Table S1. Fold change of compounds listed on table 1comparing population with high (H) and low (L) glucosinolates content under control and cold conditions.

m/z	Ionization	Molecular Formula	Putative Identification	Log_2FC (H *vs* L) control	Log_2FC (H *vs* L) cold
381.0803	$[M+K]^+$	$C_{12}H_{22}O_{11}$	Glucose disaccharide	0.27	0.26
136.0629	$[M+H]^+$	$C_5H_5N_5$	Adenine	0.13	-0.22
166.0868	$[M+H]^+$	$C_9H_{11}NO_2$	Phenylalanine	0.00	-0.01
146.0818	$[M+H]^+$	$C_6H_{11}NO_3$	L-Allysine	0.65	0.40
477.0641	$[M-H]^-$	$C_{17}H_{22}N_2O_{10}S_2$	Methoxyglucobrassicin	0.05	0.48
225.1566	$[M+H]^+$			0.19	0.33
251.0322	$[M+H]^+$	$C_{11}H_{10}N_2OS_2$	Spirobrassinin	-0.28	0.87
181.1229	$[M+H]^+$	$C_{11}H_{16}O_2$	Dihydroactinidiolide	0.17	-0.39
671.3268	$[M+Na]^+$	$C_{31}H_{52}O_{14}$	Digalactosylmonoacylglycerol (DGMG; 16:3)	0.13	-0.61
200.2377	$[M+H]^+$	$C_{13}H_{29}N$	Tridecanamine	0.03	-0.16
299.2008	$[M-H]^-$	$C_{20}H_{28}O_2$	Dehydroabietic acid	-0.47	2.18
294.2431	$[M+H]^+$	$C_{18}H_{31}NO_2$	Hexadecatrienoic acid ethanol amide	-0.14	-0.91
301.2162	$[M+H]^+$	$C_{20}H_{28}O_2$	Dehydroabietic acid	-1.59	1.87
235.0365	$[M+H]^+$	$C_{11}H_{10}N_2S_2$	Cyclobrassinin	-1.35	0.19
338.3045	$[M]^+$	$C_{21}H_{40}NO_2$	9,12-Hexadecadienoylcholine	0.05	-1.22
368.3526	$[M+H]^+$			0.19	-0.76
375.251	$[M+Na]^+$	$C_{21}H_{36}O_4$	Glyceryl linolenate (enantiomer2)	0.40	0.61
324.2898	$[M+H]^+$	$C_{20}H_{37}NO_2$	Linoleoyl ethanolamide	0.39	0.31
375.2516	$[M+Na]^+$	$C_{21}H_{36}O_4$	Glyceryl linolenate (enantiomer1)	0.36	0.21
377.2664	$[M+Na]^+$	$C_{21}H_{38}O_4$	Glyceryl linoleate	0.17	0.33
601.4235	$[M+H]^+$	$C_{31}H_{52}N_8O_4$	N-[2-[2-(2-Aminoethoxy)ethoxy]ethyl]-4-[[[4-[(4-hydroxycyclohexyl)amino]-6-(octylamino)-1,3,5-triazin-2-yl]amino]methyl]benzamide (YTC_000721)	-0.45	0.19
282.2788	$[M+H]^+$	$C_{18}H_{35}NO$	Oleamide	0.04	0.26
296.2952	$[M+H]^+$	$C_{19}H_{37}NO$	Palmitic amide propyl ester	-0.06	-0.53
535.2704	$[M+H]^+$	$C_{33}H_{34}N_4O_3$	Pyropheophorbide A	0.20	-2.06
607.2917	$[M+H]^+$			0.05	0.20