

Supporting Information

SUPPORTING INFORMATION – FIGURES AND TABLES

Table SI-1 – Mass spectrometry parameters for compounds quantified via MS².

Table SI-2 – Differentially abundant taxa among all treatment groups at d90.

Figure SI-1 – Urinary excretion of hippuric acids.*

Figure SI-2 – Urinary excretion of phenolic acids and their phase II metabolites.*

Figure SI-3 – Urinary excretion of flavonoids and their phase II metabolites.*

Figure SI-4 – CCA of rat microbiomes and urinary phenolic metabolites at day 90. Each dot represents the microbiome of one rat, while each line represents a pool of phenolic metabolites. The lines point in the direction they correlate with and are scaled to the size of the association.

* All graphs in figures SI 1-3 depict urinary excretion (in nmol) from 24h urine collections throughout the study. For clarity, statistical comparisons are shown in tables below each figure. Lower case letters indicate differences between doses and the same time point (i.e., down a column), while upper case letters indicate differences between time points and within dose (i.e., across a row). Two-way ANOVA with Tukey's HSD ($p<0.05$) used for all comparisons. nd = not detected; trace = metabolite detected but below LOQ; BB = lyophilized whole blueberry dose; NG = non-gavaged group. Data shown as mean \pm SEM in graphs; mean \pm SD in tables.

Table SI-1 – Mass spectrometry parameters for compounds quantified via MS².

Compound	MRM mode	RT (min)	MW	Precursor ion (m/z)	MS ² fragments (m/z) ^a	CV	CE (eV)	Quantitation Standard
Anthocyanins								
Cyanidin								
Arabinoside	+	1.77	419.1	419	287	46	20	
Galactoside	+	1.62	449.1	449	137, 287	46	54, 20	Cyanidin-3-glucoside
Glucoside	+	1.86	449.1	449	137, 287	46	54, 20	
Delphinidin								
Arabinoside	+	1.41	435.4	435	303	100	18	
Galactoside	+	1.26	465.4	465	69, 303	100	74, 18	Cyanidin-3-glucoside
Glucoside	+	1.41	465.4	465	69, 303	100	74, 18	
Glucuronide	+	3.35	479.4	479	303	100	18	
Malvidin								
Arabinoside	+	2.79	463.4	463	331	100	34	
Galactoside	+	2.74	493.4	493	315, 331	100	50, 34	Malvidin-3-glucoside
Glucoside	+	2.95	493.4	493	315, 331	100	50, 34	
Peonidin								
Arabinoside	+	2.44	433.4	433	301	35	20	
Galactoside	+	2.42	463.4	464	301	35	20	
Glucoside	+	2.66	463.4	464	301	35	20	Peonidin-3-glucoside
Sulfate	+	4.28	381.4	381	301	35	20	
Petunidin								
Arabinoside	+	2.13	449.4	449	317	40	22	
Galactoside	+	2.05	479.4	479	317	40	22	
Glucoside	+	2.29	479.4	479	317	40	22	Petunidin-3-glucoside
Glucuronide	+	4.02	493.4	493	317	40	22	
Sulfate	+	4.30	397.4	397	317	40	22	
Phenolic Acids								
Benzaldehydes (BALD)								
Isovanillin	-	2.50	150.2	151	92, 136	24	22, 12	Isovanillin

Benzoic acids (BzA)							
Protocatechuic acid	-	0.86	154.1	153	81, 91	28	18, 24
Gallic acid	-	0.69	170.1	169	79, 97	32	22, 20
Vanillic acid	-	1.82	168.1	167	108, 152	28	20, 12
Syringic acid	-	2.08	198.2	197	123, 182	36	24, 14
BzA glucuronide	-	3.93	298.2	297	121	30	22
Phenyl Acetic Acids (PAA)							
3-OH-PAA	-	3.95	152.2	151	136, 92	34	12, 18
4-OH-PAA	-	1.74	152.2	151	107, 133	28	10
3-OMe-PAA	-	3.86	166.2	165	106, 121	28	24, 6
Homovanillic acid	-	2.12	182.2	181	122	18	14
Phenyl Propionic Acids (PPA)							
3-OH-PPA	-	3.02	166.2	165	121, 147	24	16, 12
3-OH-4-OMe-PPA	-	3.05	196.2	195	135, 136	32	26, 12
Dihydrocaffeic acid sulfate	-	1.70	264.2	261	137, 181	28	20, 15
<i>trans</i> -Cinnamic Acids							
<i>p</i> -Coumaric acid	-	2.41	164	163	93, 120	28	28, 32
Caffeic acid	-	1.81	180.2	179	107, 117	32	22, 24
Caffeic acid sulfate ^b	-	1.68	260.2	259	135, 179	28	20, 15
Caffeic acid glucuronide	-	3.83	356.2	355	179	30	18
Ferulic acid	-	3.20	194.2	193	134, 178	30	18, 12
Ferulic acid glucuronide ^c	-	3.65, 4.18	370.2	369	193	30	22
Isoferulic acid	-	3.92	194.2	193	134, 178	30	18, 12
Isoferulic acid glucuronide	-	1.40	370.2	369	178, 193	30	18, 12
(Iso)Ferulic acid sulfate ^d	-	1.75, 2.00	274.2	273	178, 193	30	18, 12
Chlorogenic acid	-	1.70	354.3	353	85, 191	26	40, 18
Feruloylquinic acid	-	2.64	368.3	367	134, 191	30	40, 20
Ethyl gallate	-	2.80	198.2	197	124, 125	30	30
Taxifolin	-	3.40	304.3	303	125, 177	34	22, 14
Catechins							
Catechin	-	1.40	290.3	289	109, 123	33	24, 26
Epicatechin	-	2.11	290.3	289	109, 123	33	24, 26

(Epi)gallocatechin peak 1	-	0.80	306.3	305	<i>125, 179</i>	40	20, 14	Catechin
(Epi)gallocatechin peak 2	-	1.00	306.3	305	<i>125, 179</i>	40	20, 14	Catechin
Flavonols								
Quercetin	-	4.29	302.2	301	<i>151, 179</i>	38	20, 18	Quercetin
Kaempferol	-	4.52	286.2	285	<i>146, 151</i>	58	30, 18	Quercetin
Myricetin	-	3.84	318.2	317	<i>151, 179</i>	46	26, 20	Myricetin
Kaempferol-3-glycs ^e	-	1.40	448.4	447	<i>284</i>	42	18	Quercetin-3-glucoside
Quercetin-3-glycs	-	3.39	464.1	463	<i>271, 300</i>	42	40, 24	Quercetin-3-glucoside
Quercetin-3-rutinoside	-	3.41	610.2	609	<i>300</i>	42	24	Quercetin
Quercetin glucuronide ^f	-	3.54, 3.80, 4.01	478.1	477	<i>151, 300</i>	42	38, 22	Quercetin glucuronide
4-OMe-quercetin	-	4.62	316.2	315	<i>151, 300</i>	28	32, 20	4-OMe-quercetin
Myricetin glucuronide	-	3.58	494.4	493	<i>151, 317</i>	46	26, 20	Myricetin
Hippuric Acids								
Hippuric acid	-	1.80	179.2	178	<i>56, 77</i>	28	12, 16	Hippuric acid
3-OH-hippuric acid	-	1.20	195.2	194	<i>93, 121</i>	32	22, 24	3-OH-hippuric acid

MRM = Multiple Reaction Monitoring; RT = retention time; MW = molecular weight; CV = cone voltage; CE = collision energy.

^a Daughter fragments monitored; fragment listed in italics used for quantitation.

^b Three overlapping peaks were not separable, so quantitated as sum of all three peaks.

^c Two distinct peaks were observed at this MRM, representing different isomers of ferulic acid glucuronide. They are quantitated separately as peaks 1 and 2 in the results.

^d Two distinct peaks appeared at this MRM. Based on our methods, we are unable to determine which corresponds to ferulic acid sulfate and which corresponds to isoferulic acid sulfate, thus they are reported as peak 1 and peak 2 in results.

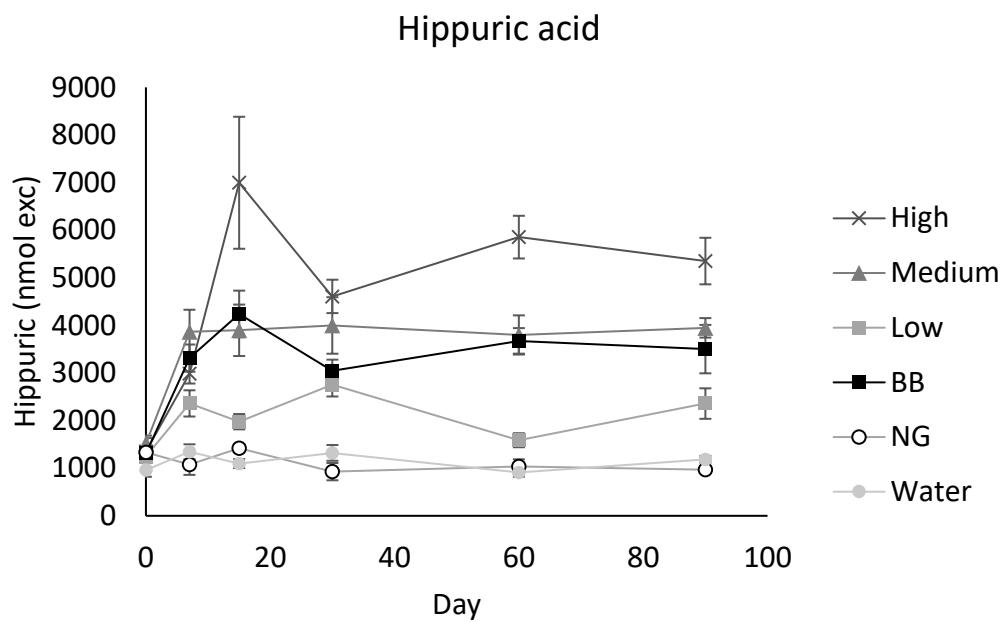
^e Galactoside and glucoside peaks overlapped and were not distinguishable, so quantitated as sum of both peaks.

^f Three distinct peaks were observed at this MRM, representing different isomers of quercetin glucuronide. They are quantitated separately as peaks 1, 2, and 3.

Table SI-2 – Differentially abundant taxa among all treatment groups at d90. Only taxa with LEfSe LDA>4 or ANCOM W>130 and centered log ratio (clr) >30 are presented. LEfSe determines differentially abundant taxa using relative abundance, while ANCOM uses raw counts.

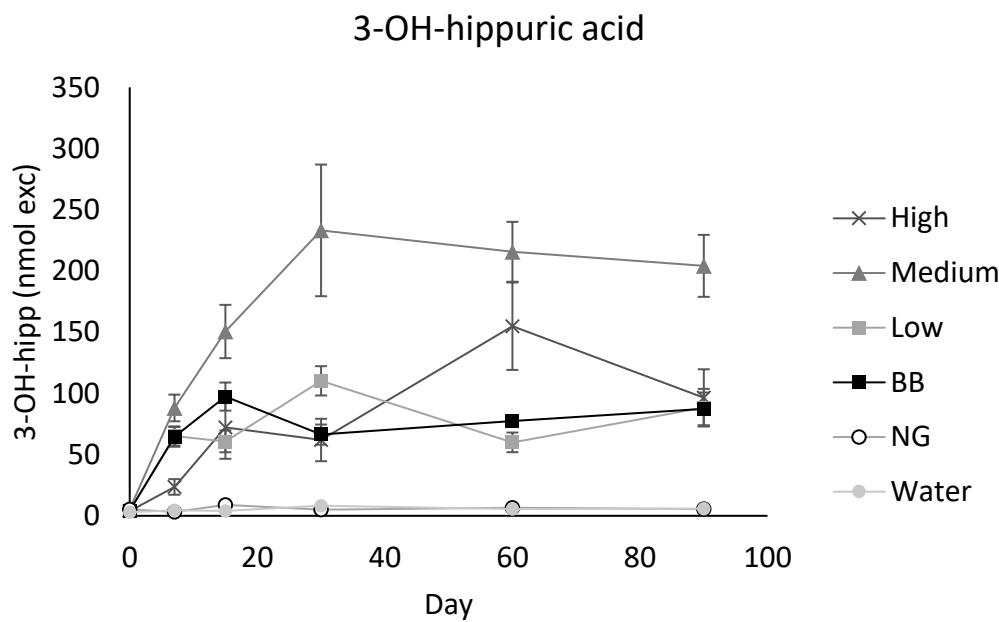
Taxa	Phylum	Lefse			ANCOM	
		Highest Group	LDA	p	clr	W
<i>Bacteroides dorei</i>	Bacteroidetes	High	5.09	3.46E-04	8.0	107
<i>Bacteroides</i>	Bacteroidetes	High	4.83	2.21E-05	3.2	51
<i>Ruminococcus-2</i>	Firmicutes	High	4.63	2.88E-03	2.3	36
<i>Lachnospiraceum</i>	Firmicutes	High	4.30	1.27E-06	49.7	273
<i>Barnesiella</i>	Bacteroidetes	High	4.13	2.63E-06	26.0	264
<i>Ruminococcus torques group</i>	Firmicutes	High	4.08	5.62E-07	16.7	263
<i>Ruminococcaceae UBA1819</i>	Firmicutes	High	4.08	1.52E-04	25.8	267
<i>Rhodospirillales</i> , uncultured, ambiguous taxa	Proteobacteria	High	4.07	4.36E-05	9.5	191
<i>Marinibryantia</i>	Firmicutes	High	4.02	5.37E-05	15.1	270
<i>Coriobacteriales incertae sedis</i> , uncultured	Actinobacteria	High	3.11	2.35E-07	39.2	270
<i>Flavonifractor</i>	Firmicutes	High	3.83	1.91E-06	30.5	270
<i>Muribaculaceae</i> , ambiguous taxa	Bacteroidetes	Medium	4.40	1.24E-02	43.7	240
<i>Bacteroides</i> , uncultured bacterium	Bacteroidetes	Medium	4.15	2.47E-05	10.5	229
<i>Rikenellaceae RC9 gut group</i> , uncultured bacterium	Bacteroidetes	Medium	4.08	2.69E-04	173.6	261
<i>Christensenellaceae R7 group</i>	Firmicutes	Medium	4.08	3.79E-03	3.2	46
<i>Oscillibacter</i> , uncultured bacterium	Firmicutes	Medium	3.28	2.65E-04	37.2	242
<i>Clostridium sensu stricto</i> , uncultured bacterium	Firmicutes	Low	3.85	6.42E-04	37.4	252
<i>Ruminiclostridium-6</i> , uncultured bacterium	Firmicutes	BB	4.37	7.58E-04	28.2	253
<i>Ruminococcaceae UCG-005</i>	Firmicutes	BB	4.36	1.57E-04	35.3	254
<i>Ruminiclostridium</i> , uncultured bacterium	Firmicutes	BB	3.43	6.16E-04	72.5	248
<i>Ruminococcus-1</i>	Firmicutes	Control	5.16	1.67E-04	74.1	269
<i>Ruminococcaceae UCG-010</i>	Firmicutes	Control	3.15	1.07E-04	48.1	242
<i>Lachnospiraceae NK4A136 group</i>	Firmicutes	Non-gavage	4.88	5.91E-04	76.5	265
<i>Lachnospiraceae NK4A136 group</i> , uncultured bacterium	Firmicutes	Non-gavage	4.74	8.91E-04	61.7	258
<i>Eubacterium coprostanoligenes</i> group, uncultured bacterium	Firmicutes	Non-gavage	4.02	8.79E-05	23.7	248

Figure SI-1a – Hippuric acid.



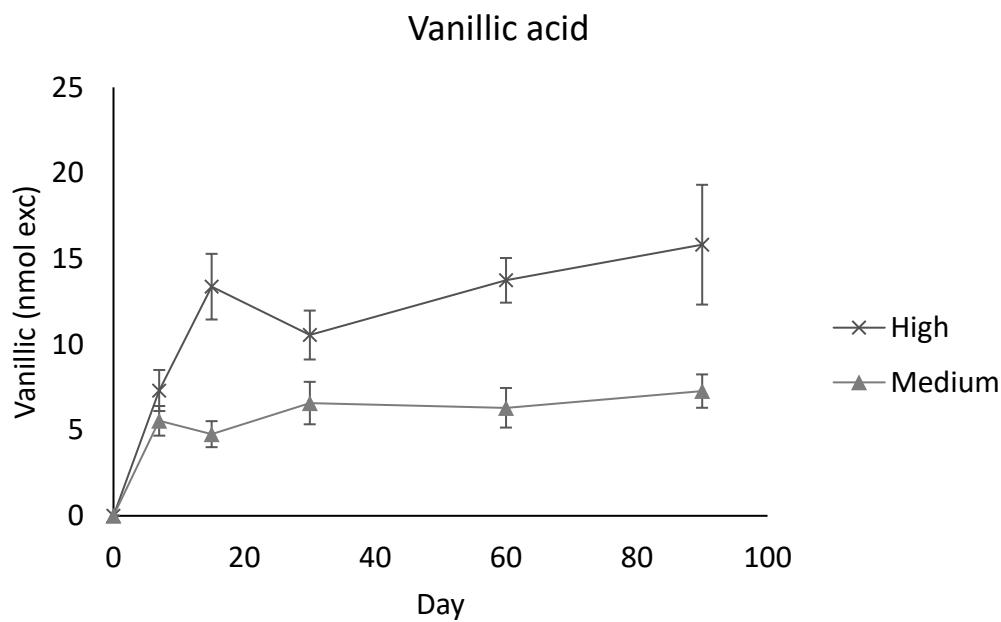
	Day					
	0	7	15	30	60	90
Water	963 ± 453	1345 ± 497 ^b	1098 ± 297 ^d	1322 ± 496 ^c	911 ± 286 ^d	1187 ± 211 ^c
Low	1247 ± 419 ^c	2361 ± 871 ^{a,A}	1977 ± 510 ^{c,AB}	2755 ± 788 ^{b,A}	1588 ± 465 ^{c,BC}	2358 ± 1014 ^{b,AB}
Medium	1518 ± 501 ^B	3867 ± 1383 ^{a,A}	3896 ± 1529 ^{b,A}	3998 ± 1781 ^{ab,A}	3799 ± 1164 ^{b,A}	3948 ± 579 ^{a,A}
High	1352 ± 380 ^c	2986 ± 623 ^{a,B}	6995 ± 4158 ^{a,A}	4609 ± 1052 ^{a,A}	5854 ± 1418 ^{a,A}	5351 ± 1383 ^{a,A}
BB	1310 ± 485 ^B	3312 ± 856 ^{a,A}	4239 ± 1471 ^{ab,A}	3045 ± 704 ^{ab,A}	3674 ± 805 ^{ab,A}	3501 ± 1245 ^{ab,A}
NG	1329 ± 608	1079 ± 438 ^b	1419 ± 175 ^{cd}	928 ± 363 ^c	1035 ± 303 ^{cd}	968 ± 124 ^c

Figure SI-1b – 3-hydroxy-hippuric acid.



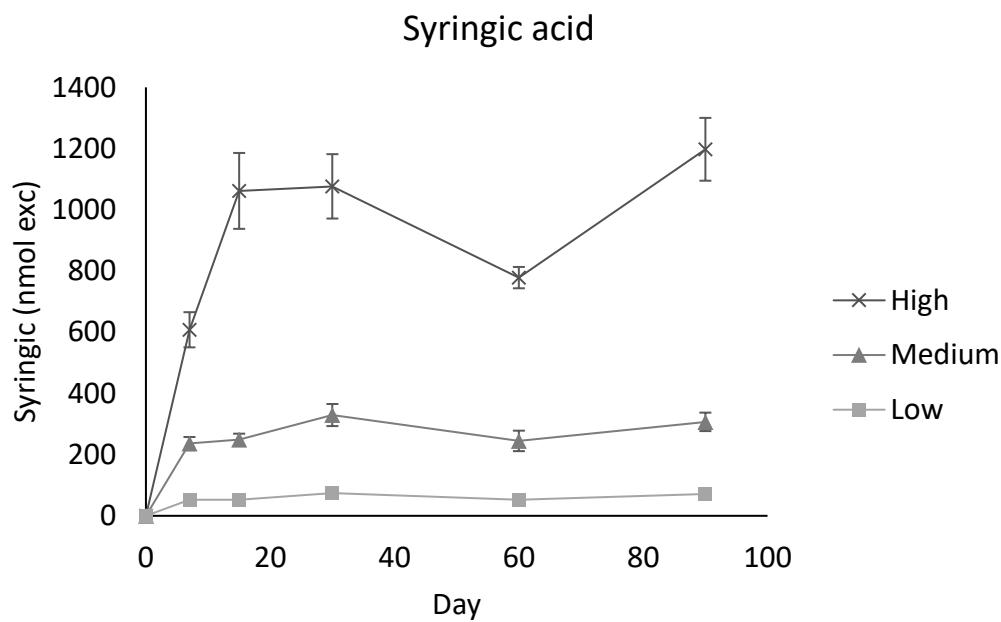
	Day					
	0	7	15	30	60	90
Water	2.98 ± 1.41	4.60 ± 1.88 ^c	4.03 ± 1.07 ^d	8.27 ± 3.49 ^d	5.60 ± 1.50 ^d	5.72 ± 1.38 ^c
Low	4.09 ± 1.61 ^c	65.2 ± 24.8 ^{a,B}	60.8 ± 28.2 ^{bC,B}	110 ± 37.8 ^{ab,A}	60.0 ± 25.4 ^{c,B}	88.3 ± 48.7 ^{b,AB}
Medium	5.37 ± 1.65 ^c	88.1 ± 32.7 ^{a,B}	151 ± 61.6 ^{a,AB}	233. ± 161 ^{a,A}	216 ± 69.2 ^{a,A}	204 ± 71.6 ^{a,A}
High	3.84 ± 1.05 ^d	23.6 ± 19.1 ^{bc,C}	72.2 ± 76.8 ^{c,B}	61.9 ± 51.9 ^{c,B}	155 ± 113 ^{ab,A}	96.5 ± 65.5 ^{a,A}
BB	4.19 ± 1.92 ^b	64.5 ± 24.2 ^{a,A}	97.4 ± 34.4 ^{ab,A}	66.3 ± 24.7 ^{bc,A}	77.3 ± 14.4 ^{bc,A}	87.3 ± 32.7 ^{b,A}
NG	5.23 ± 2.29	3.21 ± 1.60 ^c	8.93 ± 0.62 ^d	5.06 ± 0.71 ^a	6.49 ± 2.35 ^d	5.65 ± 1.80 ^c

Figure SI-2a – Vanillic acid.



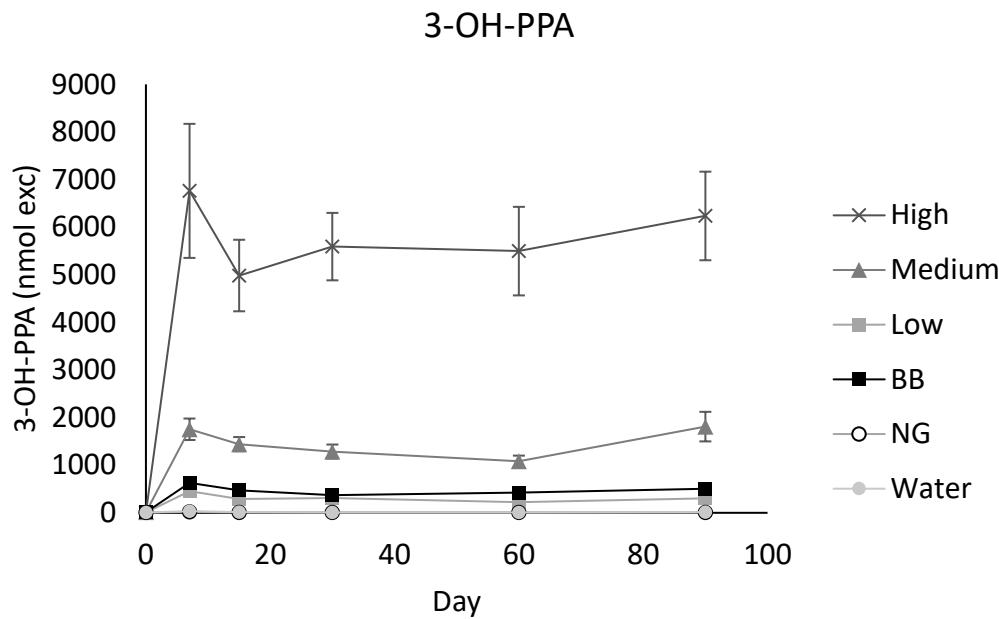
	0	7	15	30	60	90
Water	nd	nd	nd	nd	nd	nd
Low	nd	trace	trace	trace	trace	trace
Medium	nd	5.54 ± 2.60^b	4.76 ± 2.15^b	6.58 ± 3.71^b	6.30 ± 3.27^b	7.28 ± 2.75^b
High	nd	$7.31 \pm 3.59^{a,B}$	$13.4 \pm 5.75^{a,A}$	$10.6 \pm 4.28^{a,AB}$	$13.7 \pm 4.12^{a,A}$	$15.8 \pm 9.89^{a,A}$
BB	nd	trace	trace	trace	trace	trace
NG	nd	nd	nd	nd	nd	nd

Figure SI-2b – Syringic acid.



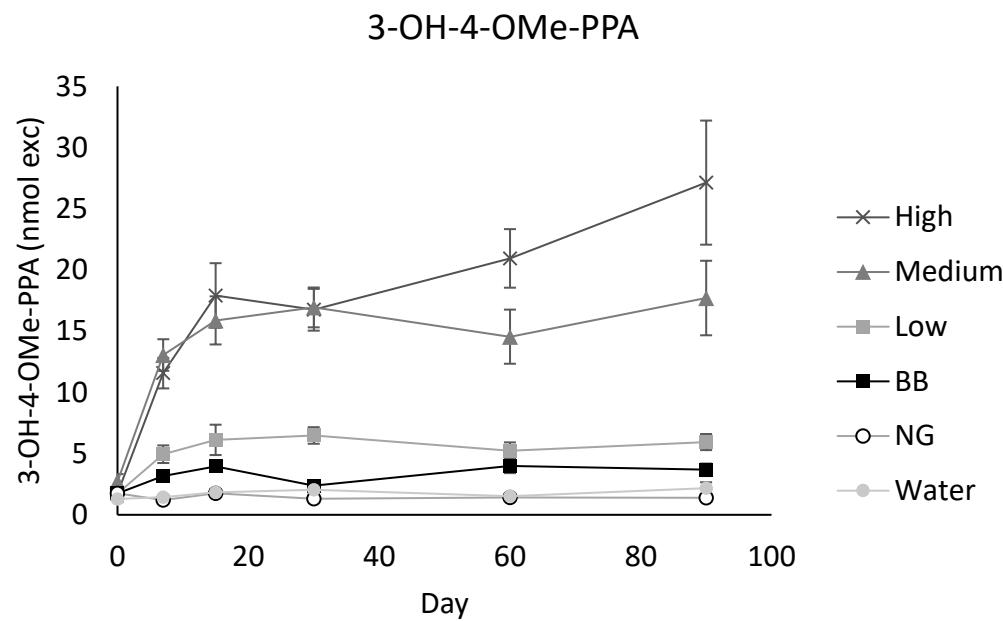
	Day					
	0	7	15	30	60	90
Water	nd	nd	nd	nd	nd	nd
Low	nd	52.8 ± 8.82 ^{c,AB}	52.1 ± 13.4 ^{c,AB}	74.3 ± 29.2 ^{c,A}	52.7 ± 19.9 ^{c,B}	71.6 ± 27.0 ^{c,AB}
Medium	nd	236 ± 64.6 ^b	249 ± 54.9 ^b	329 ± 108 ^b	245 ± 94.7 ^b	307 ± 85.3 ^b
High	nd	608 ± 172 ^{a,C}	1062 ± 372 ^{a,AB}	1076 ± 316 ^{a,AB}	778 ± 110 ^{a,B}	1197 ± 290 ^{a,A}
BB	nd	trace	trace	trace	trace	trace
NG	nd	nd	nd	nd	nd	nd

Figure SI-2c – 3-hydroxyphenyl propionic acid.



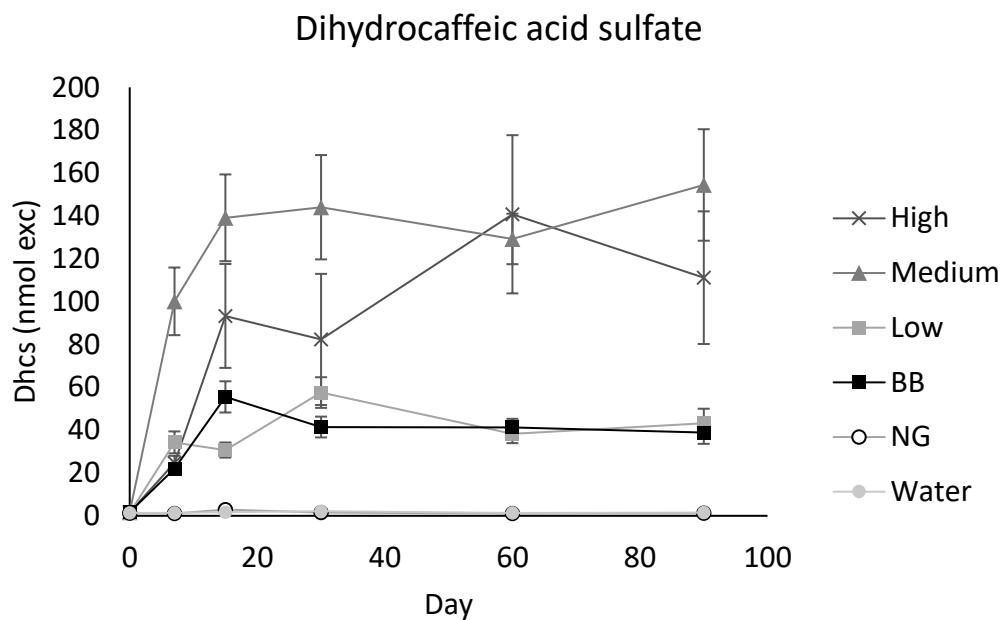
		Day					
		0	7	15	30	60	90
Water	5.70 ± 3.18	35.3 ± 36.8 ^d	12.3 ± 5.07 ^d	10.4 ± 4.50 ^d	7.05 ± 1.67 ^d	12.5 ± 5.41 ^d	
Low	5.98 ± 3.39 ^c	454 ± 132 ^{c,A}	290 ± 107 ^{c,AB}	311 ± 109 ^{c,AB}	221 ± 70.5 ^{c,B}	305 ± 60.8 ^{c,AB}	
Medium	12.0 ± 7.35 ^b	1755 ± 677 ^{b,A}	1442 ± 422 ^{b,A}	1287 ± 441 ^{b,A}	1081 ± 341 ^{b,A}	1811 ± 879 ^{b,A}	
High	7.46 ± 6.26 ^b	6762 ± 4224 ^{a,A}	4984 ± 2253 ^{a,A}	5591 ± 2124 ^{a,A}	5497 ± 2941 ^{a,A}	6235 ± 2631 ^{a,A}	
BB	10.4 ± 9.14 ^b	629 ± 228 ^{c,A}	470 ± 99.0 ^{c,A}	370 ± 58.1 ^{c,A}	427 ± 169 ^{c,A}	507 ± 255 ^{c,A}	
NG	7.82 ± 5.62	21.3 ± 19.4 ^d	10.6 ± 2.81 ^d	8.40 ± 4.89 ^d	10.5 ± 2.80 ^d	11.2 ± 4.18 ^d	

Figure SI-2d – 3-hydroxy-4-methoxyphenyl propionic acid.



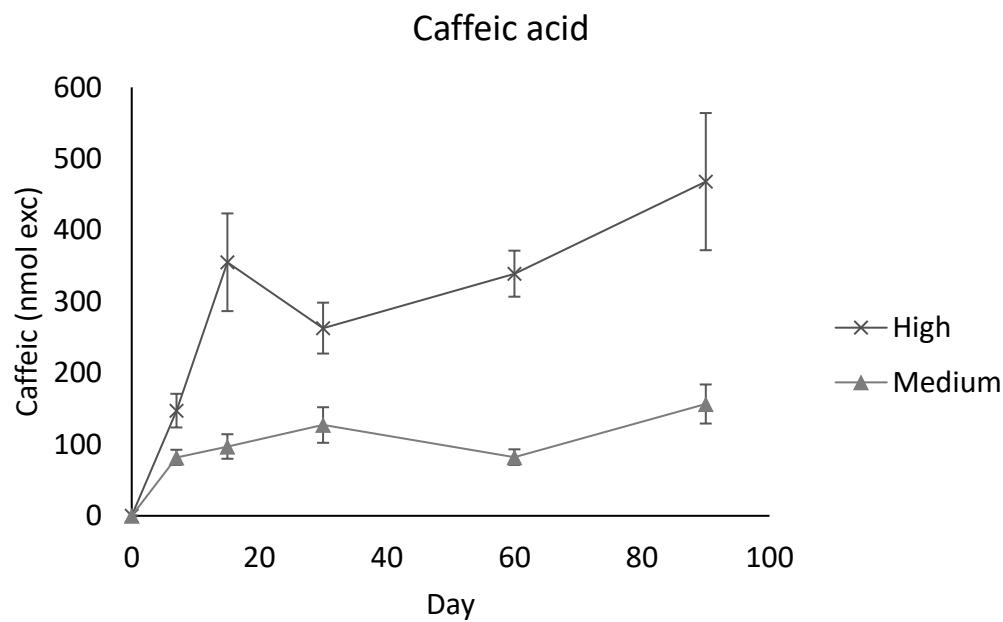
	Day					
	0	7	15	30	60	90
Water	1.29 ± 0.83	1.44 ± 0.59 ^c	1.84 ± 0.81 ^c	2.05 ± 0.72 ^c	1.51 ± 0.86 ^c	2.18 ± 1.45 ^c
Low	1.74 ± 1.2 ^B	4.95 ± 2.28 ^{b,A}	6.12 ± 3.92 ^{b,A}	6.48 ± 2.14 ^{b,A}	5.24 ± 2.14 ^{b,A}	5.94 ± 2.08 ^{b,A}
Medium	2.72 ± 1.82 ^B	13.05 ± 3.87 ^{a,A}	15.88 ± 5.56 ^{a,A}	16.94 ± 4.88 ^{a,A}	14.55 ± 6.25 ^{a,A}	17.71 ± 8.61 ^{a,A}
High	1.75 ± 0.5 ^c	11.57 ± 3.74 ^{a,B}	17.92 ± 7.92 ^{a,AB}	16.75 ± 5.12 ^{a,AB}	20.94 ± 7.56 ^{a,A}	27.13 ± 14.33 ^{a,A}
BB	1.74 ± 0.83 ^B	3.17 ± 0.9 ^{b,A}	3.96 ± 0.89 ^{b,A}	2.39 ± 0.59 ^{c,A}	3.99 ± 1.76 ^{b,A}	3.68 ± 1.25 ^{bc,A}
NG	1.75 ± 0.59	1.2 ± 0.4 ^c	1.76 ± 0.61 ^c	1.31 ± 0.4 ^c	1.42 ± 0.35 ^a	1.4 ± 0.4 ^c

Figure SI-2e – Dihydrocaffeic acid sulfate.



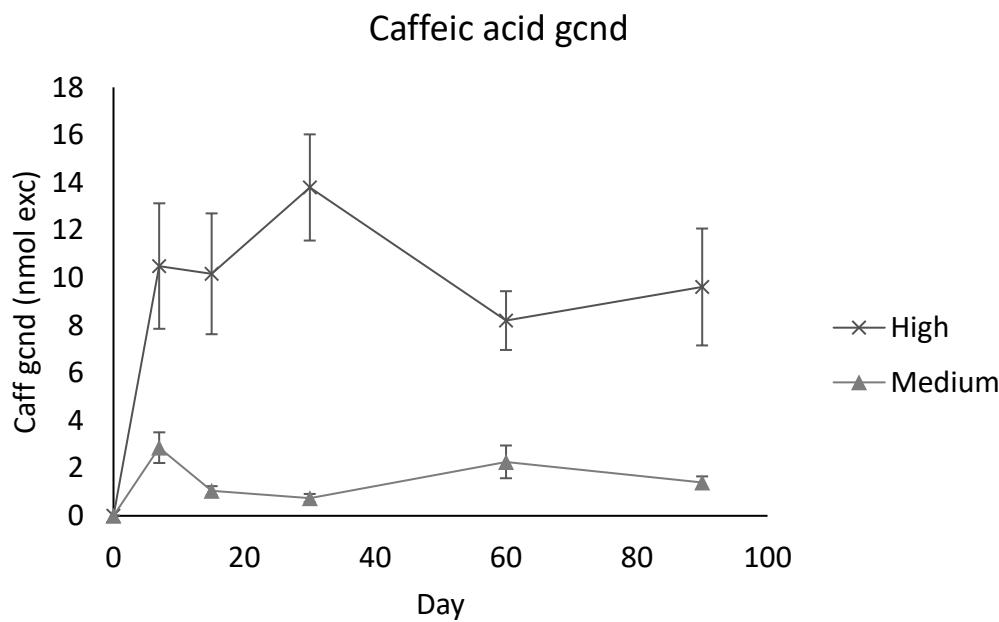
	Day					
	0	7	15	30	60	90
Water	1.36 ± 1.05	1.4 ± 0.88 ^c	1.7 ± 0.66 ^d	2.18 ± 1.06 ^c	1.33 ± 0.54 ^c	1.49 ± 0.48 ^c
Low	1.36 ± 0.65 ^c	34.29 ± 16.15 ^{b,AB}	30.7 ± 11.17 ^{c,B}	57.54 ± 22.61 ^{b,A}	38.3 ± 13.83 ^{b,AB}	43.17 ± 21.54 ^{b,AB}
Medium	1.72 ± 1.03 ^B	100 ± 47.38 ^{a,A}	139 ± 57.28 ^{a,A}	144 ± 73.04 ^{a,A}	129 ± 33.3 ^{a,A}	154 ± 73.59 ^{a,A}
High	1.6 ± 0.75 ^D	24.72 ± 9.87 ^{b,C}	93.3 ± 72.75 ^{ab,AB}	82.33 ± 91.81 ^{b,B}	141 ± 117 ^{a,A}	111 ± 87.57 ^{ab,AB}
BB	1.72 ± 0.6 ^c	22.01 ± 7.51 ^{b,B}	55.51 ± 21.85 ^{bc,A}	41.44 ± 14.56 ^{b,AB}	41.26 ± 12.0 ^{b,AB}	38.79 ± 12.75 ^{b,AB}
NG	1.21 ± 1.05	1.13 ± 0.14 ^c	2.91 ± 0.26 ^d	1.51 ± 0.92 ^c	1.03 ± 0.36 ^c	1.15 ± 0.51 ^c

Figure SI-2f – Caffeic acid.



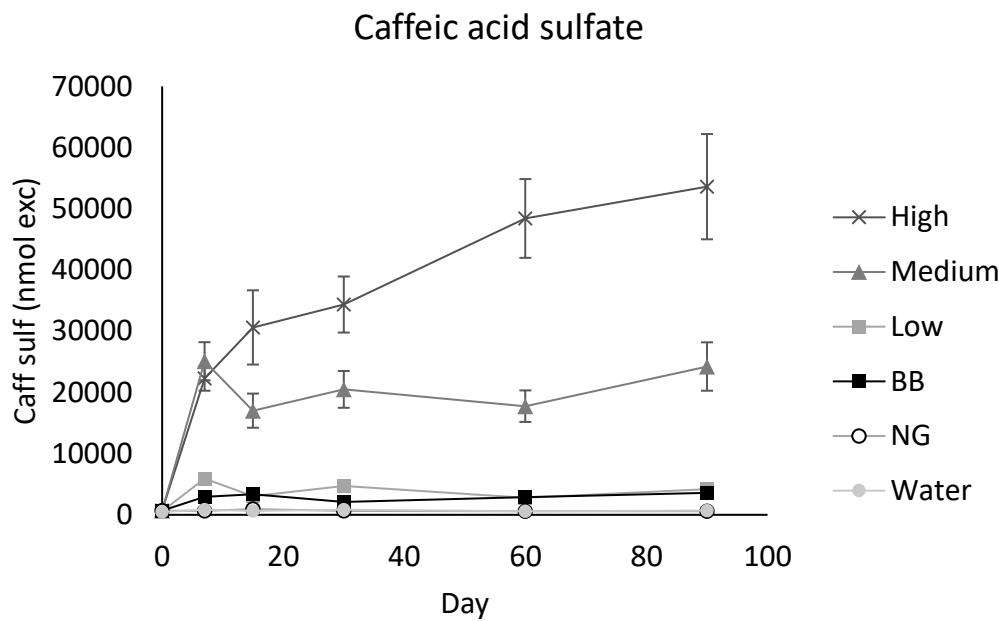
	Day					
	0	7	15	30	60	90
Water	nd	nd	nd	nd	nd	nd
Low	nd	trace	trace	trace	trace	trace
Medium	nd	81.8 ± 31.9^b	97 ± 48.6^b	127.2 ± 74.7^b	82.2 ± 30.9^b	156.6 ± 77.4^b
High	nd	$147.3 \pm 70.6^{a,B}$	$355 \pm 205.2^{a,A}$	$262.8 \pm 106.9^{a,AB}$	$339 \pm 102^{a,A}$	$468 \pm 271.6^{a,A}$
BB	nd	trace	trace	trace	trace	trace
NG	nd	nd	nd	nd	nd	nd

Figure SI-2g – Caffeic acid glucuronide.



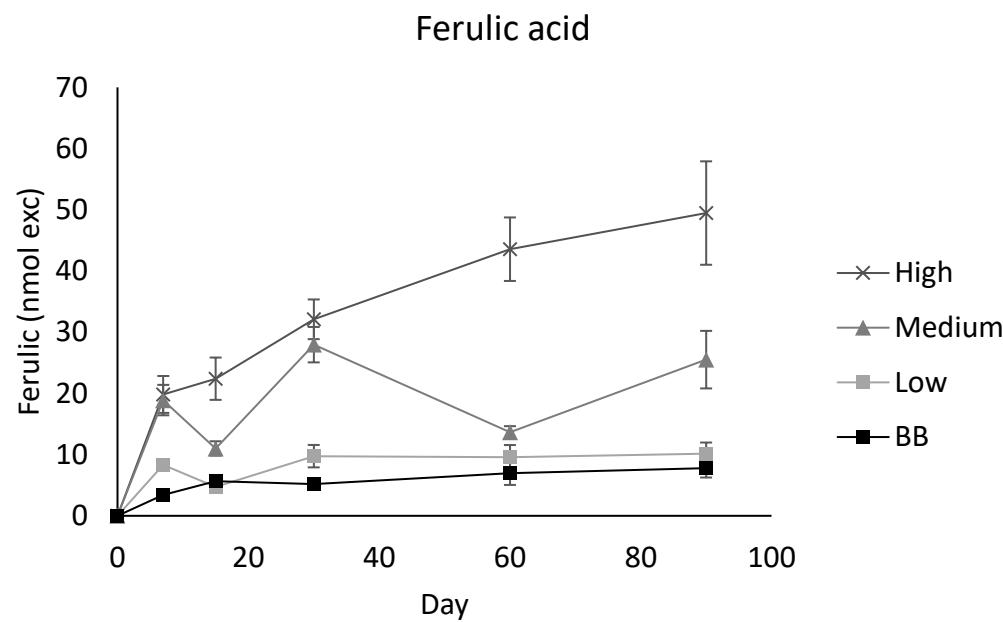
	Day					
	0	7	15	30	60	90
Water	nd	nd	nd	nd	nd	nd
Low	nd	nd	nd	nd	nd	nd
Medium	nd	$2.86 \pm 1.93^{\text{b,A}}$	$1.05 \pm 0.56^{\text{b,AB}}$	$0.75 \pm 0.52^{\text{b,B}}$	$2.27 \pm 1.95^{\text{b,AB}}$	$1.4 \pm 0.71^{\text{b,AB}}$
High	nd	$10.49 \pm 7.91^{\text{a}}$	$10.17 \pm 7.61^{\text{a}}$	$13.79 \pm 6.69^{\text{a}}$	$8.2 \pm 3.9^{\text{a}}$	$9.61 \pm 6.95^{\text{a}}$
BB	nd	nd	nd	nd	nd	nd
NG	nd	nd	nd	nd	nd	nd

Figure SI-2h – Caffeic acid sulfate.



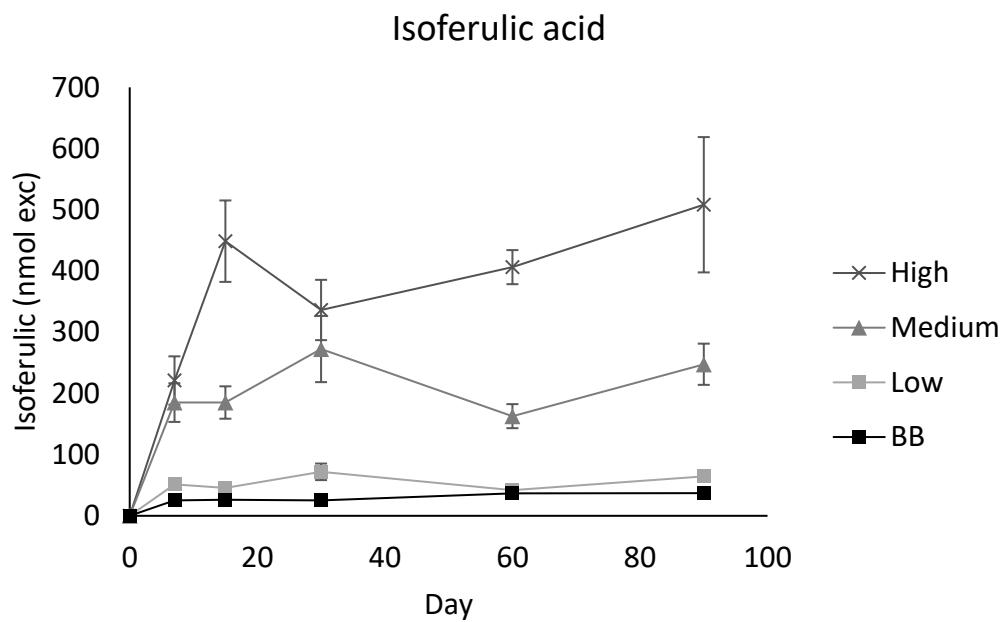
	Day					
	0	7	15	30	60	90
Water	457 ± 211	822 ± 332 ^d	620 ± 163 ^c	836 ± 64 ^d	595 ± 97 ^d	713 ± 102 ^d
Low	581 ± 252 ^D	5919 ± 2138 ^{b,A}	3064 ± 904 ^{b,BC}	4721 ± 1736 ^{b,AB}	2768 ± 1014 ^{c,C}	4203 ± 1745 ^{c,ABC}
Medium	665 ± 251 ^B	25089 ± 9344 ^{a,A}	17014 ± 7887 ^{a,A}	20487 ± 9008 ^{a,A}	17749 ± 7281 ^{b,A}	24222 ± 11182 ^{b,A}
High	707 ± 157 ^c	22268 ± 5987 ^{a,B}	30611 ± 18198 ^{a,B}	34349 ± 13737 ^{a,AB}	48414 ± 20353 ^{a,A}	53605 ± 24325 ^{a,A}
BB	685 ± 291 ^B	2914 ± 818 ^{c,A}	3346 ± 959 ^{b,A}	2123 ± 698 ^{c,A}	2870 ± 301 ^{c,A}	3585 ± 1554 ^{c,A}
NG	670 ± 380	615 ± 236 ^d	941 ± 208 ^c	642 ± 107 ^d	579 ± 176 ^d	593 ± 151 ^d

Figure SI-2i – Ferulic acid.



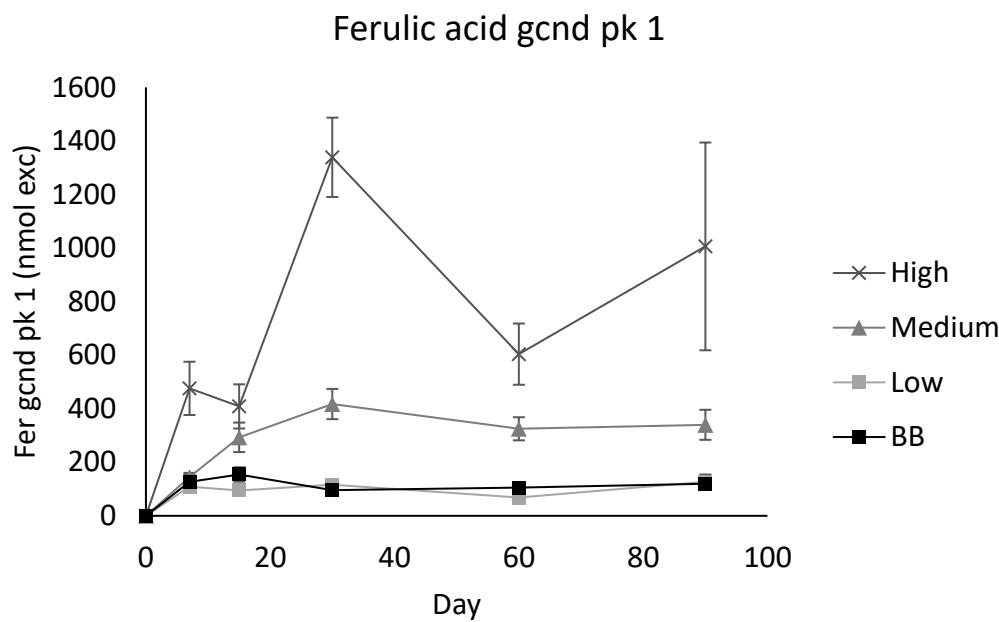
	Day					
	0	7	15	30	60	90
Water	nd	nd	nd	nd	nd	nd
Low	nd	8.3 ± 2.92 ^{b,A}	4.71 ± 2.95 ^{b,B}	9.75 ± 5.78 ^{b,A}	9.59 ± 6.24 ^{bc,A}	10.15 ± 5.76 ^{b,A}
Medium	nd	18.9 ± 7.45 ^{a,ABC}	11.01 ± 3.3 ^{a,C}	27.96 ± 8.68 ^{a,A}	13.65 ± 2.82 ^{b,BC}	25.51 ± 13.3 ^{a,AB}
High	nd	19.83 ± 9.05 ^{a,B}	22.4 ± 10.37 ^{a,B}	32.11 ± 9.73 ^{a,AB}	43.56 ± 16.41 ^{a,A}	49.46 ± 23.9 ^{a,A}
BB	nd	3.42 ± 1.16 ^{c,B}	5.65 ± 3.03 ^{b,AB}	5.18 ± 2.07 ^{b,AB}	6.94 ± 5.69 ^{c,AB}	7.78 ± 3.74 ^{b,A}
NG	nd	nd	nd	nd	nd	nd

Figure SI-2j – Isoferulic acid.



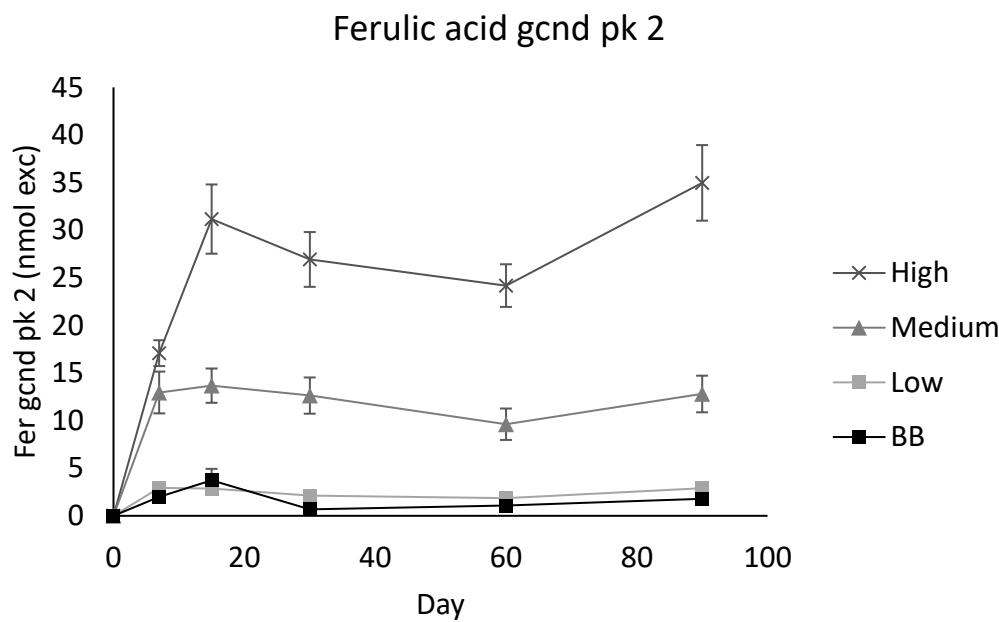
	Day					
	0	7	15	30	60	90
Water	nd	nd	nd	nd	nd	nd
Low	nd	51.4 ± 27.7 ^b	45.8 ± 24 ^c	71.9 ± 42.8 ^b	42 ± 19.5 ^c	64.3 ± 11.7 ^b
Medium	nd	184.9 ± 94.6 ^a	185.1 ± 74.9 ^b	272.5 ± 162.2 ^a	162.8 ± 55.6 ^b	247.6 ± 95.2 ^a
High	nd	221.1 ± 118.4 ^{a,B}	448.7 ± 199.5 ^{a,A}	336.3 ± 147.7 ^{a,AB}	406.3 ± 88 ^{a,A}	508.2 ± 312.6 ^{a,A}
BB	nd	25.3 ± 12.8 ^c	26.4 ± 14 ^c	25 ± 7.8 ^c	36.5 ± 18.8 ^c	37.1 ± 19.2 ^b
NG	nd	nd	nd	nd	nd	nd

Figure SI-2k – Ferulic acid glucuronide peak 1.



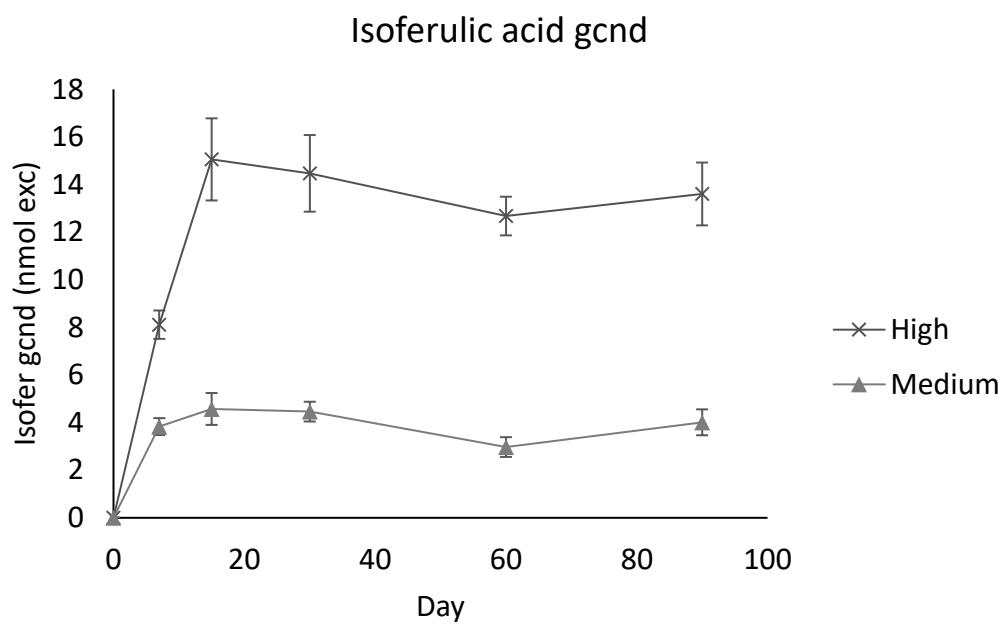
	Day					
	0	7	15	30	60	90
Water	nd	nd	nd	nd	nd	nd
Low	nd	108.5 ± 47.1 ^b	94.3 ± 39.2 ^c	115.7 ± 56.4 ^a	68 ± 27.8 ^b	127 ± 86.2 ^b
Medium	nd	144.6 ± 47.6 ^{b,B}	293 ± 155.6 ^{ab,AB}	417.4 ± 169.6 ^{b,A}	324.9 ± 122.1 ^{a,A}	339.8 ± 158.7 ^{a,A}
High	nd	475.9 ± 298.3 ^{a,B}	408.5 ± 247.2 ^{a,B}	1338.6 ± 444.3 ^{a,A}	603.6 ± 361.4 ^{a,B}	1006 ± 1097 ^{a,B}
BB	nd	126.9 ± 80.3 ^b	154.2 ± 80.7 ^{bc}	95.4 ± 34.2 ^a	105.5 ± 30.7 ^b	120.3 ± 42.4 ^b
NG	nd	nd	nd	nd	nd	nd

Figure SI-21 – Ferulic acid glucuronide peak 2.



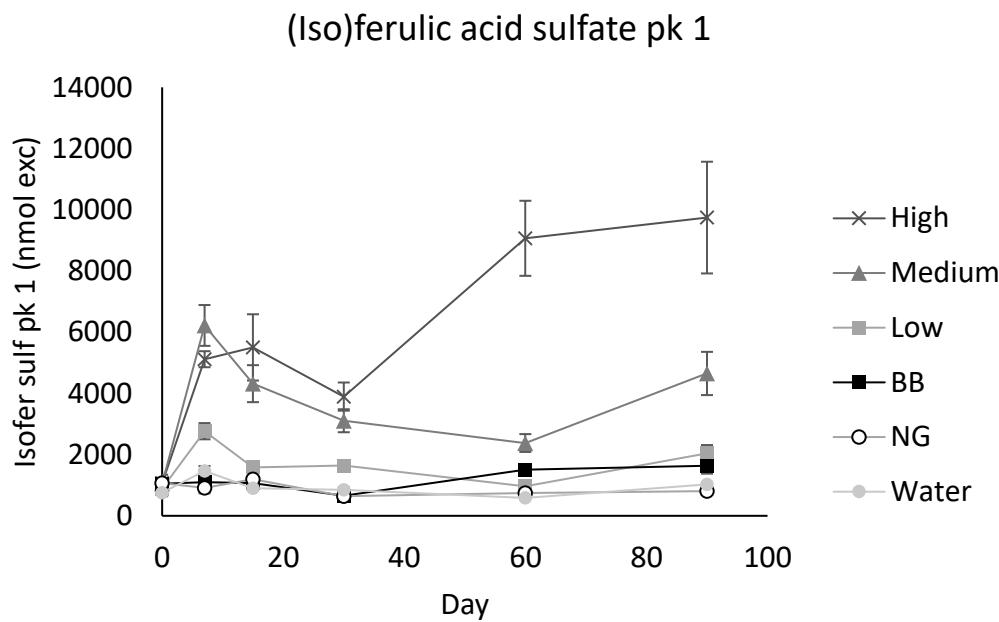
	Day					
	0	7	15	30	60	90
Water	nd	nd	nd	nd	nd	nd
Low	nd	2.93 ± 1.17^b	2.87 ± 1.31^c	2.11 ± 1.46^c	1.85 ± 0.9^c	2.89 ± 1.28^c
Medium	nd	12.95 ± 6.59^a	13.67 ± 5.09^b	12.63 ± 5.71^b	9.62 ± 4.67^b	12.79 ± 5.44^b
High	nd	17.08 ± 4.07^a	31.16 ± 10.91^a	26.92 ± 8.63^a	24.18 ± 7.09^a	34.97 ± 11.23^a
BB	nd	$2.0 \pm 1.31^{b,AB}$	$3.73 \pm 3.61^{c,A}$	$0.68 \pm 0.45^{d,c}$	$1.08 \pm 0.52^{c,BC}$	$1.78 \pm 1.02^{c,AB}$
NG	nd	nd	nd	nd	nd	nd

Figure SI-2m – Isoferulic acid glucuronide.



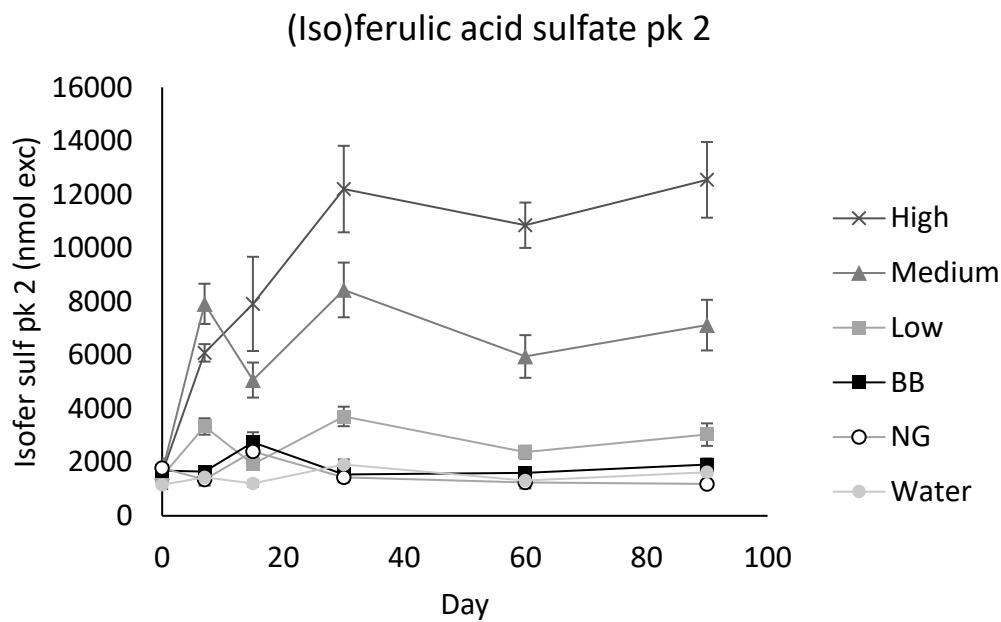
	0	7	15	30	60	90
Water	nd	nd	nd	nd	nd	nd
Low	nd	trace	trace	trace	trace	trace
Medium	nd	3.83 ± 1.07 ^{b,AB}	4.57 ± 1.89 ^{b,A}	4.46 ± 1.25 ^{b,A}	2.97 ± 1.18 ^{b,B}	4.01 ± 1.54 ^{b,AB}
High	nd	8.11 ± 1.79 ^{a,B}	15.06 ± 5.18 ^{a,A}	14.47 ± 4.83 ^{a,A}	12.68 ± 2.57 ^{a,A}	13.61 ± 3.73 ^{a,A}
BB	nd	trace	trace	trace	trace	trace
NG	nd	nd	nd	nd	nd	nd

Figure SI-2n – (Iso)ferulic acid sulfate peak 1.



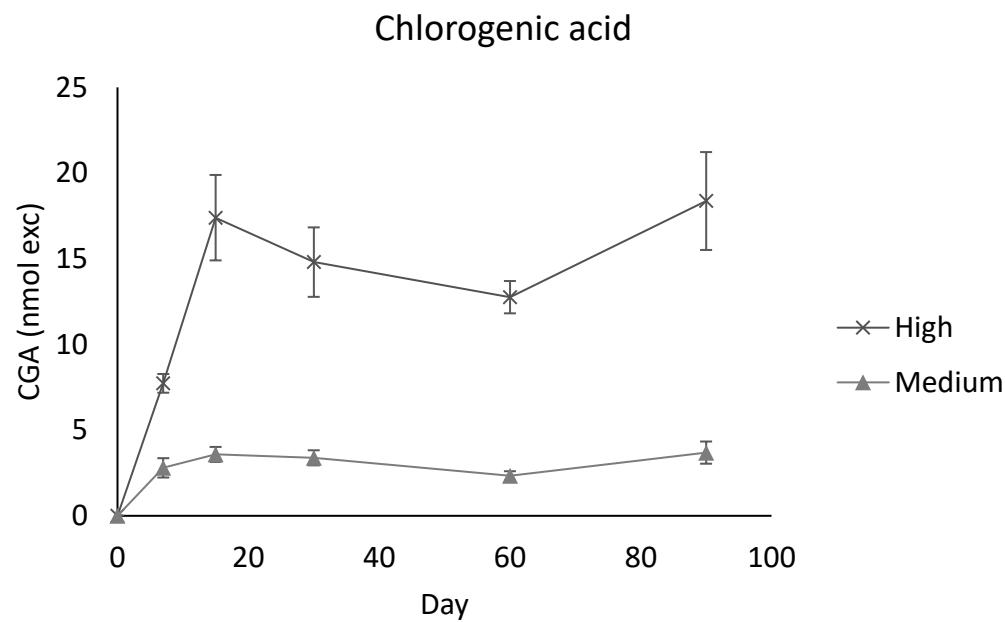
	Day					
	0	7	15	30	60	90
Water	753 ± 355	1467 ± 505 ^c	902 ± 217 ^c	845 ± 265 ^c	584 ± 108 ^d	1025 ± 212 ^d
Low	893 ± 355 ^c	2764 ± 839 ^{b,A}	1579 ± 428 ^{b,B}	1641 ± 452 ^{b,B}	960 ± 305 ^{cd,C}	2038 ± 869 ^{c,AB}
Medium	1055 ± 387 ^D	6220 ± 2000 ^{a,A}	4318 ± 1709 ^{a,AB}	3106 ± 1126 ^{a,BC}	2378 ± 824 ^{b,C}	4650 ± 1997 ^{b,AB}
High	1066 ± 260 ^c	5117 ± 785 ^{a,B}	5503 ± 3248 ^{a,B}	3896 ± 1380 ^{a,B}	9067 ± 3878 ^{a,A}	9744 ± 5162 ^{a,A}
BB	1050 ± 459 ^{AB}	1101 ± 204 ^{c,A}	1064 ± 243 ^{bc,A}	656 ± 238 ^{c,B}	1502 ± 124 ^{bc,A}	1635 ± 633 ^{cd,A}
NG	1067 ± 549	910 ± 347 ^c	1196 ± 171 ^{bc}	641 ± 162 ^d	740 ± 289 ^d	806 ± 151 ^d

Figure SI-2o – (Iso)ferulic acid sulfate peak 2.



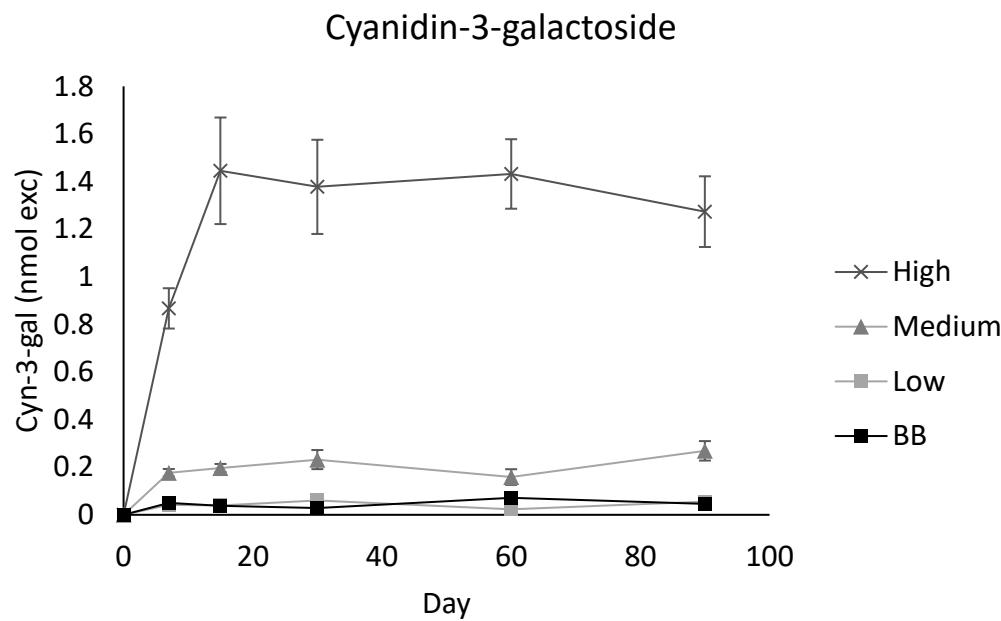
	Day					
	0	7	15	30	60	90
Water	1160 ± 512	1437 ± 445 ^c	1204 ± 342 ^c	1916 ± 572 ^c	1315 ± 274 ^d	1629 ± 306 ^d
Low	1479 ± 477 ^c	3335 ± 968 ^{b,AB}	1923 ± 479 ^{b,C}	3711 ± 1154 ^{b,A}	2374 ± 766 ^{c,BC}	3033 ± 1327 ^{c,ABC}
Medium	1628 ± 415 ^c	7915 ± 2254 ^{a,A}	5068 ± 1850 ^{a,B}	8435 ± 3064 ^{a,A}	5949 ± 2253 ^{b,AB}	7120 ± 2674 ^{b,AB}
High	1603 ± 388 ^c	6084 ± 981 ^{a,B}	7913 ± 5277 ^{a,B}	12201 ± 4846 ^{a,A}	10851 ± 2678 ^{a,A}	12546 ± 3997 ^{a,A}
BB	1686 ± 632 ^B	1650 ± 303 ^{c,B}	2743 ± 1129 ^{b,A}	1544 ± 546 ^{c,B}	1607 ± 172 ^{cd,B}	1920 ± 551 ^{cd,AB}
NG	1783 ± 704	1354 ± 449 ^c	2402 ± 406 ^b	1440 ± 381 ^c	1244 ± 448 ^d	1191 ± 165 ^d

Figure SI-2p – Chlorogenic acid.



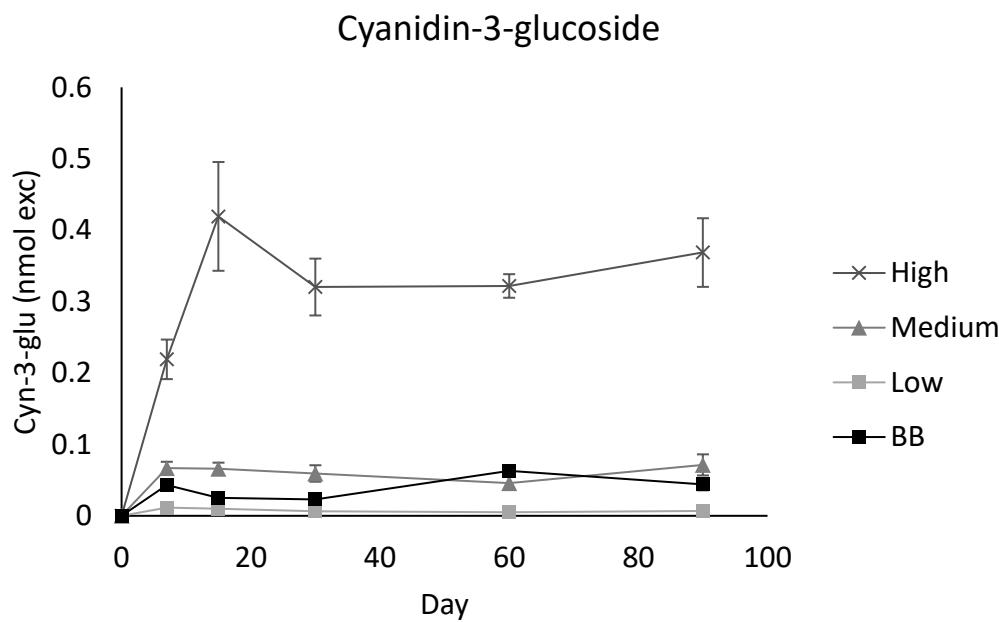
	0	7	15	30	60	90
Water	nd	nd	nd	nd	nd	nd
Low	nd	trace	trace	trace	trace	trace
Medium	nd	2.8 ± 1.69^b	3.58 ± 1.24^b	3.38 ± 1.32^b	2.34 ± 0.75^b	3.69 ± 1.83^b
High	nd	$7.73 \pm 1.64^{a,B}$	$17.39 \pm 7.48^{a,A}$	$14.8 \pm 6.08^{a,A}$	$12.76 \pm 2.98^{a,A}$	$18.37 \pm 8.08^{a,A}$
BB	nd	trace	trace	trace	trace	trace
NG	nd	nd	nd	nd	nd	nd

Figure SI-3a – Cyanidin-3-galactoside.



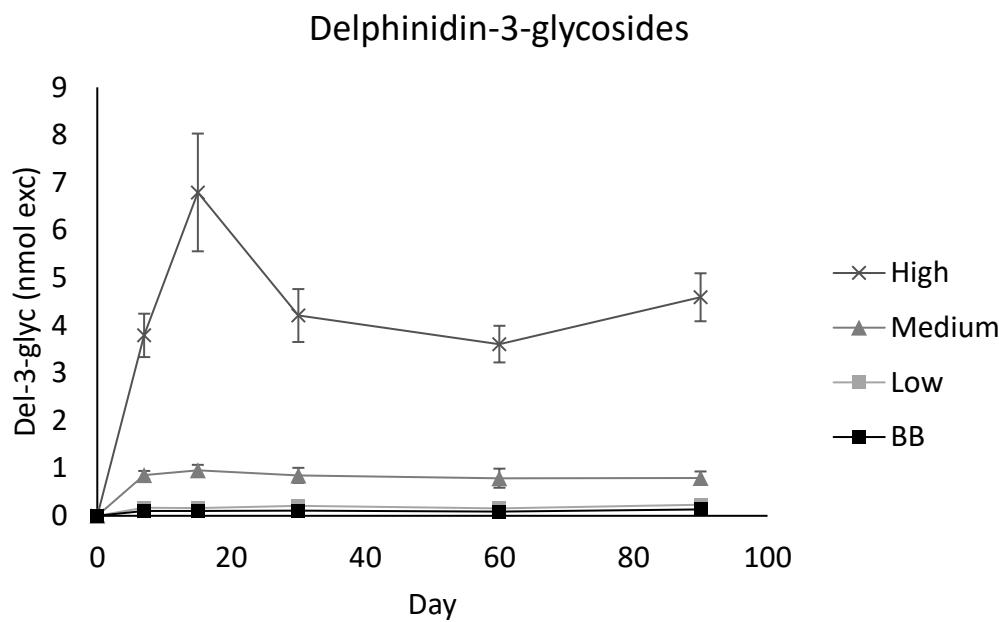
		Day					
		0	7	15	30	60	90
Water	nd	nd	nd	nd	nd	nd	nd
Low	nd	$0.041 \pm 0.023^{\text{c,A}}$	$0.039 \pm 0.017^{\text{c,A}}$	$0.06 \pm 0.032^{\text{c,A}}$	$0.023 \pm 0.014^{\text{c,B}}$	$0.056 \pm 0.022^{\text{c,A}}$	
Medium	nd	$0.177 \pm 0.047^{\text{b}}$	$0.197 \pm 0.048^{\text{b}}$	$0.232 \pm 0.12^{\text{b}}$	$0.159 \pm 0.093^{\text{b}}$	$0.269 \pm 0.116^{\text{b}}$	
High	nd	$0.867 \pm 0.254^{\text{a}}$	$1.445 \pm 0.672^{\text{a}}$	$1.378 \pm 0.594^{\text{a}}$	$1.432 \pm 0.462^{\text{a}}$	$1.274 \pm 0.42^{\text{a}}$	
BB	nd	$0.05 \pm 0.02^{\text{c,A}}$	$0.038 \pm 0.017^{\text{c,AB}}$	$0.028 \pm 0.017^{\text{d,B}}$	$0.071 \pm 0.035^{\text{b,A}}$	$0.045 \pm 0.035^{\text{c,A}}$	
NG	nd	nd	nd	nd	nd	nd	

Figure SI-3b – Cyanidin-3-glucoside.



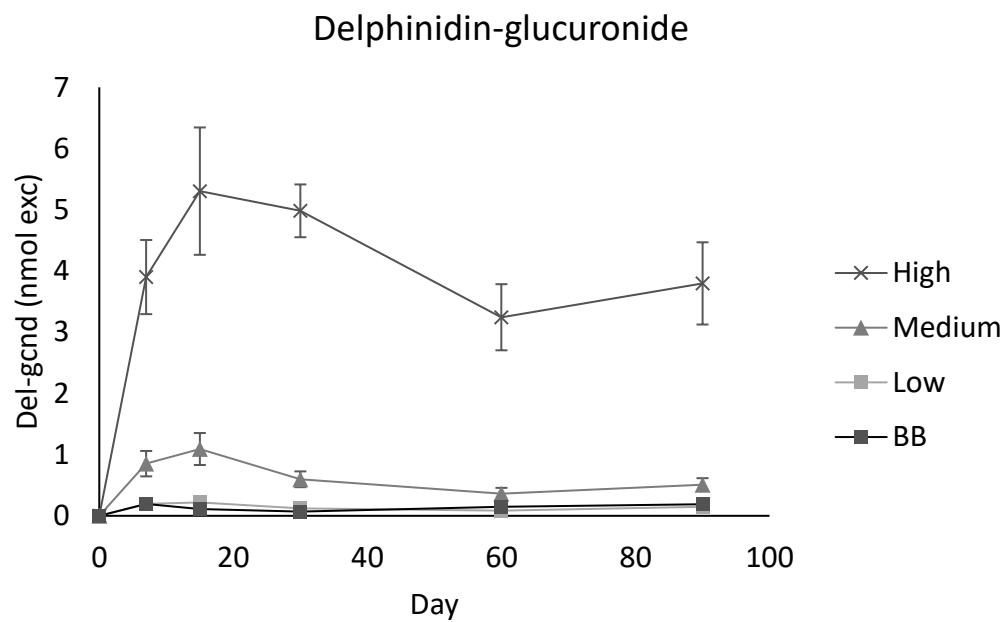
		Day					
		0	7	15	30	60	90
Water	nd	nd	nd	nd	nd	nd	nd
Low	nd	0.012 ± 0.006 ^{c,A}	0.01 ± 0.005 ^{d,AB}	0.007 ± 0.001 ^{d,AB}	0.005 ± 0.003 ^{c,B}	0.007 ± 0.005 ^{c,AB}	
Medium	nd	0.067 ± 0.026 ^b	0.066 ± 0.024 ^b	0.059 ± 0.035 ^b	0.046 ± 0.024 ^b	0.071 ± 0.042 ^b	
High	nd	0.219 ± 0.083 ^a	0.419 ± 0.228 ^a	0.32 ± 0.119 ^a	0.322 ± 0.052 ^a	0.369 ± 0.136 ^a	
BB	nd	0.043 ± 0.019 ^{b,A}	0.025 ± 0.011 ^{c,AB}	0.023 ± 0.014 ^{c,B}	0.063 ± 0.012 ^{b,A}	0.044 ± 0.021 ^{b,A}	
NG	nd	nd	nd	nd	nd	nd	

Figure SI-3c – Delphinidin-3-glycosides.



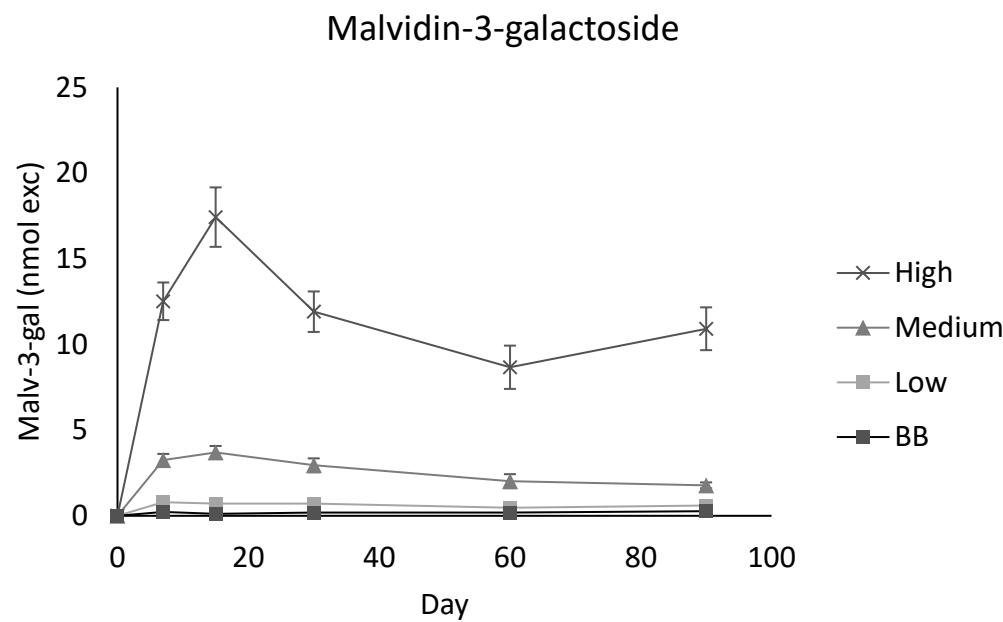
		Day					
		0	7	15	30	60	90
Water	nd	nd	nd	nd	nd	nd	nd
Low	nd	0.17 ± 0.09^c	0.16 ± 0.08^c	0.21 ± 0.12^c	0.16 ± 0.06^c	0.23 ± 0.1^c	
Medium	nd	0.86 ± 0.26^b	0.96 ± 0.32^b	0.85 ± 0.47^b	0.79 ± 0.57^b	0.8 ± 0.38^b	
High	nd	3.79 ± 1.37^a	6.79 ± 3.71^a	4.21 ± 1.67^a	3.61 ± 1.22^a	4.59 ± 1.43^a	
BB	nd	0.1 ± 0.05^c	0.1 ± 0.08^c	0.11 ± 0.04^c	0.09 ± 0.04^c	0.13 ± 0.08^c	
NG	nd	nd	nd	nd	nd	nd	

Figure SI-3d – Delphinidin-3-glucuronide.



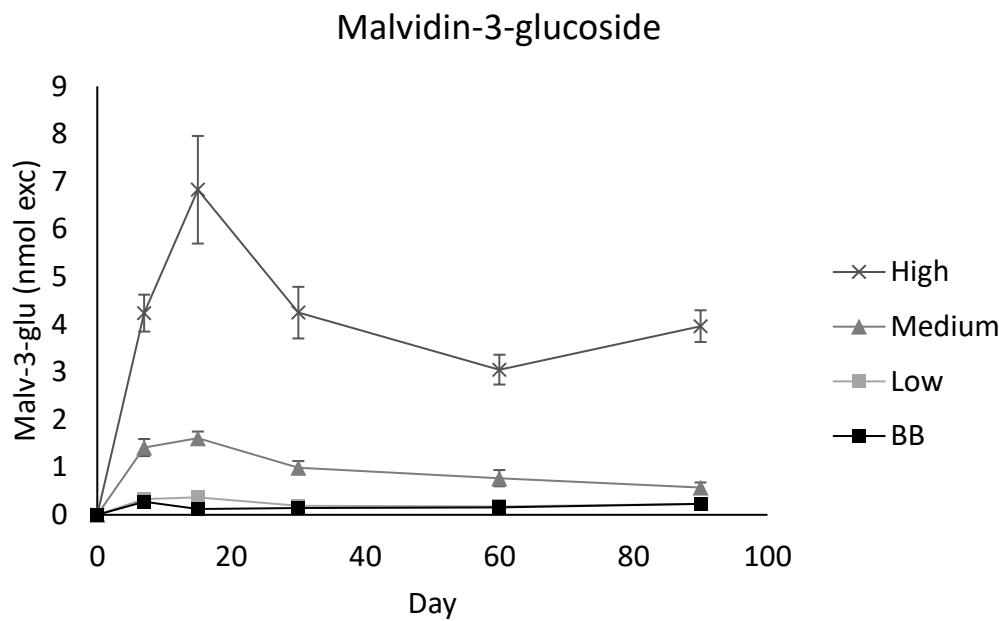
		Day					
		0	7	15	30	60	90
Water	nd	nd	nd	nd	nd	nd	nd
Low	nd	0.19 ± 0.14 ^c		0.22 ± 0.13 ^c	0.12 ± 0.09 ^c	0.08 ± 0.06 ^c	0.15 ± 0.1 ^c
Medium	nd	0.85 ± 0.62 ^{b,AB}		1.09 ± 0.74 ^{b,A}	0.6 ± 0.39 ^{b,AB}	0.36 ± 0.27 ^{b,B}	0.51 ± 0.3 ^{b,AB}
High	nd	3.9 ± 1.82 ^a		5.3 ± 3.12 ^a	4.98 ± 1.29 ^a	3.24 ± 1.71 ^a	3.8 ± 1.9 ^a
BB	nd	0.19 ± 0.06 ^c		0.11 ± 0.09 ^c	0.07 ± 0.04 ^c	0.15 ± 0.1 ^{bc}	0.19 ± 0.12 ^{bc}
NG	nd	nd		nd	nd	nd	nd

Figure SI-3e – Malvidin-3-galactoside.



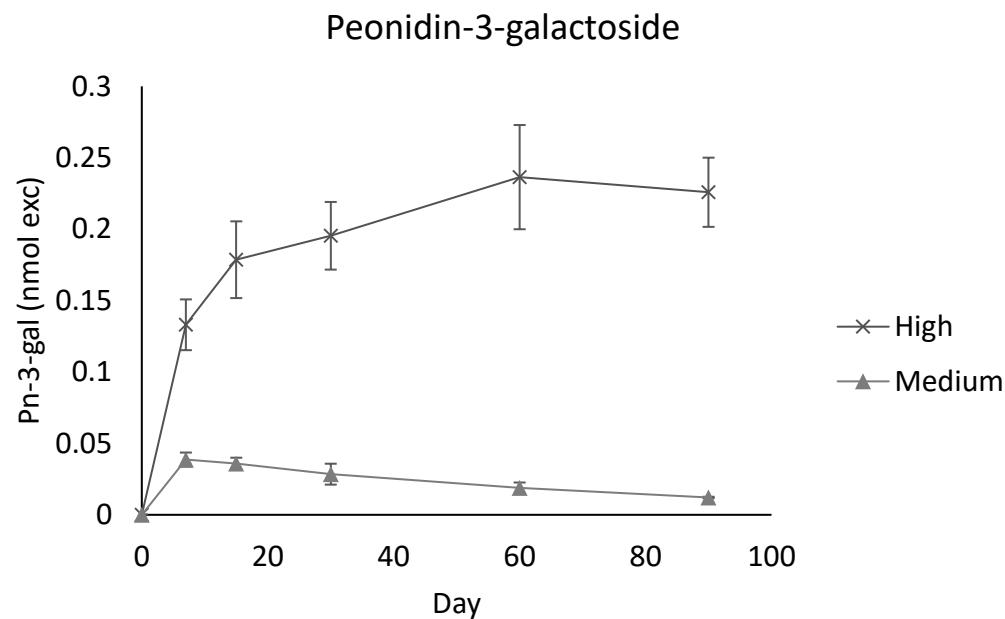
		Day					
		0	7	15	30	60	90
Water	nd	nd	nd	nd	nd	nd	nd
Low	nd	$0.79 \pm 0.36^{c,A}$	nd	$0.7 \pm 0.3^{c,AB}$	$0.72 \pm 0.52^{c,AB}$	$0.47 \pm 0.25^{c,B}$	$0.61 \pm 0.34^{c,AB}$
Medium	nd	$3.25 \pm 1.08^{b,AB}$	nd	$3.7 \pm 1.07^{b,A}$	$2.95 \pm 1.22^{b,AB}$	$2.02 \pm 1.15^{b,B}$	$1.78 \pm 0.48^{b,B}$
High	nd	$12.52 \pm 3.29^{a,AB}$	nd	$17.43 \pm 5.2^{a,A}$	$11.91 \pm 3.55^{a,AB}$	$8.67 \pm 3.99^{a,B}$	$10.91 \pm 3.53^{a,AB}$
BB	nd	$0.23 \pm 0.1^{d,A}$	nd	$0.12 \pm 0.05^{d,B}$	$0.19 \pm 0.09^{d,AB}$	$0.2 \pm 0.09^{d,AB}$	$0.27 \pm 0.12^{d,A}$
NG	nd	nd	nd	nd	nd	nd	nd

Figure SI-3f – Malvidin-3-glucoside.



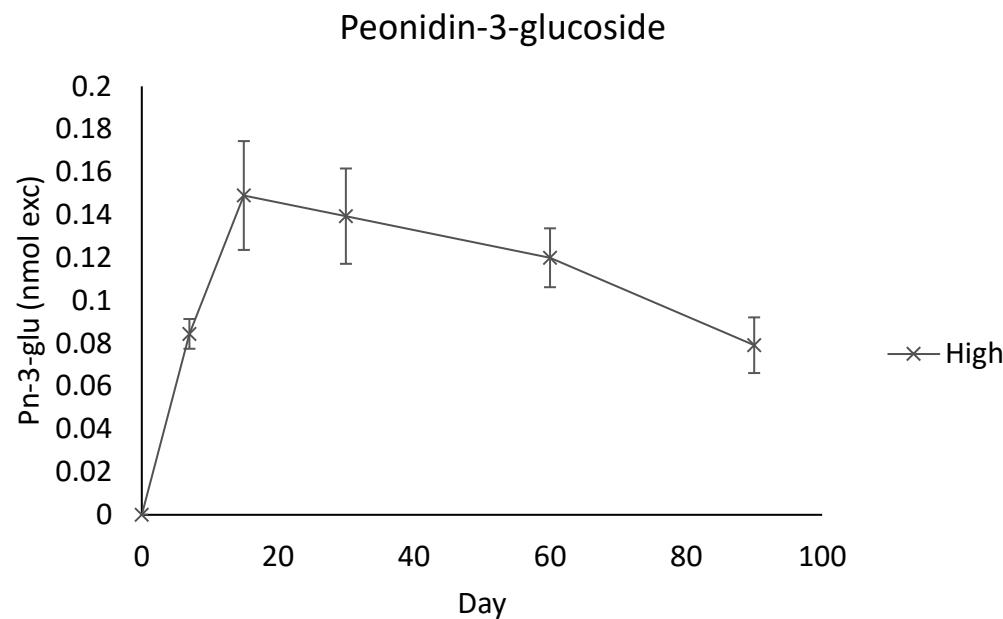
		Day					
		0	7	15	30	60	90
Water	nd	nd	nd	nd	nd	nd	nd
Low	nd	0.33 ± 0.15 ^{c,AB}		0.37 ± 0.2 ^{c,A}	0.19 ± 0.14 ^{c,C}	0.18 ± 0.1 ^{c,C}	0.23 ± 0.15 ^{c,BC}
Medium	nd	1.41 ± 0.54 ^{b,AB}		1.61 ± 0.39 ^{b,A}	0.99 ± 0.41 ^{b,BC}	0.77 ± 0.48 ^{b,C}	0.57 ± 0.31 ^{b,C}
High	nd	4.24 ± 1.16 ^{a,AB}		6.83 ± 3.39 ^{a,A}	4.25 ± 1.63 ^{a,AB}	3.05 ± 0.99 ^{a,B}	3.96 ± 0.94 ^{a,AB}
BB	nd	0.27 ± 0.13 ^{c,A}		0.12 ± 0.04 ^{d,B}	0.14 ± 0.07 ^{c,B}	0.16 ± 0.06 ^{c,AB}	0.23 ± 0.1 ^{c,A}
NG	nd	nd		nd	nd	nd	nd

Figure SI-3g – Peonidin-3-galactoside.



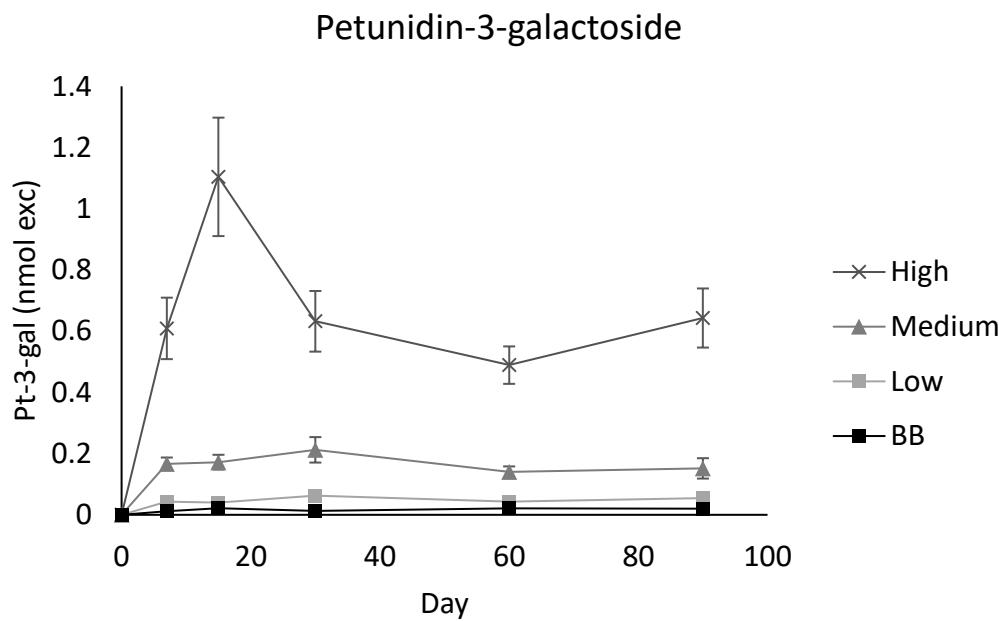
		Day					
		0	7	15	30	60	90
Water	nd	nd	nd	nd	nd	nd	nd
Low	nd	trace	trace	trace	trace	trace	trace
Medium	nd	$0.039 \pm 0.015^{\text{b,A}}$	$0.036 \pm 0.011^{\text{b,AB}}$	$0.028 \pm 0.022^{\text{b,BC}}$	$0.019 \pm 0.011^{\text{b,C}}$	$0.012 \pm 0.001^{\text{b,C}}$	
High	nd	$0.133 \pm 0.053^{\text{a}}$	$0.179 \pm 0.081^{\text{a}}$	$0.195 \pm 0.071^{\text{a}}$	$0.236 \pm 0.115^{\text{a}}$	$0.226 \pm 0.069^{\text{a}}$	
BB	nd	trace	trace	trace	trace	trace	trace
NG	nd	nd	nd	nd	nd	nd	nd

Figure SI-3h – Peonidin-3-glucoside.



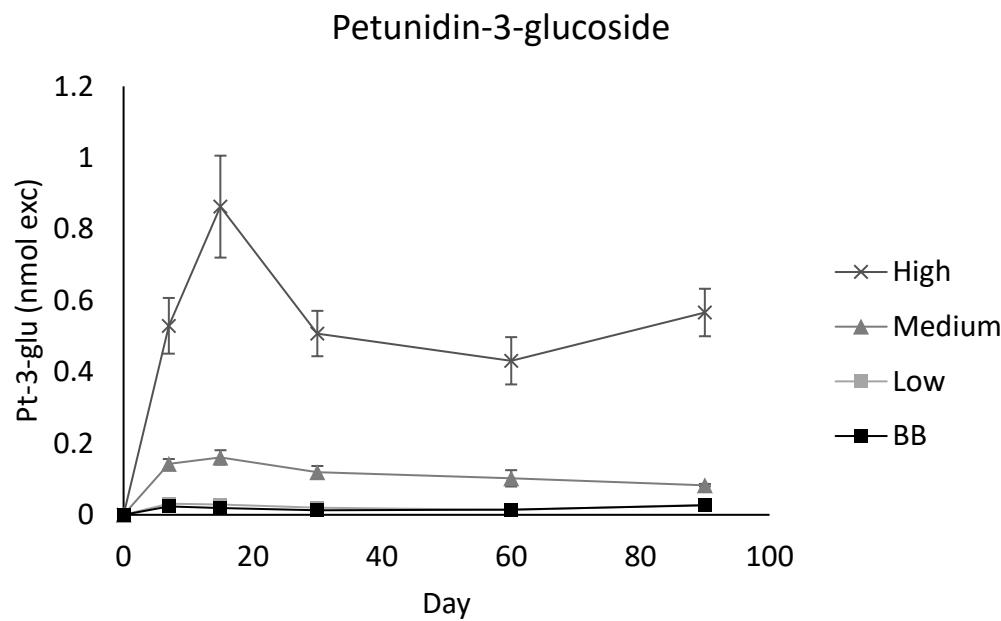
		Day					
		0	7	15	30	60	90
Water	nd	nd	nd	nd	nd	nd	nd
Low	nd	trace	trace	trace	trace	trace	trace
Medium	nd	trace	trace	trace	trace	trace	trace
High	nd	$0.084 \pm 0.021^{\text{BC}}$	$0.149 \pm 0.076^{\text{A}}$	$0.139 \pm 0.067^{\text{AB}}$	$0.12 \pm 0.043^{\text{ABC}}$	$0.079 \pm 0.037^{\text{C}}$	
BB	nd	trace	trace	trace	trace	trace	trace
NG	nd	nd	nd	nd	nd	nd	nd

Figure SI-3i – Petunidin-3-galactoside.



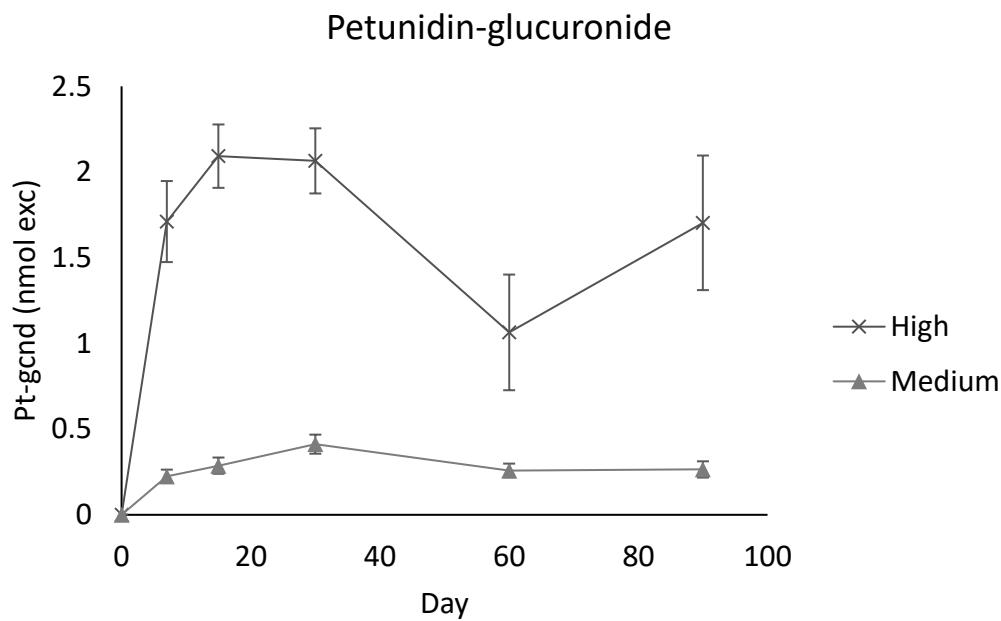
		Day					
		0	7	15	30	60	90
Water	nd	nd	nd	nd	nd	nd	nd
Low	nd	0.043 ± 0.028^c	0.04 ± 0.02^c	0.063 ± 0.049^c	0.043 ± 0.024^c	0.054 ± 0.026^c	
Medium	nd	0.167 ± 0.061^b	0.172 ± 0.068^b	0.212 ± 0.125^b	0.14 ± 0.051^b	0.152 ± 0.094^b	
High	nd	$0.609 \pm 0.301^{a,AB}$	$1.104 \pm 0.581^{a,A}$	$0.632 \pm 0.297^{a,AB}$	$0.489 \pm 0.193^{a,B}$	$0.643 \pm 0.273^{a,AB}$	
BB	nd	0.012 ± 0.006^d	0.022 ± 0.01^c	0.013 ± 0.008^d	0.021 ± 0.012^c	0.02 ± 0.007^c	
NG	nd	nd	nd	nd	nd	nd	

Figure SI-3j – Petunidin-3-glucoside.



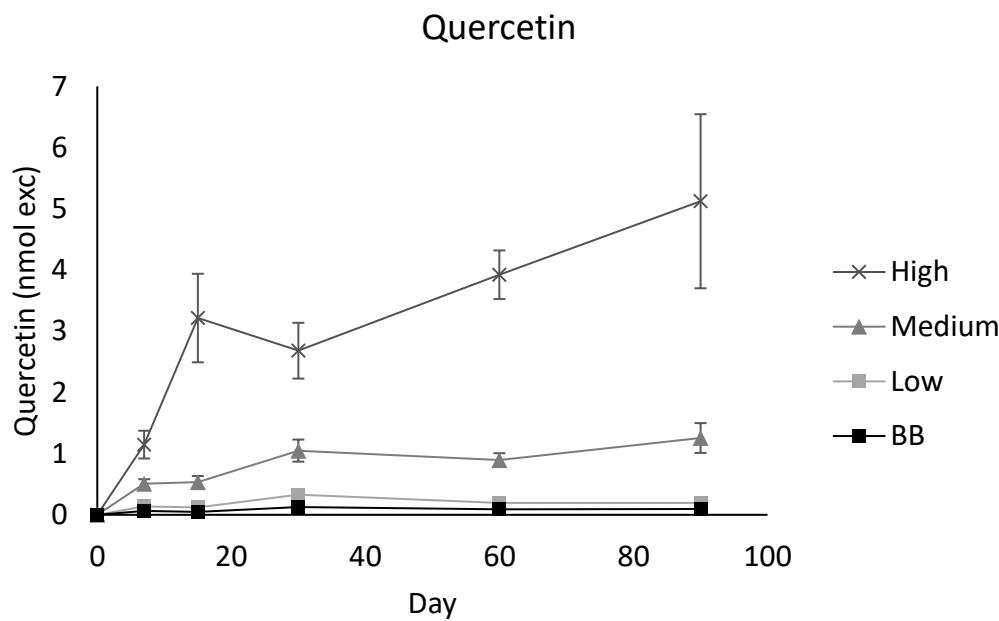
		Day					
		0	7	15	30	60	90
Water	nd	nd	nd	nd	nd	nd	nd
Low	nd	$0.031 \pm 0.02^{\text{c,A}}$	$0.029 \pm 0.015^{\text{c,A}}$	$0.019 \pm 0.013^{\text{c,AB}}$	$0.014 \pm 0.011^{\text{c,B}}$	$0.028 \pm 0.016^{\text{c,AB}}$	
Medium	nd	$0.142 \pm 0.042^{\text{b}}$	$0.161 \pm 0.057^{\text{b}}$	$0.12 \pm 0.052^{\text{b}}$	$0.102 \pm 0.065^{\text{b}}$	$0.083 \pm 0.01^{\text{b}}$	
High	nd	$0.529 \pm 0.234^{\text{a}}$	$0.863 \pm 0.428^{\text{a}}$	$0.508 \pm 0.191^{\text{a}}$	$0.431 \pm 0.209^{\text{a}}$	$0.567 \pm 0.188^{\text{a}}$	
BB	nd	$0.024 \pm 0.011^{\text{c,A}}$	$0.019 \pm 0.013^{\text{c,AB}}$	$0.012 \pm 0.006^{\text{c,B}}$	$0.014 \pm 0.005^{\text{c,AB}}$	$0.027 \pm 0.019^{\text{c,AB}}$	
NG	nd	nd	nd	nd	nd	nd	

Figure SI-3k – Petunidin-3-glucuronide.



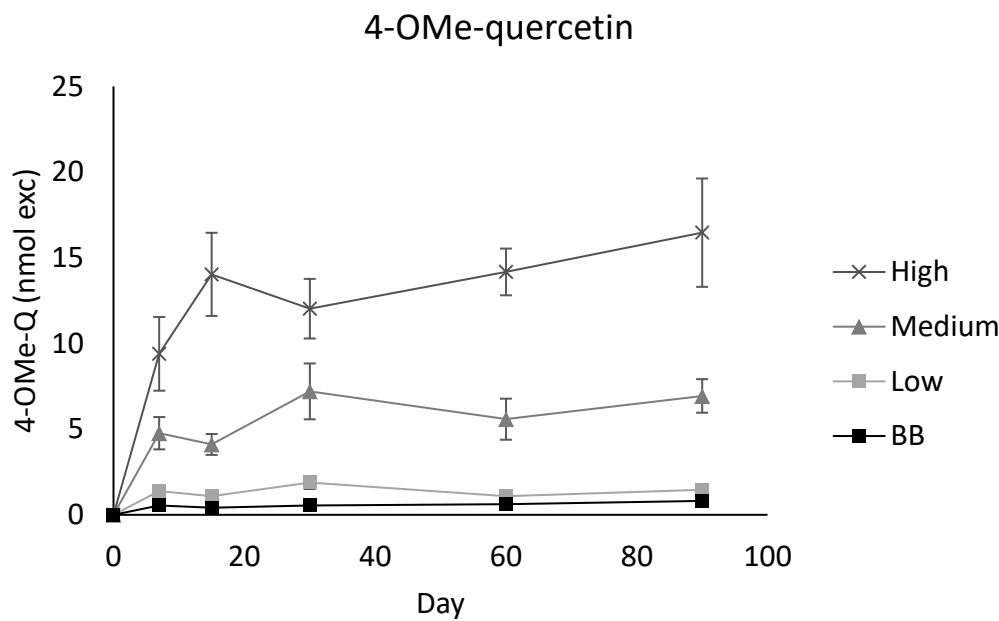
		Day					
		0	7	15	30	60	90
Water	nd	nd	nd	nd	nd	nd	nd
Low	nd	trace	trace	trace	trace	trace	trace
Medium	nd	0.22 ± 0.12^b	0.29 ± 0.13^b	0.41 ± 0.17^b	0.26 ± 0.11^b	0.26 ± 0.13^b	$1.7 \pm 1.11^{a,AB}$
High	nd	$1.71 \pm 0.71^{a,A}$	$2.09 \pm 0.55^{a,A}$	$2.06 \pm 0.57^{a,A}$	$1.06 \pm 1.07^{a,B}$	nd	nd
BB	nd	trace	trace	trace	trace	trace	trace
NG	nd	nd	nd	nd	nd	nd	nd

Figure SI-3l – Quercetin.



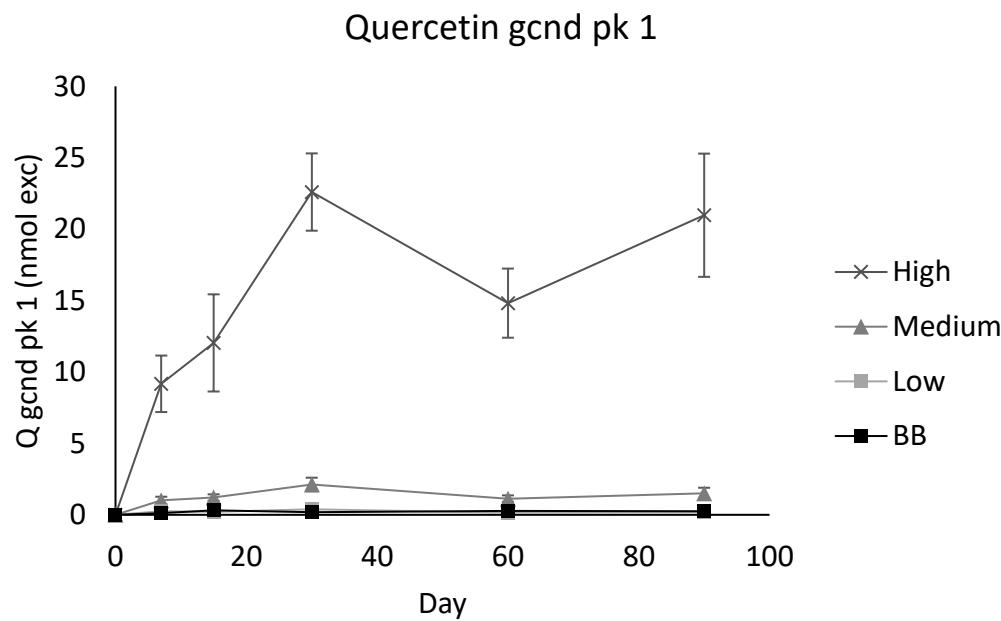
	Day					
	0	7	15	30	60	90
Water	nd	nd	nd	nd	nd	nd
Low	nd	0.14 ± 0.09 ^{b,B}	0.12 ± 0.08 ^{c,B}	0.33 ± 0.19 ^{b,A}	0.20 ± 0.10 ^{c,AB}	0.20 ± 0.04 ^{b,AB}
Medium	nd	0.51 ± 0.22 ^a	0.53 ± 0.28 ^b	1.05 ± 0.54 ^a	0.9 ± 0.31 ^b	1.26 ± 0.69 ^a
High	nd	1.15 ± 0.68 ^{a,B}	3.21 ± 2.17 ^{a,A}	2.68 ± 1.37 ^{a,A}	3.92 ± 1.26 ^{a,A}	5.12 ± 4.02 ^{a,A}
BB	nd	0.06 ± 0.04 ^b	0.05 ± 0.05 ^c	0.13 ± 0.05 ^b	0.09 ± 0.11 ^c	0.1 ± 0.04 ^b
NG	nd	nd	nd	nd	nd	nd

Figure SI-3m – 4-methoxy-quercetin.



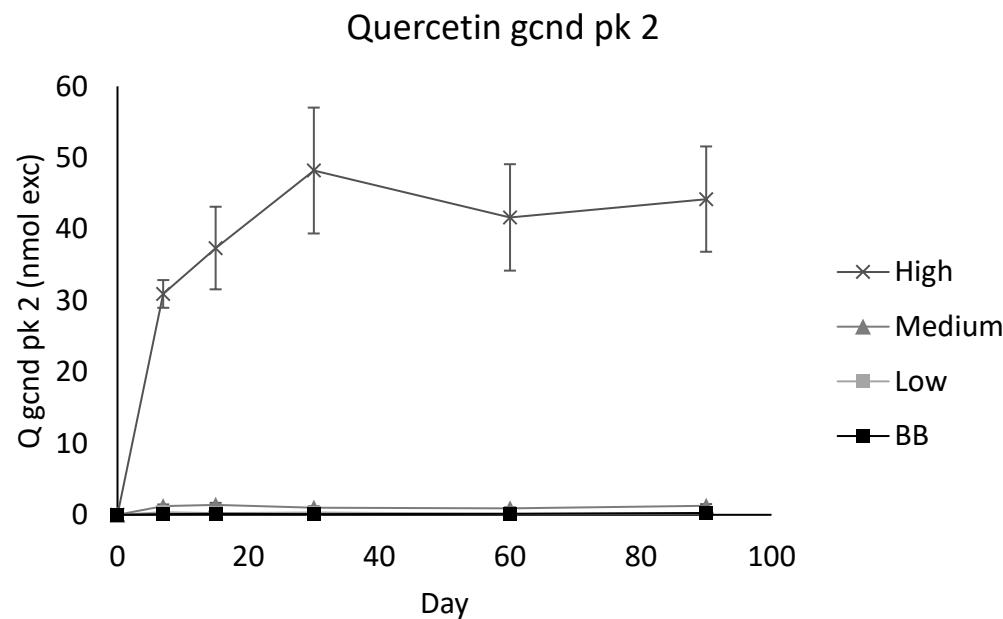
	0	7	15	30	60	90
Water	nd	nd	nd	nd	nd	nd
Low	nd	1.39 ± 0.77 ^b	1.09 ± 0.63 ^c	1.88 ± 1.19 ^b	1.08 ± 0.65 ^b	1.46 ± 0.33 ^b
Medium	nd	4.76 ± 2.83 ^a	4.11 ± 1.72 ^b	7.2 ± 4.89 ^a	5.58 ± 3.39 ^a	6.94 ± 2.77 ^a
High	nd	9.39 ± 6.45 ^{a,B}	14.03 ± 7.27 ^{a,AB}	12.03 ± 5.22 ^{a,AB}	14.17 ± 4.31 ^{a,A}	16.46 ± 8.94 ^{a,AB}
BB	nd	0.54 ± 0.26 ^{c,AB}	0.42 ± 0.26 ^{d,B}	0.54 ± 0.14 ^{c,AB}	0.62 ± 0.26 ^{b,AB}	0.81 ± 0.62 ^{b,A}
NG	nd	nd	nd	nd	nd	nd

Figure SI-3n – Quercetin glucuronide peak 1.



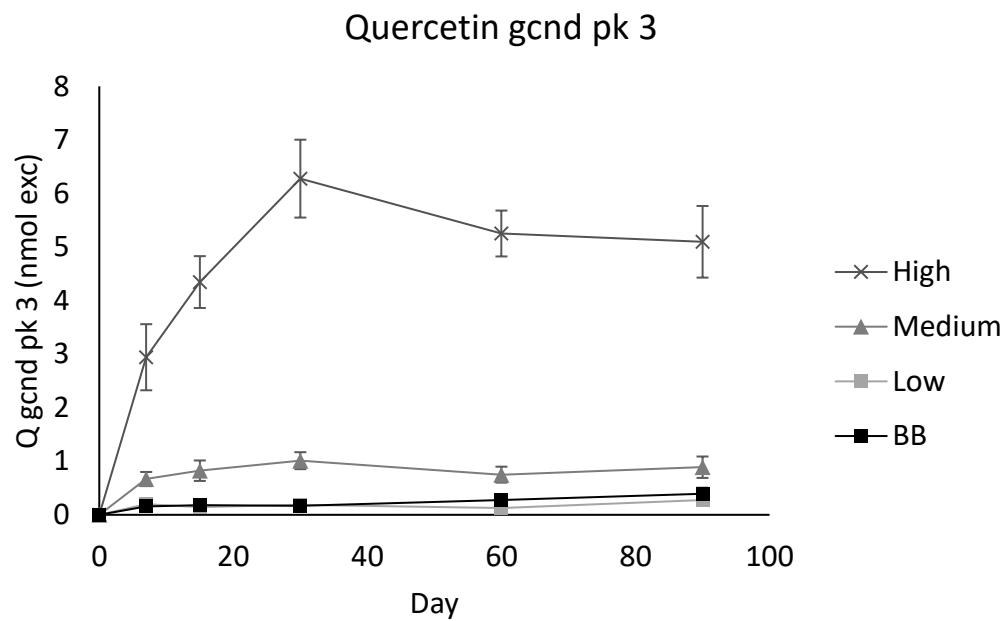
	Day					
	0	7	15	30	60	90
Water	nd	nd	nd	nd	nd	nd
Low	nd	0.26 ± 0.19 ^c	0.21 ± 0.17 ^c	0.39 ± 0.35 ^c	0.13 ± 0.07 ^c	0.19 ± 0.14 ^c
Medium	nd	1.01 ± 0.78 ^{b,B}	1.21 ± 0.65 ^{b,AB}	2.12 ± 1.43 ^{b,A}	1.13 ± 0.65 ^{b,AB}	1.52 ± 1.08 ^{b,AB}
High	nd	9.17 ± 5.93 ^{a,B}	12.03 ± 10.21 ^{a,AB}	22.6 ± 8.12 ^{a,A}	14.82 ± 7.65 ^{a,AB}	20.98 ± 12.2 ^{a,AB}
BB	nd	0.11 ± 0.08 ^{d,B}	0.31 ± 0.27 ^{c,A}	0.18 ± 0.12 ^{c,AB}	0.26 ± 0.22 ^{c,A}	0.26 ± 0.14 ^{c,AB}
NG	nd	nd	nd	nd	nd	nd

Figure SI-3o – Quercetin glucuronide peak 2.



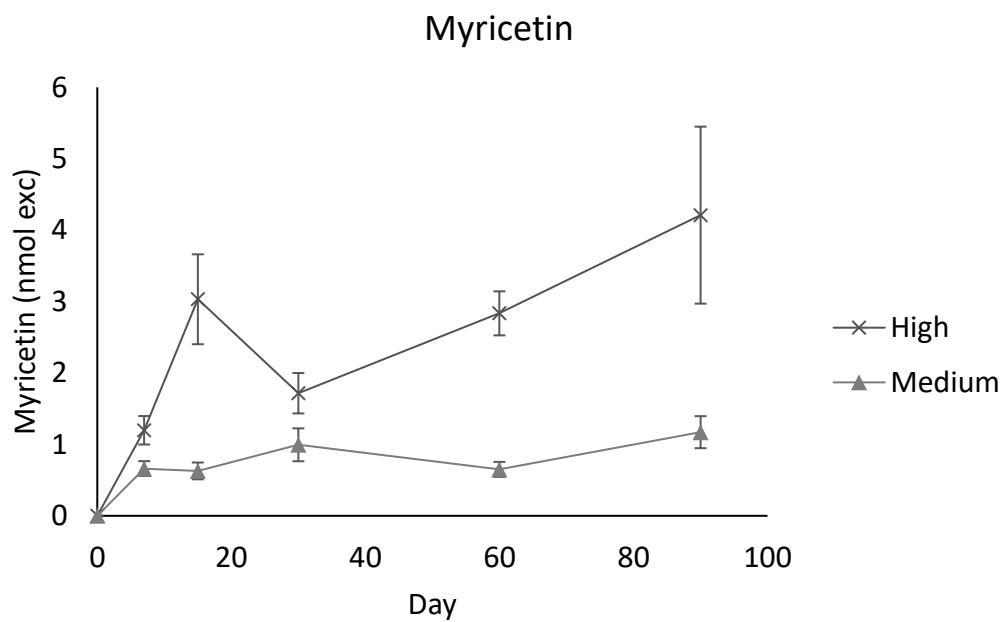
	0	7	15	30	60	90
Water	nd	nd	nd	nd	nd	nd
Low	nd	0.36 ± 0.10 ^{c,A}	0.24 ± 0.15 ^{c,AB}	0.3 ± 0.17 ^{c,AB}	0.13 ± 0.09 ^{c,C}	0.21 ± 0.09 ^{c,B}
Medium	nd	1.23 ± 0.67 ^b	1.39 ± 0.81 ^b	1.0 ± 0.56 ^b	0.89 ± 0.45 ^b	1.24 ± 0.72 ^b
High	nd	30.93 ± 5.82 ^a	37.36 ± 17.35 ^a	48.21 ± 26.44 ^a	41.64 ± 23.56 ^a	44.21 ± 20.86 ^a
BB	nd	0.11 ± 0.09 ^{d,B}	0.15 ± 0.1 ^{c,AB}	0.11 ± 0.05 ^{d,B}	0.16 ± 0.07 ^{c,AB}	0.26 ± 0.12 ^{c,A}
NG	nd	nd	nd	nd	nd	nd

Figure SI-3p – Quercetin glucuronide peak 3.



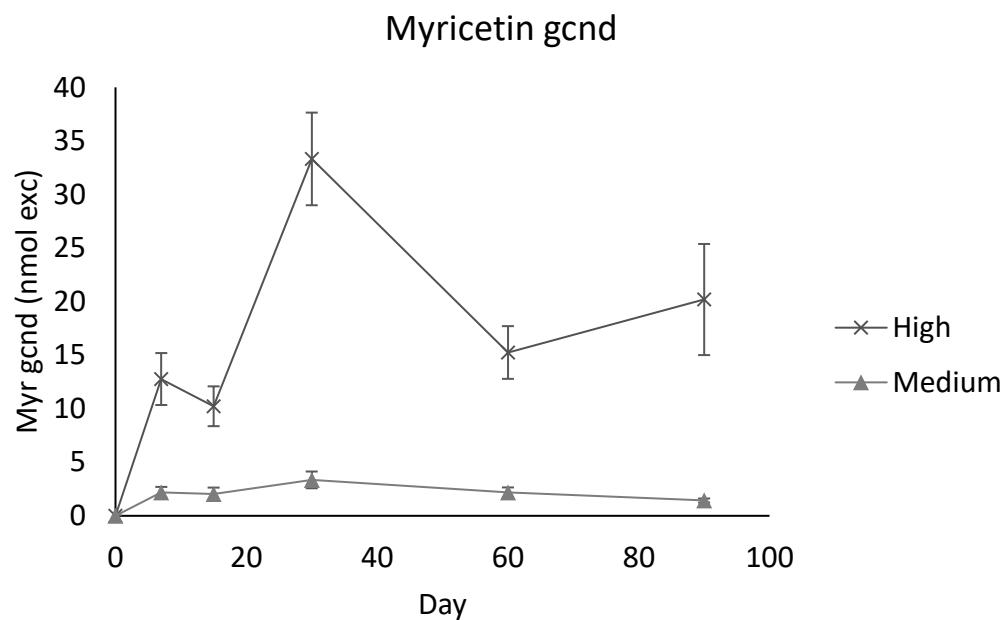
	Day					
	0	7	15	30	60	90
Water	nd	nd	nd	nd	nd	nd
Low	nd	0.2 ± 0.15 ^c	0.14 ± 0.13 ^c	0.19 ± 0.09 ^c	0.12 ± 0.09 ^c	0.28 ± 0.24 ^c
Medium	nd	0.67 ± 0.4 ^b	0.82 ± 0.54 ^b	1.01 ± 0.47 ^b	0.75 ± 0.42 ^b	0.89 ± 0.56 ^b
High	nd	2.94 ± 1.85 ^a	4.35 ± 1.45 ^a	6.28 ± 2.18 ^a	5.25 ± 1.35 ^a	5.1 ± 1.89 ^a
BB	nd	0.16 ± 0.09 ^c	0.18 ± 0.14 ^c	0.17 ± 0.11 ^c	0.28 ± 0.21 ^{bc}	0.39 ± 0.28 ^{bc}
NG	nd	nd	nd	nd	nd	nd

Figure SI-3q – Myricetin.



	Day					
	0	7	15	30	60	90
Water	nd	nd	nd	nd	nd	nd
Low	nd	trace	trace	trace	trace	trace
Medium	nd	0.66 ± 0.31	0.63 ± 0.33 ^b	0.99 ± 0.69 ^b	0.65 ± 0.3 ^b	1.17 ± 0.63 ^b
High	nd	1.20 ± 0.60 ^B	3.03 ± 1.89 ^{a,A}	1.72 ± 0.85 ^{a,AB}	2.84 ± 0.98 ^{a,A}	4.21 ± 3.51 ^{a,A}
BB	nd	trace	trace	trace	trace	trace
NG	nd	nd	nd	nd	nd	nd

Figure SI-3r – Myricetin glucuronide.



	0	7	15	30	60	90
Water	nd	nd	nd	nd	nd	nd
Low	nd	nd	nd	nd	nd	nd
Medium	nd	2.20 ± 1.50^b	2.04 ± 1.68^b	3.35 ± 2.34^b	2.2 ± 1.27^b	1.43 ± 0.54^b
High	nd	$12.77 \pm 7.28^{a,B}$	$10.23 \pm 5.58^{a,B}$	$33.32 \pm 12.97^{a,A}$	$15.25 \pm 7.78^{a,B}$	$20.19 \pm 14.67^{a,AB}$
BB	nd	nd	nd	nd	nd	nd
NG	nd	nd	nd	nd	nd	nd

