochaetaceae		Antidiabetic	(Chen et al., 2019)
9	Interfungin A	*Phellinus linteus* F. Hymenochaetaceae		Antidiabetic	(Chen et al., 2019)

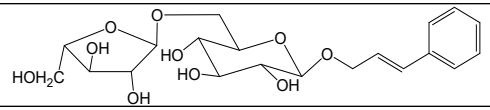
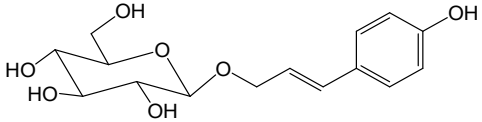
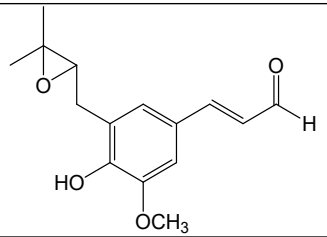
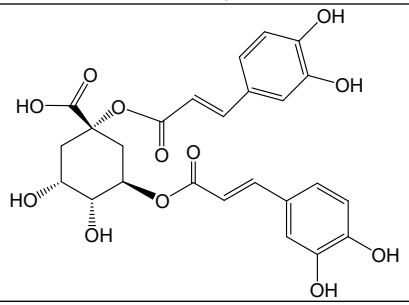
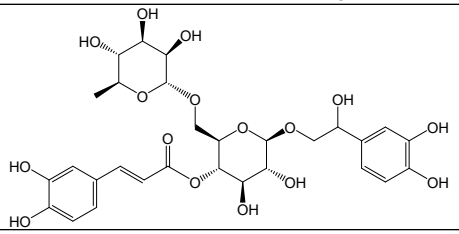
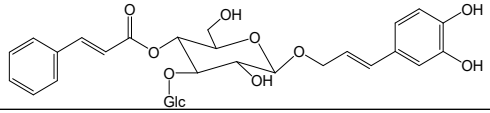
10	Davallialactone	*Phellinus linteus* F. Hymenochaetaceae		Antidiabetic	(Chen et al., 2019)
11	Inoscavin A	*Phellinus linteus* F. Hymenochaetaceae		Antidiabetic	(Chen et al., 2019)
12	Cinnamyl alcohol	*Rhodiola rosea* & *R. arctica* F. Crassulaceae		Weak tonic	(Kurkin, 2003)
				suppresses 3T3-L1 cell differentiation by inhibiting anti-adipogenesis-related proteins	(Hwang et al., 2017)
13	Cinnamaldehyde (3-phenyl-2-propenal)	*Cinnamomum cassia* & *C. zeylanicum* F. Lauraceae		Anti-inflammatory	(Ilijeva and Buchbauer, 2016); (Sá et al., 2014)
14	2′-hydroxycinnam-aldehyde	*Cinnamomum cassia* F. Lauraceae		Anti-inflammatory	(Sá et al., 2014)
15	Cinnamyl acetate	*Cinnamomum zeylanicum* & other *Cinnamomum* spp. F. Lauraceae		Anti-inflammatory	(Sá et al., 2014)

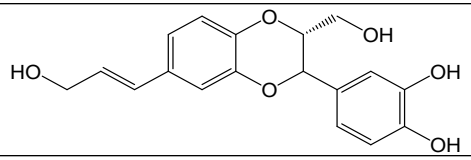
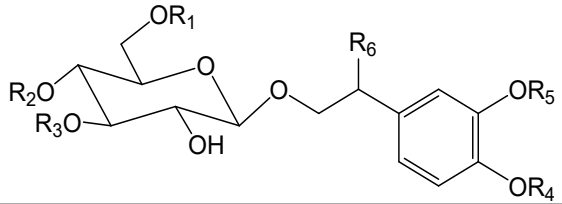
16	Cinnamic acid (3-phenylprop-2-enoic acid)	*Cinnamomum zeylanicum* F. Lauraceae, *Coffee arabica* F. Rubiaceae *Thea sinensis* F. Theaceae *Theobroma cocoa* F. Malvaceae *Ilexpara guariensis* F. Aquifoliaceae *Spinacia oleracea F. Amaranthaceae Solanum tuberosum* F. Solanaceae *Solanum lycopersicum* F. Solanaceae		Antibacterial, antitubercular, antifungal, anticancer and anti-inflammatory activity	(Sá et al., 2014)
					
17	*p*-Hydroxycinnamic acid	*Vepris glomerata* F. Rutaceae	$R_1 = R_3 = R_3 = R_4 = H$; $R_2 = OH$	Antibacterial agent	(Kiplimo and Koorbanally, 2012)
18	Methyl cinnamate	*Vepris glomerata* F. Rutaceae	$R_1 = R_2 = OH$; $R_3 = H$; $R_4 = CH_3$	Antibacterial agent	(Kiplimo and Koorbanally, 2012)
19	Elemicin (5-allyl-1,2,3-trimethoxy-benzene)	*Myristica fragrans* F. Myristicaceae & *Asiasarum sieboldii* F. Aristolochiaceae		Anti-inflammatory	(Ilijeva and Buchbauer, 2016); (Sá et al., 2014)

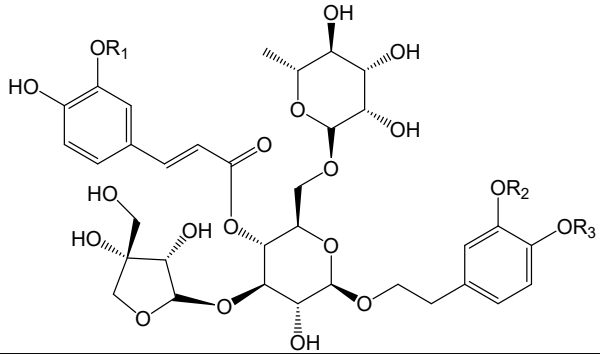
20	Estragole (1-ally-4-methoxy-benzene)	*Artemisia dracunculus* F. Asteraceae ,*Leonotis ocymifolia* F. Lamiaceae, *Ocimum basilicum* F. Lamiaceae, *Croton zehntneri* F. Euphorbiaceae, *Pimpinella anisum* F. Apiaceae *Foeniculum vulgare* F. Apiaceae; *Illicium anisatum* F. Schisandraceae, *Boswellia serrata* F. Asparagaceae		Anti-inflammatory and anti-platelet activity. It is involved in immunological processes, including the inhibition of all effects on TNFα	(Ilijeva and Buchbauer, 2016)
21	Asarone (1,2,4-trimethoxy-5-[(*E*)-prop-1-enyl]benzene)	*Daucus carota* F. Apiaceae		Anti-inflammatory	(Sá et al., 2014)
22	Phenethyl alcohol	*Oils obtained from the blossoms of Rose spp. F. Rosaceae Citrus aurantium* subsp. amara *F. Rutaceae Cananga odorata F. Annonaceae, Dianthus caryophyllus F. Caryophyllaceae and Pelargonium* spp. F. Geraniaceae		Anti-inflammatory	(Sá et al., 2014)

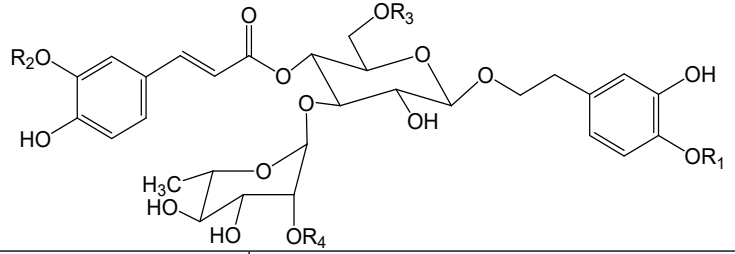
23	Hydroxychavicol (4-prop-2-enylbenzene-1,2- diol)	*Piper betle* F. Piperaceae		Antimicrobial, antioxidant, anti-inflammatory, cytotoxic and anti-platelet activities	(Ilijeva and Buchbauer, 2016)
24	2′-Hydroxy-cinnamaldehyde [3-(2-hydroxyphenyl)-2-propenal]	*Cinnamomum cassia* F. Lauraceae		Immune-modulatory and anti-inflammatory activity	(Ilijeva and Buchbauer, 2016); (Sá et al., 2014)
25	Isoeugenol (4-propenyl-2-methoxyphenol)	*Eugenia caryophylata* F. Myrtaceae		Inhibitory effect against some metabolic enzymes such as α-amylase, α-glycosidase and acetylcholinesterase enzymes IC_{50} 411.5, 19.25 and 77.00 nM, respectively Ki 21 ± 9 nM and 16 ± 3 nM, respectively	(Topal, 2019)
26	Methyleugenol (4-ally-1,2-dimethoxybenzene)	*Cinnamomum cordatum* F. Lauraceae & *Croton malambo* F. Euphorbiaceae		Antibacterial, antifungal, anticancer, anti-inflammatory and antiplatelet activities	(Ilijeva and Buchbauer, 2016); (Sá et al., 2014)
27	Methylisoeugenol (1,2-dimethoxy-4-propenylbenzene)	*Asarum arifolium* F. Aristolochiaceae, *Cymbopogon javanensis* F. Poaceae & *Pimenta pseudocaryophyllus* F.		Hypotensive, vasorelaxant, anxiolytic and antidepressant activities	(Ilijeva and Buchbauer, 2016)

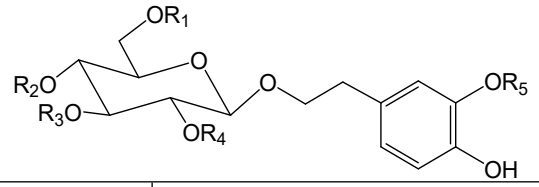
		Myrtaceae			
28	Myristicin (1-allyl-3,4-methylen-dioxy-5- methoxy-benzene)	*Petroselinum crispum* F. Apiaceae *Daucus crota* F. Apiaceae *Ocimum basilicum* F. Lamiaceae *Cinnamomum zeylanicum* F. Lauraceae *Myristica fragrans* F. Myristicaceae		Used in traditional medicine for the treatment of anxiety, diarrhea and stomach aches Besides its carminative effect it has antibacterial, anti-inflammatory, anticancer and hepatoprotective activity	(Ilijeva and Buchbauer, 2016); (Sá et al., 2014)
29	Safrole (4-allyl-1,2-methelene-dioxybenzen)	*Sassafras albidum* F. Lauraceae *Ocimum basilicum* F. Lamiaceae *Pimpinella anisum F. Apiaceae* *Myristica fragrans* F. Myristicaceae and *Piper nigrum* F. Piperaceae		It is a well-known mutagenic and carcinogenic agent. It has anticancer, anti-inflammatory and analgesic effects	(Ilijeva and Buchbauer, 2016); (Sá et al., 2014)
30	*p*-Coumaryl alcohol	*Rhodiola rosea* F. Crassulaceae		Tonic	(Kurkin, 2003)
31	Rosin	*Rhodiola rosea* & *R. arctica* F. Crassulaceae		Tonic	(Kurkin, 2003)
32	Rosavin	*Rhodiola rosea*; *R. arctica* F. Crassulaceae		Immunomodulating activity	(Zapesochnaya et al., 1995)

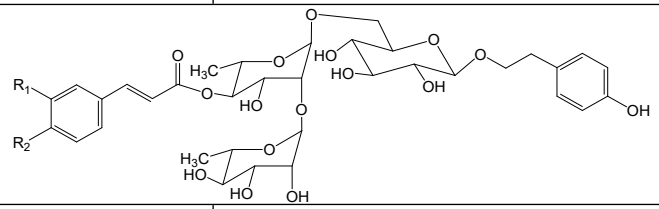
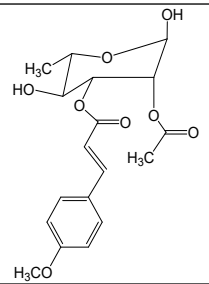
33	Rosarin	Rhodiola rosea; *R. arctica* F. Crassulaceae		Tonic	(Kurkin, 2003)
34	Triandrin	*Rhodiola rosea* F. Crassulaceae; *Salix triandra* F. Salicaceae; *Lilium cordatum* F. Liliaceae		Immunomodulating activity	(Zapesochnaya et al., 1995)
35	Glomeral	*Vepris glomerata* F. Rutaceae		Antibacterial agent	(Kiplimo and Koorbanally, 2012)
36	1,3-Dicaffeoylquinic acid (cynarin)	*Helichrysum italicum* F. Asteraceae		Cholagogue	(Kurkin, 2003)
37	Forsythoside C	*Forsythia suspensa* F. Oleaceae		Antimicrobial	(Kurkin, 2003)
38	Plantamajoside	*Plantago major* F. Plantaginaceae		Antimicrobial	(Kurkin, 2003)

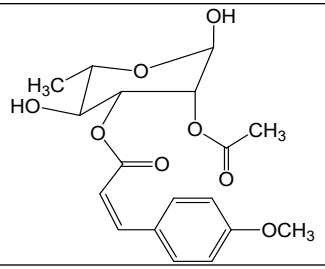
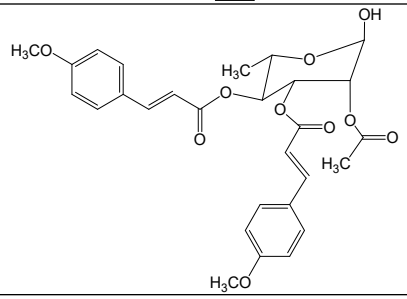
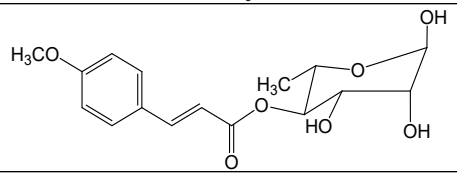
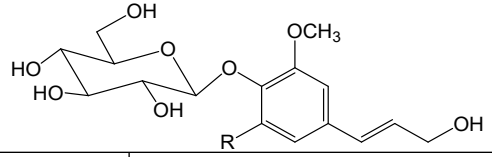
39	Americanol A	*Phytolacca americana* F. Phytolaccaceae		Hepatoprotector and neutropic activity	(Kurkin, 2003)
					
40	Jinoside A	*Rehmannia glutinosa* F. Orobanchaceae	R_1 = β-galactosyl; R_2 = feruloyl; R_3 = α-rhamnosyl; R_4 = R_5 = R_6 = H	immunosuppressive action	(Pan et al., 2003)
41	Jinoside B	*Rehmannia glutinosa* F. Orobanchaceae	R_1 = β-galactosyl; R_2 = feruloyl; R_3 = α-rhamnosyl; R_4 = CH_3; R_5 = R_6 = H	immunosuppressive action	(Pan et al., 2003)
42	3,4-Dihydroxy-β-phenethyl-*O*-β-D-glucopyranosyl-(1→3)-*O*-α-L-rhamopyranosyl-(1→6)-4-*O*-caffeoyl-β-D-glucopyranoside	*Rehmannia glutinosa* F. Orobanchaceae	R_1 = H; R_2 = caffeoyl; R_3 = β-glucosyl; R_4 = R_5 = R_6 = H	Active against *Pseudomonas capacia* and *P. maltophilia*	(Pan et al., 2003)
43	3,4-Dihydroxy-β-phenethyl-*O*-β-D-glucopyranosyl-(1→3)-4-*O*-caffeoyl-β-D-glucopyranoside	*Rehmannia glutinosa* F. Orobanchaceae	R_1 = α-rhamnosyl; R_2 = caffeoyl; R_3 = β-glucosyl; R_4 = R_5 = R_6 = H	Active against *Pseudomonas capacia* and *P. maltophilia* at con centrations of 0.2–0.5 mg/disk	(Pan et al., 2003)
44	Incanoside	*Caryopteris incana* F. Lamiaceae	R_1 = caffeoyl; R_2 = H; R_3 = β-glucosyl(1→2)α-rhamnosyl; R_4 = R_5 = R_6 = H	Antioxidant and antimicrobial activity against Gram +ve and -ve bacteria	(Pan et al., 2003)
45	Incanoside C	*Caryopteris incana* F.	R_1 = H; R_2 = feruloyl; R_3 = β-	Antioxidant	(Pan et al.,

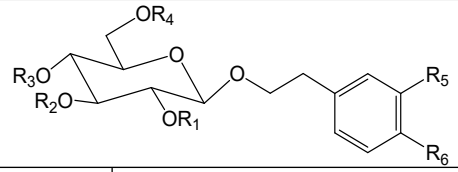
		Lamiaceae	glucosyl(1→2)α-rhamnosyl; R_4 = R_5 = R_6 = H		2003)
46	Incanoside D	*Caryopteris incana* F. Lamiaceae	R_1 = H; R_2 = feruloyl; R_3 = β-glucosyl(1→2)α-rhamnosyl; R_4 = CH_3; R_5 = R_6 = H	Antioxidant	(Pan et al., 2003)
47	Incanoside E	*Caryopteris incana* F. Lamiaceae	R_1 = H; R_2 = feruloyl; R_3 = β-glucosyl(1→2)α-rhamnosyl; R_4 = H; R_5 = CH_3; R_6 = H	Antioxidant	(Pan et al., 2003)
48	Arenarioside	*Ballota nigra* F. Lamiaceae	R_1 = β-xylosyl; R_2 = caffeoyl; R_3 = α-rhamnosyl; R_4 = R_5 = R_6 = H	Antioxidative and free radical scavenging activities	(Pan et al., 2003)
49	Balloletroside	*Ballota nigra* F. Lamiaceae	R_1 = β-apiosyl; R_2 = caffeoyl; R_3 = α-arabinosyl(1→2)α-rhamnosyl; R_4 = R_5 = R_6 = H	Antioxidative and free radical scavenging activities	(Pan et al., 2003)
50	Campneoside I	*Paulownia tomentosa* F. *Paulowniaceae*	R_1 = H; R_2 = caffeoyl; R_3 = α-rhamnosyl; R_4 = R_5 = H; R_6 = OCH_3	Active against *Streptococcus faecium* MD8b, *S. aureus* (SG 511, 285 and 503) and *S. pyogenes* (A308 and A77)	(Pan et al., 2003)
					
51	Pedicularioside A	*Pedicularis striata F.* Scrophulariaceae	R_1 = R_2 = R_3 = H	Antitumor, anti-hemolysis and	(Pan et al., 2003); (Frezza

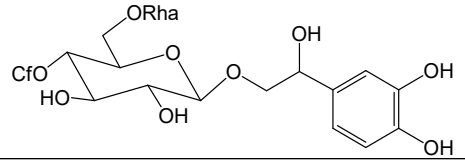
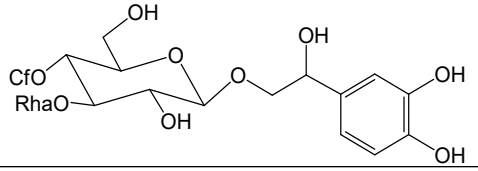
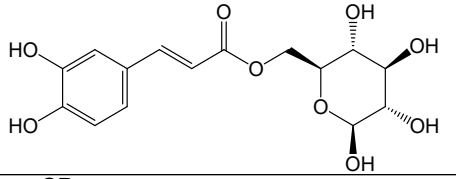
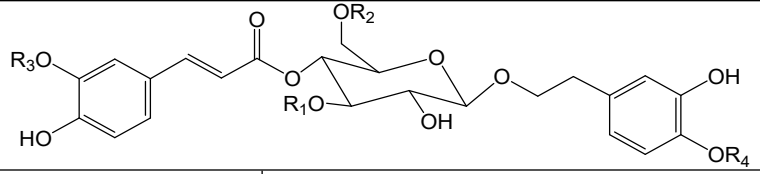
				antioxidant activities	et al., 2019)
52	Pedicularioside N	*Pedicularis striata F.* Scrophulariaceae	$R_1 = R_3 = Me$; $R_2 = H$	Antitumor and antioxidant activity	(Pan et al., 2003); (Frezza et al., 2019)
53	Pedicularioside M	*Pedicularis striata F.* Scrophulariaceae	$R_1 = Me$; $R_2 = R_3 = H$	Antioxidant activity	(Pan et al., 2003); (Frezza et al., 2019)
					
54	Forsythoside B	*Phlomis armeniaca* F. Lamiaceae & *Scutellaria salviifolia* F. Lamiaceae	$R_1 = R_2 = H$; R_3 = β-apiosyl; $R_4 = H$	Active against several kinds of cancer cells and antioxidant activity IC_{50} 0.08 μM	(Saracoglu et al., 1995); (Pan et al., 2003)
55	Leucosceptoside A	*Phlomis armeniaca* F. Lamiaceae & *Scutellaria salviifolia* F. Lamiaceae	$R_1 = H$; $R_2 = CH_3$; $R_3 = R_4 = H$	Active against several kinds of cancer cells and antioxidant activity IC_{50} 0.18 μM	(Saracoglu et al., 1995); (Pan et al., 2003)
		Penstemon linarioides F. Scrophulariaceae		inhibitory activity against PKCR IC_{50} 19.0 μM	(Zhou et al., 1998)
56	Martynoside	*Phlomis armeniaca* F. Lamiaceae *Scutellaria salviifolia* F. Lamiaceae	$R_1 = R_2 = CH_3$; $R_3 = R_4 = H$	Active against several kinds of cancer cells and antioxidant activity IC_{50} 0.17 μM	(Saracoglu et al., 1995) ; (Pan et al., 2003)

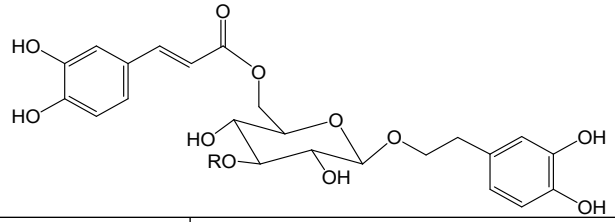
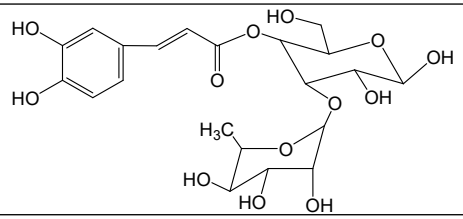
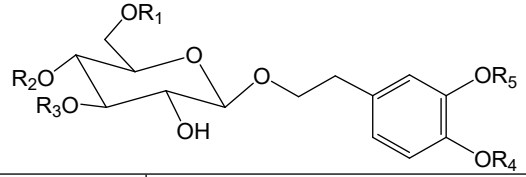
57	Phlinoside A	*Caryopteris incana* F. Lamiaceae	$R_1 = R_2 = R_3 = H$; R_4 = β-glucosyl	Antioxidant	(Pan et al., 2003)
58	Phlinoside B	*Phlomis armeniaca* F. Lamiaceae *Scutellaria salviifolia* F. Lamiaceae	$R_1 = R_2 = R_3 = H$; R_4 = β-xylosyl	Active against several kinds of cancer cells	(Saracoglu et al., 1995); (Pan et al., 2003)
59	Phlinoside C	*Phlomis armeniaca* F. Lamiaceae *Scutellaria salviifolia* F. Lamiaceae	$R_1 = R_2 = R_3 = H$; R_4 = α-rhamnosyl	Active against several kinds of cancer cells	(Saracoglu et al., 1995); (Pan et al., 2003)
60	Tecurioside	*Phlomis armeniaca* F. Lamiaceae *Scutellaria salviifolia* F. Lamiaceae	$R_1 = R_2 = R_3 = H$; R_4 = α-lyxosyl	Active against several kinds of cancer cells	(Saracoglu et al., 1995) ; (Pan et al., 2003)
					
61	2′-Acetylacteoside	*Cistanche deserticola* F. Orobanchaceae	R_1 = H; R_2 = caffeoyl; R_3 = α-rhamnosyl; R_4 = Ac; R_5 = H	Hepatoprotective and anti-hemolysis activities Antioxidant activity	(Pan et al., 2003)
62	Tubuloside B	*Cistanche deserticola* F. Orobanchaceae	R_1 = caffeoyl; R_2 = H; R_3 = α-rhamnosyl; R_4 = Ac; R_5 = H	Hepatoprotective activity Antioxidant activity	(Pan et al., 2003)
63	Cistanoside C	*Cistanches* spp. F. Orobanchaceae	R_1 = H; R_2 = caffeoyl; R_3 = α-rhamnosyl; R_4 = H; $R_5 = CH_3$	Protective effects on both sex and learning behaviors in the hanging stress loaded mice	(Pan et al., 2003)

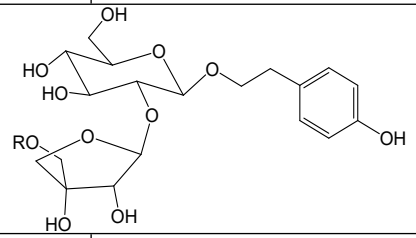
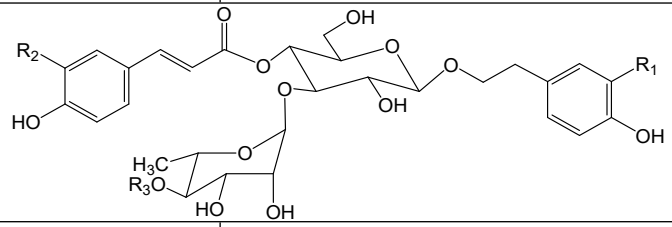
64	Cistanoside D	*Pedicularis striata* F. Scrophulariaceae	R_1 = H; R_2 = feruloyl; R_3 = α-rhamnosyl; R_4 = H; R_5 = CH_3	Anti-hemolysis and antioxidant activities	(Pan et al., 2003)
65	Poliumoside	*Brandisia hancei* F. Orobanchaceae	R_1 = α-rhamnosyl; R_2 = caffeoyl; R_3 = α-rhamnosyl; R_4 = R_5 = H	Anti-hemolysis effect	(Pan et al., 2003)
		Penstemon linarioides F. Scrophulariaceae		Inhibitory activity against PKCR IC_{50} 24.4 μM	(Zhou et al., 1998)
66	Brandioside	*Brandisia hancei* F. Orobanchaceae	R_1 = α-rhamnosyl; R_2 = caffeoyl; R_3 = α-rhamnosyl; R_4 = R_5 = H	Anti-hemolysis effect	(Pan et al., 2003)
					
67	4-Cinnamoyl-mussatioside	*Mussatia* species F. Bignoniaceae	R_1 = R_2 = H	Antiaggregation effect on platelets	(Pan et al., 2003)
68	4-Di-methylcaffeoyl-mussatioside	*Mussatia hyacinthina* F. Bignoniaceae	R_1 = R_2 = OMe	Antiaggregation effect on platelets	(Pan et al., 2003)
69	4-*p*-Methoxycinnamoyl-mussatioside	*Mussatia hyacinthina* F. Bignoniaceae	R_1 = H; R_2 = OMe	Antiaggregation effect on platelets	(Pan et al., 2003)
70	2-*O*-Acetyl-3-*O*-(*E*)-*p*-methoxycinnamoyl-α-L-rhamnopyranoside	*Scrophularia buergeriana* F. Scrophulariaceae		Anti-neurodegeneration effect	(Kim and Kim, 2000); (Pan et al., 2003)

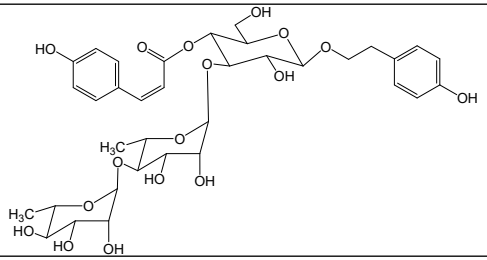
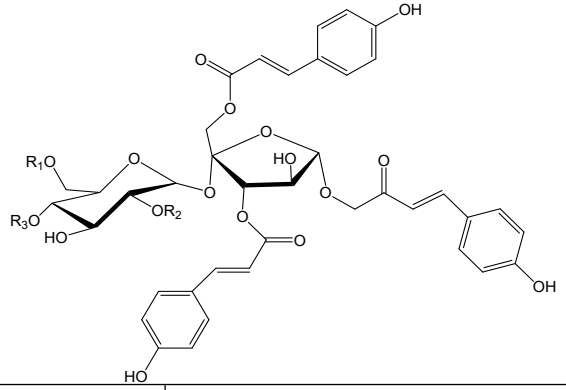
71	2-*O*-Acetyl-3-*O*- (*Z*)-*p*-methoxycinnamoyl-α-L-rhamnopyranoside	*Scrophularia buergeriana* F. Scrophulariaceae		Anti-neurodegeneration effect	(Kim and Kim, 2000); (Pan et al., 2003)
72	2-*O*-Acetyl-3,4-di-*O*-(*E*)-*p*-methoxycinnamoyl-α-L-rhamnopyranoside	*Scrophularia buergeriana* F. Scrophulariaceae		Anti-neurodegeneration effect	(Kim and Kim, 2000); (Pan et al., 2003)
73	4-*O*-(*E*)-*p*-Methoxycinnamoyl-α-L-rhamnopyranoside	*Scrophularia buergeriana* F. Scrophulariaceae		Anti-neurodegeneration effect	(Kim and Kim, 2000); (Pan et al., 2003)
					
74	Coneferin	*Phillyrea latifolia* F. Oleaceae	R = H	Change the activity of some enzymes; antioxidant and anti-inflammatory activities	(Pan et al., 2003); (Lanza et al., 2001)
75	Syringin	*Phillyrea latifolia* F. Oleaceae	R = OCH_3	Change the activity of some enzymes; antioxidant and anti-inflammatory activities	(Pan et al., 2003); (Lanza et al., 2001)

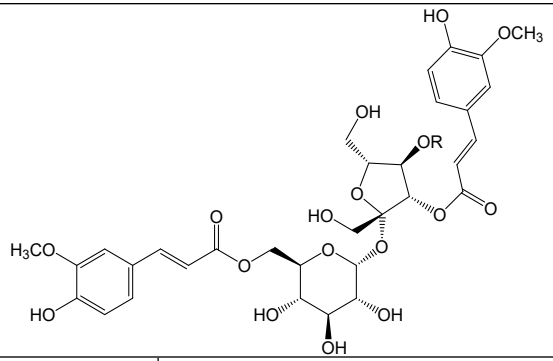
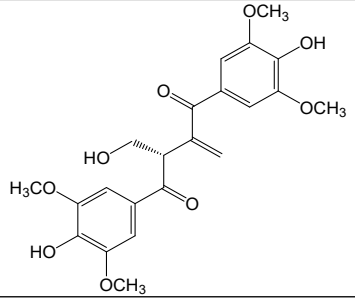
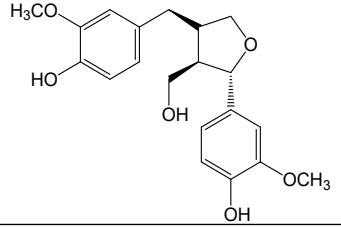
		Syringa vulgaris, *S. amurensis* F. Oleaceae; *Lilium cordatum* F. Liliaceae; *Codonopsis tangshen* F. Campanulaceae; *Eleutherococcus senticosus* F. Araliaceae		Immunomodulating activity	(Zapesochnaya et al., 1995)
					
76	Cistanoside A	*Cistanches* species F. Orobanchaceae	R_1 = H; R_2 = α-rhamnosyl; R_3 = caffeoyl; R_4 = β-glucosyl; R_5 = OH; R_6 = OCH_3	Protective effects on both sex and learning behaviors in the hanging stress loaded mice	(Pan et al., 2003)
		Cistanche deserticola F. Orobanchaceae		Antioxidative and free radical scavenging activities	(Pan et al., 2003)
77	Tubuloside A	*Cistanche deserticola* F. Orobanchaceae	R_1 = Ac; R_2 = α-rhamnosyl; R_3 = caffeoyl; R_4 = β-glucosyl; R_5 = R_6 = OH	Antioxidative and free radical scavenging activities	(Pan et al., 2003)
78	Syringalide A 3′-α-rhamnopyranoside	*Cistanche deserticola* F. Orobanchaceae	R_1 = H; R_2 = α-rhamnosyl; R_3 = caffeoyl; R_4 = R_5 = H; R_6 = OH	Antioxidative and free radical scavenging activities	(Pan et al., 2003)

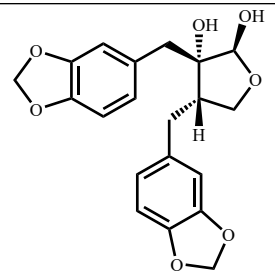
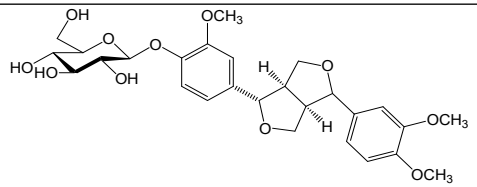
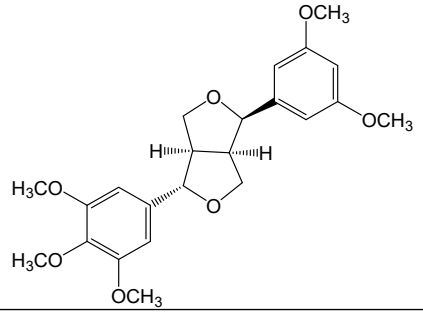
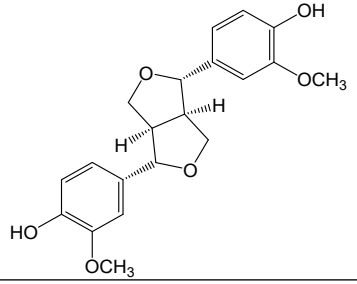
79	Suspensaside	*Forsythiae suspensa* & *F. viridisscima* F. Oleaceae		Change the activity of some enzymes and antioxidant activity	(Pan et al., 2003)
80	β-Hydroxyacteoside	*Forsythiae suspensa* & *F. viridisscima* F. Oleaceae		Change the activity of some enzymes and antioxidant activity	(Pan et al., 2003)
81	6-*O*-Caffeoyl-β-*O*-glucose	*Caryopteris incana* F. Lamiaceae		Antioxidative and free radical scavenging activities	(Pan et al., 2003)
					
82	2-(3-Hydroxy-4-methoxy-phenyl)-ethyl-*O*-(α-L-rhamnosyl)-(1→3)-O-(α-L-rhamnosyl)-(1→6)-4-*O*-*E*-feruloyl-β-D-glucopyranoside	*Digitalis purpurea* F. Scrophulariaceae	$R_1 = R_2 =$ α-rhamnosyl; $R_3 = R_4 = CH_3$	Inhibitory activity against PKCR IC_{50} 125 μM	(Zhou et al., 1998)
83	Calceolarioside A	*Digitalis purpurea* F. Scrophulariaceae	$R_1 = R_2 = R_3 = R_4 = H$	Inhibitory activity against PKCR IC_{50} 0.6 μM	(Zhou et al., 1998)
		Globularia orientalis F. Plantaginaceae		Antioxidant activity IC_{50} 0.04 μM	(Heilmann et al., 2000); (Pan et al., 2003)

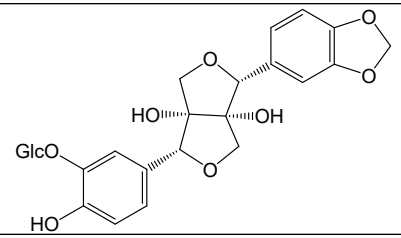
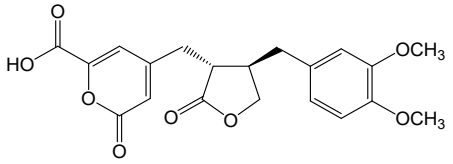
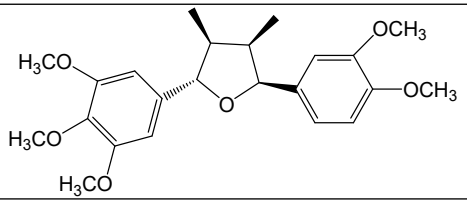
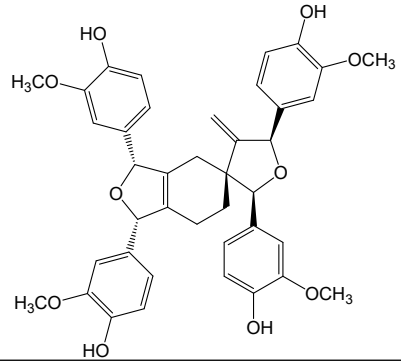
					
84	Plantainoside D	*Digitalis purpurea* F. Scrophulariaceae	R = β-glucosyl	Inhibitory activity against PKCR IC_{50} 14.8 μM	(Zhou et al., 1998)
85	Cistanoside F	*Cistanche deserticola* F. Orobanchaceae		Antioxidative and free radical scavenging activity	(Pan et al., 2003)
					
86	Isomartynoside	*Galeopsis pubescens* F. Lamiaceae	R_1 = feruloyl; R_2 = H; R_3 = α-rhamnosyl; R_4 = CH_3 = R_5 = H	Antioxidant activity IC_{50} 0.17 μM	(Heilmann et al., 2000); (Pan et al., 2003)
87	Lugrandoside	*Digitalis ferruginea* subsp. *ferruginea* F. Scrophulariaceae	R_1 = β-glucosyl; R_2 = caffeoyl; R_3 = R_4 = R_5 = H	Antioxidant activity IC_{50} 0.04 μM	(Heilmann et al., 2000); (Pan et al., 2003)
88	Ferruginoside B	*Digitalis ferruginea* subsp. *ferruginea* F. Scrophulariaceae	R_1 = β-glucosyl; R_2 = R_3 = R_4 = R_5 = H	Antioxidant activity IC_{50} 1.9 μM	(Heilmann et al., 2000); (Pan et al., 2003)
89	Darendoside B	*Scutellaria orientalis* subsp. *pinnatifida* F. Lamiaceae	R_1 = R_2 = H; R_3 = α-rhamnosyl; R_4 = CH_3; R_5 = H	Antioxidant activity IC_{50} 3.6 μM	(Heilmann et al., 2000); (Pan et al., 2003)
90	Deacylacteoside dimethyl ether	*Incarvillea sinensis* var. przewalskii F.	R_1 = R_2 = H; R_3 = α-rhamnosyl; R_4 = R_5 = CH_3	Antioxidant activity	(Heilmann et al., 2000); (Pan

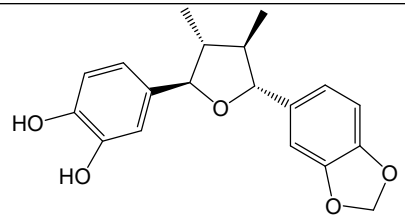
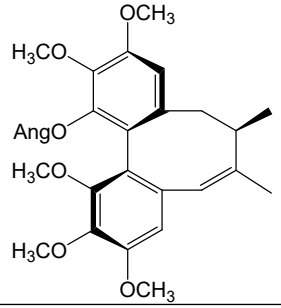
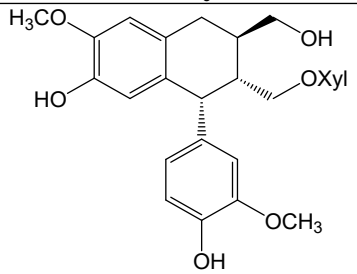
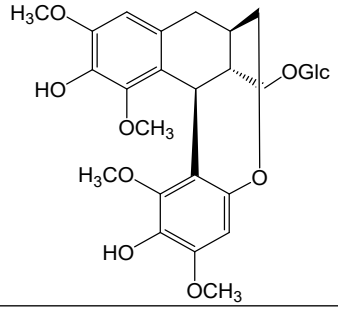
		Bignoniaceae		IC_{50} 8.5 μM	et al., 2003)
91	Leucosceptoside B	*Marrubium alysson* F. Lamiaceae	R_1 = β-apiosyl; R_2 = feruloyl; R_3 = α-rhamnosyl; $R_4 = CH_3$; R_5 = H	Antioxidant activity IC_{50} 0.17 μM	(Heilmann et al., 2000); (Pan et al., 2003)
92	Alyssonoside	*Phlomis grandiflora* var. fimbrilligera F. Lamiaceae	R_1 = β-apiosyl; R_2 = feruloyl; R_3 = α-rhamnosyl; $R_3 = R_4 = R_5$ = H	Antioxidant activity IC_{50} 0.15 μM	(Heilmann et al., 2000); (Pan et al., 2003)
					
93	Hattushoside	*Phlomis grandiflora* var. fimbrilligera F. Lamiaceae	R = Syringyl	Antioxidant activity IC_{50} 0.35 μM	(Heilmann et al., 2000); (Pan et al., 2003)
94	Phlomisethanoside	*Phlomis grandiflora* var. fimbrilligera F. Lamiaceae	R = Vanilloyl	Antioxidant activity IC_{50} 0.04 μM	(Heilmann et al., 2000); (Pan et al., 2003)
					
95	Ligupurpuroside A	*Ligustrum purpurascens* F. Oleaceae	$R_1 = R_2$ = OH; R_3 = H	Antioxidative and free radical scavenging activities	(Pan et al., 2003)
96	*Trans*-Ligupurpuroside B	*Ligustrum purpurascens* F. Oleaceae	$R_1 = R_2$ = H; R_3 = α-rhamnosyl	Antioxidative and free radical scavenging activities	(Pan et al., 2003)

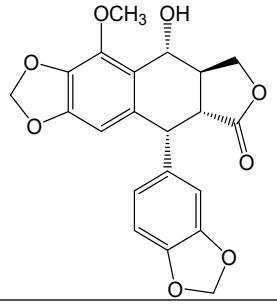
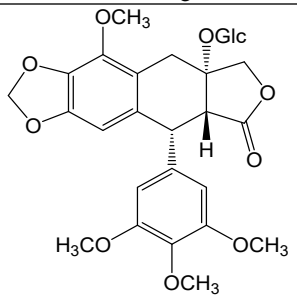
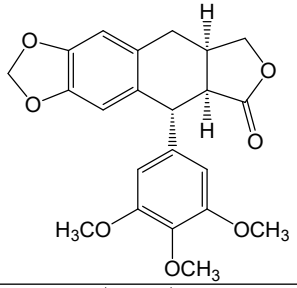
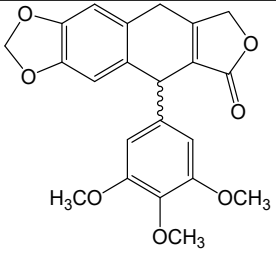
97	Osmanthuside B	*Ligustrum purpurascens* F. Oleaceae	$R_1 = R_2 = R_3 = H$	Antioxidative and free radical scavenging activities	(Pan et al., 2003)
98	*Cis*-Ligupurpuroside B	*Ligustrum purpurascens* F. Oleaceae		Antioxidative and free radical scavenging activities	(Pan et al., 2003)
					
99	Hydropiperoside	*Persicaria orientalis* F. Polygonaceae	$R_1 = R_2 = R_3 = H$	Inhibitor of melanogenesis	(Masum et al., 2019)
100	Vanicoside A	*Persicaria orientalis* F. Polygonaceae	R_1 = feruloyl; R_2 = Ac; $R_3 = H$	Inhibitor of melanogenesis	(Masum et al., 2019)
101	Vanicoside B	*Persicaria orientalis* F. Polygonaceae	R_1 = feruloyl; $R_2 = R_3 = H$	Inhibitor of melanogenesis	(Masum et al., 2019)
102	Vanicoside C	*Persicaria orientalis* F. Polygonaceae	$R_1 = R_3 = H$; R_2 = Ac	Inhibitor of melanogenesis	(Masum et al., 2019)
103	Vanicoside E	*Persicaria orientalis* F. Polygonaceae	R_1 = feruloyl; $R_2 = R_3$ =Ac	Inhibitor of melanogenesis	(Masum et al., 2019)

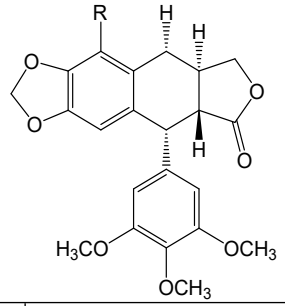
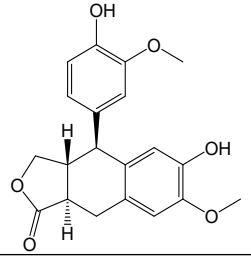
					
104	3,6′-*O*-Diferuloyl-sucrose	*Lilium longiflorum* F. Liliaceae	R = H	DPP-IV inhibitory activity IC_{50} 46.19	(Kim et al., 2020)
105	4-*O*-Acetyl-3,6′-*O*-diferuloyl-sucrose	*Lilium longiflorum* F. Liliaceae	R = Ac	DPP-IV inhibitory activity IC_{50} 63.26 μM	(Kim et al., 2020)
106	(+)-Liriodenol	*Liriodendron* hybrid F. Magnoliaceae		Cytotoxic effects against NIC-H460, BGC-823, SGC-7901 and MDA-MB-231 IC_{50} 31, 45, 34 and 29 mg/mL, respectively	(Yang et al., 2015); (Teponno et al., 2016)
107	(+)-Lariciresinol	*Wikstroemia elliptica* F. Thymelaeaceae		Anticancer activity	(Saarinen et al., 2008); (Cui et al., 2020)

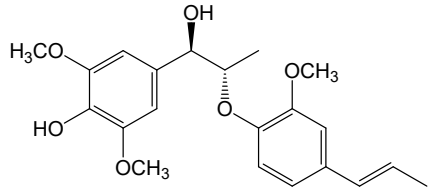
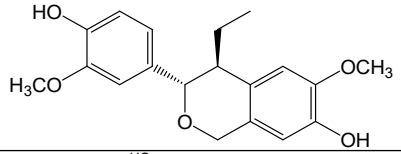
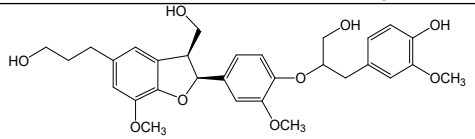
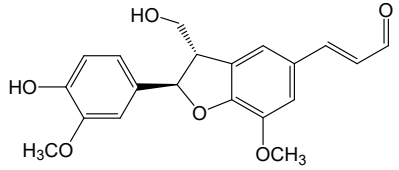
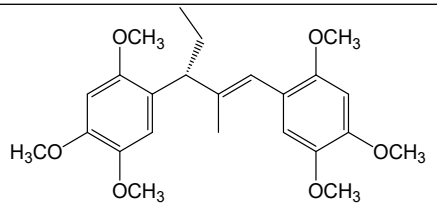
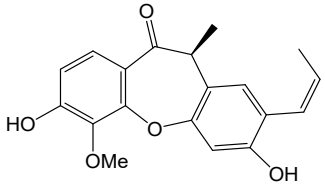
108	Glandularin	*Glandularia* × *hybrida* F. Verbenaceae		Moderate cytotoxic activity against SK-MEL and VERO cells with IC_{50} 45.6 and 37.6 µM, respectively. Moderate inhibition activity on iNOS IC_{50} 49.7 µM	(Mohamed et al., 2022)
109	Phillyrin	*Phillyrea latifolia* F. Oleaceae		*In vitro* anti-inflammatory activity. It inhibits the release of the cyclo-oxygenase metabolites prostaglandin E_2 IC_{50} 45.6 µM	(Lanza et al., 2001)
110	Epimagnolin B	*Magnolia fargesii* F. Magnoliaceae		Anti-inflammatory activity by inhibition of the production of NO and PGE2 and the expression of respective enzyme iNOS and COX-2	(Teponno et al., 2016)
111	(+)-Pinoresinol	*Melia toosendan* F. Meliaceae		Potent ABTS free radical scavenging activity IC_{50} 45.1 µM	(Wang et al., 2014)

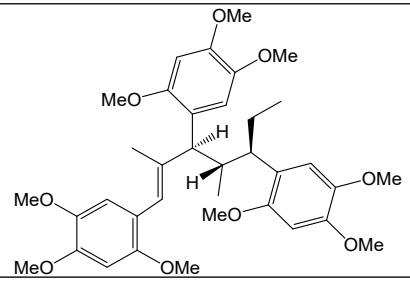
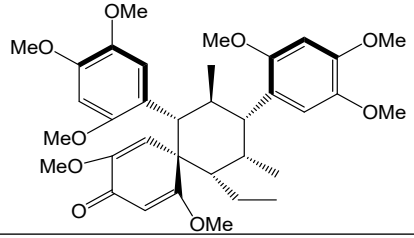
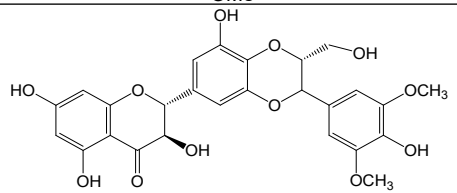
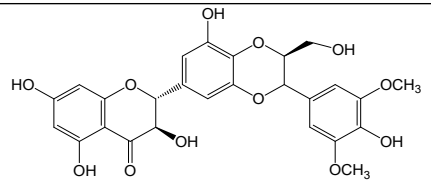
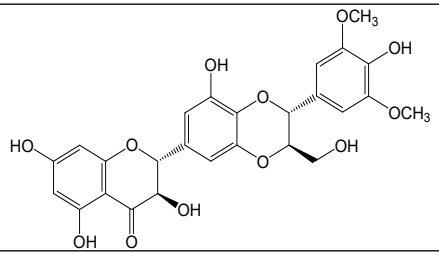
112	Khainaoside A	*Vitex glabrata* F. Verbenaceae		Potent inhibitory effects on estrogen-enhanced cell proliferation	(Teponno et al., 2016)
113	Arctiidilactone	*Arctium lappa* F. Asteraceae		Potent anti-inflammatory and exhibited 75.51, 70.72, and 61.17% inhibition at 10, 1, and 0.1 μM, respectively	(Yang et al., 2015); (Teponno et al., 2016)
114	Ligraminol A	*Acorus gramineus* F. Araceae		Active against the SK-MEL-2 cell line IC_{50} 4.5 μM	(Teponno et al., 2016)
115	Ramonanin A	*Guaiacum officinale* F. Zygophyllaceae		Moderate *in vitro* cytotoxic activities against human breast cancer cell lines and induced cell death *via* apoptosis	(Teponno et al., 2016)

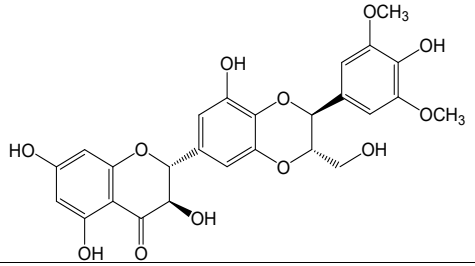
116	(7, 8-Trans-8, 8′-trans-7′, 8′-trans)-7- (3,4-methylenedioxyphenyl)-8-methyl-8′-methyl-7′-(3′,4′- dihydroxyphenyl)-tetrahydrofuran	*Schisandra sphenanthera* F. Schisandraceae		Anti-oxidative haemolysis of human red blood cells (RBCs) activity IC_{50} 35 µg/mL	(Jiang et al., 2015); (Teponno et al., 2016)
117	Neglschisandrin F	*Schisandra neglecta* F. Schisandraceae		It exhibited marginal cytotoxicity against the human lung carcinoma A549 cell line with EC_{50} values of 12 µg/ mL	(Teponno et al., 2016)
118	Tiliamuroside B	*Tilia amurensis* F. Tiliaceae		Significant cytotoxicity against A549, SK-OV-3, SK-MEL-2, and HCT-15 cell lines IC_{50} 7.3, 8.9, 7.8 and 6.2 µM, respectively.	(Kim et al., 2012)
119	(+)-Ovafolinin B-9′-*O*-β-D-glucopyranoside	*Eurya japonica* F. Theaceae		Potent antioxidant activity ED_{50} 23	(Teponno et al., 2016)

120	Cleistantoxin	*Cleistanthus indochinensis* F. Euphorbiaceae		Strong cytotoxic activity against KB, MCF-7, HT29 and MCF-7R cancer cell lines IC_{50} 0.02, 0.04, 0.01 and 0.03 µM, respectively	(Teponno et al., 2016); (Thanh et al., 2012)
121	3α-*O*-(*β*-D -Glucopyranosyl)desoxy-podophyllotoxin	*Cleistanthus boivinianus* F. Euphorbiaceae		Active against A2780 ovarian cancer and HCT-116 human colon carcinoma cell lines. IC_{50} 33.0 ± 3.6 nM and 20.5 nM, repectively	(Liu et al., 2015)
122	Deoxypicropodo-phyllotoxin	*Cleistanthus boivinianus* F. Euphorbiaceae		Active against A2780 ovarian cancer cell line IC_{50} >10 µM	(Liu et al., 2015)
123	(±)-β-Apopicropodophyllin	*Cleistanthus boivinianus* F. Euphorbiaceae		Potent activity against the A2780 ovarian cancer cell line IC_{50} 63.1 ± 6.7nM. Modest activity against the A2058 human caucasian	(Liu et al., 2015)

				metastatic melanoma and MES-SA human uterine sarcoma cell lines IC_{50} 4.6 and 4.0 μM, respectively	
					
124	(−)-Desoxypodophyllotoxin	*Cleistanthus boivinianus* F. Euphorbiaceae	R = H	Potent activity against the A2780 ovarian cancer cell line IC_{50} 230 ± 1 nM	(Liu et al., 2015)
125	*β*-Peltatin-5-*O*-*β*-D-glucopyranoside	*Cleistanthus boivinianus* F. Euphorbiaceae	R = *O*-*β*-D-glucopyranose	Moderate activity against the A2780 IC_{50} 4.9 ± 0.1 μM	(Liu et al., 2015)
126	Conidendrin	*Abies holophylla* F. Pinaceae		Moderately inhibited NO production IC_{50} 28.5 μM	(Kim et al., 2013)

127	Myrifralignan C	*Myristica fragrans* F. Myristicaceae		Potent inhibitory activity against the production of nitric oxide (NO) in the RAW264.7 cell line stimulated by lipopolysaccharide	(Teponno et al., 2016)
128	Meliasendanin A	*Melia toosendan* F. Meliaceae		Stronger ABTS free radical scavenging activity IC_{50} 62.8 μM	(Wang et al., 2014)
129	Euryalin B	*Euryale ferox* F. Nymphaeaceae		Strong effect against DPPH assay SC_{50} 6.8 μM	(Teponno et al., 2016)
130	*7R,8S*-Balanophonin	*Crataegus pinnatifida* F. Rosaceae		Potent cytotoxic activity against the HT-1080 cell line IC_{50} = 8.86 μM	(Huang et al., 2013)
131	Tatarinan S	*Acorus tatarinowii* F. Araceae		Potential protective effect against β-amyloid toxicity, its value of PT50 extended up to 62.3% at 100 μM	(Luo et al., 2016)
132	Penthorin B	*Penthorum chinense* F. Saxifragaceae		*In vitro* protective activities against acetaminophen-induced hepatocyte injury, the inhibition was calculated as 15.0%	(He et al., 2015)

				at 5 μM	
133	Tatanan A	*Acorus tatarinowii* F. Araceae		Potently increase Glucokinase (GK) enzymatic activity $EC_{1.5}$ 0.16–1.85 μM	(Ni et al., 2011)
134	Tatanan B	*Acorus tatarinowii* F. Araceae		Potently increase Glucokinase (GK) enzymatic activity $EC_{1.5}$ 0.16–1.85 μM	(Ni et al., 2011)
135	Hovenin A	*Hovenia acerba* F. Rhamnaceae		Moderate inhibition on the production of NO and IL-6 in LPS-stimulated RAW264.7 cells IC_{50} 45 – 63 μM	(Teponno et al., 2016)
136	Hovenin B	*Hovenia acerba* F. Rhamnaceae		Moderate inhibition on the production of NO and IL-6 in LPS-stimulated RAW264.7 cells IC_{50} 45 – 63 μM	(Teponno et al., 2016)
137	Hovenin C	*Hovenia acerba* F. Rhamnaceae		Moderate inhibition on the production of NO and IL-6 in LPS-stimulated RAW264.7 cells IC_{50} 45 – 63 μM	(Teponno et al., 2016)

138	Hovenin D	*Hovenia acerba* F. Rhamnaceae		Moderate inhibition on the production of NO and IL-6 in LPS-stimulated RAW264.7 cells IC_{50} 45– 63 μM	(Teponno et al., 2016)

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Bermejo, P., Abad, M. jose, Díaz, A.M., Fernµndez, L., Santos, J. De, Sanchez, S., Villaescusa, L., Carrasco, L., Irurzun, A., 2002. Antiviral Activity of seven iridoids. Planta Med. 68, 106–110.

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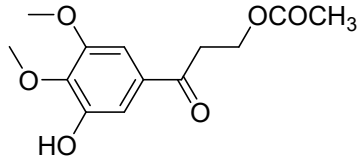
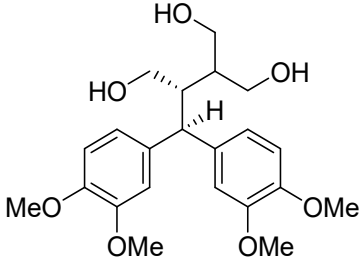
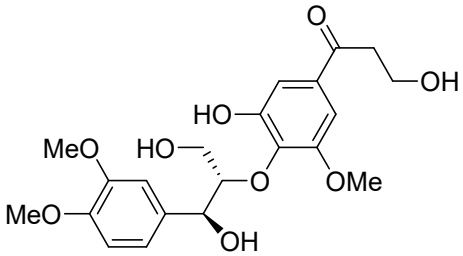
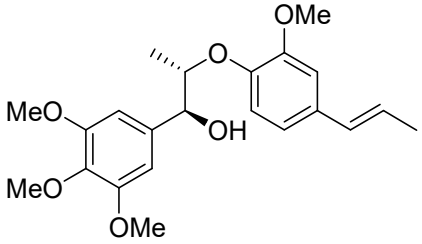
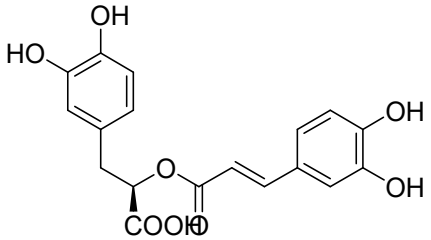
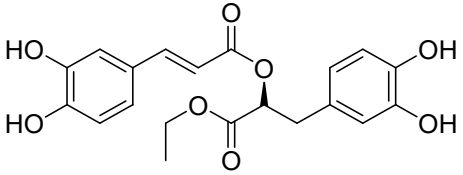
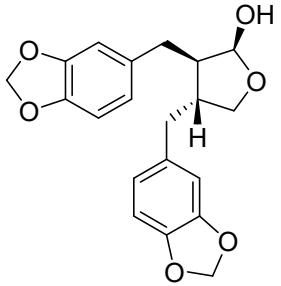
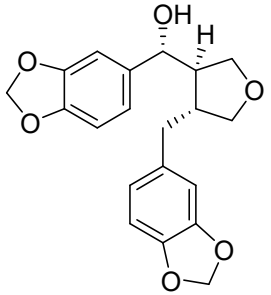
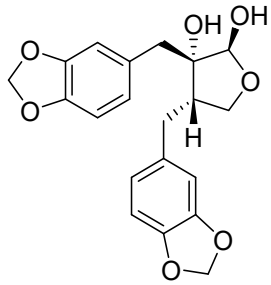
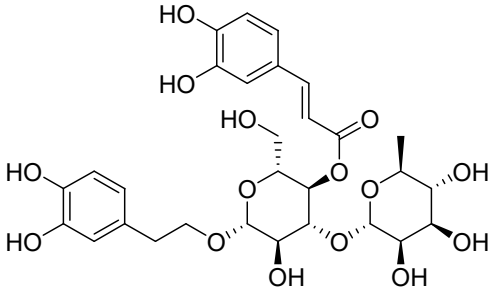
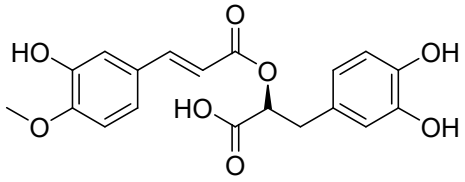
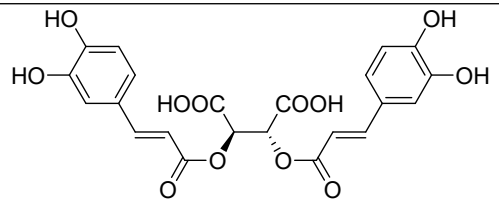
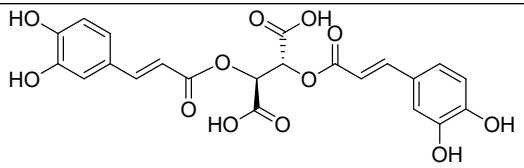
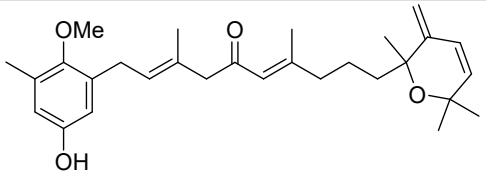
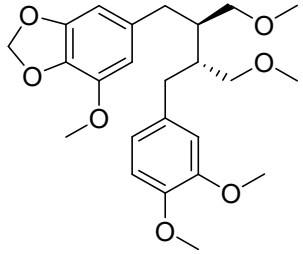
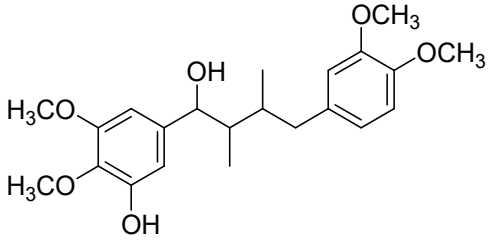
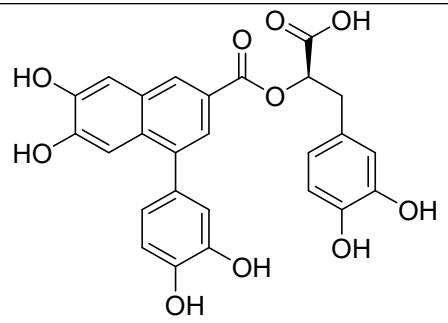
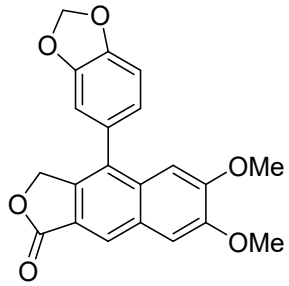
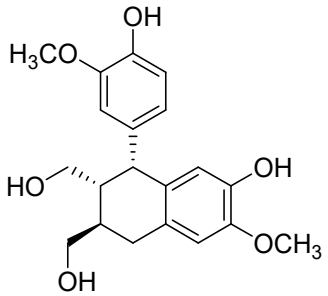
Table S3. Docking Scores of selected phenylpropanoids & phenylethanoids within three proteins of *P. falciparum*.

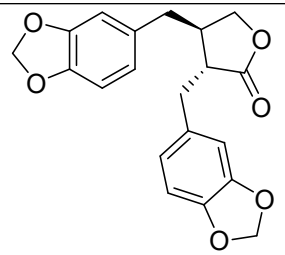
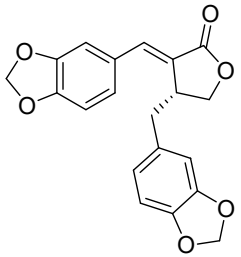
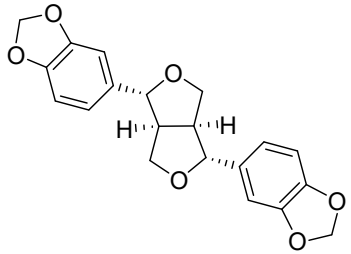
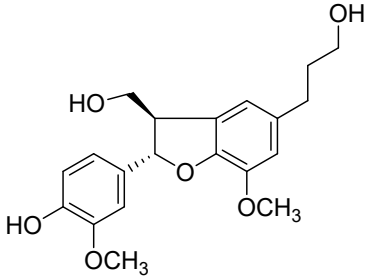
ID	Molecule Structure	1V0P[a]		4PD4[b]		6AGT[c]	
		S[g]	RMSD[h]	S	RMSD	S	RMSD
1	 Feddeiketone A	-5.48	1.68	-6.37	2.29	-7.33	1.24
2	 Feddeiphenol A	-7.10	1.61	-7.04	1.51	-6.48	1.58
3	 Feddeiphenol C	-7.22	1.69	-7.47	1.71	-8.87	1.83
4		-6.75	2.48	-8.20	1.49	-8.68	1.47

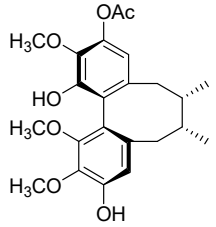
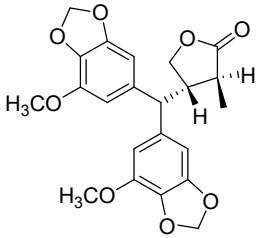
	Surinamensin						
5	 Rosmarinic acid	-6.26	1.79	-7.73	1.19	-7.34	1.35
6	 Ethyl rosmarinate	-6.94	1.65	-7.33	1.55	-7.34	1.02
7	 Cubebin	-6.2	1.56	-7.02	1.72	-8.24	0.82
8	 Isocubebin	-6.13	1.26	-7.39	1.55	-7.88	1.89

9	 Glandularin	-6.43	1.84	-7.67	1.89	-7.89	1.78
10	 Forsythoside A	-8.31	2.47	-8.41	1.44	-7.65	2.16
11	 Shimobashiric acid B	-6.33	1.52	-7.48	1.57	-7.80	1.10
12	 L-Chicoric acid	-7.65	1.29	-7.56	1.69	-8.38	1.49

13	 Di-*E*-caffeoyl-*meso*-tartaric acid	-6.32	1.82	-8.50	1.32	-7.29	1.12
14	 Usneoidone E	-6.94	2.64	-8.10	1.28	-5.98	1.59
15	 Niranthin	-7.07	1.71	-7.13	1.21	-7.04	1.33
16	 Kadangustin H	-6.52	1.97	-9.35	1.62	-8.87	0.93

17	 Globoidnan A	-7.71	1.51	-7.70	1.78	-9.20	1.44
18	 Retrojusticidin B	-6.53	2.52	-5.75	1.03	-7.66	1.62
19	 (-)-Isolariciresinol	-7.01	1.55	-5.00	1.48	-6.84	1.06

20	 Hinokinin	-5.99	1.21	-7.12	1.68	-7.55	1.97
21	 Savinin	-6.58	1.84	-6.15	2.15	-6.78	0.98
22	 Sesamin	-6.01	2.09	-7.61	1.57	-7.73	1.72
23	 Vladinol F	-6.59	2.09	-7.03	1.54	-7.88	0.93

24	 Neglectalignan A	-6.47	2.15	-5.84	0.81	-7.26	1.05
25	 Peperomin A	-7.06	1.76	-7.69	0.87	-6.39	1.4
#	**Co-crystallized Ligand**	-7.32[d]	2.10	-6.91[e]	1.63	-7.98[f]	0.63

[a]1V0P: *P. falciparum* kinase; [b]4PD4: cytochrome bc1; and [c]6AGT: lysyl-tRNA synthetase (PfKRS1) active sites; [d]Purvalanol B (**PVB**); [e]2-[trans-4-(4-chlorophenyl)cyclohexyl]-3-hydroxynaphthalene-1,4-dione (**AOQ**); [f]N-(cyclohexylmethyl)-4-oxo-4H-1-benzopyran-2-carboxamide (**9X0**); [g]Docking Score (S; Kcal/mol); [h]Root-Mean Square Deviation (Å)

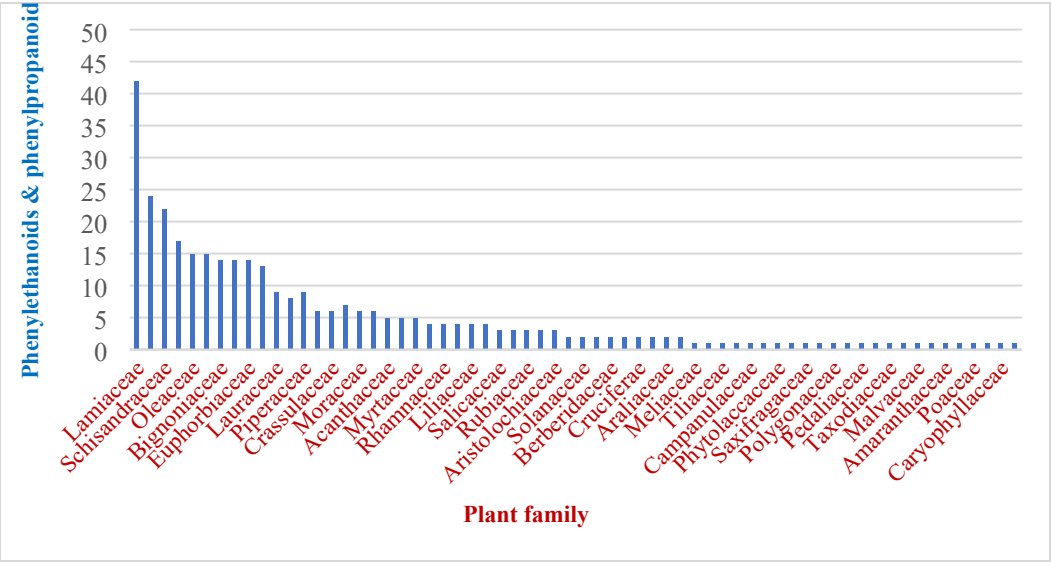


Fig. S1. Distribution of the investigated 261 compounds in different plant families

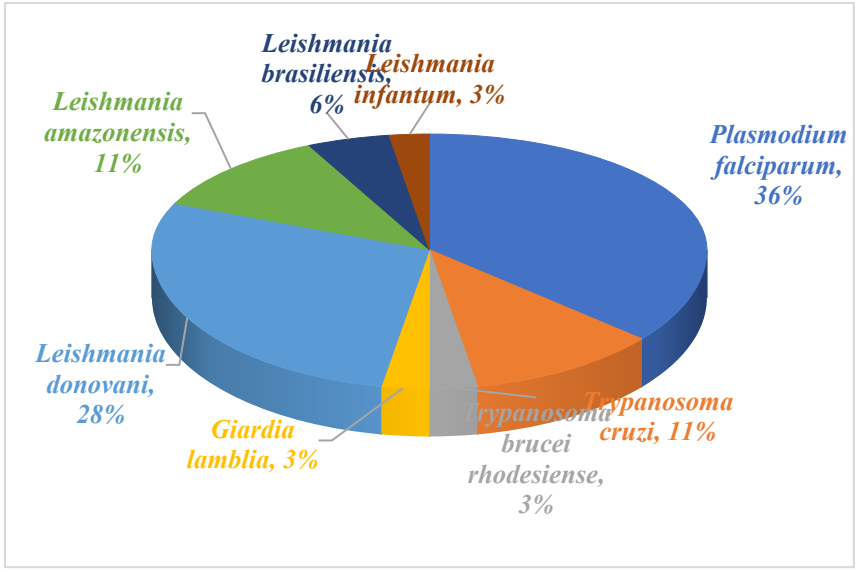


Fig. S2. Different antiprotozoal activity of 27 compounds out of the investigated 261 compounds

Feddeiphenol A **Feddeiphenol C**

Forsythoside A

L-Chicoric acid

Niranthin

Globoidnan A

(-)-Isolariciresinol

Peperomin A

PVB

Fig. S3. Presumptive mode of interaction of test molecules and PVB within active site of *P. falciparum* kinase (PDB ID: 1V0P)

Rosmarinic acid

Forsythoside A

Di-E-caffeoyl-meso-tartaric acid

Globoidnan A

Sesamin

AOQ

Fig S4. Presumptive mode of interaction of test molecules and AOQ within active site of *P. falciparum* mitochondrial cytochrome bc1 complex (PDB ID: 4PD4).

Feddeiphenol C

Surinamensin

Kadangustin H

Globoidnan A

9X0

Fig. S5. Presumptive mode of interaction of test molecules and 9X0 within active site of *P. falciparum* lysyl-tRNA synthetase (PfKRS1; PDB ID: 6AGT)

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