WEB350

$Benjamin\ Weigel$ 10/01/2015

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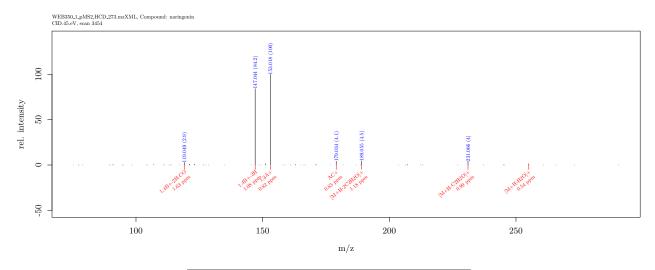
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	substance	fragment	formula	MW	mz
1	naringenin	1,4B+-2H			147.04
2	naringenin	1,4B+-2H-2CO			91.05
3	naringenin	1,4B+-2H-CO			119.05
4	naringenin	AC+			179.03
5	naringenin	[M+H]+	C15H12O5	272.07	273.08
6	naringenin	[M+H-2C2H2O]+	C15H12O5	272.07	189.06

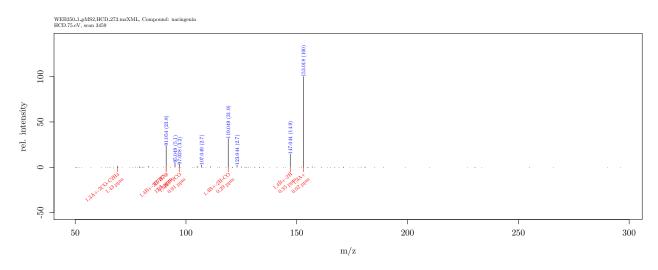
Automatic annotation of MS spectra

naring en in. CID. 45 eV



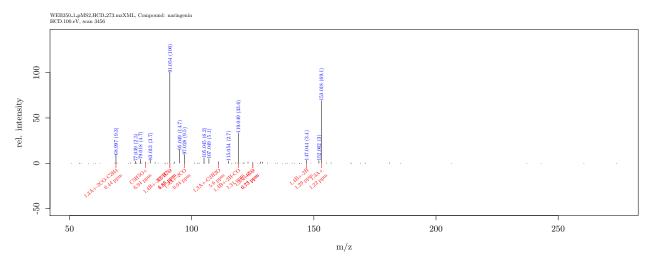
	mz	int	ppm	fragment
1	119.05	2.9	1.63	1,4B+-2H-CO
2	147.04	84.2	1.08	1,4B+-2H
3	153.02	100.0	0.82	1,3A+
4	179.03	4.1	0.83	AC+
5	189.05	4.5	1.18	[M+H-2C2H2O]+
6	231.07	4.0	0.99	[M+H-C2H2O]+
7	255.07	1.3	0.54	[M+H-H2O]+

naring en in. HCD. 75 eV



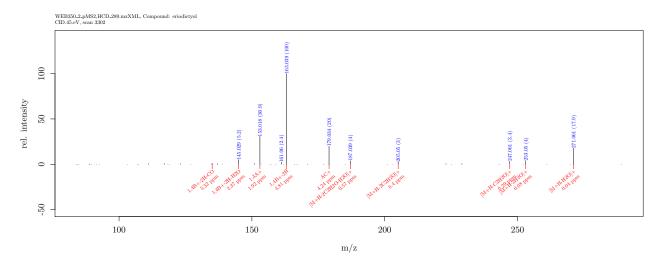
	mz	int	ppm	fragment
1	69.00	1.5	1.43	1,3A+-2CO-C2H4
2	91.05	23.8	1.01	1,4B+-2H-2CO
3	91.05	23.8	7.50	C7H7+
4	97.03	3.2	0.91	1,3A+-2CO
5	119.05	31.9	0.29	1,4B+-2H-CO
6	147.04	14.9	0.35	1,4B+-2H
7	153.02	100.0	0.02	1,3A+

naring en in. HCD. 100 eV



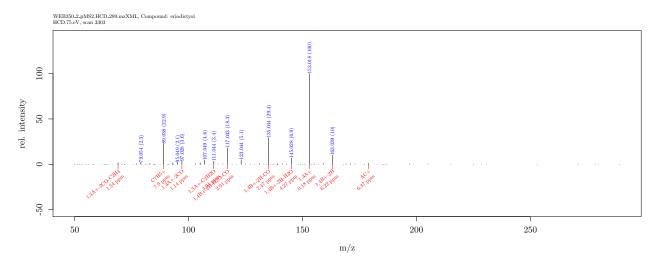
	mz	int	ppm	fragment
1	69.00	9.3	0.44	1,3A+-2CO-C2H4
2	81.03	1.4	6.94	C5H5O+
3	91.05	100.0	1.85	1,4B+-2H-2CO
4	91.05	100.0	6.66	C7H7+
5	97.03	9.5	0.04	1,3A+-2CO
6	111.01	1.8	5.60	1,3A+-C2H2O
7	119.05	33.6	1.31	1,4B+-2H-CO
8	125.02	1.0	0.73	1,3A+-CO
9	125.02	1.0	0.73	1,4A+
10	147.04	3.4	1.29	1,4B+-2H
11	153.02	69.1	1.22	1,3A+

${\it eriodictyol.} {\it CID.45eV}$



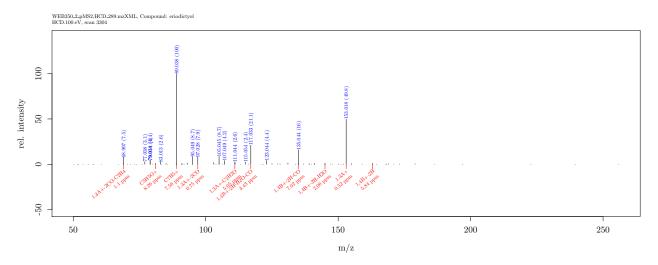
	mz	int	ppm	fragment
1	135.04	1.1	5.32	1,4B+-2H-CO
2	145.03	5.2	2.37	1,4B+-2H-H2O
3	153.02	30.9	1.92	1,3A+
4	163.04	100.0	4.81	1,4B+-2H
5	179.03	20.0	4.24	AC+
6	187.04	4.0	0.57	[M+H-2C2H2O-H2O]+
7	205.05	3.0	0.40	[M+H-2C2H2O]+
8	247.06	3.4	0.29	[M+H-C2H2O]+
9	253.05	4.0	0.08	[M+H-2H2O]+
10	271.06	17.9	0.04	[M+H-H2O]+

${\it eriodictyol.} HCD.75eV$



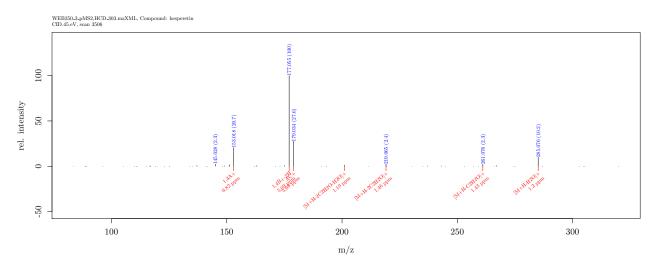
	mz	int	ppm	fragment
1	69.00	1.7	1.54	1,3A+-2CO-C2H4
2	89.04	22.9	7.90	C7H5+
3	97.03	3.6	1.14	1,3A+-2CO
4	111.01	1.8	4.91	1,3A+-C2H2O
5	117.03	18.3	2.91	1,4B+-2H-H2O-CO
6	135.04	29.4	7.47	1,4B+-2H-CO
7	145.03	6.9	4.27	1,4B+-2H-H2O
8	153.02	100.0	0.18	1,3A+
9	163.04	10.0	6.22	1,4B+-2H
10	179.03	1.1	6.37	AC+

${\it eriodictyol.} HCD. 100 eV$



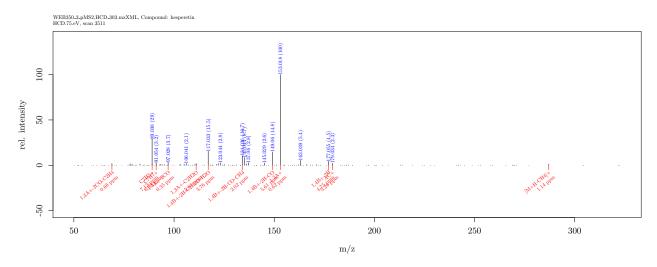
	mz	int	ppm	fragment
1	69.00	7.5	1.10	1,3A+-2CO-C2H4
2	81.03	1.2	8.26	C5H5O+
3	89.04	100.0	7.56	C7H5+
4	97.03	7.9	0.75	1,3A+-2CO
5	111.01	1.9	5.05	1,3A+-C2H2O
6	117.03	21.1	3.43	1,4B+-2H-H2O-CO
7	135.04	16.0	7.02	1,4B+-2H-CO
8	145.03	1.0	2.06	1,4B+-2H-H2O
9	153.02	49.8	0.52	1,3A+
10	163.04	1.0	5.84	1,4B+-2H

${\bf hesperetin. CID. 45eV}$



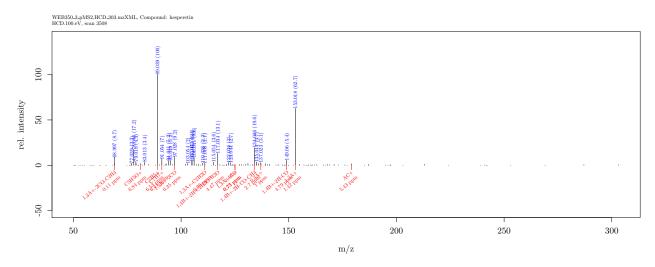
	mz	int	ppm	fragment
1	153.02	20.7	0.82	1,3A+
2	177.05	100.0	5.09	1,4B+-2H
3	179.03	27.6	5.69	AC+
4	201.05	1.3	1.19	[M+H-2C2H2O-H2O]+
5	219.07	2.4	1.46	[M+H-2C2H2O]+
6	261.08	2.3	1.43	[M+H-C2H2O]+
7	285.08	10.2	1.20	[M+H-H2O]+

${\bf hesperetin. HCD.75eV}$



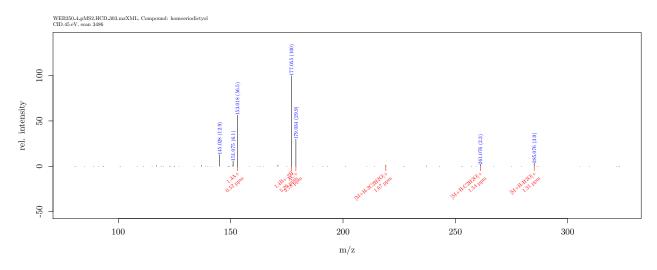
	mz	int	ppm	fragment
1	69.00	2.0	0.66	1,3A+-2CO-C2H4
2	89.04	29.0	7.13	C7H5+
3	91.05	3.2	6.99	C7H7+
4	97.03	3.7	0.35	1,3A+-2CO
5	111.01	1.4	5.81	1,3A+-C2H2O
6	117.03	15.5	3.76	1,4B+-2H-C2H2O-H2O
7	134.04	10.7	2.02	1,4B+-2H-CO-CH3
8	149.06	14.8	5.61	1,4B+-2H-CO
9	153.02	100.0	0.62	1,3A+
10	177.05	4.5	4.75	1,4B+-2H
11	179.03	2.3	5.26	AC+
12	287.06	1.4	1.14	[M+H-CH4]+

${\bf hesperetin. HCD. 100eV}$



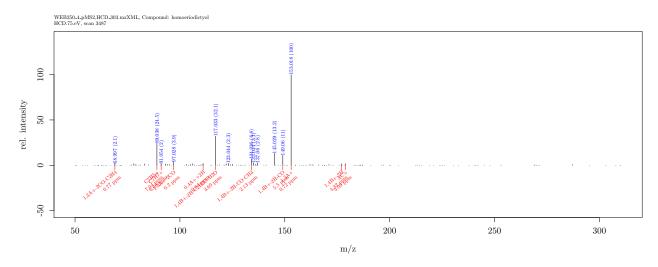
	mz	int	ppm	fragment
1	69.00	8.7	0.11	1,3A+-2CO-C2H4
2	81.03	1.9	6.84	C5H5O+
3	89.04	100.0	6.53	C7H5+
4	91.05	7.0	6.41	C7H7+
5	97.03	9.2	0.35	1,3A+-2CO
6	111.01	2.1	6.36	1,3A+-C2H2O
7	117.03	13.1	4.47	1,4B+-2H-C2H2O-H2O
8	125.02	1.2	0.73	1,3A+-CO
9	125.02	1.2	0.73	1,4A+
10	134.04	19.6	2.70	1,4B+-2H-CO-CH3
11	137.02	3.1	1.00	0.3A +
12	149.06	5.4	4.79	1,4B+-2H-CO
13	153.02	62.7	1.42	1,3A+
14	179.03	1.6	5.43	AC+

homoeriodictyol. CID. 45 eV



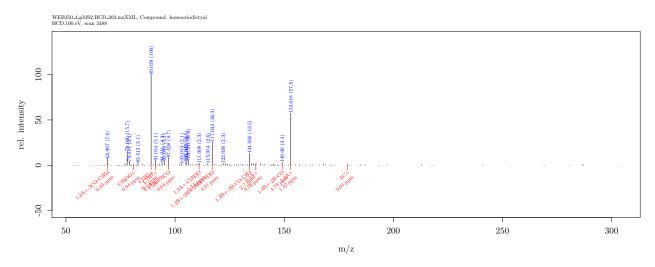
	mz	int	ppm	fragment
1	153.02	56.5	0.52	1,3A+
2	177.05	100.0	5.26	1,4B+-2H
3	179.03	29.9	5.78	AC+
4	219.07	1.4	1.67	[M+H-2C2H2O]+
5	261.08	2.3	1.54	[M+H-C2H2O]+
6	285.08	3.9	1.31	[M+H-H2O]+

${\bf homoeriodictyol. HCD. 75eV}$



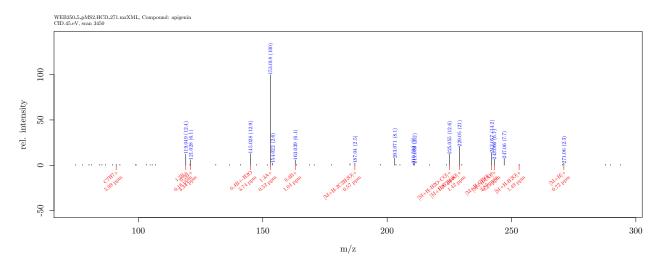
	mz	int	ppm	fragment
1	69.00	2.1	0.77	1,3A+-2CO-C2H4
2	89.04	24.5	7.04	C7H5+
3	91.05	2.0	6.66	C7H7+
4	97.03	3.9	0.20	1,3A+-2CO
5	111.04	1.8	0.84	0.4A + +2H
6	117.03	32.1	3.69	1,4B+-2H-C2H2O-H2O
7	134.04	6.8	2.13	1,4B+-2H-CO-CH3
8	149.06	11.0	5.50	1,4B+-2H-CO
9	153.02	100.0	0.72	1,3A+
10	177.05	1.8	4.32	1,4B+-2H
11	179.03	1.8	5.09	AC+

${\bf homoeriodictyol. HCD. 100eV}$



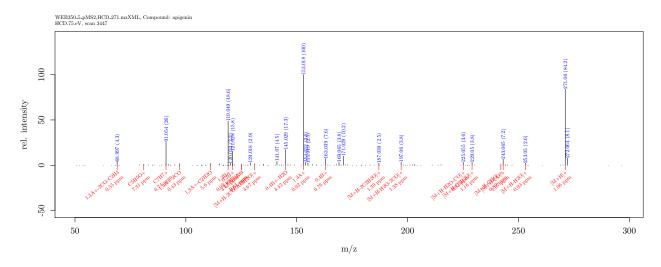
	mz	int	ppm	fragment
1	69.00	7.8	0.33	1,3A+-2CO-C2H4
2	81.03	1.2	6.94	C5H5O+
3	89.04	100.0	6.70	C7H5+
4	91.05	5.1	6.49	C7H7+
5	97.03	8.7	0.04	1,3A+-2CO
6	111.01	2.3	5.74	1,3A+-C2H2O
7	117.03	26.3	4.21	1,4B+-2H-C2H2O-H2O
8	134.04	13.5	2.70	1,4B+-2H-CO-CH3
9	137.02	1.8	0.56	0.3A +
10	149.06	3.4	4.79	1,4B+-2H-CO
11	153.02	57.8	1.32	1,3A+
12	179.03	1.1	5.01	AC+

apigenin. CID. $45\mathrm{eV}$



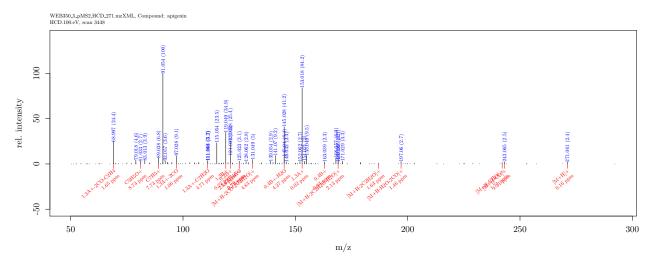
	mz	int	ppm	fragment
1	91.05	1.2	5.99	C7H7+
2	119.05	12.4	0.16	1,3B+
3	121.03	6.1	3.34	0.2B+
4	145.03	12.9	3.74	0.4B + - H2O
5	153.02	100.0	0.52	1,3A+
6	163.04	6.1	1.04	0.4B+
7	187.04	2.5	0.57	[M+H-2C2H2O]+
8	225.05	12.6	1.26	[M+H-H2O-CO]+
9	229.05	21.0	1.42	[M+H-C2H2O]+
10	242.06	14.2	2.85	[M+H-CHO].+
11	243.07	6.7	0.25	[M+H-CO]+
12	253.05	1.3	1.49	[M+H-H2O]+
13	271.06	2.3	0.72	[M+H]+

${\it apigenin.} HCD.75eV$



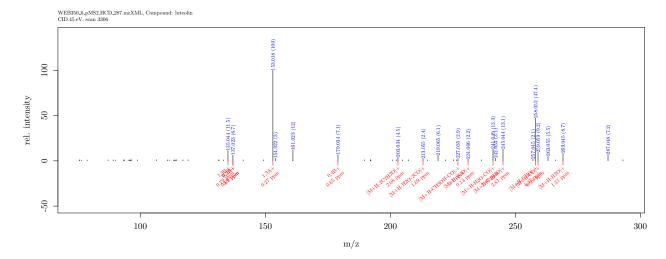
	mz	int	ppm	fragment
1	69.00	4.3	0.55	1,3A+-2CO-C2H4
2	81.03	1.2	7.31	C5H5O+
3	91.05	26.0	6.74	C7H7+
4	97.03	1.8	0.43	1,3A+-2CO
5	111.01	2.0	5.60	1,3A+-C2H2O
6	119.05	48.6	0.99	1,3B+
7	121.03	15.8	3.47	0.2B+
8	125.02	1.5	0.61	1,3A+-CO
9	125.02	1.5	0.61	1,4A+
10	131.05	1.7	3.67	[M+H-2CO-2C2H2O]+
11	145.03	17.3	3.42	0.4B + -H2O
12	153.02	100.0	0.92	1,3A+
13	163.04	7.6	0.76	0.4B+
14	187.04	2.5	1.39	[M+H-2C2H2O]+
15	197.06	3.8	1.38	[M+H-H2O-2CO]+
16	225.05	3.6	0.92	[M+H-H2O-CO]+
17	229.05	3.8	1.16	[M+H-C2H2O]+
18	242.06	1.0	0.89	[M+H-CHO].+
19	243.07	7.2	1.07	[M+H-CO]+
20	253.05	2.6	0.93	[M+H-H2O]+
21	271.06	84.2	1.06	[M+H]+

apigenin. $\rm HCD.100eV$



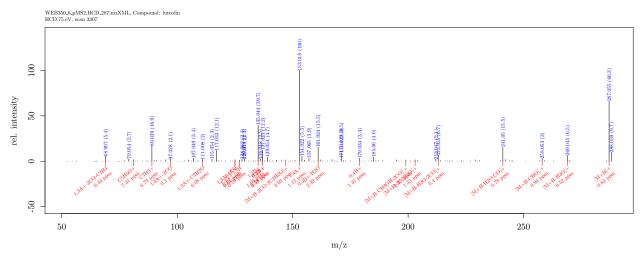
	mz	int	ppm	fragment
1	69.00	24.4	1.65	1,3A+-2CO-C2H4
2	81.03	2.7	8.73	C5H5O+
3	89.04	6.8	7.73	C7H5+
4	97.03	9.1	1.06	1,3A+-2CO
5	111.01	3.7	4.71	1,3A+-C2H2O
6	119.05	34.9	0.22	1,3B+
7	121.03	25.4	2.58	0.2B+
8	125.02	3.1	0.79	1,3A+-CO
9	125.02	3.1	0.79	1,4A+
10	131.05	5.0	4.83	[M+H-2CO-2C2H2O]+
11	145.03	41.2	4.27	0.4B + -H2O
12	153.02	84.2	0.02	1,3A+
13	163.04	2.3	0.93	0.4B+
14	169.03	2.2	2.13	[M+H-2C2H2O-H2O]+
15	187.04	1.0	1.63	[M+H-2C2H2O]+
16	197.06	2.7	1.46	[M+H-H2O-2CO]+
17	242.06	1.5	1.71	[M+H-CHO].+
18	243.07	2.5	1.51	[M+H-CO]+
19	271.06	2.4	0.16	[M+H]+

${\bf luteolin. CID. 45eV}$



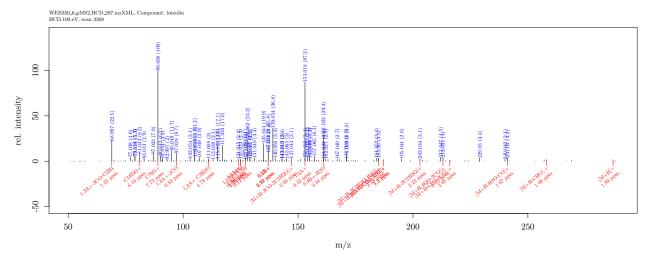
	mz	int	ppm	fragment
1	135.04	11.5	0.79	1,3B+
2	137.02	6.7	3.70	0.2B+
3	137.02	6.7	0.89	0.3A +
4	153.02	100.0	0.27	1,3A+
5	179.03	7.1	0.65	0.4B+
6	203.03	4.5	2.08	[M+H-2C2H2O]+
7	213.05	2.4	1.69	[M+H-H2O-2CO]+
8	227.03	2.9	2.10	[M+H-CH3OH-CO].+
9	231.07	2.2	0.13	[M+H-2CO]+
10	241.05	13.3	2.43	[M+H-H2O-CO]+
11	245.04	13.1	2.81	[M+H-C2H2O]+
12	258.05	47.4	4.37	[M+H-CHO].+
13	259.06	9.2	6.99	[M+H-CO]+
14	269.04	8.7	1.31	[M+H-H2O]+

lute olin. HCD. 75 eV



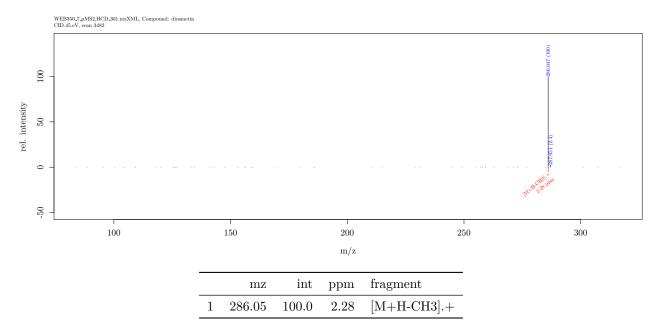
	mz	int	ppm	fragment
1	69.00	5.4	0.44	1,3A+-2CO-C2H4
2	81.03	1.6	7.31	C5H5O+
3	89.04	16.9	6.79	C7H5+
4	97.03	2.1	0.20	1,3A+-2CO
5	111.01	2.0	6.08	1,3A+-C2H2O
6	125.02	1.7	0.61	1,3A+-CO
7	125.02	1.7	0.61	1,4A+
8	127.04	1.2	0.79	1,4A++2H
9	135.04	39.7	1.69	1,3B+
10	137.02	12.2	3.59	0.2B+
11	137.02	12.2	0.78	0.3A +
12	147.04	1.5	3.03	[M+H-2CO-2C2H2O]+
13	153.02	100.0	1.12	1,3A+
14	161.02	15.5	2.49	0.4B + -H2O
15	179.03	3.3	1.31	0.4B+
16	199.04	1.4	1.15	[M+H-CH3OH-2CO].+
17	203.03	1.7	1.33	[M+H-2C2H2O]+
18	213.06	6.7	0.40	[M+H-H2O-2CO]+
19	241.05	15.5	0.78	[M+H-H2O-CO]+
20	258.05	3.0	0.94	[M+H-CHO].+
21	269.04	6.5	0.52	[M+H-H2O]+
22	287.06	66.3	0.82	[M+H]+

lute olin. HCD. 100 eV

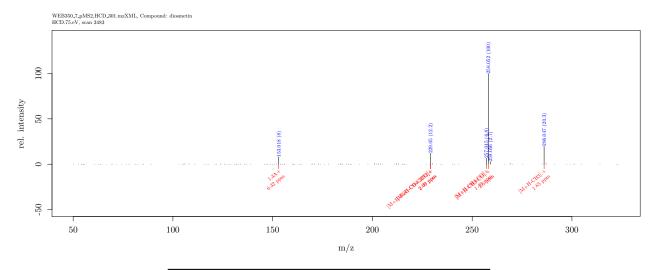


	mz	int	ppm	fragment
1	69.00	22.5	1.32	1,3A+-2CO-C2H4
2	81.03	8.2	8.44	C5H5O+
3	89.04	100.0	7.73	C7H5+
4	97.03	8.7	0.83	1,3A+-2CO
5	111.01	3.0	4.78	1,3A+-C2H2O
6	124.02	2.2	0.28	1,4A.+
7	125.02	2.3	1.16	1,3A+-CO
8	125.02	2.3	1.16	1,4A+
9	127.04	2.1	0.11	1,4A++2H
10	137.02	15.8	2.92	0.2B+
11	137.02	15.8	0.11	0.3A +
12	147.04	3.1	3.66	[M+H-2CO-2C2H2O]+
13	153.02	87.3	0.32	1,3A+
14	161.02	29.3	3.34	0.4B + -H2O
15	185.02	1.9	2.58	[M+H-2C2H2O-H2O]+
16	187.04	1.6	1.30	[M+H-CH4-3CO]+
17	187.04	1.6	1.30	[M+H-H2O-2CO-C2H2]+
18	203.03	3.1	2.23	[M+H-2C2H2O]+
19	213.06	4.0	0.12	[M+H-H2O-2CO]+
20	216.04	1.2	2.65	[M+H-CH3-2CO].+
21	241.05	4.2	1.67	[M+H-H2O-CO]+
22	258.05	1.7	1.06	[M+H-CHO].+
23	287.05	1.6	1.99	[M+H]+

${\bf diosmetin. CID. 45eV}$

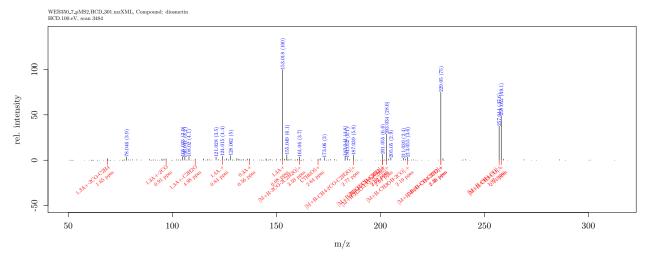


${\bf diosmetin. HCD.75eV}$



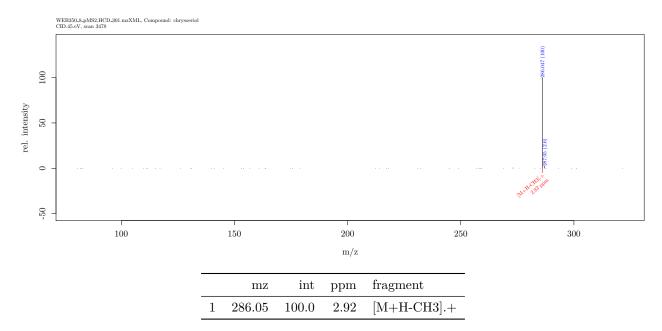
	mz	int	ppm	fragment
1	153.02	8.0	0.32	1,3A+
2	229.05	12.2	2.09	[M+H-CH4-2CO]+
3	229.05	12.2	2.09	[M+H-H2O-CO-C2H2]+
4	257.04	6.8	1.49	[M+H-CH4-CO]+
5	258.05	100.0	2.60	[M+H-CH3-CO].+
6	286.05	20.3	1.85	[M+H-CH3].+

${\bf diosmetin. HCD. 100eV}$

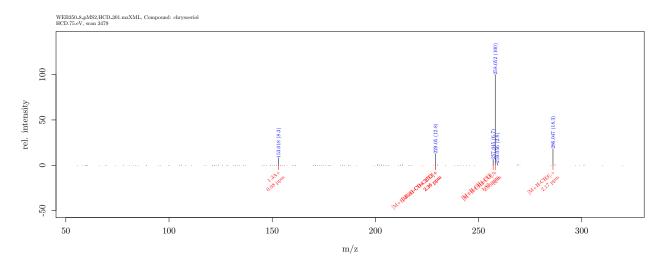


	mz	int	ppm	fragment
1	69.00	1.8	1.65	1,3A+-2CO-C2H4
2	97.03	1.7	0.91	1,3A+-2CO
3	111.01	1.3	4.98	1,3A+-C2H2O
4	124.02	4.4	0.84	1,4A.+
5	137.02	1.5	0.56	0.3A +
6	153.02	100.0	0.08	1,3A+
7	161.06	3.7	3.59	[M+H-2CO-2C2H2O]+
8	170.02	1.1	2.84	C7H6O5+
9	187.04	5.8	2.77	[M+H-CH4-2CO-C2H2O]+
10	201.05	6.6	2.02	[M+H-CH4-3CO]+
11	201.05	6.6	2.02	[M+H-H2O-2CO-C2H2]+
12	203.03	28.6	2.01	[M+H-H2O-CO-2C2H2]+
13	213.05	3.6	2.19	[M+H-CH3OH-2CO].+
14	229.05	75.0	2.36	[M+H-CH4-2CO]+
15	229.05	75.0	2.36	[M+H-H2O-CO-C2H2]+
16	257.04	37.6	1.97	[M+H-CH4-CO]+
17	258.05	49.1	2.24	[M+H-CH3-CO].+

${\bf chrysoeriol. CID. 45eV}$

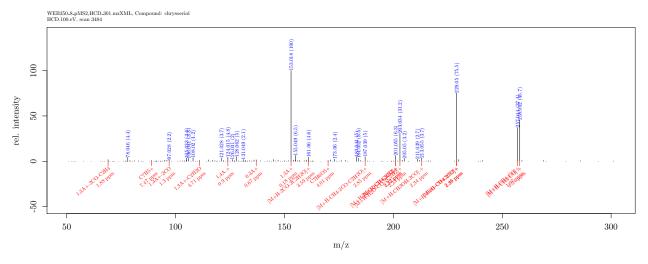


${\it chrysoeriol.} HCD.75eV$



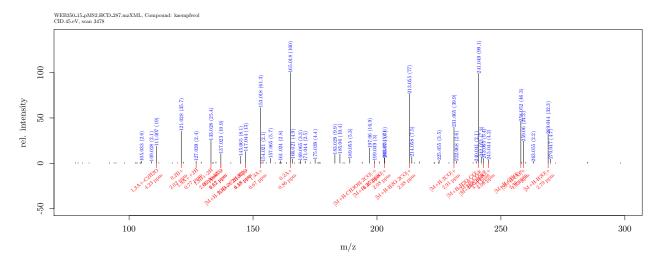
	mz	int	ppm	fragment
1	153.02	8.3	0.08	1,3A+
2	229.05	12.8	2.36	[M+H-CH4-2CO]+
3	229.05	12.8	2.36	[M+H-H2O-CO-C2H2]+
4	257.04	6.7	1.85	[M+H-CH4-CO]+
5	258.05	100.0	2.95	[M+H-CH3-CO].+
6	286.05	18.3	2.17	[M+H-CH3].+

${\it chrysoeriol.} HCD.100eV$



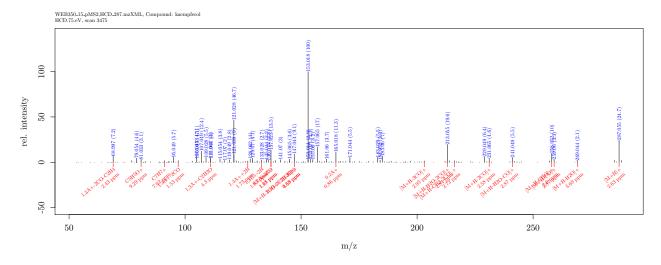
	mz	int	ppm	fragment
1	69.00	1.9	1.88	1,3A+-2CO-C2H4
2	89.04	1.0	7.47	C7H5+
3	97.03	2.2	1.30	1,3A+-2CO
4	111.01	1.1	4.71	1,3A+-C2H2O
5	124.02	4.8	0.90	1,4A.+
6	137.02	1.6	0.67	0.3A +
7	153.02	100.0	0.18	1,3A+
8	161.06	4.6	3.59	$[\mathrm{M} + \mathrm{H} - 2\mathrm{CO} - 2\mathrm{C} 2\mathrm{H} 2\mathrm{O}] +$
9	170.02	1.1	4.01	C7H6O5+
10	187.04	5.0	2.85	[M+H-CH4-2CO-C2H2O]+
11	201.05	6.3	2.32	[M+H-CH4-3CO]+
12	201.05	6.3	2.32	[M+H-H2O-2CO-C2H2]+
13	203.03	31.2	2.23	[M+H-H2O-CO-2C2H2]+
14	213.05	3.7	2.34	[M+H-CH3OH-2CO].+
15	229.05	75.5	2.36	[M+H-CH4-2CO]+
16	229.05	75.5	2.36	[M+H-H2O-CO-C2H2]+
17	257.04	37.4	1.97	[M+H-CH4-CO]+
18	258.05	45.7	2.24	[M+H-CH3-CO].+

${\bf kaempferol. CID. 45eV}$



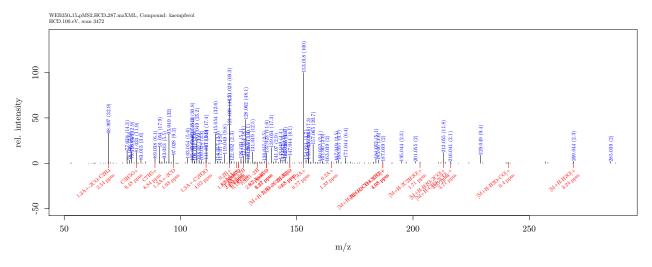
	mz	int	ppm	fragment
1	111.01	19.0	4.23	1,3A+-C2H2O
2	121.03	35.7	2.02	0.2B+
3	127.04	2.4	0.77	1,4A++2H
4	133.03	25.4	2.06	1,3B+-2H
5	137.02	10.9	1.52	0.2A+-CO
6	137.02	10.9	0.67	0.3A +
7	147.04	13.0	0.48	1,4B++2H-H2O
8	147.04	13.0	4.59	[M+H-2CO-2C2H2O]+
9	153.02	61.3	0.67	1,3A+
10	165.02	100.0	0.86	0.2A +
11	199.04	3.0	4.45	[M+H-CH3OH-2CO].+
12	203.03	6.6	2.08	[M+H-2C2H2O]+
13	213.05	77.0	2.98	[M+H-H2O-2CO]+
14	231.07	39.9	2.91	[M+H-2CO]+
15	241.05	99.1	2.68	[M+H-H2O-CO]+
16	243.06	5.4	4.71	[M+H-CO2]+
17	245.04	4.2	3.06	[M+H-C2H2O]+
18	258.05	46.3	2.36	[M+H-CHO].+
19	259.06	24.3	1.93	[M+H-CO]+
20	269.04	32.3	2.79	[M+H-H2O]+

${\bf kaempferol. HCD. 75eV}$



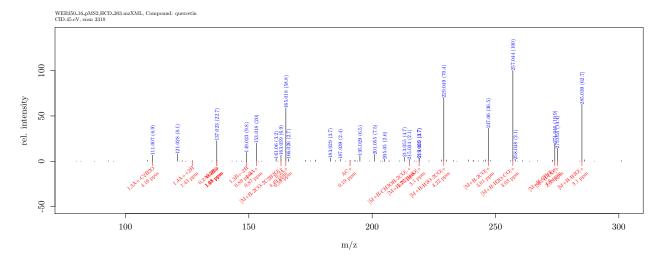
	mz	int	ppm	fragment
1	69.00	7.2	2.43	1,3A+-2CO-C2H4
2	81.03	3.1	9.29	C5H5O+
3	91.05	1.9	7.92	C7H7+
4	97.03	1.9	1.53	1,3A+-2CO
5	111.01	5.0	4.30	1,3A+-C2H2O
6	127.04	1.4	1.73	1,4A++2H
7	133.03	2.7	1.83	1,3B+-2H
8	137.02	13.5	1.08	0.2A+-CO
9	137.02	13.5	1.11	0.3A +
10	147.04	9.1	0.58	1,4B++2H-H2O
11	147.04	9.1	4.69	[M+H-2CO-2C2H2O]+
12	165.02	11.3	0.86	0.2A +
13	203.07	1.5	2.95	[M+H-3CO]+
14	213.05	19.6	2.84	[M+H-H2O-2CO]+
15	216.04	1.8	2.72	[M+H-CH3-2CO].+
16	231.07	4.6	2.58	[M+H-2CO]+
17	241.05	5.5	2.87	[M+H-H2O-CO]+
18	258.05	10.0	2.60	[M+H-CHO].+
19	259.06	3.3	2.87	[M+H-CO]+
20	269.04	2.1	3.69	[M+H-H2O]+
21	287.05	24.7	2.63	[M+H]+

${\bf kaempferol. HCD. 100eV}$



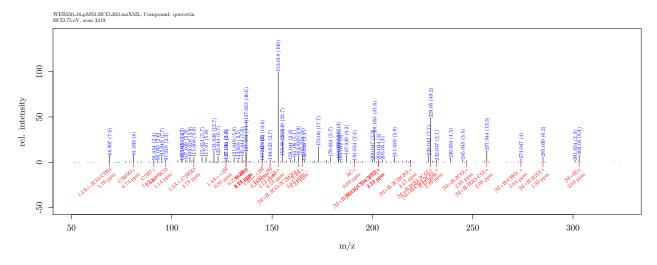
	mz	int	ppm	fragment
1	69.00	32.9	2.54	1,3A+-2CO-C2H4
2	81.03	11.9	9.48	C5H5O+
3	89.04	6.1	8.84	C7H5+
4	97.03	9.2	1.93	1,3A+-2CO
5	111.01	3.9	4.02	1,3A+-C2H2O
6	121.03	69.3	1.89	0.2B+
7	124.02	1.3	2.38	1,4A.+
8	125.02	1.6	1.40	1,3A+-CO
9	125.02	1.6	1.40	1,4A+
10	127.04	1.6	0.19	1,4A++2H
11	133.03	1.2	2.87	1,3B+-2H
12	137.02	11.6	0.97	0,2A+-CO
13	137.02	11.6	1.22	0.3A +
14	147.04	8.1	0.68	1,4B++2H-H2O
15	147.04	8.1	4.80	[M+H-2CO-2C2H2O]+
16	153.02	100.0	0.77	1,3A+
17	165.02	1.9	1.33	0.2A +
18	187.04	2.0	4.08	[M+H-CH4-3CO]+
19	187.04	2.0	4.08	[M+H-H2O-2CO-C2H2]+
20	203.03	1.3	1.71	[M+H-2C2H2O]+
21	213.05	11.8	3.05	[M+H-H2O-2CO]+
22	216.04	2.1	3.71	[M+H-CH3-2CO].+
23	241.05	1.0	0.40	[M+H-H2O-CO]+
24	269.04	2.3	3.24	[M+H-H2O]+

${\it quercetin.} {\it CID.45eV}$



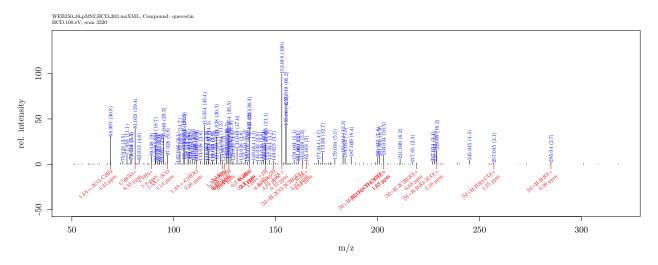
	mz	int	ppm	fragment
1	111.01	6.9	4.16	1,3A+-C2H2O
2	127.04	1.0	1.43	1,4A++2H
3	137.02	22.7	1.08	0.2A+-CO
4	137.02	22.7	1.08	0.2B+
5	137.02	22.7	1.11	0.3A +
6	149.02	9.8	0.89	1,3B+-2H
7	153.02	20.0	0.87	1,3A+
8	163.04	6.9	4.49	[M+H-2CO-2C2H2O]+
9	165.02	58.8	0.59	0.2A +
10	191.03	1.2	0.19	AC+
11	215.03	2.1	2.75	[M+H-CH3OH-2CO].+
12	219.03	3.7	3.10	[M+H-2C2H2O]+
13	229.05	70.4	3.22	[M+H-H2O-2CO]+
14	247.06	36.5	3.01	[M+H-2CO]+
15	257.04	100.0	3.03	[M+H-H2O-CO]+
16	274.05	19.9	4.60	[M+H-CHO].+
17	275.05	14.4	2.08	[M+H-CO]+
18	285.04	62.7	3.10	[M+H-H2O]+

${\it quercetin.} HCD.75 eV$



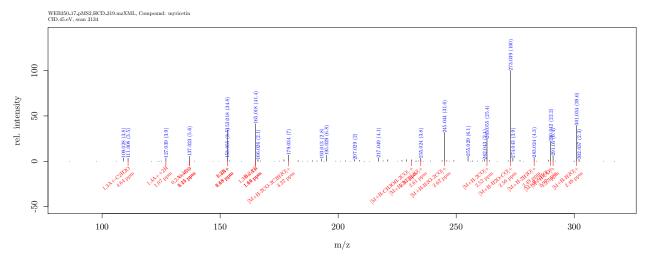
	mz	int	ppm	fragment
1	69.00	7.6	1.76	1,3A+-2CO-C2H4
2	81.03	8.0	8.73	C5H5O+
3	91.05	2.4	7.92	C7H7+
4	97.03	2.3	1.14	1,3A+-2CO
5	111.01	5.8	4.78	1,3A+-C2H2O
6	127.04	2.9	0.95	1,4A++2H
7	137.02	46.6	1.75	0,2A+-CO
8	137.02	46.6	1.75	0.2B+
9	137.02	46.6	0.44	0.3A +
10	145.03	2.0	0.28	1,4B++2H
11	149.02	2.7	2.12	1,3B+-2H
12	153.02	100.0	0.18	1,3A+
13	163.04	6.9	3.65	[M+H-2CO-2C2H2O]+
14	165.02	9.0	1.23	0.2A +
15	191.03	2.3	0.03	AC+
16	203.03	3.0	2.23	[M+H-CH4-3CO]+
17		3.0	2.23	[M+H-H2O-2CO-C2H2]+
18	219.03	1.1	2.47	[M+H-2C2H2O]+
19	229.05	49.2	2.42	[M+H-H2O-2CO]+
20	232.04	2.1	2.39	[M+H-CH3-2CO].+
21	247.06	1.9	2.95	[M+H-2CO]+
22	257.04	13.3		[M+H-H2O-CO]+
23	274.05	4.0	2.04	[M+H-CHO].+
24	285.04	6.2	1.92	[M+H-H2O]+
25	303.05	8.4	2.03	[M+H]+

${\bf quercetin. HCD. 100eV}$



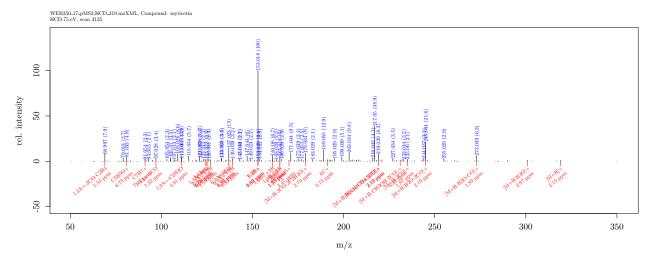
	mz	int	ppm	fragment
1	69.00	30.8	1.32	1,3A+-2CO-C2H4
2	81.03	39.4	8.35	C5H5O+
3	89.04	9.0	7.90	C7H5+
4	97.03	9.8	1.14	1,3A+-2CO
5	111.01	5.1	5.26	1,3A+-C2H2O
6	124.02	3.0	0.47	1,4A.+
7	125.02	1.4	0.61	1,3A+-CO
8	125.02	1.4	0.61	1,4A+
9	127.04	6.4	0.05	1,4A++2H
10	137.02	38.3	2.30	0,2A+-CO
11	137.02	38.3	2.30	0.2B+
12	137.02	38.3	0.11	0.3A +
13	145.03	3.6	0.46	1,4B++2H
14	149.02	3.7	3.04	1,3B+-2H
15	153.02	100.0	0.32	1,3A+
16	163.04	5.2	3.37	[M+H-2CO-2C2H2O]+
17	165.02	3.0	3.82	0.2A+
18	203.03	10.5	1.63	[M+H-CH4-3CO]+
19	203.03	10.5	1.63	[M+H-H2O-2CO-C2H2]+
20	219.03	1.6	0.03	[M+H-2C2H2O]+
21	229.05	16.2	2.16	[M+H-H2O-2CO]+
22	257.04	2.1	1.25	[M+H-H2O-CO]+
23	285.04	2.7	0.96	[M+H-H2O]+

${\it myricetin.} CID.45eV$



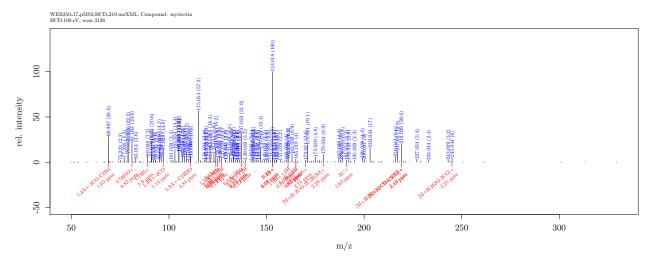
	mz	int	ppm	fragment
1	111.01	3.5	4.64	1,3A+-C2H2O
2	127.04	3.9	1.07	1,4A++2H
3	137.02	5.6	1.75	0.2A+-CO
4	137.02	5.6	0.44	0.3A +
5	153.02	34.8	1.69	0.2B+
6	153.02	34.8	0.18	1,3A+
7	165.02	41.4	1.14	0.2A +
8	165.02	41.4	1.66	1,3B+-2H
9	179.03	7.0	3.22	[M+H-2CO-2C2H2O]+
10	231.03	1.8	2.54	[M+H-CH3OH-2CO].+
11	235.02	3.8	2.61	[M+H-2C2H2O]+
12	245.04	31.6	2.62	[M+H-H2O-2CO]+
13	263.05	25.4	2.52	[M+H-2CO]+
14	273.04	100.0	2.56	[M+H-H2O-CO]+
15	283.02	4.3	2.49	[M+H-2H2O]+
16	290.04	22.2	2.92	[M+H-CHO].+
17	291.05	6.4	1.27	[M+H-CO]+
18	301.03	39.6	2.46	[M+H-H2O]+

myricetin. HCD. 75eV



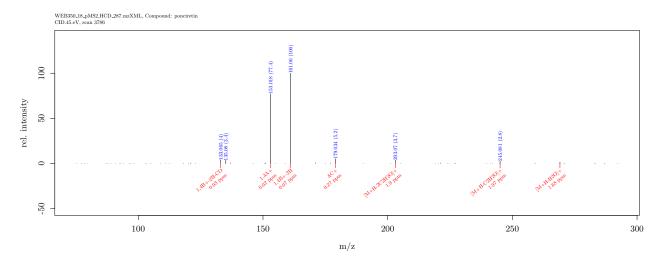
	mz	int	ppm	fragment
1	69.00	7.9	1.54	1,3A+-2CO-C2H4
2	81.03	4.8	8.73	C5H5O+
3	91.05	2.3	7.41	C7H7+
4	97.03	3.4	1.22	1,3A+-2CO
5	111.01	5.9	4.91	1,3A+-C2H2O
6	124.02	2.0	0.71	1,4A.+
7	125.02	2.6	0.98	1,3A+-CO
8	125.02	2.6	0.98	1,4A+
9	127.04	1.6	1.13	1,4A++2H
10	137.02	15.0	1.86	0,2A+-CO
11	137.02	15.0	0.33	0.3A +
12	139.04	3.2	0.32	0.3A + +2H
13	153.02	100.0	1.89	*
14	153.02	100.0	0.02	1,3A+
15	161.02	1.9	1.00	1,4B++2H
16	165.02	6.0	1.23	0.2A +
17	165.02	6.0	1.75	1,3B+-2H
18	170.02	1.4	3.47	
19	179.03	9.0	2.79	[M+H-2CO-2C2H2O]+
20	191.03	1.9	0.75	AC+
21	219.03	8.3	2.19	[M+H-CH4-3CO]+
22	219.03	8.3	2.19	[M+H-H2O-2CO-C2H2]+
23	231.03	1.4	3.33	[M+H-CH3OH-2CO].+
24	235.06	2.1	1.87	[M+H-3CO]+
25	245.04	21.6	2.19	[M+H-H2O-2CO]+
26	273.04	6.3	1.89	[M+H-H2O-CO]+
27	301.03	1.4	2.97	[M+H-H2O]+
28	319.04	1.1	2.15	[M+H]+

${\bf myricetin. HCD. 100eV}$



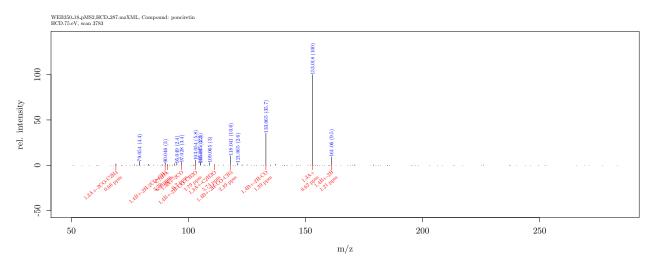
	mz	int	ppm	fragment
1	69.00	28.8	1.65	1,3A+-2CO-C2H4
2	81.03	23.6	8.82	C5H5O+
3	89.04	7.2	7.90	C7H5+
4	97.03	13.8	1.14	1,3A+-2CO
5	111.01	7.2	4.85	1,3A+-C2H2O
6	124.02	15.2	1.08	1,4A.+
7	125.02	4.9	0.06	1,3A+-CO
8	125.02	4.9	0.06	1,4A+
9	127.04	4.4	0.71	1,4A++2H
10	137.02	31.9	1.75	0,2A+-CO
11	137.02	31.9	0.44	0.3A +
12	139.04	3.3	0.12	0.3A++2H
13	153.02	100.0	1.79	0.2B +
14	153.02	100.0	0.08	1,3A+
15	161.02	4.1	0.91	1,4B++2H
16	165.02	4.0	0.40	0.2A+
17	165.02	4.0	0.92	1,3B+-2H
18	170.02	2.6	2.75	C7H6O5+
19	179.03	8.9	2.28	[M+H-2CO-2C2H2O]+
20	191.03	2.3	1.65	AC+
21	219.03	20.6	2.19	[M+H-CH4-3CO]+
22	219.03	20.6	2.19	[M+H-H2O-2CO-C2H2]+
23	245.04	6.0	2.25	[M+H-H2O-2CO]+

ponciretin. CID. 45 eV



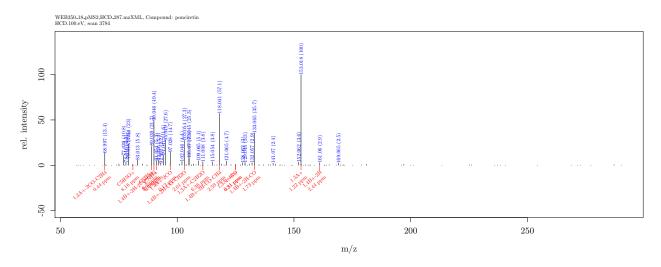
	mz	int	ppm	fragment
1	133.06	4.0	0.93	1,4B+-2H-CO
2	153.02	77.4	0.02	1,3A+
3	161.06	100.0	0.07	1,4B+-2H
4	179.03	5.2	0.27	AC+
5	203.07	3.7	1.90	[M+H-2C2H2O]+
6	245.08	2.8	1.97	[M+H-C2H2O]+
7	269.08	1.3	1.68	[M+H-H2O]+

ponciret in. HCD. 75 eV



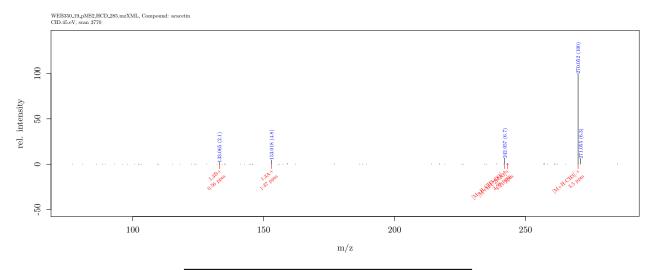
	mz	int	ppm	fragment
1	69.00	1.6	0.66	1,3A+-2CO-C2H4
2	90.05	3.0	3.79	1,4B+-2H-2CO-CH3
3	91.05	1.1	6.91	C7H7+
4	97.03	3.4	0.20	1,3A+-2CO
5	103.05	5.8	1.79	1,4B+-2H-CO-CH2O
6	111.01	1.1	5.74	1,3A+-C2H2O
7	118.04	10.6	2.39	1,4B+-2H-CO-CH3
8	133.06	35.7	1.39	1,4B+-2H-CO
9	153.02	100.0	0.62	1,3A+
10	161.06	9.5	1.21	1,4B+-2H

${\bf ponciretin. HCD. 100eV}$



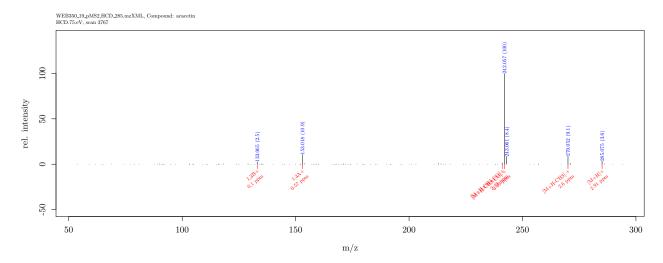
	mz	int	ppm	fragment
1	69.00	13.4	0.44	1,3A+-2CO-C2H4
2	81.03	1.3	8.16	C5H5O+
3	89.04	21.7	6.70	C7H5+
4	90.05	49.4	3.96	1,4B+-2H-2CO-CH3
5	91.05	5.3	6.49	C7H7+
6	97.03	14.7	0.12	1,3A+-2CO
7	103.05	27.3	2.01	1,4B+-2H-CO-CH2O
8	111.01	3.8	6.36	1,3A+-C2H2O
9	118.04	57.1	2.59	1,4B+-2H-CO-CH3
10	125.02	1.3	0.31	1,3A+-CO
11	125.02	1.3	0.31	1,4A+
12	133.06	35.7	1.73	1,4B+-2H-CO
13	153.02	100.0	1.22	1,3A+
14	161.06	2.9	2.44	1,4B+-2H

acacetin. CID. 45 eV



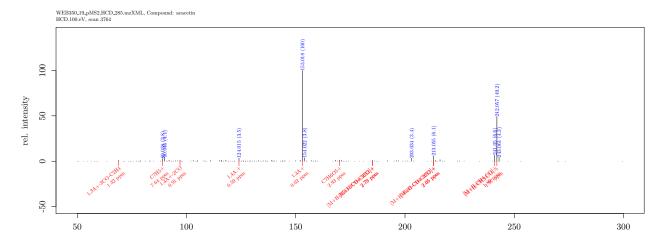
	mz	int	ppm	fragment
1	133.06	2.1	0.56	1,3B+
2	153.02	4.8	1.37	1,3A+
3	242.06	6.7	3.98	[M+H-CH3-CO].+
4	243.06	1.2	4.21	[M+H-C2H2O]+
5	270.05	100.0	3.50	[M+H-CH3].+

$acacetin. HCD. 75 \mathrm{eV}$



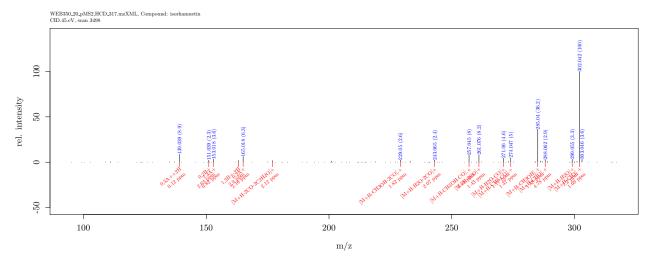
	mz	int	ppm	fragment
1	133.06	2.5	0.10	1,3B+
2	153.02	10.9	0.57	1,3A+
3	241.05	1.4	2.43	[M+H-CH4-CO]+
4	242.06	100.0	3.29	[M+H-CH3-CO].+
5	270.05	9.1	2.60	[M+H-CH3].+
6	285.08	3.6	2.91	[M+H]+

acacetin. HCD. 100 eV



	mz	int	ppm	fragment
1	69.00	1.1	1.32	1,3A+-2CO-C2H4
2	89.04	2.8	7.64	C7H5+
3	97.03	1.2	0.91	1,3A+-2CO
4	124.02	3.5	0.59	1,4A.+
5	153.02	100.0	0.02	1,3A+
6	170.02	1.3	2.93	C7H6O5+
7	185.06	1.3	2.79	[M+H-CH4-3CO]+
8	185.06	1.3	2.79	[M+H-H2O-2CO-C2H2]+
9	213.05	6.1	2.05	[M+H-CH4-2CO]+
10	213.05	6.1	2.05	[M+H-H2O-CO-C2H2]+
11	241.05	6.6	1.86	[M+H-CH4-CO]+
12	242.06	49.2	1.97	[M+H-CH3-CO].+

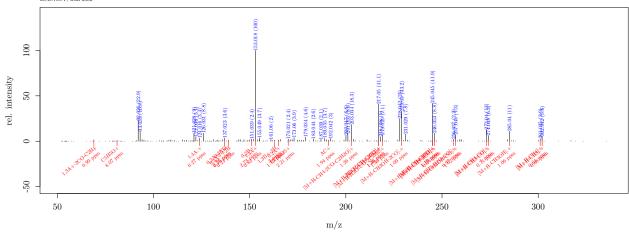
is or hamnet in. CID. 45 eV



	mz	int	ppm	fragment
1	139.04	8.9	0.12	0.3A++2H
2	151.04	2.3	2.63	0.2B+
3	153.02	3.6	0.82	1,3A+
4	163.04	2.0	2.90	1,3B+-2H
5	165.02	6.3	2.16	0.2A +
6	177.05	1.8	2.12	[M+H-2CO-2C2H2O]+
7	229.05	2.6	1.82	[M+H-CH3OH-2CO].+
8	243.07	2.4	2.07	[M+H-H2O-2CO]+
9	257.04	8.0	1.25	[M+H-CH3OH-CO].+
10	261.08	8.2	1.43	[M+H-2CO]+
11	271.06	4.6	1.17	[M+H-H2O-CO]+
12	274.05	5.0	1.37	[M+H-CH3-CO].+
13	285.04	36.2	1.38	[M+H-CH3OH].+
14	288.06	2.9	4.78	[M+H-CHO].+
15	299.06	3.3	1.20	[M+H-H2O]+
16	302.04	100.0	1.69	[M+H-CH3].+

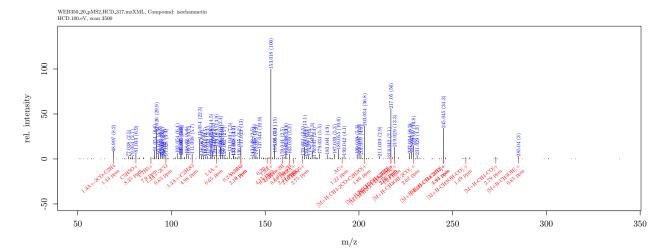
is or hamnet in. HCD. 75 eV





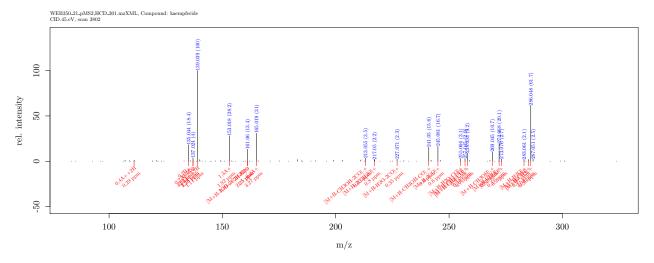
	mz	int	ppm	fragment
1	69.00	1.5	0.99	1,3A+-2CO-C2H4
2	81.03	1.1	8.07	C5H5O+
3	124.02	3.4	0.27	1,4A.+
4	137.02	3.6	2.75	0,2A+-CO
5	137.02	3.6	0.56	0.3A +
6	139.04	1.3	0.21	0.3A + +2H
7	151.04	2.4	2.73	0.2B+
8	153.02	100.0	0.82	1,3A+
9	163.04	1.2	3.00	1,3B+-2H
10	165.02	1.3	1.79	0.2A+
11	170.02	2.4	2.21	C7H6O5+
12	191.03	1.1	1.94	AC+
13	203.03	18.3	1.26	[M+H-CH4-2CO-C2H2O]+
14	217.05	41.1	1.36	[M+H-CH4-3CO]+
15	217.05	41.1	1.36	[M+H-H2O-2CO-C2H2]+
16	219.03	7.1	1.36	[M+H-H2O-CO-2C2H2]+
17	229.05	33.2	1.09	[M+H-CH3OH-2CO].+
18	245.04	41.9	1.19	[M+H-CH4-2CO]+
19	245.04	41.9	1.19	[M+H-H2O-CO-C2H2]+
20	246.05	8.8	0.24	[M+H-CH3-2CO].+
21	256.04	2.2	0.97	[M+H-CH3-H2O-CO].+
22	257.04	7.3	1.02	[M+H-CH3OH-CO].+
23	273.04	13.0	1.00	[M+H-CH4-CO]+
24	274.05	6.3	0.71	[M+H-CH3-CO].+
25	285.04	11.0	1.06	[M+H-CH3OH].+
26	301.03	2.9	0.64	[M+H-CH4]+
27	302.04	5.6	0.88	[M+H-CH3].+

is or hamnet in. HCD. 100 eV



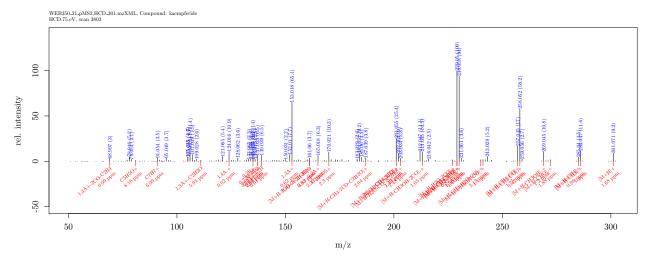
	mz	int	ppm	fragment
1	69.00	8.2	1.43	1,3A+-2CO-C2H4
2	81.03	6.9	8.35	C5H5O+
3	89.04	1.9	7.90	C7H5+
4	97.03	3.4	0.83	1,3A+-2CO
5	111.01	5.7	4.98	1,3A+-C2H2O
6	124.02	13.9	0.65	1,4A.+
7	137.02	13.0	2.19	0.2A+-CO
8	137.02	13.0	0.00	0.3A +
9	151.04	1.2	4.15	0.2B+
10	153.02	100.0	0.22	1,3A+
11	159.04	2.5	0.64	1,4B++2H
12	163.04	5.3	2.44	1,3B+-2H
13	165.02	1.0	2.16	0.2A+
14	170.02	3.5	2.75	C7H6O5+
15	191.03	1.9	1.22	AC+
16	203.03	36.8	1.86	[M+H-CH4-2CO-C2H2O]+
17	217.05	56.0	2.06	[M+H-CH4-3CO]+
18	217.05	56.0	2.06	[M+H-H2O-2CO-C2H2]+
19	219.03	13.3	1.64	[M+H-H2O-CO-2C2H2]+
20	229.05	14.8	2.02	[M+H-CH3OH-2CO].+
21	245.04	34.3	1.94	[M+H-CH4-2CO]+
22	245.04	34.3	1.94	[M+H-H2O-CO-C2H2]+
23	257.04	1.6	1.49	[M+H-CH3OH-CO].+
24	273.04	1.9	2.79	[M+H-CH4-CO]+
25	285.04	3.0	0.85	[M+H-CH3OH].+

${\bf kaempferide. CID. 45eV}$



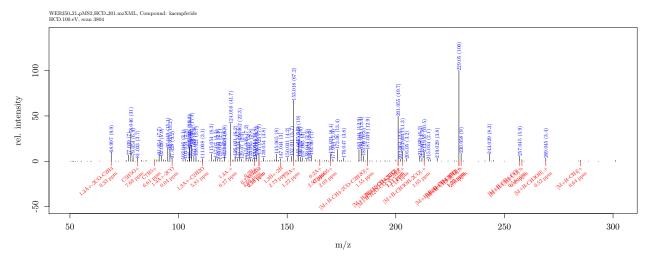
	mz	int	ppm	fragment
1	111.04	1.3	0.29	0.4A + +2H
2	135.04	18.4	4.22	0.2B+
3	137.02	4.0	3.75	0.2A+-CO
4	137.02	4.0	1.56	0.3A +
5	139.04	100.0	1.11	0.3A + +2H
6	153.02	28.2	1.92	1,3A+
7	161.06	13.4	2.25	1,4B++2H-H2O
8	161.06	13.4	1.50	[M+H-2CO-2C2H2O]+
9	165.02	31.0	3.27	0.2A +
10	213.06	3.5	0.03	[M+H-CH3OH-2CO].+
11	217.05	2.2	0.80	[M+H-2C2H2O]+
12	227.07	2.3	0.35	[M+H-H2O-2CO]+
13	241.05	15.6	0.40	[M+H-CH3OH-CO].+
14	245.08	16.7	0.60	[M+H-2CO]+
15	255.07	3.1	0.90	[M+H-H2O-CO]+
16	257.04	2.9	0.42	[M+H-CH4-CO]+
17	258.05	9.2	0.71	[M+H-CH3-CO].+
18	269.04	10.7	0.52	[M+H-CH3OH].+
19	272.07	20.1	0.31	[M+H-CHO].+
20	273.08	2.7	0.20	[M+H-CO]+
21	283.06	2.1	0.47	[M+H-H2O]+
22	285.04	2.0	2.03	[M+H-CH4]+
23	286.05	61.7	0.36	[M+H-CH3].+

${\bf kaempferide. HCD. 75eV}$



	mz	int	ppm	fragment
1	69.00	3.0	0.99	1,3A+-2CO-C2H4
2	81.03	1.2	8.16	C5H5O+
3	91.05	3.5	6.99	C7H7+
4	111.01	1.2	5.94	1,3A+-C2H2O
5	124.02	10.9	0.02	1,4A.+
6	135.04	14.0	3.32	0.2B+
7	137.02	6.5	2.86	0.2A+-CO
8	137.02	6.5	0.67	0.3A +
9	139.04	6.5	0.01	0.3A + +2H
10	153.02	65.1	0.62	1,3A+
11	161.06	3.7	0.93	1,4B++2H-H2O
12	161.06	3.7	2.83	[M+H-2CO-2C2H2O]+
13	165.02	6.3	2.25	0.2A +
14	170.02	10.3	2.30	C7H6O5+
15	187.04	3.8	2.04	[M+H-CH4-2CO-C2H2O]+
16	201.05	25.4	1.49	[M+H-CH4-3CO]+
17	201.05	25.4	1.49	[M+H-H2O-2CO-C2H2]+
18	203.03	3.3	1.48	[M+H-H2O-CO-2C2H2]+
19	213.05	10.5	1.05	[M+H-CH3OH-2CO].+
20	227.07	1.6	0.82	[M+H-H2O-2CO]+
21	229.05	100.0	1.56	[M+H-CH4-2CO]+
22	229.05	100.0	1.56	[M+H-H2O-CO-C2H2]+
23	230.06	94.0	1.41	[M+H-CH3-2CO].+
24	240.04	1.8	2.13	[M+H-CH3-H2O-CO].+
25	241.05	2.0	1.10	[M+H-CH3OH-CO].+
26	257.04	17.0	1.25	[M+H-CH4-CO]+
27	258.05	58.2	1.42	[M+H-CH3-CO].+
28	269.04	10.8	1.20	[M+H-CH3OH].+
29	272.07	1.8	1.88	[M+H-CHO].+
30	285.04	4.5	0.96	[M+H-CH4]+
31	286.05	11.6	1.00	[M+H-CH3].+
32	301.07	9.2	1.68	[M+H]+

${\bf kaempferide. HCD. 100eV}$



	mz	int	ppm	fragment
1	69.00	9.9	0.33	1,3A+-2CO-C2H4
2	81.03	3.7	7.69	C5H5O+
3	89.04	1.8	6.61	C7H5+
4	97.03	3.2	0.04	1,3A+-2CO
5	111.01	3.1	5.81	1,3A+-C2H2O
6	124.02	41.7	0.27	1,4A.+
7	135.04	4.8	3.66	0.2B+
8	137.02	7.7	2.75	0.2A+-CO
9	137.02	7.7	0.56	0.3A +
10	147.04	3.0	2.73	1,3B+-2H
11	153.02	67.2	1.22	1,3A+
12	165.02	1.9	2.53	0.2A +
13	170.02	8.4	2.03	C7H6O5+
14	187.04	12.9	1.55	[M+H-CH4-2CO-C2H2O]+
15	201.05	49.7	1.11	[M+H-CH4-3CO]+
16	201.05	49.7	1.11	[M+H-H2O-2CO-C2H2]+
17	203.03	11.3	1.18	[M+H-H2O-CO-2C2H2]+
18	213.05	10.5	1.05	[M+H-CH3OH-2CO].+
19	229.05	100.0	1.22	[M+H-CH4-2CO]+
20	229.05	100.0	1.22	[M+H-H2O-CO-C2H2]+
21	230.06	9.0	2.51	[M+H-CH3-2CO].+
22	257.04	5.9	0.54	[M+H-CH4-CO]+
23	258.05	1.8	0.48	[M+H-CH3-CO].+
24	269.04	3.4	0.52	[M+H-CH3OH].+
25	285.04	1.2	0.64	[M+H-CH4]+

	nitənmsd102i	302 (100)	299 (3)	288 (3) 285 (36)	974 (5)		271(5)	261 (8) 257 (8)	243(2)	229(3)		177 (2)	165 (6)	151(2)	150 (0)	139 (9)		153(4)		163(2)			
	каетргетіде	286 (62)	283 (2) 283 (2) 273 (3)	272(20) $269(11)$	958 (9)		257 (3) 255 (3)	245 (17) $241 (16)$	227 (2)	$217(2) \\ 213(4)$		161 (13)	165 (31)	135 (18)	137 (4)	139(100) $111(1)$		153(28)				161 (13)	
	тугісеtіп		301 (40) $291 (6)$	290 (22)	(F) 207		273 (100)	263(25)	245 (32)	235 (4) 231 (2)		179(7)	165 (41)	153 (35)	137 (6)			153(35)	() , , , ,	165 (41) $127 (4)$			
	пізээлэпр		285 (63) 275 (14)	274 (20)			257 (100) 3	247 (37)	229 (70)	$219(4) \\ 215(2)$		163(7) $191(1)$	165 (59)	137 (23)	137 (23)			153(20)		149(10) $127(1)$			
	к яешbіего]		269 (32) 259 (24)	258 (46)	245 (4)	243(5)	241 (99)		213 (77)	$\begin{pmatrix} 203 (7) \\ 199 (3) \end{pmatrix}$		147 (13)	165 (100)	121 (36)	137 (11)			153 (61)	(21) 111	$\begin{vmatrix} 133 (25) \\ 127 (2) \end{vmatrix}$		147 (13)	
45	chrysoeriol	286 (100)																					
od CID.	diosmetin	270 (100) 286 (100) 286 (100)																					
or metho	асасећіп	270 (100)			243(1)													153(5)	133(2)				
table fo	niloətul			258 (47)	245 (13)		241 (13)	231 (2) 227 (3)	213(2)	203 (4)				137(7)	137(7)		179(7)	153 (100) 153 (100)	135 (11)				
Fragment table for method $CID.45$	аріgепіп	271 (2)	253 (1) 243 (7)	242 (14)	229 (21)		225 (13)		1	187 (3)				121 (6)			163 (6) $145 (13)$		119 (12)				91(1)
Table 1: F	homoeriodictyol		285 (4)		261(2)					219(1)		179 (30)						53 (77) 153 (21) 153 (57)			$147 (84) \ 163 (100) \ 161 (100) \ 177 (100) \ 177 (100)$		
Ta	hesperetin		285 (10)		261(2)				(219(2)	201(1)	179 (28)						153(21)			177 (100)		
	ponciretin		269 (1)		245 (3)					203 (4)		179 (5)						153 (77)			161(100)		133 (4)
	eriodictyol		271 (18)	953 (1)	247 (3)				1	205 (3)	187 (4)	179 (20)						153(31)			163(100)	145 (5)	135 (1)
	піпэзпітвп		255(1)		231 (4)				(189(5)		179 (4)						153 (100) 153 (31)			147 (84)		119(3)
	зпэтзвті	2 [M+H] ⁺ 2 [M+H-CH ₃]•+	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	6 $[M+H-CHO]^{\bullet+}$ 7 $[M+H-CH_3OH]^{\bullet+}$ 8 $[M+H-2H_2OH]^{+}$				14 [M+H-2CO] ⁺ 15 [M+H-CH ₂ OH-CO]• ⁺		$17 \text{ [M+H-2C}_2\text{H}_2\text{O]}^{-1}$ $18 \text{ [M+H-CH}_3\text{OH}-2\text{CO]}^{\bullet+}$	$19 [M+H-2C_2H_2O-H_2O]^+$	$20 \text{ [M+H-2CO-2C}_2 \text{H}_2 \text{O]}^{+}$ 21 AC^{+}	22 0,2A+	24 0,2B ⁺	25 0,3A ⁺	$^{26}_{270,4A}^{+2H}$	$28\ 0.4B^{+}$ $29\ 0.4B^{+}$ $-H_{2}O$	30 1,3A+ 31 13A+-C ₂ H ₂ O	32 1,3B ⁺	$33\ 1,3B^{+}-2H$ $34\ 1,4A^{+}+2H$	$35 \text{ 1,4B}^{+} - 2\text{H}$	$36\ 1,4B^{+}+2H-H_{2}O$ $37\ 1,4B^{+}-2H-H_{2}O$	38 1,4B ⁺ -2H-CO 39 C ₇ H ⁺

Table 2: Fragment table for method HCD.75

				Table 7:		ciit tabi	Tragment table for method not. 19	TO DOTTO	GF:10						
ninegniran	lovtaiboira	ro faornorro	ponciretin	hesperetin	homoeriodicty	apigenin	luteolin	acacetin	diosmetin	chrysoeriol	ksempferol	quercetin	тугісеtіп	kaempferide	nisorhamnetin
				3		271 (84)	287 (66)	285 (4) 270 (9)	286 (20)	286 (18)	287 (25)	303 (8)	319(1)	301 (9) 286 (12)	302 (6)
				287 (1)	,	253 (3)	269 (6)				269(2)	285 (6)	301(1)	285 (5)	301 (3)
						242 (1)	258 (3)				258 (10)	274 (4)		272(2) 269(11)	285 (11)
						229 (4) 225 (4)	241 (16)	242 (100) 3 241 (1)	$242 (100) 258 (100) 258 (100) \\ 241 (1) 257 (7) 257 (7)$		241 (5)	257 (13)	273 (6)	258 (58) 257 (17)	274(6) $273(13)$
									229 (12)	229 (13)		247 (Z) 232 (2)		241 (2) 240 (2) 230 (94) 229 (100)	257 (7) 256 (2) 246 (9) 245 (42)
						197 (4)	213 (7)				213 (20) 203 (2)	229 (49)	245 (22) $235 (2)$	$229 (100) \\ 227 (2)$	245 (42)
						187 (2)	203(2) 199(1)					219 (1)		213 (11)	229 (33)
												203 (3) 203 (3)	219 (8) 219 (8)		219(7) $217(41)$ $217(41)$ $203(18)$
179	179	179(1)		179(2)	179 (2)	131(2)	147 (1)				147 (9) 165 (11)	163 (7) 191 (2) 165 (9)	179 (9) 191 (2) 165 (6)		191 (1) 165 (1)
						121 (16)	137 (12) $137 (12)$						137 (15) $153 (100)$ $137 (15)$ $130 (2)$	137(7) $135(14)$ $137(7)$	137 (4) 151 (2) 137 (4)
					111(2)	163(8)	179(3)						(c) co-1		(1)
153 (100) 153 (100)	153 (153 (100) 153 (100)		153 (100) 1	_	161 (16) $153 (100)$	153(11)	153(8)	153(8)		153 (100)		153 (65)	153(100)
$ \begin{array}{ccc} 111 & (2) \\ 97 & (3) & 97 & (4) \\ 69 & (2) & 69 & (2) \end{array} $	111 97 (69 (2) (2)	111 (1) 97 (3) 69 (2)	111 (1) 97 (4) 69 (2)	97 (4) 69 (2)	125 (1) $111 (2)$ $97 (2)$ $69 (4)$	125(2) $111(2)$ $97(2)$ $69(5)$	100 (0)			111 (5) 97 (2) 69 (7)	111 (6) 97 (2) 69 (8)	125 (3) 111 (6) 97 (3) 69 (8)	111 (1) 69 (3)	69 (1)
						119 (49)	155 (40) 127 (1)	(6) (9)			133(3) $127(1)$	149 (3) 127 (3)	165(6) $127(2)$		163(1)
						125(1)	125(2)					145 (2)	124 (2) $125 (3)$ $161 (2)$	124 (11)	124 (3)
147 (15) 163 (10)	163 (10)	161 (10)	177 (4)	177(2)						147 (9)			161 (4)	
145 (7) 119 (32) 135 (29)	145 135 ((23)	133 (36) 118 (11) 103 (6)	149 (15) 134 (11)	149 (11) 134 (7)										
91 (24)	117	117 (18)	90 (3)	117 (15)	117 (32)										
91 (24)		(6)	91 (1)	91 (3)	91 (2)	91 (26)	00 (17)				91(2)	91 (2)	170(1) $91(2)$	170 (10) 91 (4)	170(2)
ño	8	89 (23)		89 (29)	89 (24)	81 (1)	81 (2)				81 (3)	81 (8)	81 (5)	81 (1)	81 (1)

эрітэїфтэвя	285 (1)		257 (2) 245 (34) 245 (34)	229 (15) 219 (13) 217 (56) 217 (56)	203 (37)	191 (2) 165 (1) 137 (13) 151 (1) 137 (13)	153 (100)	111 (6) 97 (3) 69 (8)	163 (5) 124 (14) 159 (2)				170(3)	89 (2) 81 (7)
	285	269 (3) 258 (2) 257 (6)	230 (9) 229 (100) 229 (100)	213 (10) 203 (11) 201 (50) 201 (50)	187 (13)	165 (2) 137 (8) 135 (5) 137 (8)	153 (67)	111 (3) 97 (3) 69 (10)	147 (3) 124 (42)				170(8)	89 (2) 81 (4)
тугісеtіп			7	245 (6) 219 (21) 219 (21)	179(9)	191 (2) 165 (4) 137 (32) 153 (100) 137 (32)	153 (100)	125 (5) 111 (7) 97 (14) 69 (29)	165 (4) 127 (4) 124 (15) 125 (5) 161 (4)				170(3)	89 (7) 81 (24)
пітесетіп	285 (3)	257 (2)	(01) 000	229 (16) 219 (2) 203 (10) 203 (10)	163 (5)	165 (3) 137 (38) 137 (38) 137 (38)	-	125 (1) 111 (5) 97 (10) 69 (31)	149 (4) 127 (6) 124 (3) 125 (1) 145 (4)					89 (9) 81 (39)
kaempferol	269 (2)	241 (1)	216 (2)	213 (12) 203 (1) 187 (2) 187 (2)	147 (8)	165 (2) 137 (12) 121 (69) 137 (12)		12.5 (2) 1111 (4) 97 (9) 69 (33)	133 (1) 127 (2) 124 (1) 125 (2)	147 (8)				$ \begin{vmatrix} 89 (6) \\ 81 (12) \end{vmatrix} $
chrysoeriol		258 (46) 257 (37)	229 (76) 229 (76)	213 (4) 203 (31) 201 (6) 201 (6)	187 (5) 161 (5)	137 (2)	153 (100)	$ 111 (1) \\ 97 (2) \\ 69 (2) $	124 (5)				170(1)	89(1)
diosmetin		258 (49) 257 (38)	229 (75) 229 (75)	213 (4) 203 (29) 201 (7) 201 (7)	187 (6) 161 (4)	137 (1)	153 (100)	111 (1) 97 (2) 69 (2)	124 (4)				170(1)	
ясясеііп		242 (49) 241 (7)	213 (6) 213 (6)	185 (1) 185 (1)				97 (1) 69 (1)	124 (4)				170(1)	89 (3)
luteolin	287 (2)	241 (4)	216(1)	213 (4) 203 (3) 187 (2) 187 (2)	185 (2) 147 (3)	137 (16) 137 (16)		125(2) $111(3)$ $97(9)$ $69(22)$	127 (2) 124 (2) 125 (2)					89 (100) 81 (8)
піпэзідв	271 (2) 243 (2) 243 (2)	7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7	01	187 (1)	169(2) 131(5)	121 (25)		$ \begin{array}{c} 125 (3) \\ 111 (4) \\ 97 (9) \\ 69 (24) \\ 110 (35) \end{array} $	125 (3)					89 (7) 81 (3)
homoeriodictyol						179 (1)	153 (58)	111 (2) 97 (9) 69 (8)		,	149(3) $134(13)$	117 (26)	(3)	89 (100) 81 (1)
hesperetin						179 (2)		1.25 (1) $111 (2)$ $97 (9)$ $69 (9)$	125 (1)			117 (13)	(1)	$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$
ponciretin							153 (100)	111 (4) $97 (15)$ $69 (13)$	125(1)	161 (3)	133 (36) 118 (57) 103 (27)	90 (49)	(3)	89 (22) 81 (1)
eriodictyol							153 (50)	111 (2) 97 (8) 69 (8)		163 (1)	135 (16)	1	117 (21)	89 (100) 81 (1)
ninsgaringa							153 (69)	111 (2) 111 (2) 97 (10) 69 (9)	125 (1)	147 (3)	119 (34)	91 (100)	(100)	81(1)
Jnəmzeri	$[M+H]^+$ $[M+H-CH_4]^+$ $[M+H-H_2O]^+$ $[M+H-CO]^+$ $[M+H-CO]^{\bullet}$					3 AC+ 4 0,2A+ 5 0,2A+-CO 6 0,2B+ 7 0,3A+	$\begin{array}{c} 8 \text{ U,AP} + 2\Pi \\ 9 \text{ 0,4B} + \\ 0 \text{ 0,4B} - \text{H}_2\text{O} \\ 11,3A + \\ 21,3A + \\ 22,4A + CO \end{array}$	$\begin{array}{c} 2.1,34^{+}-C.0\\ 2.3,34^{+}-C_2H_2O\\ 4.1,34^{+}-2CO\\ 5.1,34^{+}-2CO-C_2H_4\\ 6.1,37^{+}\end{array}$	7 1,3B+2H 8 1,4A+2H 9 1,4A+ 0 1,4A+ 1 1,4B+2H	$2\ 1,4B^+-2H$ $3\ 1,4B^++2H-H_2O$ $4\ 1,4B^+-2H-H_2O$	$\begin{array}{c} 5\ 1,4\mathrm{B}^{+}-2\mathrm{H}-\mathrm{CO} \\ 6\ 1,4\mathrm{B}^{+}-2\mathrm{H}-\mathrm{CO}-\mathrm{CH}_{3} \\ 7\ 1,4\mathrm{B}^{+}-2\mathrm{H}-\mathrm{CO}-\mathrm{CH}_{2} \end{array}$	8 1,4B ⁺ -2H-2CO 9 1,4B ⁺ -2H-2CO-CH ₃ 0 1,4B ⁺ -2H-C ₂ H ₂ O-H ₂ O	1 1,4B 1 – 2H – H2O – CO 2 C7 H6O5 9 C1 H	53 C7H ⁷ 54 C7H ⁸ 55 C ₅ H ₅ O ⁺
	naringenin eriodictyol ponciretin hesperetin apigenin luteolin acacetin diosmetin chrysoeriol	fragment fragment fragment heroering homoeriodictyol homoeriodictyol homoeriodictyol $\frac{[M+H]^+}{[M+H-H_2O]^+}$	$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$	$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	Art Art	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	The color of the	Harden H	The control of the