

Correction to Nontargeted Metabolite Profiling in Compatible Pathogen-Inoculated Tobacco (*Nicotiana tabacum* L. cv. Wisconsin 38) Using UPLC-Q-TOF/MS

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Several values in Table 2 (highlighted by boldface type in the “adduct” column for masses 146.0589, 312.1227, 625.2560, 805.3303, and 891.3327) have been revised.

Table 2. Relative Levels of Ppn-Responsive Metabolites Accumulated at Early Oxidative Burst (1 h ppi) and Second Burst (48 h ppi)

FC	RT (min)	mass (<i>m/z</i>)	adduct	tentative identification	1 h ppi		48 h ppi	
					log ₂ ^a	<i>p</i> value ^b	log ₂	<i>p</i> value
1. carbohydrates								
	0.75	133.0127	[M – H] [–]	malic acid	1.07	0.0003	–0.12	0.6807
	2.16	191.0547	[M – H] [–]	quinic acid	1.66	0.0082	0.07	0.8909
2. amino acids								
	0.63 ^c	173.1035	[M – H] [–]	arginine	1.18	0.0097	–0.71	0.0604
	1.13 ^c	180.0658	[M – H] [–]	tyrosine	–0.68	0.2305	1.75	0.0239
	1.44	120.0786	[M + H – CH ₂ O ₂] ⁺	phenylalanine	–0.70	0.0481	1.56	0.0115
	1.44 ^c	164.0712	[M – H] [–]	phenylalanine	–0.66	0.1008	1.92	0.0294
	1.45 ^c	166.0857	[M + H] ⁺	phenylalanine	–0.77	0.0252	1.35	0.0395
	1.70	203.0813	[M – H] [–]	tryptophan	–1.09	0.0866	1.51	0.0300
	1.71	188.0695	[M + H – NH ₃] ⁺	tryptophan	–0.88	0.0860	1.42	0.0038
3. secondary metabolites (phenolic compounds)								
	1.28	371.0989	[M + H ₂ O – H] [–]	caffeoylquinic acid	–1.14	0.0021	–0.71	0.0420
	1.70	146.0589	[M + H] ⁺	indole-3-carboxyaldehyde	–0.80	0.1184	1.42	0.0052
	1.70 ^c	159.0918	[M – H] [–]	tryptamine	–0.99	0.0973	1.53	0.0280
	2.08	177.0537	[M + H – H ₂ O] ⁺	ferulic acid	1.28	0.0085	–0.38	0.2498
	2.11	367.1023	[M – H] [–]	feruloylquinic acid	1.65	0.0024	–0.01	0.9674
	2.49	249.1344	–	caffeic acid-conjugated compound	–0.62	0.0090	1.28	0.0207
	2.88	314.1365	[M + H] ⁺	feruloyltyramine	–1.02	0.0010	4.75	0.0146
	2.90	312.1227	[M – H] [–]	feruloyltyramine	–0.06	0.8772	5.54	0.0214
	3.52	625.2560	[M + H] ⁺	grossamide	ND ^d	ND ^d	4.26	0.0228
	3.55	623.2374	[M – H] [–]	grossamide	ND ^d	ND ^d	5.42	0.0268
4. secondary metabolites (others)								
	2.87	714.2897	+	hexose-conjugated compound	–1.47	0.0201	1.38	0.0084
	2.88	805.3345	+	hexose-conjugated compound	–1.38	0.0147	1.23	0.0138
	3.00	645.2932	+	fragment ion of <i>m/z</i> 807.3491	–0.71	0.1130	1.60	0.0074
	3.01	807.3491	+	hexose-conjugated compound	–0.85	0.0826	1.52	0.0132
	3.03	805.3303	–	identical with <i>m/z</i> 807.3491 in ESI+	–0.88	0.0521	1.28	0.0183
	3.12	893.3543	+	malonylhexose-conjugated compound	–1.22	0.1142	1.81	0.0264
	3.13	891.3327	–	identical with <i>m/z</i> 893.3543 in ESI+	–1.24	0.0885	1.65	0.0296
	5.48	497.2361	[M + H – 246] ⁺	loroglossin	–2.82	0.0017	–1.16	0.0289
	9.23	503.1093	[M + H] ⁺	dimer of sulfamethoxazole	0.65	0.1763	1.31	0.0121
5. lysophospholipids								
	4.66	593.2735	[M – H] [–]	lysoPI (18:3)	1.49	0.0191	1.97	0.0237
	5.12	595.2871	[M – H] [–]	lysoPI (18:2)	2.53	0.0322	3.93	0.0335
	6.15	555.2840	[M – H] [–]	lysoPI (P-16:0)	1.70	0.0172	3.47	0.0174
	4.67	518.3246	[M + H] ⁺	lysoPC (18:3)	1.89	0.0021	1.94	0.0310

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Table 2. continued

FC	RT (min)	mass (<i>m/z</i>)	adduct	tentative identification	1 h ppi		48 h ppi	
					log ₂ ^a	<i>p</i> value ^b	log ₂	<i>p</i> value
	4.70	562.3159	[M + FA - H] ⁻	lysoPC (18:3)	1.99	0.0027	1.65	0.0144
	5.00	520.3406	[M + H] ⁺	lysoPC (18:2)	2.59	0.0041	2.27	0.0806
	5.01	504.3081	[M + FA - 60 - H] ⁻	lysoPC (18:2)	3.22	0.0098	2.07	0.0392
	5.01	564.3298	[M + FA - H] ⁻	lysoPC (18:2)	2.91	0.0056	2.21	0.0396
	5.45	452.2784	[M - H] ⁻	lysoPE (16:0)	1.60	0.0015	1.46	0.0045
	5.27	431.2206	[M - H] ⁻	lysoPA (18:3)	3.43	0.0002	4.10	0.0083
	5.88	433.2352	[M - H] ⁻	lysoPA (18:2)	2.16	0.1109	3.56	0.0483
	5.94	481.2568	[M - H] ⁻	lysoPG (16:1)	2.38	0.0111	2.63	0.0052
	6.31	483.2720	[M - H] ⁻	lysoPG (16:0)	2.97	0.0149	1.85	0.0431
6. phospholipids								
	7.02	746.4747	[M - H] ⁻	PC (oxo-11:0/18:2)	0.10	0.8652	-1.46	0.0228
	7.25	826.5286	[M + H] ⁺	PC (18:3/18:3 + O ₃)	-0.16	0.4734	-1.30	0.0018
	7.28	870.5166	[M + FA - H] ⁻	PC (18:3/18:3 + O ₃)	-0.11	0.7091	-1.31	0.0011
	8.00	872.5290	[M + FA - H] ⁻	PC (18:2/18:3 + O ₃)	0.54	0.2351	-1.25	0.0004
	8.71	804.5444	[M + H] ⁺	PC (16:0/18:3 + O ₃)	0.20	0.4386	-1.08	0.0006
	8.75	848.5261	[M + FA - H] ⁻	PC (16:0/18:3 + O ₃)	0.11	0.7257	-1.63	0.0002
	7.30	782.4615	[M - H] ⁻	PE (18:3/18:3 + O ₃)	-0.03	0.9326	-1.13	0.0017
	7.79	634.4088	[M - H] ⁻	PE (oxo-11:0/16:0)	0.16	0.5829	-1.01	0.0138
	8.80	760.4773	[M - H] ⁻	PE (16:0/18:3 + O ₃)	0.32	0.3440	-1.02	0.0091
7. free fatty acids								
	4.58	318.2996	[M + H] ⁺	phosphatidylcholine	0.85	0.0002	1.24	0.0425
	4.89 ^c	293.2100	[M - H] ⁻	hydroxylinolenic acid	2.16	0.0595	2.34	0.0318
	5.11 ^c	291.1979	[M - H] ⁻	ketolinolenic acid	1.34	0.0920	1.72	0.0361
	5.26 ^c	295.2268	[M - H] ⁻	hydroxylinoleic acid	1.01	0.0334	1.32	0.0545
	5.69	445.2364	[M - H] ⁻	linolenic acid-conjugated lipid	1.55	0.0138	2.63	0.0257
	6.56	447.2508	[M - H] ⁻	linoleic acid-conjugated lipid	2.22	0.0526	4.07	0.0435
	6.87 ^c	277.2175	[M - H] ⁻	linolenic acid	1.93	0.0096	1.40	0.0025
	7.66 ^c	279.2314	[M - H] ⁻	linoleic acid	1.75	0.0205	1.71	0.0049
8. galactolipids								
	4.74	721.2969	[M + FA - H] ⁻	DGMG (18:3)	0.60	0.3714	-1.82	0.0000
	5.21	653.3743	[M - H] ⁻	DGMG (16:0)	1.44	0.0102	1.57	0.0089
	5.21	699.3785	[M + FA - H] ⁻	DGMG (16:0)	1.45	0.0148	1.52	0.0139
	8.67	1069.6010	[M - H] ⁻	TGDG (16:3/18:3)	-2.73	0.0248	-2.51	0.0220
	8.67	1115.6080	[M + FA - H] ⁻	TGDG (16:3/18:3)	-2.74	0.0236	-1.85	0.0207
	9.89	797.5392	[M + FA - H] ⁻	MGDG (16:0/18:3)	1.20	0.0129	-1.25	0.0304

^aLog₂ means log₂[ratio of average peak intensity in pathogen-inoculated samples to that in controls]. ^b*p* value is calculated by independent two-sample's *t* test between *Ppn*-inoculated samples and their corresponding controls. ^cIdentification based on accurate mass value and retention time of standardts, +, ESI+ mode, -, ESI- mode. ^dND, not detected.