

Figure S1. Extraction processes commonly applied on *R. alaternus*.

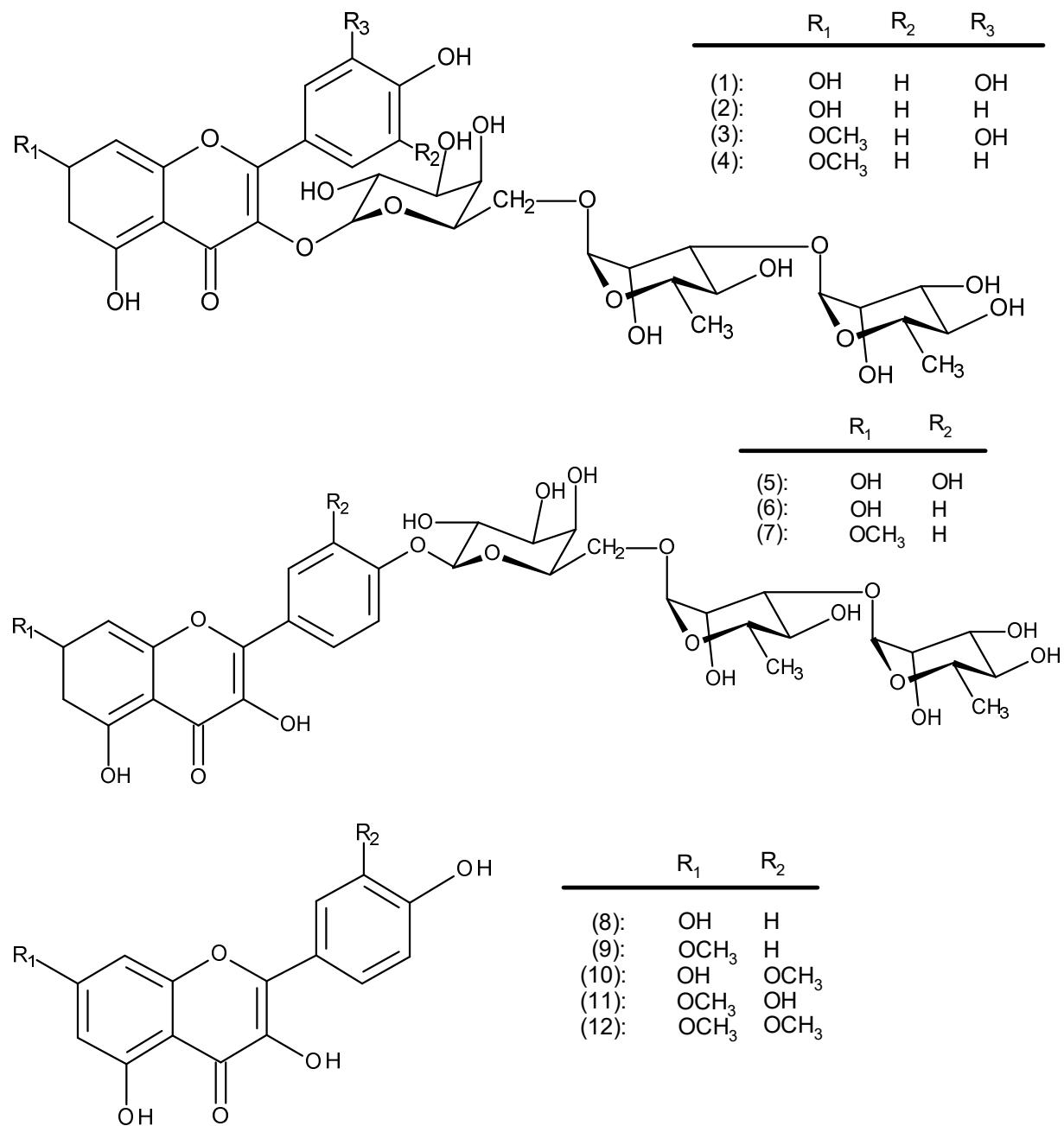


Figure S2. Biomolecules found in *Rhamnus alaternus*.

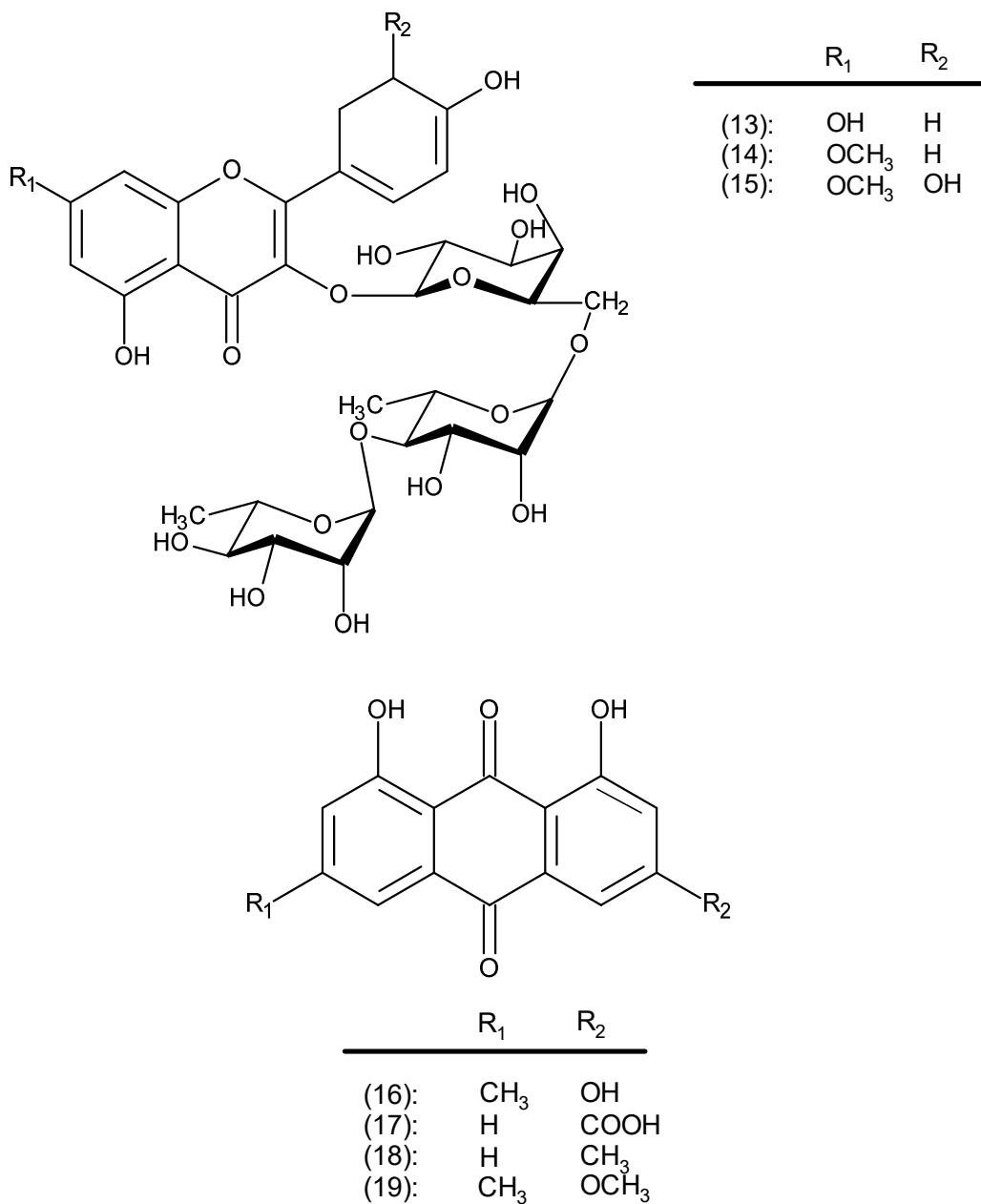
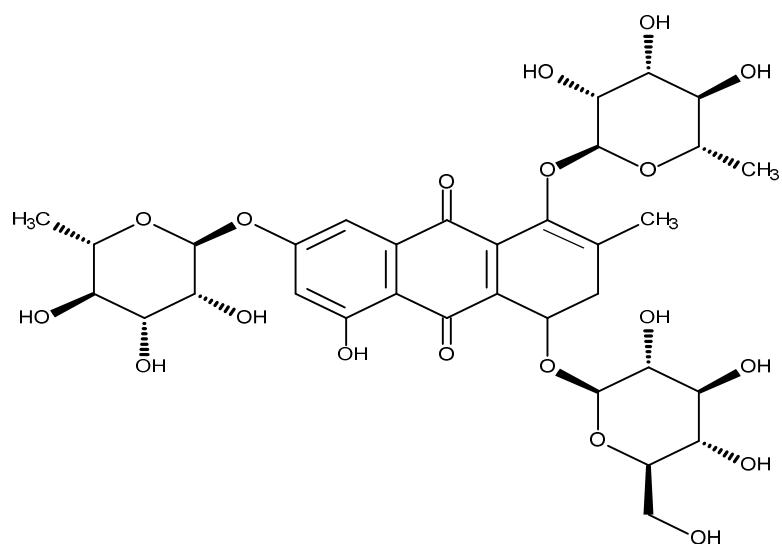
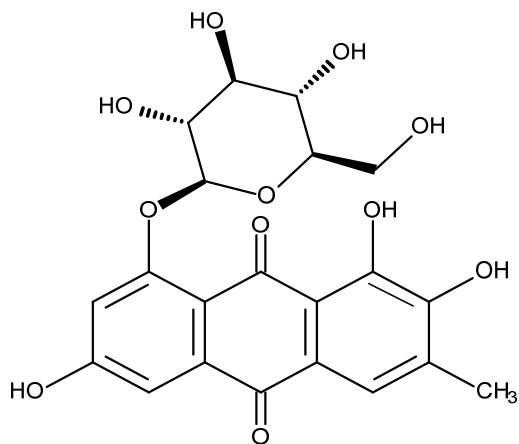


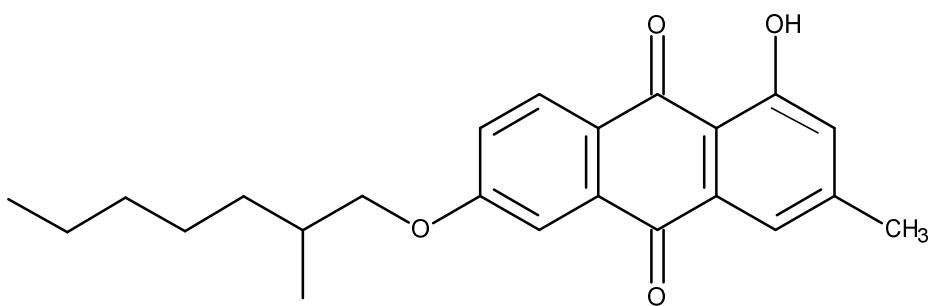
Figure S2. (Continued)



(20)



(21)



(22)

Figure S2. (Continued)

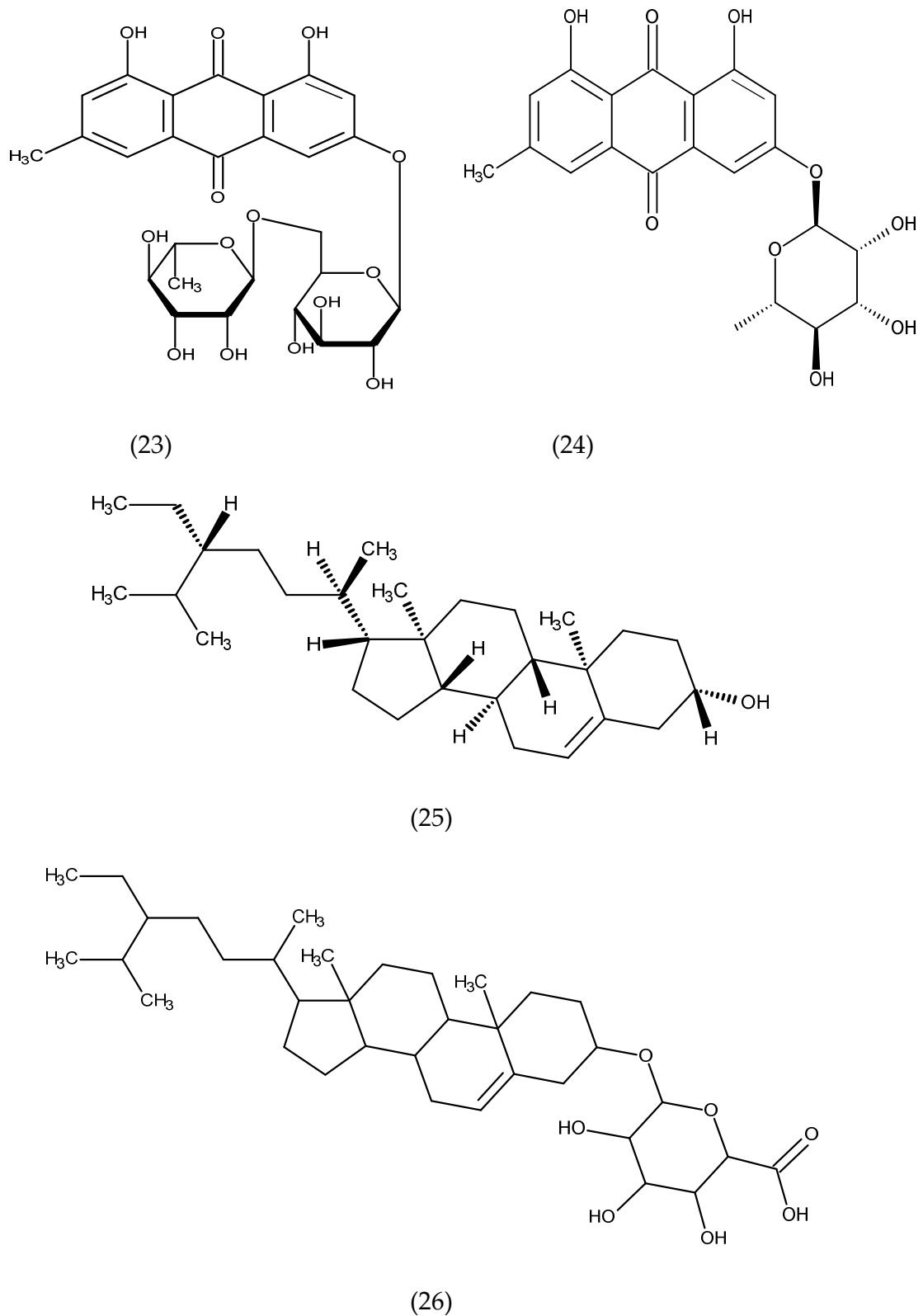
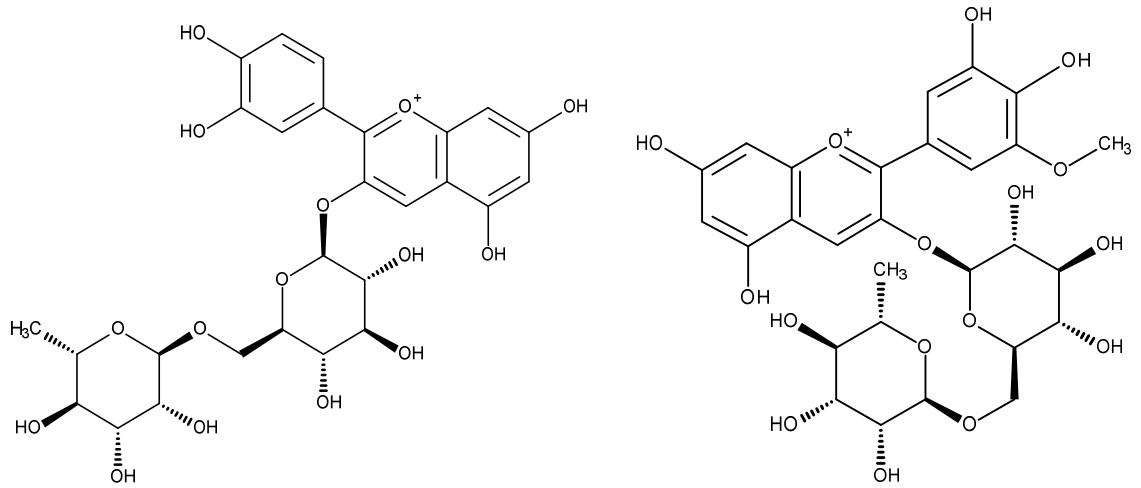
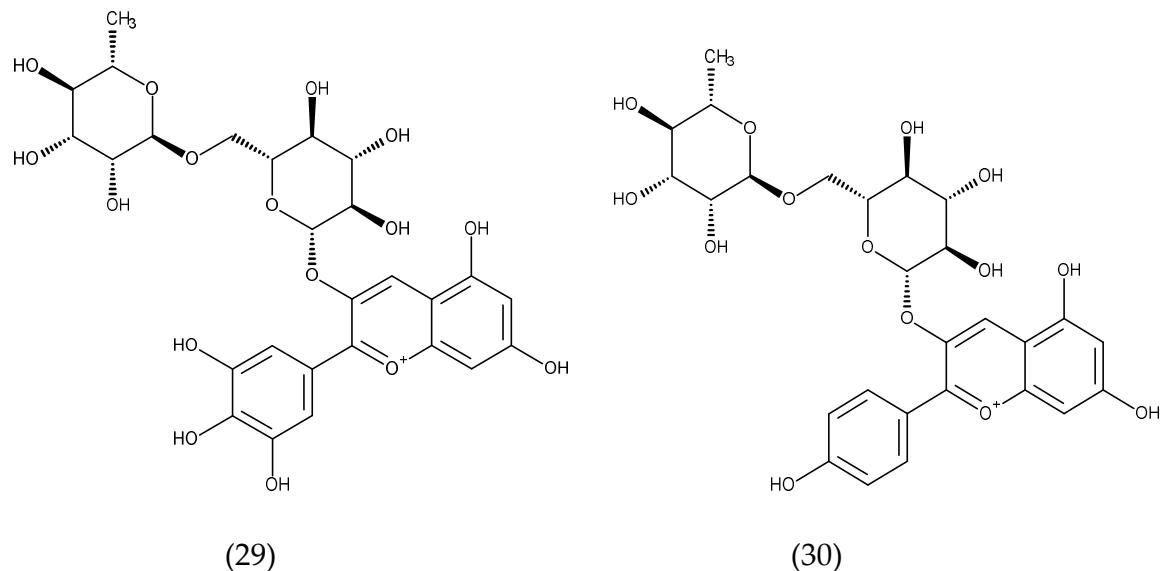


Figure S2. (Continued)



(27)

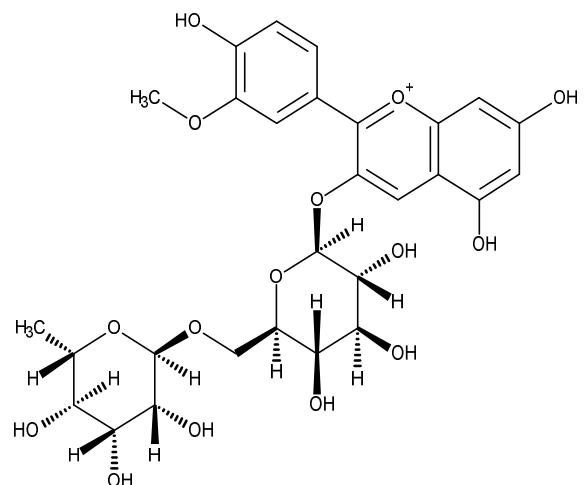
(28)



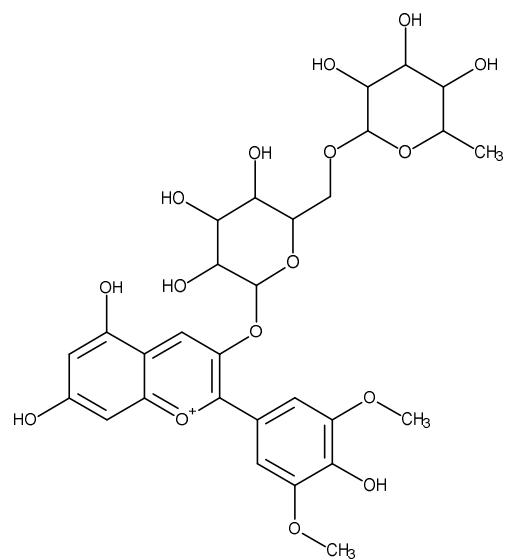
(29)

(30)

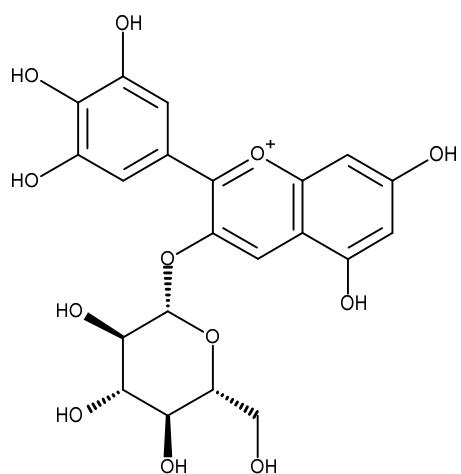
Figure S2. (Continued)



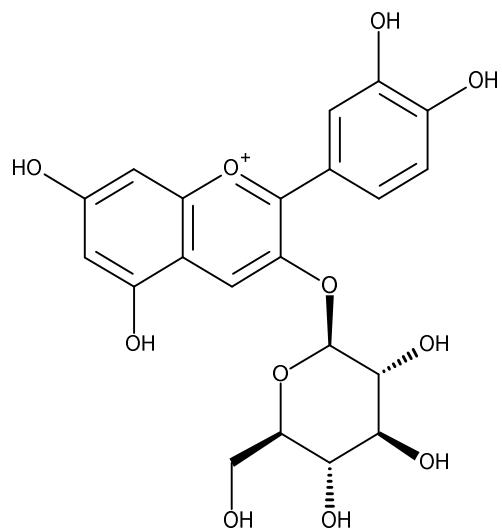
(31)



(32)

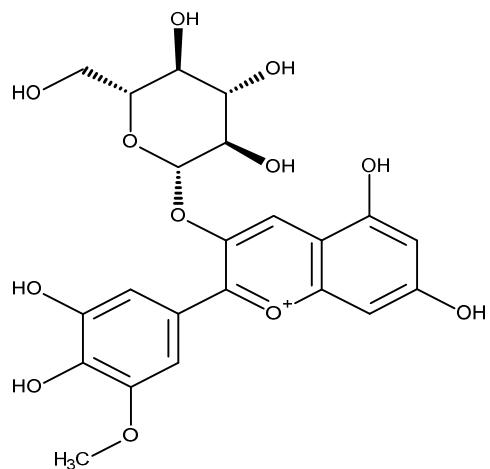


(33)

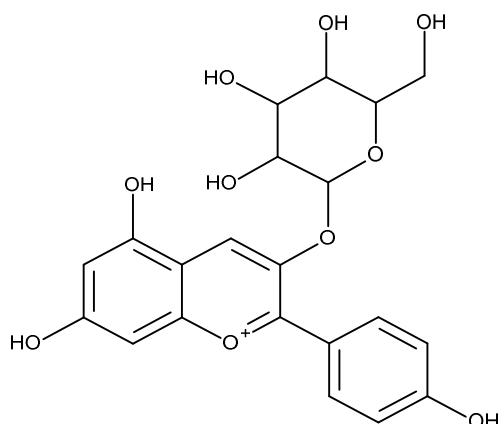


(34)

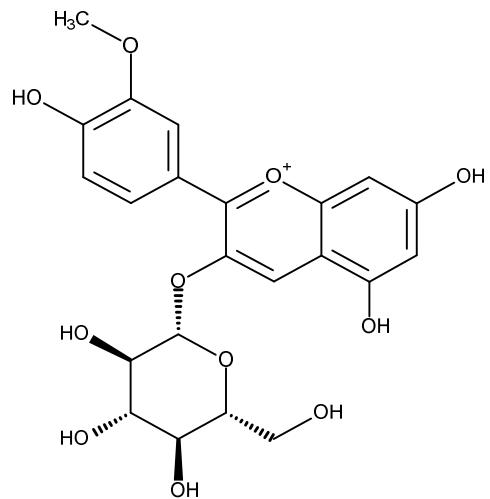
Figure S2. (Continued)



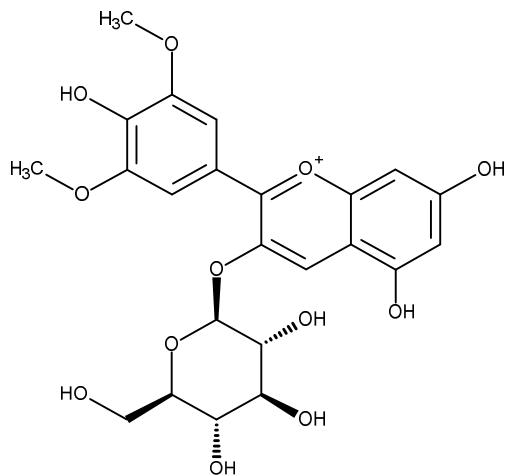
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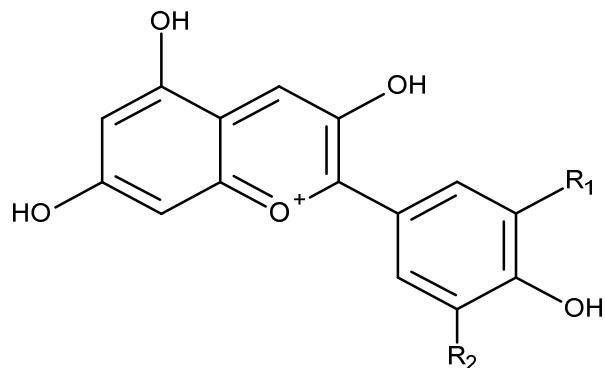
(36)



(37)



(38)



	R ₁	R ₂
(39):	OH	OH
(40):	OH	H
(41):	OH	OCH ₃
(42):	H	H
(43):	OCH ₃	H
(44):	OCH ₃	OCH ₃

Figure S2. (Continued)

Table S1: name of compounds of figure S2.

Name of compound	Compound number
Quercetin-3-O-rhamninoside	1
Kaempferol-3-O-rhamninoside	2
Quercetin-4'-O-rhamninoside	3
Kaempferol-4'-O-rhamninoside	4
Rhamnetin-3-O-rhamninoside	5
Rhamnocitrin-3-O-rhamninoside	6
Rhamnocitrin-4'-O-rhamninoside	7
Kaempferol	8
Quercetin	9
Isorhamnetin	10
Rhamnetin	11
Rhamnazin	12
Kaempferol-3-O-isorhamninoside	13
Rhamnocitrin-3-O-isorhamninoside	14
Rhamnetin-3-O-isorhamninoside	15
Emodin	16
Rhein	17
Chrysophanol	18
Physcion	19
1,4,6,8 tetrahydroxy-3 methyl anthraquinone	20
1-O- β -D-glucopyranosyl-4,6-di-O- α -L-rhamnopyran oside	
1,2,6,8 tetrahydroxy-3 methyl anthraquinone 8-O- β -D-glucopyranoside	21
1, 6 dihydroxy-3 methyl 6 [2'-Me (heptoxy)] anthraquinone	22
Physcion-3-O- β -rutinoside	23
Emodin-6O- α -L-rhamnopyranoside	24
β -sitosterol	25
β -sitosterol-3-O- β -D-glycopyranoside	26
Cyanidin 3-rutinoside	27
Petunidin 3-rutinoside	28
Delphinidin 3-rutinoside	29
Pelargonidin 3-rutinoside	30
Peonidin 3-rutinoside	31
Malvidin 3-rutinoside	32
Delphinidin 3-glucoside	33
Cyanidin 3-glucoside	34
Petunidin 3-glucoside	35
Pelargonidin 3-glucoside	36
Peonidin 3-glucoside	37
Malvidin 3-glucoside	38
Delphindin	39
Cyandin	40
Petumidin	41
Pelagonidin	42
Peonidin	43
Malvidin	44