A review of alpha-glucosidase inhibitors from plants as potential candidates for the treatment of type-2 diabetes (submission to *Phytochemistry Reviews*)

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Online resource 1: List of plant-derived alpha-glucosidase inhibiting molecules organized according to their chemical classification

No.	Classes	Compound name	Plant source	IC50 (µM)	Mode of inhibition	IC50 of the positive control (µM)	References
1	Sesquiterpenoids	1S,4S,5S,6R,7R,9S,10S)-1,9 dibenzoyloxy-6-cinnamoyloxy-4-hydroxydihydro-β-agarofuran	Celastrus paniculatus	39.56	ND	Acarbose (52.87)	(Sasikumar et al. 2018)
2		1S,4S,5R,7S,8S,9S,10S)-1,8,15-triacetoxy-9-bezoyloxy-4-hydroxydihydro-β-agarofuran	Celastrus paniculatus	51.23	ND	Acarbose (52.87)	(Sasikumar et al. 2018)
3		1R,2R,4S,5S,6R,7R,9S,10R)-1,9-dibezoyloxy-2-acetoxy-6-cinnamoyloxy-4-hydroxydihydro-β-agarofuran	Celastrus paniculatus	35.6	ND	Acarbose (52.87)	(Sasikumar et al. 2018)
4		1α-acetoxy-6β,9α-dibenzoyloxy-8α cinnamoyloxy-4β-hydroxydihydro-β-agarofuran	Celastrus paniculatus	36.54	ND	Acarbose (52.87)	(Sasikumar et al. 2018)
5		1α,6β,9β-tribenzoyloxy-4β-hydroxydihydro-β-agarofuran	Celastrus paniculatus	44.83	ND	Acarbose (52.87)	(Sasikumar et al. 2018)
6		1α,2α,6β,15-tetraacetoxy-9α-benzoyloxy- 4β,8β dihydroxydihydro-β-agarofuran	Celastrus paniculatus	51.6	ND	Acarbose (52.87)	(Sasikumar et al. 2018)
7		1α,6β,8β,15-tetraacetoxy-9α-benzoyloxy-4β-hydroxydihydro- β-agarofuran	Celastrus paniculatus	42.58	ND	Acarbose (52.87)	(Sasikumar et al. 2018)
8		1α,8β-diacetoxy-6β,9β-dibenzoyloxy-4β-hydroxydihydro-β-agarofuran	Celastrus paniculatus	53.67	ND	Acarbose (52.87)	(Sasikumar et al. 2018)
9		1α-acetoxy-6β,9β-dibenzoyloxy-8α,4β-dihydroxydihydro-β-agarofuran	Celastrus paniculatus	50.6	ND	Acarbose (52.87)	(Sasikumar et al. 2018)
10		1α,9β-dibenzoyloxy-6β-acetoxy-8α,4β-dihydroxydihydro-β-agarofuran	Celastrus paniculatus	51.7	ND	Acarbose (52.87)	(Sasikumar et al. 2018)
11		1α,9β-dibenzoyloxy-4β-hydroxydihydro-β-agarofuran	Celastrus paniculatus	45.84	ND	Acarbose (52.87)	(Sasikumar et al. 2018)
12		6-isopropyl-4,10-dimethyldecahydro-2,3,4-naphthalenetriol	Teucrium Mascatense	121.2	ND	Acarbose (942.0)	(Rizvi et al. 2019)
13		α-humulene	Zingiber zerumbet	197.2	ND	Acarbose (47.2)	(Ajish et al. 2015)
14		Zerumbone	Zingiber zerumbet	95.7	ND	Acarbose (47.2)	(Ajish et al. 2015)
15		Zerumbol	Zingiber zerumbet	116.1	ND	Acarbose (47.2)	(Ajish et al. 2015)
16		Zerumbone 2,3-epoxide	Zingiber zerumbet	170.25	ND	Acarbose (47.2)	(Ajish et al. 2015)

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17	Diterpenoids	(5S,9S,10S,12E)-labda-8(17),12-diene-15,16-dioic anhydride	Amomum villosum	21.1	ND	Genistein (17.6)	(Yin et al. 2019)
18		(5S,9S,10S,16R,11E)-16-hydroxylabda-8(17),11,13-trien-15,16-olide	Amomum villosum	10	Mixed-type inhibition	Genistein (17.6)	(Yin et al. 2019)
19		labda-8(17),13(14)-dien-15,16-olide	Amomum villosum	14.8	ND	Genistein (17.6)	(Yin et al. 2019)
20		(E)-labda-8(17),12-dien-16,15-olide	Amomum villosum	17.1	ND	Genistein (17.6)	(Yin et al. 2019)
21		Coronarin-D methyl ether	Amomum villosum	15.8	ND	Genistein (17.6)	(Yin et al. 2019)
22		Coronarin-D ethyl ether	Amomum villosum	13.8	ND	Genistein (17.6)	(Yin et al. 2019)
23		15-hydroxylabda-8(17),13-dien-16,15-olide	Amomum villosum	17.5	ND	Genistein (17.6)	(Yin et al. 2019)
24		Methyl 15,16-dinor-7-oxolabda-8-ene-14-oate	Leonurus japonicus	220.2	ND	Acarbose (214.5)	(Nguyen et al. 2017a)
25		Hispanone	Leonurus japonicus	235.2	ND	Acarbose (214.5)	(Nguyen et al. 2017a)
26		Leoheteronins A	Leonurus japonicus	234.9	ND	Acarbose (214.5)	(Nguyen et al. 2017a)
27		15-methoxyleoheteronin B	Leonurus japonicus	26.7	ND	Acarbose (214.5)	(Nguyen et al. 2017a)
28		Taxumariene A	Taxus mairei	5.97	ND	Acarbose (155.86)	(Chen et al. 2020)
29		Taxumariene B	Taxus mairei	108.42	ND	Acarbose (155.86)	(Chen et al. 2020)
30		Taxumariene C	Taxus mairei	16.54	ND	Acarbose (155.86)	(Chen et al. 2020)
31		Taxumariene D	Taxus mairei	13.52	ND	Acarbose (155.86)	(Chen et al. 2020)
32		Taxumariene E	Taxus mairei	38.53	ND	Acarbose (155.86)	(Chen et al. 2020)
33		Taxumariene G	Taxus mairei	30.71	ND	Acarbose (155.86)	(Chen et al. 2020)
34		Chepraecoxin A	Chelonopsis praecox	305	Non-competitive inhibition	Acarbose (172.3)	(Deng et al. 2019)
35		Chepraecoxin B	Chelonopsis praecox	532.5	ND	Acarbose (172.3)	(Deng et al. 2019)
36		Chepraecoxin C	Chelonopsis praecox	675.6	ND	Acarbose (172.3)	(Deng et al. 2019)
37		Chepraecoxin D	Chelonopsis praecox	884.4	ND	Acarbose (172.3)	(Deng et al. 2019)
38		Chepraecoxin F	Chelonopsis praecox	361	ND	Acarbose (172.3)	(Deng et al. 2019)
39		Eupractenoid A	Euphorbia ebracteolata	7.94	Non-competitive inhibition	Acarbose (578.75)	(Wei et al. 2017b)
40		Eupractenoid B	Euphorbia ebracteolata	50.36	ND	Acarbose (578.75)	(Wei et al. 2017b)
41		4β,9α,20-trihydroxy-13,15-secotiglia-1,6-diene-3,13-dione 20-O-β-D-[6-galloyl]glu-copyranoside	Euphorbia fischeriana	23.6	ND	Acarbose (560.2)	(Wei et al. 2017c)
42		4β,9α,20-trihydroxy-13,15- secotiglia-1,6-diene- 3,13-dione-20-O-β- D-glucopyranoside	Euphorbia fischeriana	30.3	ND	Acarbose (560.2)	(Wei et al. 2017c)
43		Ent-8(14)-pimarene-12β,15S,16-triol	Euphorbia fischeriana	128.5	ND	Acarbose (560.2)	(Wei et al. 2017c)
44		Sapinsigin D	Sapium insigne	340	Non-competitive inhibition	Acarbose (148.5)	(Yan et al. 2018)
45		Sapinsigin F	Sapium insigne	587.3	ND	Acarbose (148.5)	(Yan et al. 2018)

No.	Classes	Compound name	Plant source	IC50 (µM)	Mode of inhibition	IC50 of the positive control (µM)	References
46	Triterpenoids	Charantoside IX	Momordica charantia	57.13	ND	Acarbose (5.48)	(Yue et al. 2017)
47		Charantoside VI	Momordica charantia	45.1	ND	Acarbose (5.48)	(Yue et al. 2017)
48		5b,19-epoxy-23(S)-methoxycucurbita-6,24-dien-3b-ol	Momordica charantia	27.7	ND	Acarbose (5.48)	(Yue et al. 2017)
49		25-O-methylkaraviagein D	Momordica charantia	10.19	ND	Acarbose (5.48)	(Yue et al. 2017)
50		Charantoside C	Momordica charantia	51.21	ND	Acarbose (5.48)	(Yue et al. 2017)
51		Karaviloside I	Momordica charantia	35.31	ND	Acarbose (5.48)	(Yue et al. 2017)
52		Karaviloside II	Momordica charantia	28.55	ND	Acarbose (5.48)	(Yue et al. 2017)
53		(19R,23E)-5b,19-epoxy-19,25-dimethoxycucurbita-6,23-dien- 3b-ol	Momordica charantia	20.2	ND	Acarbose (5.48)	(Yue et al. 2017)
54		Goyaglycoside d	Momordica charantia	108.43	ND	Acarbose (5.48)	(Yue et al. 2017)
55		(19R,23E)-5b,19-epoxy-19- methoxycucurbita-6,23-dien-3b,25-diol	Momordica charantia	76.91	ND	Acarbose (5.48)	(Yue et al. 2017)
56		Goyaglycoside b	Momordica charantia	30.96	ND	Acarbose (5.48)	(Yue et al. 2017)
57		Charantoside I	Momordica charantia	32.52	ND	Acarbose (5.48)	(Yue et al. 2017)
58		3α,21β,22α-trihydroxy-21,22-bis(2-methyl-1-oxobutoxy)-olean-15-en-23- methyl carboxylate-3yl- 3-O-β-D-glucopyranosyl(1→3) O-β-D-glucuronopyranoside	Gymnema sylvestre	79	ND	Acarbose (147.15)	(Alkefaia et al. 2019)
59		3α, 7β, 21β, 22α-tetrahydroxy-21,22-bis(2-methyl-1-oxobutoxy)-olean-15-en-3yl-3-O-β-D-glucopyranosyl (1→3)-O-β-D-glucuronopyranoside	Gymnema sylvestre	122	ND	Acarbose (147.15)	(Alkefaia et al. 2019)
60		3α, 7β, 21β, 22α-tetrahydroxy-21-(2-methyl-1-oxobutoxy)-22-[(2- methyl-1-oxobutenyl)oxy] olean-15-en-3yl-3-O-β- D-glucopyranosyl(1→3) O-β-D-glucuronopyranoside	Gymnema sylvestre	63.4	ND	Acarbose (147.15)	(Alkefaia et al. 2019)
61		3α, 7β,21β, 22α-tetrahydroxyolean-15-en-23, 29-dioic acid-3-yl-3-O-β-D- glucopyranosyl (1→3) O-β-D-Glucuronopyranoside	Gymnema sylvestre	65.33	ND	Acarbose (147.15)	(Alkefaia et al. 2019)
62		3β, 7β, 21β, 22α, 23,28-hexahydroxy-21-(2-methyl-1-oxobutoxy)-22-[(2-methyl-1-oxobutenyl)oxy]-olean-15-en-3-yl-3-O-β-D-glucopyranosyl(1→3) O-β-D-glucuronopyranoside	Gymnema sylvestre	126.73	ND	Acarbose (147.15)	(Alkefaia et al. 2019)
63		3-oxolupenal	Nuxia oppositifolia	142.01	ND	Acarbose (59.01)	(Alqahtani et al. 2020)
64		Katononic acid	Nuxia oppositifolia	194.85	ND	Acarbose (59.01)	(Alqahtani et al. 2020)
65		Oleanolic acid	Salvia africana-lutea	50.1	ND	Acarbose (945.5)	(Etsassala et al. 2019)

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66	Triterpenoids	Ursolic acid	Salvia africana-lutea	24.7	ND	Acarbose (945.5)	(Etsassala et al. 2019)
67		β-amyrin	Salvia africana-lutea	40.1	ND	Acarbose (945.5)	(Etsassala et al. 2019)
68		11,12-dehydroursolic acid lactone	Salvia africana-lutea	188.7	ND	Acarbose (945.5)	(Etsassala et al. 2019)
69		Leuctriterpencoside	Leucas zeylanica	0.85	ND	Acarbose (2.35)	(Chen et al. 2019)
70		3β-hydroxy-30-hydroperoxy-20-taraxastene	Cirsium setosum	18.34	ND	Acarbose (42.52)	(Li et al. 2019a)
71		3β-hydroxy-22α-methoxy-20- taraxastene	Cirsium setosum	26.98	ND	Acarbose (42.52)	(Li et al. 2019a)
72		30-nor-3β,22α-dihydroxy-20- taraxastene	Cirsium setosum	44.62	ND	Acarbose (42.52)	(Li et al. 2019a)
73		3β,22α-dihydroxy-20-taraxastene	Cirsium setosum	17.49	ND	Acarbose (42.52)	(Li et al. 2019a)
74		20-taraxastene-3,22-dione	Cirsium setosum	68.9	ND	Acarbose (42.52)	(Li et al. 2019a)
75		3β-acetoxy-20-taraxasten-22- one	Cirsium setosum	54.16	ND	Acarbose (42.52)	(Li et al. 2019a)
76		3β-hydroxy-20-taraxasten-22- one	Cirsium setosum	22.67	ND	Acarbose (42.52)	(Li et al. 2019a)
77		30-nor-3β-hydroxy-20-taraxastene	Cirsium setosum	80.07	ND	Acarbose (42.52)	(Li et al. 2019a)
78		3b-acetoxy-20-oxo-21-nordammaran-23-carboxylic acid methyl ester	Artemisia argyi	101.04	ND	Acarbose (333.53)	(Zhang et al. 2020)
79		3b-acetoxy-17b-dammaranic acid	Artemisia argyi	105.54	ND	Acarbose (333.53)	(Zhang et al. 2020)
80		2a,3b,23-trihydroxymultiflor-7-en-28-oic acid	Akebia trifoliata	109	ND	Acarbose (409)	(Ouyang et al. 2018)
81		Akebia oside C	Akebia trifoliata	15	ND	Acarbose (409)	(Ouyang et al. 2018)
82		2a,3bdihydroxyolean-13(18)-en-28-oic acid	Akebia trifoliata	21	ND	Acarbose (409)	(Ouyang et al. 2018)
83		2a,3b,29-trihydroxyolean- 12-en-28-oic acid	Akebia trifoliata	503	ND	Acarbose (409)	(Ouyang et al. 2018)
84		Stachlic acid A	Akebia trifoliata	592	ND	Acarbose (409)	(Ouyang et al. 2018)
85		Mesembryanthemoidigenic acid	Akebia trifoliata	42	ND	Acarbose (409)	(Ouyang et al. 2018)
86		2a,3b,20a-trihydroxy-29-norolean-12-en- 28-oic acid	Akebia trifoliata	367	ND	Acarbose (409)	(Ouyang et al. 2018)
87		Gypsogenic acid	Akebia trifoliata	9	ND	Acarbose (409)	(Ouyang et al. 2018)
88		Serratagenic acid	Akebia trifoliata	60	ND	Acarbose (409)	(Ouyang et al. 2018)
89		Lupeol	Pueraria lobata	176.35	ND	Acarbose (144.26)	(Seong et al. 2016)
90		Lupenone	Pueraria lobata	112.36	ND	Acarbose (144.26)	(Seong et al. 2016)
91		Betulinic acid	Euonymus alatus	83.6	ND	Acarbose (310.2)	(Choi et al. 2015)
92		Hederagenin	Euonymus alatus	85.3	ND	Acarbose (310.2)	(Choi et al. 2015)
93		Rhodotomoside A	Rhodomyrtus tomentosa	426	ND	Acarbose (26.33)	(Mo et al. 2019)

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94	Isoflavonoids	Prunetin 5-O-β-glucopyranoside	Potentilla astracanica	120.95	Un-competitive inhibition	Acarbose (49.44)	(Şöhretoğlu et al. 2017)
95		Genistein5-O-β-glucopyranoside	Potentilla astracanica	96.21	Competitive inhibition	Acarbose (49.44)	(Şöhretoğlu et al. 2017)
96		Prunetin	Potentilla astracanica	112.11	Non-competitive inhibition	Acarbose (49.44)	(Şöhretoğlu et al. 2017)
97		Genistein	Potentilla astracanica	5.43	Un-competitive inhibition	Acarbose (49.44)	(Şöhretoğlu et al. 2017)
98		3S,4R-tuberosin	Pueraria lobata	378.89	ND	Acarbose (1998.79)	(Wang et al. 2017b)
99		Daidzein	Pueraria lobata	23.01	Non-competitive inhibition	Acarbose (1998.79)	(Wang et al. 2017b)
100		Puerarin	Pueraria lobata	524.08	ND	Acarbose (1998.79)	(Wang et al. 2017b)
101		Daidzin	Pueraria lobata	253.78	ND	Acarbose (1998.79)	(Wang et al. 2017b)
102		Ononin	Pueraria lobata	422.89	ND	Acarbose (1998.79)	(Wang et al. 2017b)
103		Calycosin	Pueraria lobata	6.84	Non-competitive inhibition	Acarbose (144.26)	(Seong et al. 2016)
104		Coumestrol	Pueraria lobata	495.03	ND	Acarbose (93.1)	(Seong et al. 2016)
105		Puerarol	Pueraria lobata	50.7	ND	Acarbose (93.1)	(Seong et al. 2016)
106	Flavanones	Farrerol	Matteuccia intermedia	44.1	ND	Acarbose (172.3)	(Li et al. 2019b)
107		Matteucin	Matteuccia intermedia	37.6	ND	Acarbose (172.3)	(Li et al. 2019b)
108		Matteucinol	Matteuccia intermedia	28	ND	Acarbose (172.3)	(Li et al. 2019b)
109		Methoxymatteucin	Matteuccia intermedia	69.7	ND	Acarbose (172.3)	(Li et al. 2019b)
110		3′-hydroxy-matteucinol	Matteuccia intermedia	43.6	ND	Acarbose (172.3)	(Li et al. 2019b)
111		Cyrtominetin	Matteuccia intermedia	12.4	ND	Acarbose (172.3)	(Li et al. 2019b)
112		(2S)-7,4'-hydroxyl-6-(2",3"-epoxy-3"-methylbutyl) flavanone	Psoralea corylifolia	29.2	ND	Acarbose (214.1)	(Liu et al. 2018)
113		Brosimacutin E	Psoralea corylifolia	99.5	ND	Acarbose (214.1)	(Liu et al. 2018)
114		(2S)-7-methoxy-6-(2-hydroxy-3-methylbut-3-en-1-yl)-2-(4-hydroxyphenyl)chroman-4-One	Psoralea corylifolia	41.2	ND	Acarbose (214.8)	(Zhu et al. 2019)
115		(2S)-4′-hydroxyl-7-hydroxymethylene-6-(2″,3″-epoxy-3″-methylbutyl)flavanone	Psoralea corylifolia	32.7	ND	Acarbose (214.8)	(Zhu et al. 2019)
116		Bavachinone B	Psoralea corylifolia	28	ND	Acarbose (214.8)	(Zhu et al. 2019)
117	Flavanols	(–)-epicatechin-3-O-(E)-coumarate	Camellia sinensis	62.1	ND	Acarbose (0.97)	(Wang et al. 2017a)
118		(–)-epicatechin-3-O-(E)-caffeate	Camellia sinensis	107.1	ND	Acarbose (0.97)	(Wang et al. 2017a)
119		Ampelopsin	Camellia sinensis	104.6	ND	Acarbose (0.97)	(Wang et al. 2017a)
120		(–)-epicatechin-3-O-gallate	Camellia sinensis	84.2	ND	Acarbose (0.97)	(Wang et al. 2017a)
121		(–)-epiafzelechin-3-O-gallate	Camellia sinensis	71.3	ND	Acarbose (0.97)	(Wang et al. 2017a)
122		(+)-catechin-3-O-gallate	Camellia sinensis	32.5	ND	Acarbose (0.97)	(Wang et al. 2017a)
123		(+)-epiafzelechin-3-O-gallate	Camellia sinensis	74.6	ND	Acarbose (0.97)	(Wang et al. 2017a)
124		(–)-epigallo-catechin	Camellia sinensis	89.7	ND	Acarbose (0.97)	(Wang et al. 2017a)
125		(+)-gallocatechin	Camellia sinensis	91.8	ND	Acarbose (0.97)	(Wang et al. 2017a)
126		(–)-epigallo-catechin-3-O-gallate	Camellia sinensis	78.1	ND	Acarbose (0.97)	(Wang et al. 2017a)
127		(+)-gallocatechin-3-O-gallate	Camellia sinensis	78.7	ND	Acarbose (0.97)	(Wang et al. 2017a)

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128	Flavonols	Rutin	Potentilla inclinata	43.09	ND	Acarbose (49.44)	(Şöhretoğlu et al. 2018)
129		Kaempferol-3-O-α-rhamnopyranosyl-(1→6)-β –glucopyranoside	Potentilla inclinata	231.92	Un-competitive inhibition	Acarbose (49.44)	(Şöhretoğlu et al. 2018)
130		Quercetin-3-O-β-glucopyranoside	Potentilla inclinata	245.5	Non-competitive inhibition	Acarbose (49.44)	(Şöhretoğlu et al. 2018)
131		Sexangu-laretin 3-O-β-glucopyranosyl-(1→2)-β-glucopyranoside	Potentilla inclinata	144.96	Non-competitive inhibition	Acarbose (49.44)	(Şöhretoğlu et al. 2018)
132		Quercetin	Lumnitzera littorea	11.24	ND	Acarbose (214.06)	(Thuy et al. 2019)
133		Quercitrin	Lumnitzera littorea	17.17	ND	Acarbose (214.06)	(Thuy et al. 2019)
134		Myricetin	Lumnitzera littorea	307.31	ND	Acarbose (214.06)	(Thuy et al. 2019)
135		Myricitrin	Lumnitzera littorea	330.55	ND	Acarbose (214.06)	(Thuy et al. 2019)
136		Afzelin	Lumnitzera littorea	14.57	ND	Acarbose (214.06)	(Thuy et al. 2019)
137		Myricetin 3-O-(4″-O-galloyl)-α-L-rhamnopyranoside	Lumnitzera littorea	67.4	ND	Acarbose (214.06)	(Thuy et al. 2019)
138	Flavones	Isovitexin	Tinospora crispa	61.2	ND	Acarbose (0.033)	(Chang et al. 2015)
139		Isoorientin 2″-(E)-p-coumarate	Tinospora crispa	35.7	ND	Acarbose (0.033)	(Chang et al. 2015)
140		Isovitexin 2″-(E)-p-coumarate	Tinospora crispa	4.3	ND	Acarbose (0.033)	(Chang et al. 2015)
141		Cosmosiin 6″-(E)-ferulate	Tinospora crispa	8.8	ND	Acarbose (0.033)	(Chang et al. 2015)
142		Cosmosiin 6″-(E)-p-coumarate	Tinospora crispa	14.6	ND	Acarbose (0.033)	(Chang et al. 2015)
143		Cosmosiin 6′′-(E)-cinnamate	Tinospora crispa	11.3	ND	Acarbose (0.033)	(Chang et al. 2015)
144		Leontopodioside A	Leontopodium leontopodioides	55.6	ND	Acarbose (626.3)	(Xiao et al. 2016)
145		Leontopodioside B	Leontopodium leontopodioides	39.7	ND	Acarbose (626.3)	(Xiao et al. 2016)
146		Hypemonone E	Hypericum monogynum	781.2	ND	Acarbose (233)	(Zeng et al. 2018)
147		Dioxycudraflavone A	Morus alba	25.27	ND	1-Deoxynojirimycin (85.29)	(Li et al. 2018)
148		Sanggenon V	Morus alba	2.89	ND	1-Deoxynojirimycin (85.29)	(Li et al. 2018)
149		Morusignin L	Morus alba	23.2	ND	1-Deoxynojirimycin (85.29)	(Li et al. 2018)
150		Licoflavone C	Morus alba	78.8	ND	1-Deoxynojirimycin (85.29)	(Li et al. 2018)
151		Albanin T	Morus alba	11.04	ND	Acarbose (203.97)	(Ha et al. 2018)
152		5'-(1″,1″-dimethylallyl) 5,7,2′,4′-tetrahydroxyflavone	Morus alba	8.7	ND	Acarbose (203.97)	(Ha et al. 2018)
153		5′-geranyl-5,7,2′,4′-tetrahydroxy- flavone	Morus alba	18.31	ND	Acarbose (203.97)	(Ha et al. 2018)
154		Albanin A	Morus alba	100.96	ND	Acarbose (203.97)	(Ha et al. 2018)
155		Morusinol	Morus alba	65.27	ND	Acarbose (203.97)	(Ha et al. 2018)
156		Albanin C	Morus alba	12.04	ND	Acarbose (203.97)	(Ha et al. 2018)
157		Kuwanon C	Morus alba	11.85	ND	Acarbose (203.97)	(Ha et al. 2018)
158	Chalcone derivatives	Morusalbin A	Morus alba	4.53	ND	Acarbose (203.97)	(Ha et al. 2018)
159		Morusalbin B	Morus alba	5.07	ND	Acarbose (203.97)	(Ha et al. 2018)
160		Morusalbin C	Morus alba	5.4	ND	Acarbose (203.97)	(Ha et al. 2018)
161		Morusalbin D	Morus alba	3.55	Competitive inhibition	Acarbose (203.97)	(Ha et al. 2018)
162		Macrourin I	Morus macroura	1.7	ND	Acarbose (1428)	(Wang et al. 2018)
163		Macrourin J	Morus macroura	1.58	ND	Acarbose (1428)	(Wang et al. 2018)
164		Wittiorumin F	Morus macroura	1.89	ND	Acarbose (1428)	(Wang et al. 2018)
165		Kuwanon J	Morus macroura	2.17	ND	Acarbose (1428)	(Wang et al. 2018)
166		Albafuran C	Morus macroura	2.52	ND	Acarbose (1428)	(Wang et al. 2018)
167		Mulberrofuran E	Morus macroura	5.22	ND	Acarbose (1428)	(Wang et al. 2018)
168		Mulberrofuran F	Morus macroura	2.13	ND	Acarbose (1428)	(Wang et al. 2018)
169		Sorocein I	Morus macroura	1.47	ND	Acarbose (1428)	(Wang et al. 2018)

No.	Classes	Compound name	Plant source	IC50 (μM)	Mode of inhibition	IC50 of the positive control (μM)	References
170	Stilbenes	Paeonilactiflorol	Paeonia lactiflora	13.57	ND	Acarbose (149.00)	(Zhang et al. 2019)
171		Trans-resveratrol	Paeonia lactiflora	123.39	ND	Acarbose (149.00)	(Zhang et al. 2019)
172		Cis-ε-viniferin	Paeonia lactiflora	86.65	ND	Acarbose (149.00)	(Zhang et al. 2019)
173		Trans-ε-viniferin	Paeonia lactiflora	43.91	ND	Acarbose (149.00)	(Zhang et al. 2019)
174		(–)-7a,8a-cis-ε-viniferin	Paeonia lactiflora	59.16	ND	Acarbose (149.00)	(Zhang et al. 2019)
175		Carasiphenol A	Paeonia lactiflora	32.88	ND	Acarbose (149.00)	(Zhang et al. 2019)
176		Trans-gnetin H	Paeonia lactiflora	14.39	ND	Acarbose (149.00)	(Zhang et al. 2019)
177		Suffruticosol A	Paeonia lactiflora	15.57	ND	Acarbose (149.00)	(Zhang et al. 2019)
178		Suffruticosol B	Paeonia lactiflora	10.82	ND	Acarbose (149.00)	(Zhang et al. 2019)
179		Polygonumnolide D	Polygonum multiflorum	2.4	ND	Acarbose (50.04)	(Yang et al. 2017)
180		(E)-2,3,5,4′-tetrahydroxylstilbene-2-β-D-glucopyranoside	Polygonum multiflorum	14.9	ND	Acarbose (50.04)	(Yang et al. 2017)
181		(Z)-2,3,5,4′-tetrahydroxylstilbene-2-β-D-glucopyranoside	Polygonum multiflorum	8.6	ND	Acarbose (50.04)	(Yang et al. 2017)
182		(E)- 2,3,5,4′-tetrahydroxylstilbene-2-β-D-(3″-Omonogalloylesters)-glucoside	Polygonum multiflorum	11.1	ND	Acarbose (50.04)	(Yang et al. 2017)
183		Cysestermerol A	Cynodon dactylon	172.88	ND	Acarbose (104.13)	(Wang et al. 2019)
184	Phenolic acids	Invonoid A	Balanophora involucrate	70.34	ND	Acarbose (505.79)	(Wei et al. 2017a)
185		Invonoid B	Balanophora involucrate	92.63	ND	Acarbose (505.79)	(Wei et al. 2017a)
186		Brevifolin carboxylic acid	Balanophora involucrate	45.64	ND	Acarbose (505.79)	(Wei et al. 2017a)
187	Lignans	7′R*-methoxy-7-epi-lariciresinol	Taxus wallichiana	42.9	ND	Acarbose (215)	(Dang et al. 2017b)
188		7′S*-methoxy-7-epilariciresinol	Taxus wallichiana	170	ND	Acarbose (215)	(Dang et al. 2017b)
189		α-conidendrin	Taxus wallichiana	194	ND	Acarbose (215)	(Dang et al. 2017b)
190		Formosanol	Taxus wallichiana	35.3	ND	Acarbose (215)	(Dang et al. 2017b)
191		(+)-tsugacetal	Taxus wallichiana	38.8	ND	Acarbose (215)	(Dang et al. 2017b)
192		α-intermedianol	Taxus wallichiana	133	ND	Acarbose (215)	(Dang et al. 2017b)
193		Matairesinol	Taxus wallichiana	175	ND	Acarbose (215)	(Dang et al. 2017b)
194		Oxomatairesinol	Taxus wallichiana	79.1	ND	Acarbose (215)	(Dang et al. 2017b)
195		Lanceolatanin C	Taxus wallichiana	52.2	ND	Acarbose (215)	(Dang et al. 2017b)
196		Lanceolatanin D	Taxus wallichiana	135	ND	Acarbose (215)	(Dang et al. 2017b)
197	Tannins	1,2,3-tri-O-galloyl-6-O-cinnamoyl-β-D-glucose	Terminalia chebula	14.7	ND	Acarbose (174.0)	(Lee et al. 2017)
198		1,2,3,6-tetra-O-galloyl-4-O-cinnamoyl-β–D-glucose	Terminalia chebula	2.9	Mixed-type inhibition	Acarbose (174.0)	(Lee et al. 2017)
199		1,6-di-O-galloyl-2-O-cinnamoyl-β-D-glucose	Terminalia chebula	46.1	ND	Acarbose (174.0)	(Lee et al. 2017)
200		1,2-di-O-galloyl-6-O-cinnamoyl-β–D-glucose	Terminalia chebula	68.4	ND	Acarbose (174.0)	(Lee et al. 2017)
201		1,2,3,6-tetra-O-galloyl-β-D-glucose	Terminalia chebula	15.5	ND	Acarbose (174.0)	(Lee et al. 2017)
202		1,2,3,4,6-penta-O-galloyl-β-D-glucose	Terminalia chebula	8.3	ND	Acarbose (174.0)	(Lee et al. 2017)
203		4-O-(2",4"-di-O-galloyl-α-L-rhamnosyl) ellagic acid	Terminalia chebula	6.4	Mixed-type inhibition	Acarbose (174.0)	(Lee et al. 2017)
204		4-O-(4"-O-galloyl-α-L-rhamnosyl)ellagic acid	Terminalia chebula	37.9	ND	Acarbose (174.0)	(Lee et al. 2017)
205		4-O-(3",4"-di-O-galloyl-α-L-rhamnosyl) ellagic acid	Terminalia chebula	12.3	ND	Acarbose (174.0)	(Lee et al. 2017)

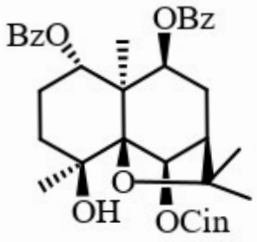
No.	Classes	Compound name	Plant source	IC50 (μM)	Mode of inhibition	IC50 of the positive control (μM)	References
206	Anthraquinones	8-hydroxy-1,2,6,7-tetramethoxy-3-methylanthraquinone	Cassia obtusefolia	460.36	ND	Acarbose (< 7.822)	(Luo et al. 2019)
207		1,6,8-trihydroxy-2,7-dimethoxy-3-methylanthraquinone	Cassia obtusefolia	364.5	ND	Acarbose (< 7.822)	(Luo et al. 2019)
208		7-methoxy obtusifolin	Cassia obtusefolia	634.17	ND	Acarbose (< 7.822)	(Luo et al. 2019)
209		Chrysophanol	Cassia obtusefolia	200	ND	Acarbose (< 7.822)	(Luo et al. 2019)
210		Physicon	Cassia obtusefolia	79.47	ND	Acarbose (< 7.822)	(Luo et al. 2019)
211		Obtusifolin	Cassia obtusefolia	508.83	ND	Acarbose (< 7.822)	(Luo et al. 2019)
212		Aurantio-obtusin	Cassia obtusefolia	326.41	ND	Acarbose (< 7.822)	(Luo et al. 2019)
213		Questin	Cassia obtusefolia	414.9	ND	Acarbose (< 7.822)	(Luo et al. 2019)
214		Obtusin	Cassia obtusefolia	60.76	ND	Acarbose (191.4)	(Jung et al. 2017)
215		Emodin	Cassia obtusefolia	3.77	ND	Acarbose (191.4)	(Jung et al. 2017)
216		Chryso-obtusin	Cassia obtusefolia	100.5	ND	Acarbose (191.4)	(Jung et al. 2017)
217		2-Hydroxyemodin-1-methylether	Cassia obtusefolia	18.81	ND	Acarbose (191.4)	(Jung et al. 2017)
218	Depside derivatives	Methyl 2-O-(4-hydroxybenzoyl)-2,4,6-trihydroxyphenylacetate	Impatiens balsamina	28.77	ND	Acarbose (5.20)	(Li et al. 2015)
219		Methyl 2-O-(4-hydroxybenzoyl)-4-O-β-D-glucopyranosyl-6-hydroxyphenylacetate	Impatiens balsamina	30.8	ND	Acarbose (5.20)	(Li et al. 2015)
220		Butoxy2-O-(4-hydroxybenzoyl)-4,6-dihydroxyphenylacetate	Impatiens balsamina	2	ND	Acarbose (5.20)	(Li et al. 2015)
221	Coumarins	Dolichosin A	Dolichos trilobus	19.5	ND	Acarbose (163.6)	(Jiang et al. 2019)
222		Isosojagol	Dolichos trilobus	32.2	ND	Acarbose (163.6)	(Jiang et al. 2019)
223		Phaseol	Dolichos trilobus	21.6	ND	Acarbose (163.6)	(Jiang et al. 2019)
224		4″,5″-dehydroisopsoralidin	Dolichos trilobus	12	ND	Acarbose (163.6)	(Jiang et al. 2019)
225		7-[(E)-3′,7′-dimethyl-6′-oxo-2′,7′-octadienyl]oxy-coumarin	Zanthoxylum schinifolium	161.6	ND	Acarbose (121.5)	(Nguyen et al. 2016)
226		7-(6′R-hydroxy-3′,7′-dimethyl-2′E,7′-octadienyloxy)coumarin	Zanthoxylum schinifolium	78.2	ND	Acarbose (121.5)	(Nguyen et al. 2016)
227		7-[(E)-7′-hydroxy-3′,7′-dimethy-locta-2′,5′-dienyloxy]-coumarin	Zanthoxylum schinifolium	164.4	ND	Acarbose (121.5)	(Nguyen et al. 2016)
228		Collinin	Zanthoxylum schinifolium	92.1	ND	Acarbose (121.5)	(Nguyen et al. 2016)
229		(E)-4-methyl-6-(-coumarin-7'-yloxy)hex-4-enal	Zanthoxylum schinifolium	90.6	ND	Acarbose (121.5)	(Nguyen et al. 2016)
230		Paratrimerin E	Paramignya trimera	106.9	ND	Acarbose (214.5)	(Dang et al. 2017a)
231		Ostruthin	Paramignya trimera	17.1	ND	Acarbose (214.5)	(Dang et al. 2017a)
232		Umbelliferone	Paramignya trimera	32.4	ND	Acarbose (214.5)	(Dang et al. 2017a)
233		Scopoletin	Paramignya trimera	69	ND	Acarbose (214.5)	(Dang et al. 2017a)
234		Ninhvanin	Paramignya trimera	84.6	ND	Acarbose (214.5)	(Dang et al. 2017a)
235		Xanthyletin	Paramignya trimera	37.5	ND	Acarbose (214.5)	(Dang et al. 2017a)
236		Pandanusin A	Paramignya trimera	95.3	ND	Acarbose (214.5)	(Dang et al. 2017a)
237		Paratrimerin F	Paramignya trimera	31.7	ND	Acarbose (214.5)	(Dang et al. 2017a)

No.	Classes	Compound name	Plant source	IC50 (μM)	Mode of inhibition	IC50 of the positive control (μM)	References
238	Diarylheptanoids	Tsaokopyranol A	Amomum tsao-ko	169.5	ND	Acarbose (219.0)	(He et al. 2020)
239		Tsaokopyranol B	Amomum tsao-ko	154.5	ND	Acarbose (219.0)	(He et al. 2020)
240		Tsaokopyranol C	Amomum tsao-ko	472	ND	Acarbose (219.0)	(He et al. 2020)
241		Tsaokopyranol D	Amomum tsao-ko	100.1	ND	Acarbose (219.0)	(He et al. 2020)
242		Tsaokopyranol E	Amomum tsao-ko	89.6	ND	Acarbose (219.0)	(He et al. 2020)
243		Tsaokopyranol F	Amomum tsao-ko	116.5	ND	Acarbose (219.0)	(He et al. 2020)
244		Tsaokopyranol G	Amomum tsao-ko	460.4	ND	Acarbose (219.0)	(He et al. 2020)
245		Tsaokopyranol H	Amomum tsao-ko	59.4	ND	Acarbose (219.0)	(He et al. 2020)
246		Tsaokopyranol I	Amomum tsao-ko	67.3	ND	Acarbose (219.0)	(He et al. 2020)
247		Tsaokopyranol J	Amomum tsao-ko	65.6	ND	Acarbose (219.0)	(He et al. 2020)
248		Tsaokopyranol K	Amomum tsao-ko	97	ND	Acarbose (219.0)	(He et al. 2020)
249		Tsaokopyranol L	Amomum tsao-ko	1042	Non-competitive inhibition	Acarbose (219.0)	(He et al. 2020)
250		Tsaokopyranol M	Amomum tsao-ko	853	Non-competitive inhibition	Acarbose (219.0)	(He et al. 2020)
251		(2R,6S)-3,4-dehydro-1,7-bis(4-hydroxy phenyl)-4'-de-O-methyl centrolobine	Amomum tsao-ko	248	ND	Acarbose (219.0)	(He et al. 2020)
252		(2R,6R)-3,4-dehydro-4'-de-O-methyl centrolobin	Amomum tsao-ko	457	ND	Acarbose (219.0)	(He et al. 2020)
253		Phaeoheptanoxide	Amomum tsao-ko	68.6	ND	Acarbose (219.0)	(He et al. 2020)
254		Engelheptanoxides C	Amomum tsao-ko	179.5	ND	Acarbose (219.0)	(He et al. 2020)
255	Xanthones	Fuscaxanthones J	Garcinia fusca	8.3	ND	Acarbose (214.5)	(Nguyen et al. 2017b)
256		Fuscaxanthones K	Garcinia fusca	62.3	ND	Acarbose (214.5)	(Nguyen et al. 2017b)
257		Cowanin	Garcinia fusca	20.7	ND	Acarbose (214.5)	(Nguyen et al. 2017b)
258		Cowanol	Garcinia fusca	168.7	ND	Acarbose (214.5)	(Nguyen et al. 2017b)
259		Cowagarcinione E	Garcinia fusca	16.9	ND	Acarbose (214.5)	(Nguyen et al. 2017b)
260		1,3-dihydroxy-6,7-dimethoxy-2,8-diprenylxanthone	Garcinia fusca	18.2	ND	Acarbose (214.5)	(Nguyen et al. 2017b)
261		α-mangostin	Garcinia fusca	11.4	ND	Acarbose (214.5)	(Nguyen et al. 2017b)
262		1,3-dihydroxy-2-(2-hydroxy-3-methylbut-3-enyl)-6,7-dimethoxy-8-(3-methylbut-2-enyl)xanthone	Garcinia fusca	94.3	ND	Acarbose (214.5)	(Nguyen et al. 2017b)
263		Garbogiol	Garcinia fusca	21.2	ND	Acarbose (214.5)	(Nguyen et al. 2017b)
264		Cowaxanthone	Garcinia fusca	43.7	ND	Acarbose (214.5)	(Nguyen et al. 2017b)
265		Garciniacowones H	Garcinia cowa	25.4	ND	Acarbose (80.0)	(Raksat et al. 2019)
266		Garciniacowones I	Garcinia cowa	15.4	ND	Acarbose (80.0)	(Raksat et al. 2019)
267		Garciniacowones J	Garcinia cowa	76.2	ND	Acarbose (80.0)	(Raksat et al. 2019)
268		Oblongixanthone G	Garcinia oblongifolia	9.4	ND	Acarbose (900)	(Trinh et al. 2017)
269		Oblongixanthone H	Garcinia oblongifolia	21.2	ND	Acarbose (900)	(Trinh et al. 2017)
270	Alkaloids	Paramiacridone	Paramignya trimera	62.5	ND	Acarbose (223.0)	(Trinh et al. 2020)
271		5-hydroxynoracronycin	Paramignya trimera	14.5	ND	Acarbose (223.0)	(Trinh et al. 2020)
272		Glycocitrin III	Paramignya trimera	101.4	ND	Acarbose (223.0)	(Trinh et al. 2020)
273		3-heptyl-2-methylisoquinolin-1(2H)-one	Zanthoxylum schinifolium	82.4	ND	Acarbose (121.5)	(Nguyen et al. 2016)
274		Vindogentianine	Catharanthus roseus	427.44	ND	Acarbose (256.11)	(Tiong et al. 2015)
275		Utilisin	Echinochloa utilis	84.7	ND	Acarbose (125.2)	(Nguyen et al. 2017c)

No.	Classes	Compound name	Plant source	IC50 (μM)	Mode of inhibition	IC50 of the positive control (μM)	References
276	Amides	Mariamide A	Silybum marianum	1.5	ND	Acarbose (2.68)	(Qin et al. 2017)
277		Mariamide B	Silybum marianum	20.24	ND	Acarbose (2.68)	(Qin et al. 2017)
278		4-hydroxy-N-{4-[(E)-3-(4-hydroxy-3-methoxyphenyl) prop-2-enamido]butyl}benzamide	Silybum marianum	55.95	ND	Acarbose (2.68)	(Qin et al. 2017)
279		4-hydroxy-N-{4-[3-(4-hydroxy-phenyl)-E-acryloylamino]-butyl}-benzamide	Silybum marianum	5.3	ND	Acarbose (2.68)	(Qin et al. 2017)
280		N, N-1,4-butanediylbis(4-hydroxy-benzamide)	Silybum marianum	35.21	ND	Acarbose (2.68)	(Qin et al. 2017)
281		4,4′-diphenylmethane-bis(methyl) carbamates	Silybum marianum	26.92	ND	Acarbose (2.68)	(Qin et al. 2017)
282		N-(p-coumaroyl) serotonin	Echinochloa utilis	40.9	ND	Acarbose (125.2)	(Nguyen et al. 2017c)

[a]ND, not determined

[b]Inhibitory activity of flavanols (structures 117-127) was toward sucrose



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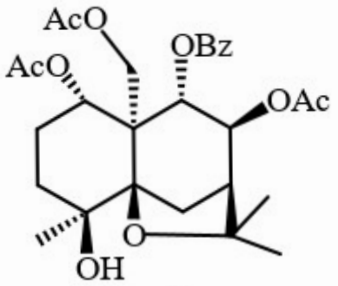

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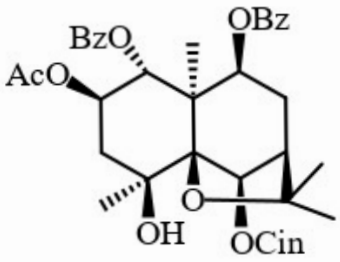

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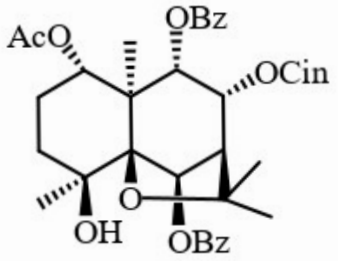

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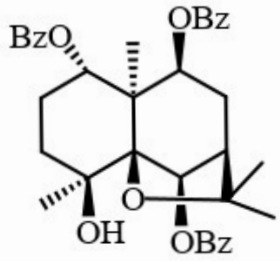

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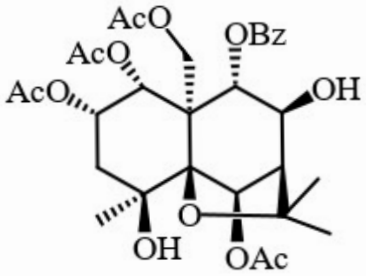

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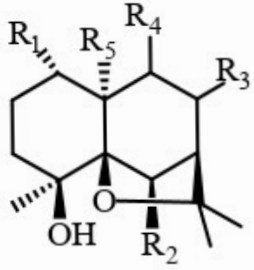
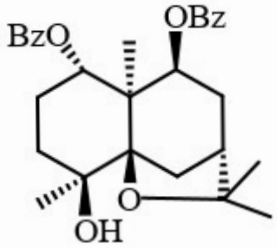
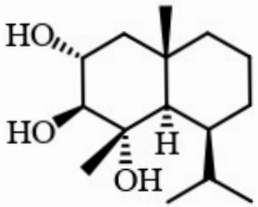




11

	R_1	R_2	R_3	R_4	R_5
7	OAc	OAc	β-OAc	α-OBz	CH_2OAc
8	OAc	OBz	β-OAc	β-OBz	CH_3
9	OAc	OBz	α-OH	α-OBz	CH_3
10	OBz	OAc	α-OH	β-OBz	CH_3



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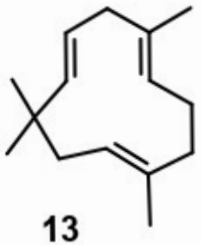

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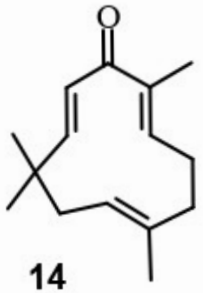

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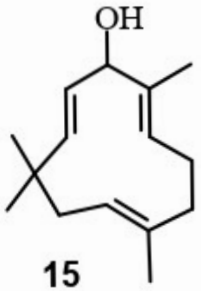

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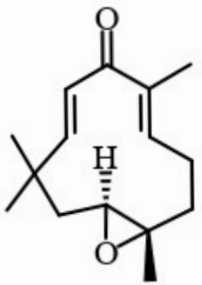

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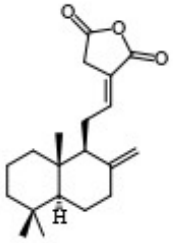

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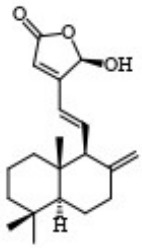

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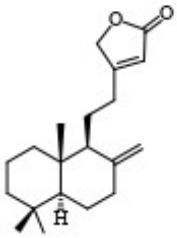

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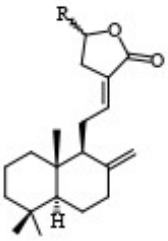
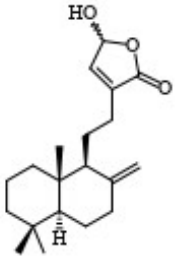


R

20: H

21: -OCH_3

22: -OCH_2CH_3



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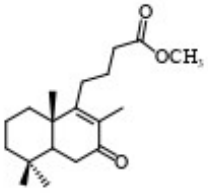

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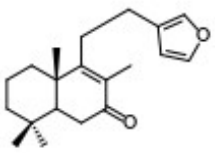

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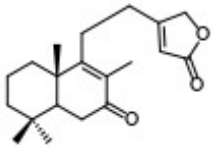

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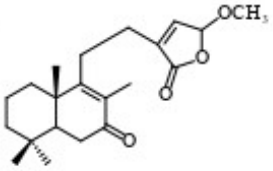

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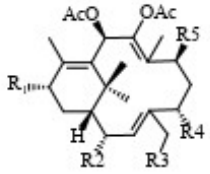
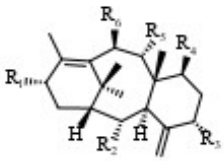
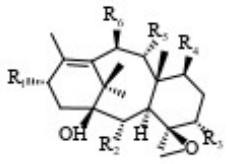


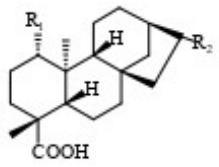
	R_1	R_2	R_3	R_4	R_5
28:	OAc	OAc	OH	MAPS	OAc
29:	OH	OH	OH	OH	OAc
30:	OH	OAc	OAc	OBz	OAc



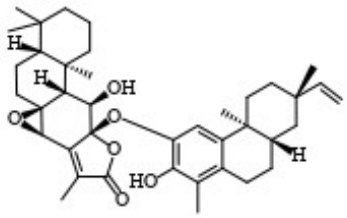
	R_1	R_2	R_3	R_4	R_5	R_6
31:	OAc	OAc	OH	OH	OAc	OAc
32:	OAc	OAc	OH	OAc	OH	OAc



	R_1	R_2	R_3	R_4	R_5	R_6
33:	OAc	OAc	OH	OAc	OH	OAc



	R_1	R_2
34:	OAc	$=CH_2$
35:	OH	$=CH_2$
36:	OAc	$=CH_2, \triangle^{11,12}$
37:	OAc	α-CHO
38:	OAc	CHO, $\triangle^{15,16}$



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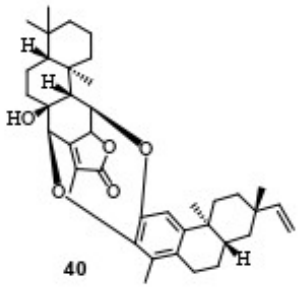

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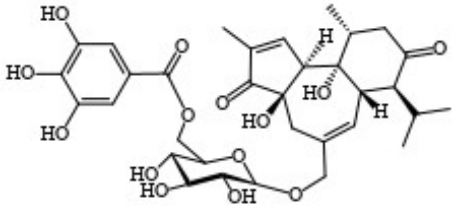

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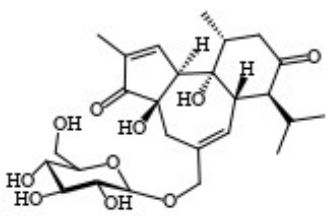

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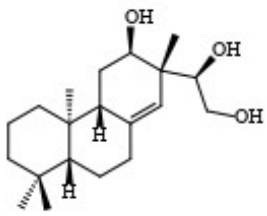

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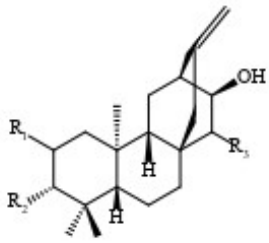
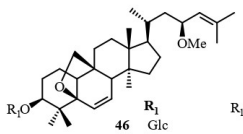
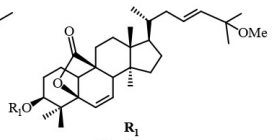


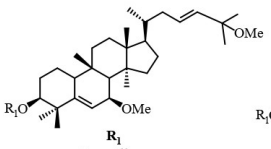
	R_1	R_2	R_3
44:	H	=O	H
45:	=O	OH	=O



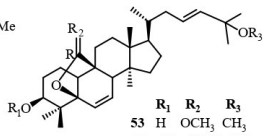
	R_1
46	Glc
47	All
48	H



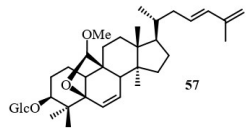
	R_1
49	H
50	All



	R_1
51	All
52	Glc



	R_1	R_2	R_3
53	H	OCH_3	CH_3
54	All	OCH_3	CH_3
55	H	OCH_3	H
56	All	OCH_3	H



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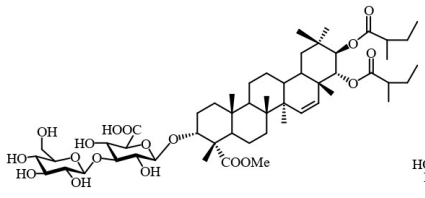

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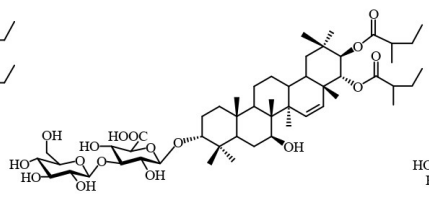

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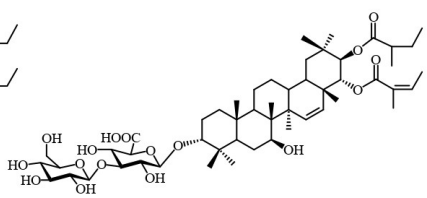

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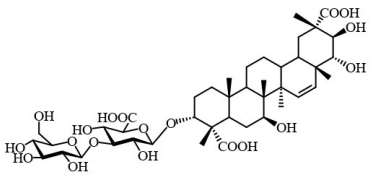

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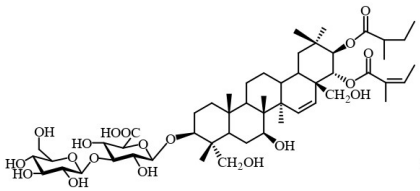

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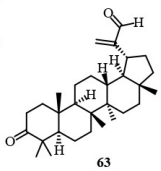

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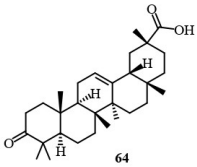

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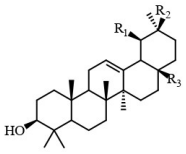
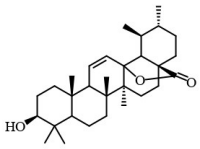


	R_1	R_2	R_3
65	H	CH_3	COOH
66	CH_3	H	COOH
67	H	CH_3	H



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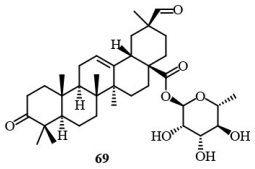

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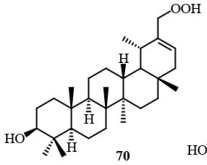

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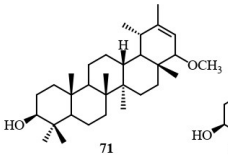

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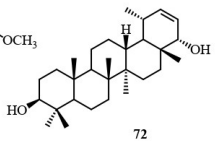

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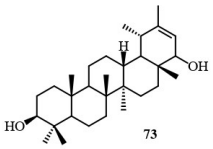

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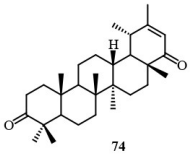

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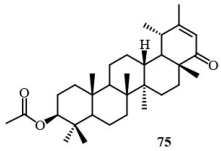

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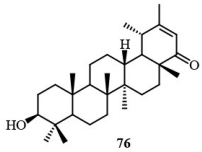

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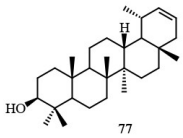

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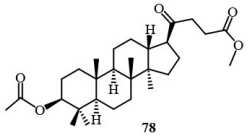

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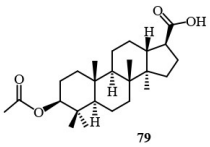

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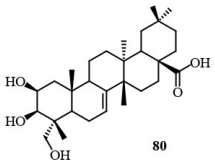

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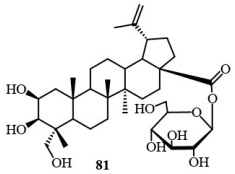

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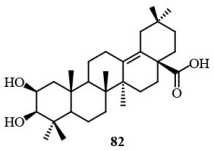

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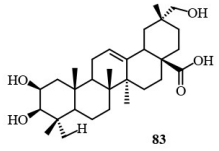

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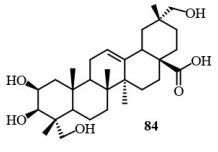

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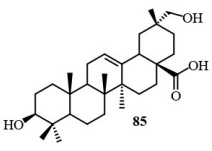

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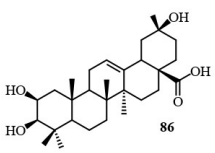

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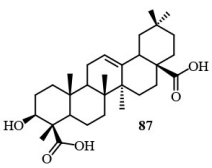

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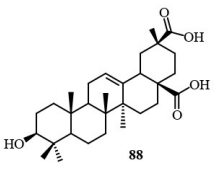

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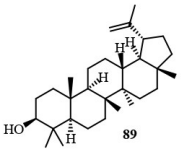

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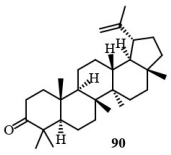

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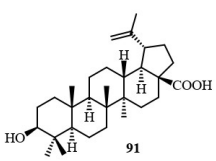

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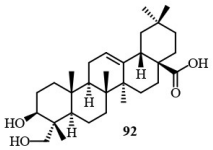

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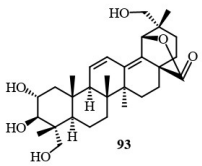

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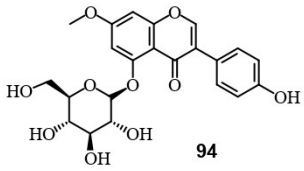

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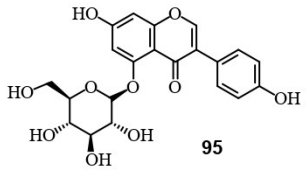
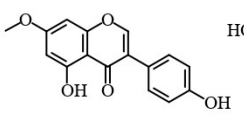


95



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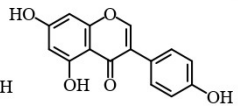
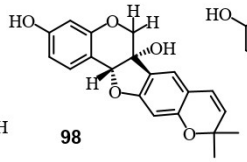
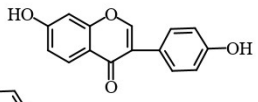


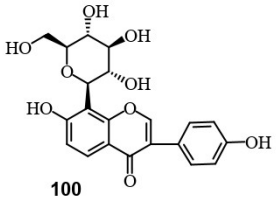
97



98



99



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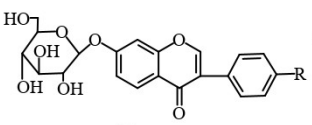
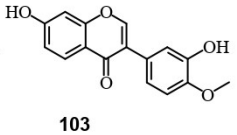


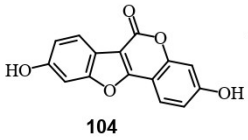
R

101 OH

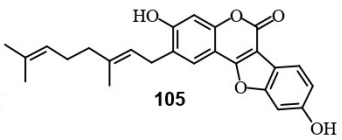
102 OCH_3



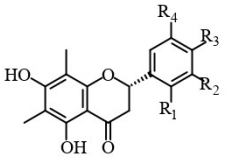
103



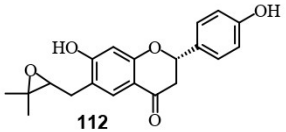
104



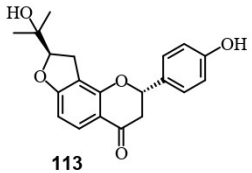
105



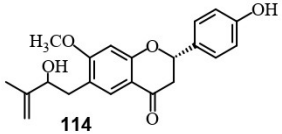
	R_1	R_2	R_3	R_4
106	H	H	OH	H
107	OH	H	H	H
108	H	H	OCH_3	H
109	OH	H	H	OCH_3
110	H	OH	OCH_3	H
111	H	OH	OH	H



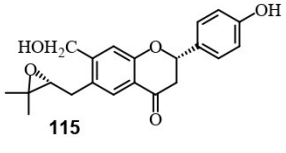
112



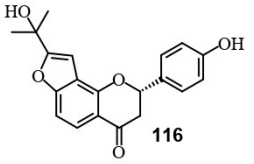
113



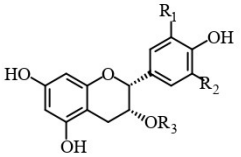
114



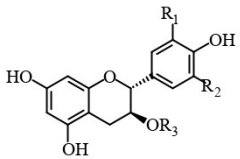
115



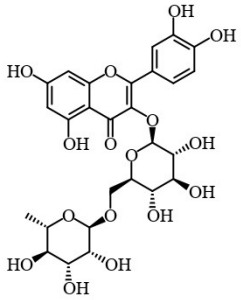
116



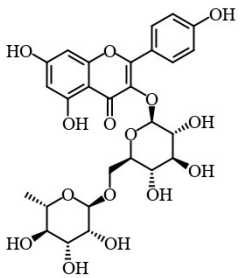
	R_1	R_2	R_3
117	OH	H	(*E*)-Coumaroyl
118	OH	H	(*E*)-Caffeoyl
119	OH	H	Galloyl
120	H	H	Galloyl
121	OH	OH	H
122	OH	OH	Galloyl



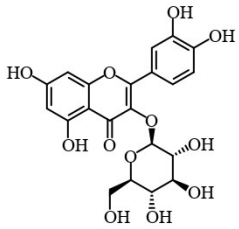
	R_1	R_2	R_3
123	OH	OH	H
124	OH	H	Galloyl
125	H	H	Galloyl
126	OH	OH	H
127	OH	OH	Galloyl



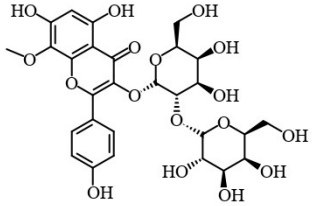
128



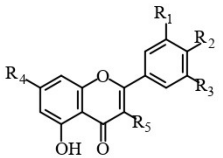
129



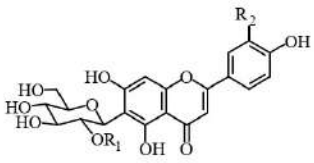
130



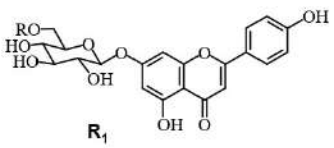
131



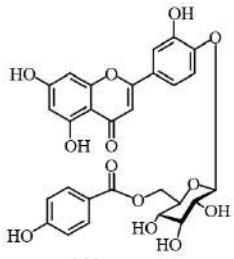
	R_1	R_2	R_3	R_4	R_5
132	OH	OH	H	OH	OH
133	OH	OH	H	OH	*O*-Rhamnoside
134	OH	OH	OH	OH	OH
135	OH	OH	OH	OH	*O*-Rhamnoside
136	H	OH	H	OH	*O*-Rhamnoside
137	OH	OH	OH	OH	*O*-(4"-*O*-Galloyl)-rhamnoside



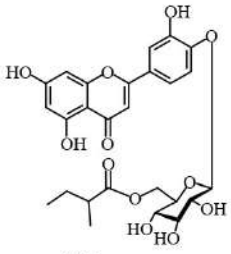
	R_1	R_2
138	H	H
139	(*E*)-*p*-cou	OH
140	(*E*)-*p*-cou	H



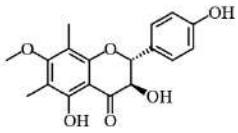
	R_1
141	(*E*)-fer
142	(*E*)-*p*-cou
143	(*E*)-*p*-cin



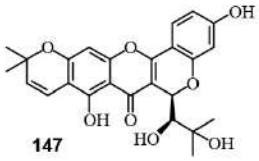
144



145



146



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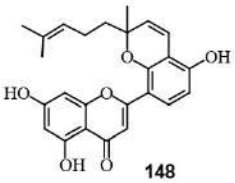
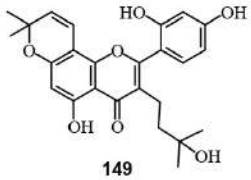


148



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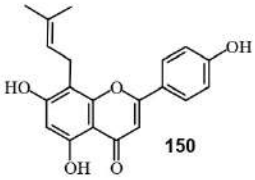

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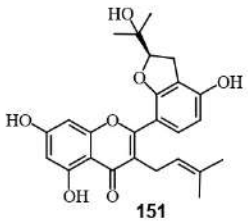

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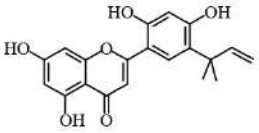
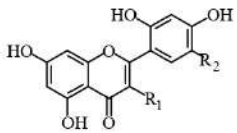
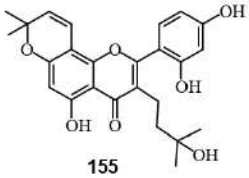


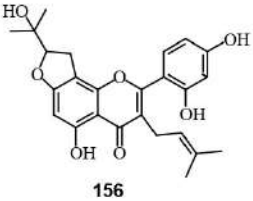
152



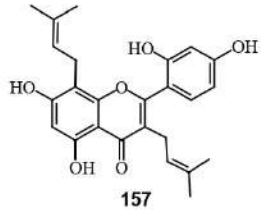
	R_1	R_2
153	H	geranyl
154	prenyl	H



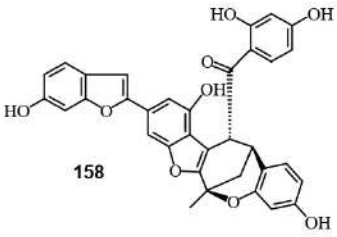
155



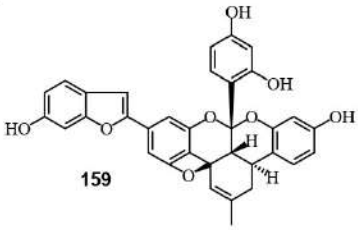
156



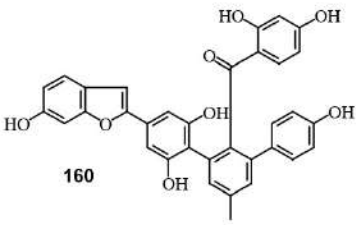
157



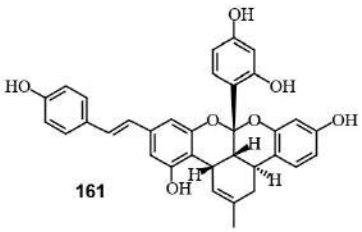
158



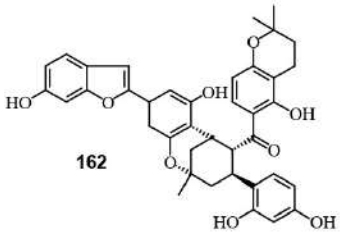
159



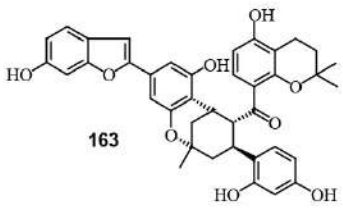
160



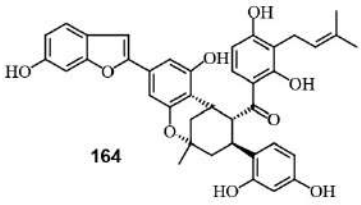
161



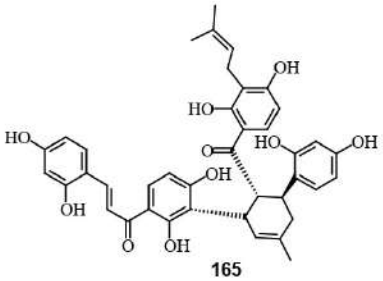
162



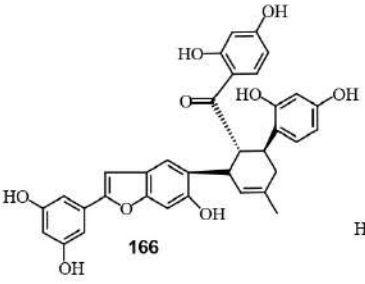
163



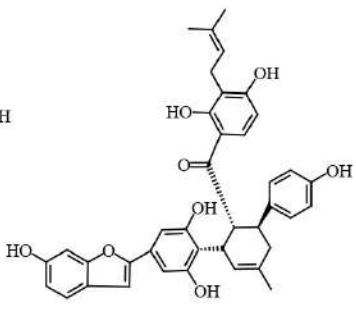
164



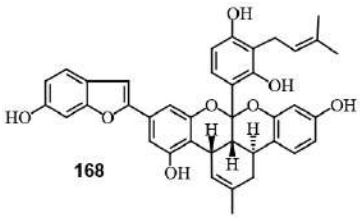
165



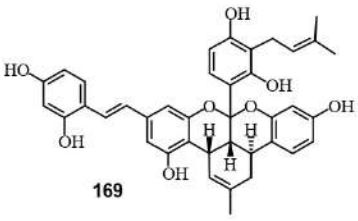
166



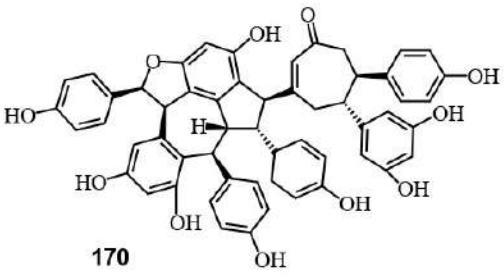
167



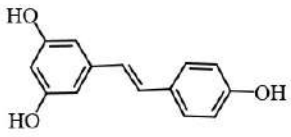
168



169



170



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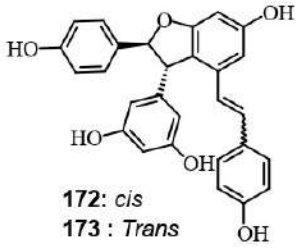
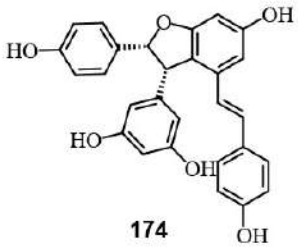
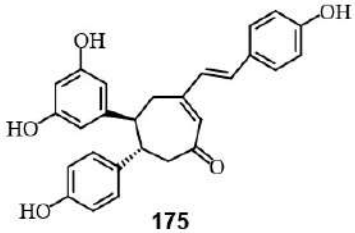


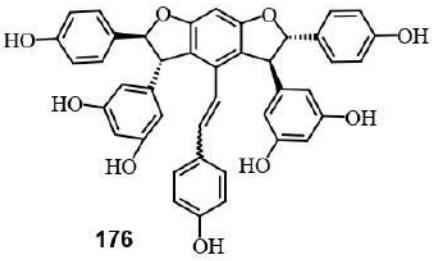
172: *cis*
173 : *Trans*



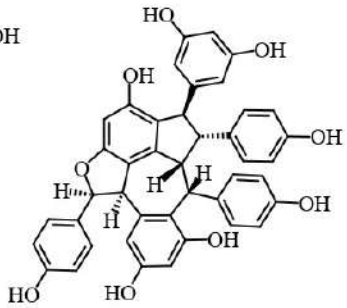
174



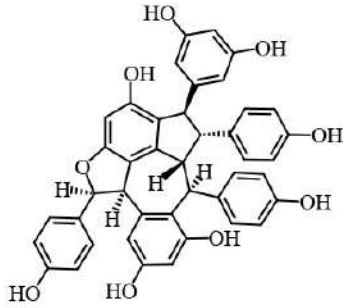
175



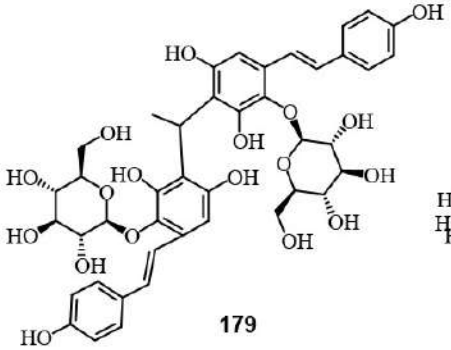
176



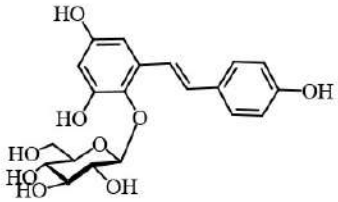
177



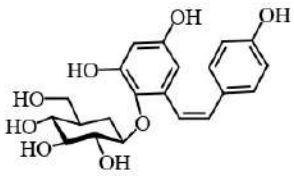
178



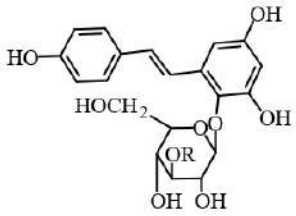
179



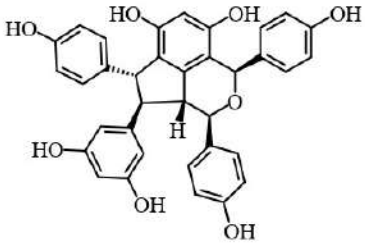
180



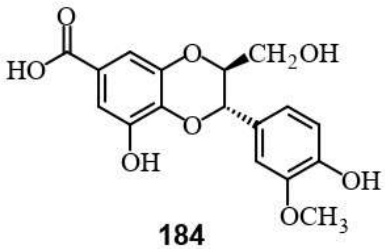
181



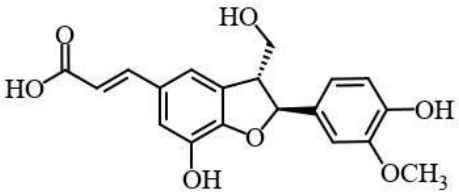
R
182 Galloyl



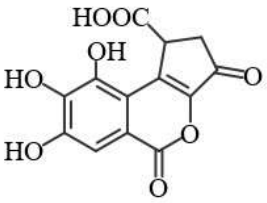
183



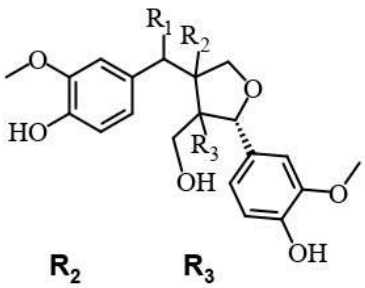
184



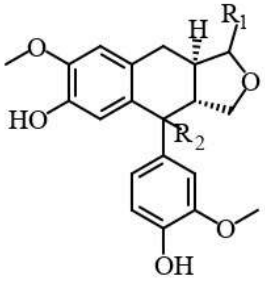
185



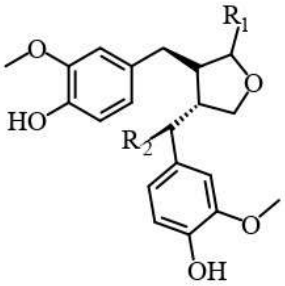
186



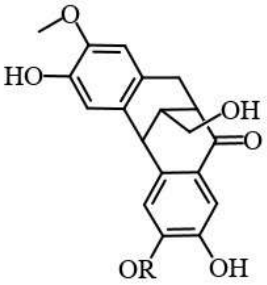
	R_1	R_2	R_3
187:	(*R**)-OCH_3	beta-H	beta-H
188:	(S*)-OCH_3	beta-H	beta-H



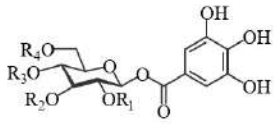
	R_1	R_2
189:	=O	alpha-H
190:	alpha-OCH_3	alpha-H
191:	beta-OCH_3	alpha-H



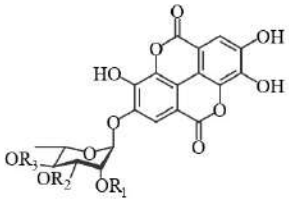
	R_1	R_2
192:	*alpha*-OCH_3	*beta*-OCH_3
193:	=O	H
194:	=O	=O



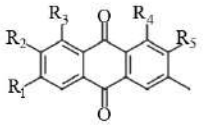
	R
195:	Me
196:	H



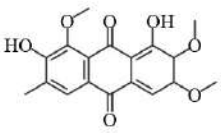
	R_1	R_2	R_3	R_4
197:	Gal	Gal	H	Cin
198:	Gal	Gal	Cin	Gal
199:	Cin	H	H	Gal
200:	Gal	H	H	Cin
201:	Gal	Gal	H	Gal
202:	Gal	Gal	Gal	Gal



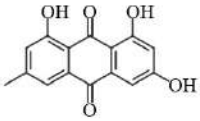
	R_1	R_2	R_3
203:	Gal	H	Gal
204:	H	H	Gal
205:	H	Gal	Gal



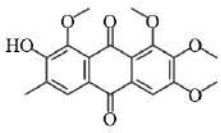
	R_1	R_2	R_3	R_4	R_5
206:	OCH_3	OCH_3	OH	OCH_3	OCH_3
207:	OH	OCH_3	OH	OH	OCH_3
208:	H	OCH_3	OH	OCH_3	OH
209:	H	H	OH	OH	H
210:	OCH_3	H	OH	OH	H
211:	H	H	OH	OCH_3	OH
212:	OH	OCH_3	OH	OCH_3	OH
213:	OH	H	OCH_3	OH	H



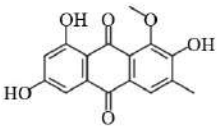
214



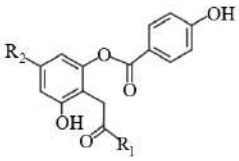
215



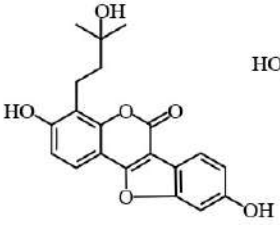
216



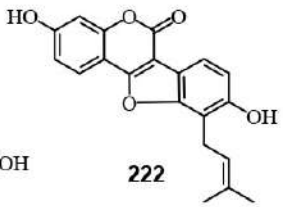
217



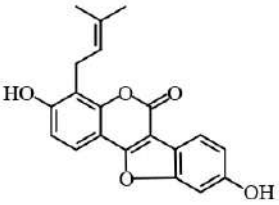
	R_1	R_2
218:	OCH_3	OH
219:	OCH_3	OGlu
220:	$O(CH_2)_3CH_3$	OH



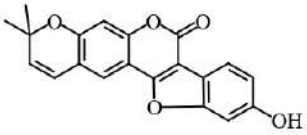
221



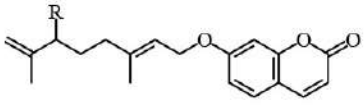
222



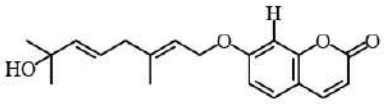
223



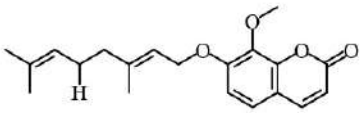
224



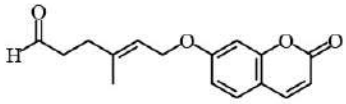
R	
225:	O
226:	OH



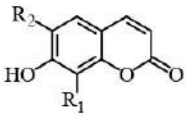
227

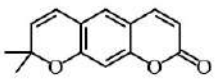


228

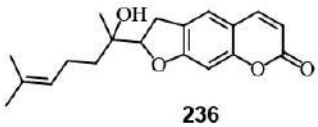


229

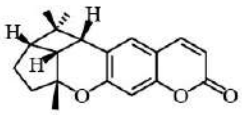




235

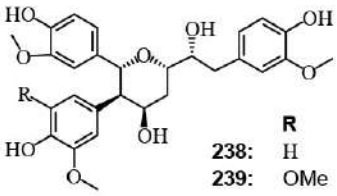


236

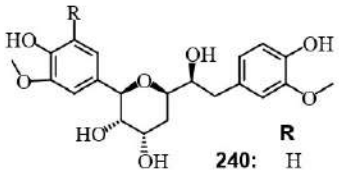


237

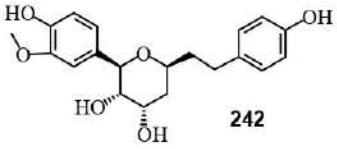
	R_1	R_2
230:	H	6,7-dihydroxygeranyl
231:	H	geranyl
232:	H	H
233:	H	OCH_3
234:	OCH_3	geranyl



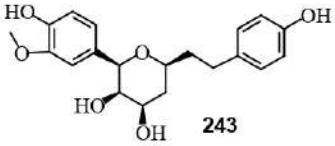
R
238: H
239: OMe



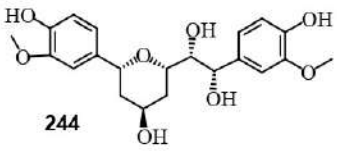
R
240: H
241: OMe



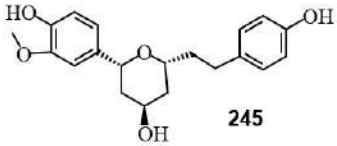
242



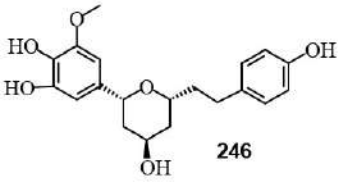
243



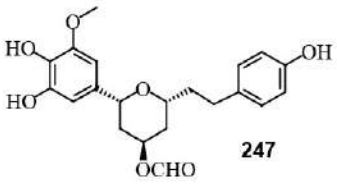
244



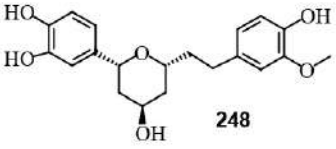
245



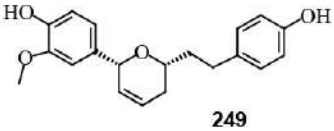
246



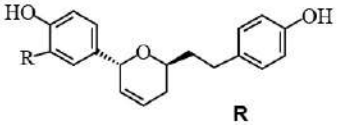
247



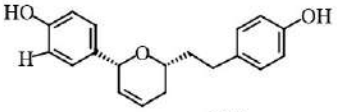
248



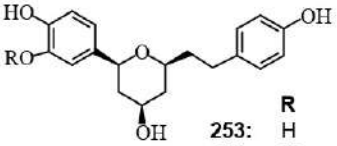
249



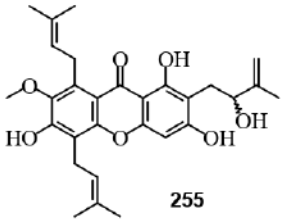
R
250: OMe
251: H



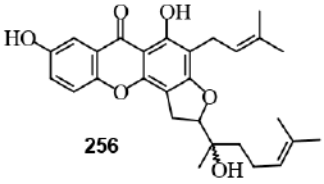
252



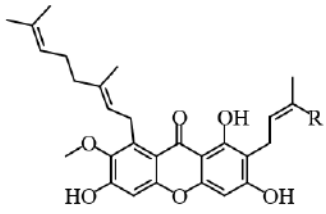
R
253: H
254: Me



255



256

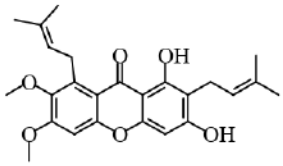


R

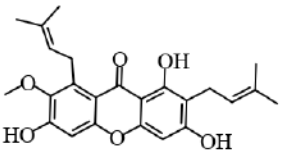
257: CH_3

258: CH_2OH

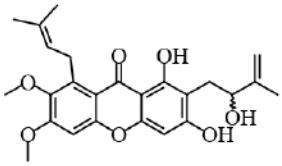
259: CH_2OCOCH_3



260



261



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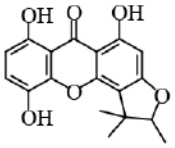

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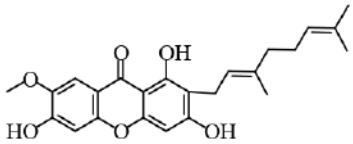

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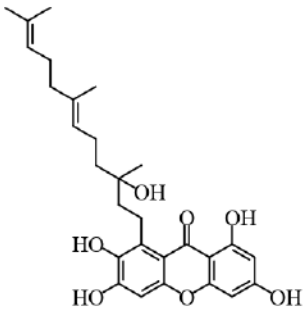

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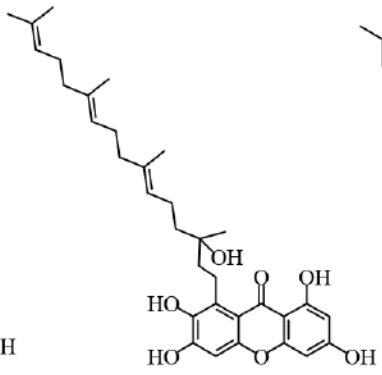

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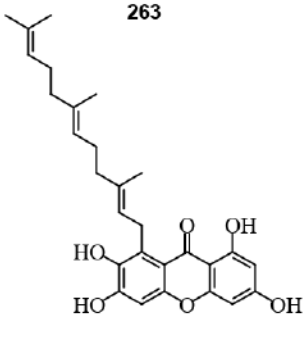

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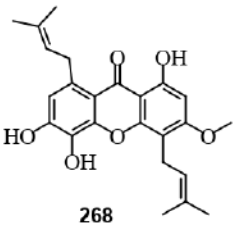

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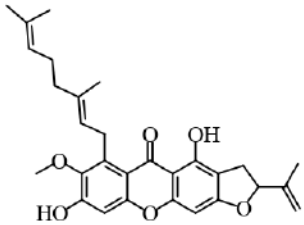

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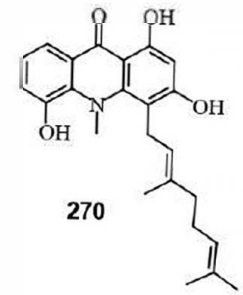

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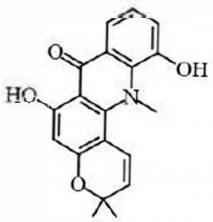

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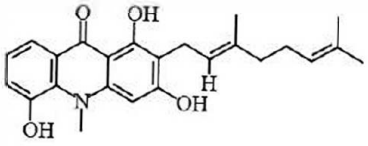

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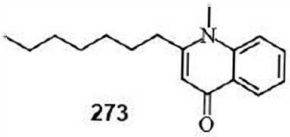

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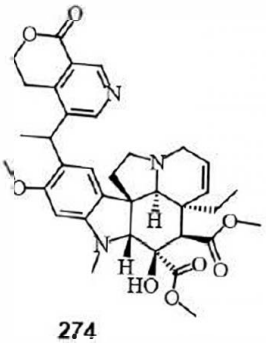

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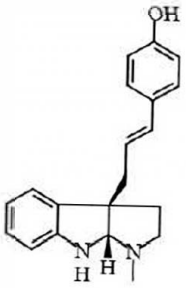

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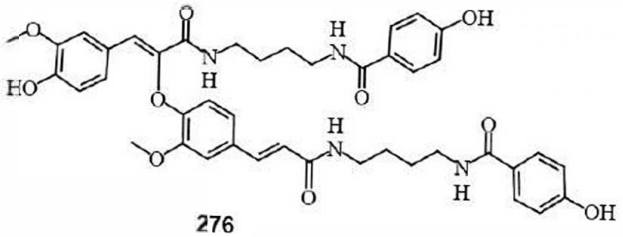

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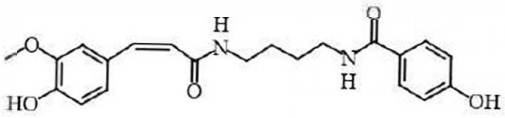

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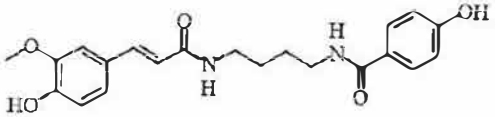

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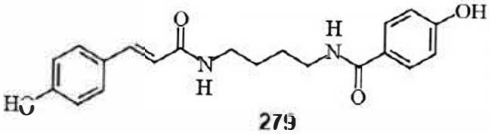

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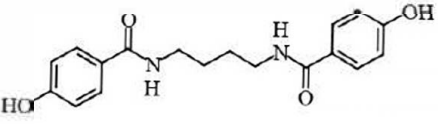

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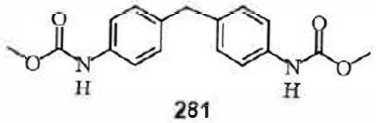

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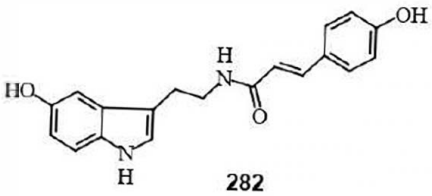

282

Online resource 2: Chemical structures of plant-derived alpha-glucosidase inhibiting molecules.

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