

Table S2. Summary of analysis of toxic compounds found in soil samples (P-value < 0.05; FDR < 0.05; VIP > 1; FC > 1.5). All compounds are identified on the basis of high precursor mass accuracy and also MSMS spectrum and isotopic patterns matching.

Compound	Molecular Formula	RT [s]	Measured m/z	Mass Error [ppm]	mSigma	MS/MS Score	VIP ^a	P-value	FDR	FC ^b
2,4,8-Trimethyl-quinoline	C ₁₂ H ₁₃ N	130.2	172.1119	0.89	7.0	903/1000	1.50	3.07E-04	4.54E-03	52.97
Palmitamide	C ₁₆ H ₃₃ NO	300.9	256.2633	0.37	10.1	917/1000	1.68	8.34E-03	3.40E-02	2.26
Phenanthridone	C ₁₃ H ₉ NO	182.8	196.0755	1.38	8.5	913/1000	1.34	7.18E-03	3.06E-02	37.31
Dibenz(a,h)acridine	C ₂₁ H ₁₃ N	295.3	280.1118	0.82	19.7	960/1000	1.22	1.22E-03	7.93E-03	95.59
Carbazole	C ₁₂ H ₉ N	132.3	168.0807	0.62	8.8	989/1000	1.22	2.06E-03	1.25E-02	117.03
Benzo(f)quinoline	C ₁₃ H ₉ N	156.7	180.0807	0.46	5.4	930/1000	1.20	4.32E-03	2.07E-02	117.38
1-(m-tolyl)isoquinoline	C ₁₆ H ₁₃ N	222.1	220.1120	0.89	21.8	847/1000	1.14	7.99E-03	3.29E-02	25.87
Carboline	C ₁₁ H ₈ N ₂	154.0	169.0760	0.20	19.3	948/1000	1.15	1.09E-02	4.14E-02	14.17
1-(p-Tolyl)cyclopropanecarbonitrile	C ₁₁ H ₁₁ N	114.3	158.0964	0.84	4.9	877/1000	1.09	5.00E-03	2.32E-02	12.05

^aVIP scores derived from OPLS-DA model; ^bfold change between toxic and non-toxic samples calculated from the abundance mean values for each group. FC: fold change; FDR: false discovery rate; m/z: mass-to-charge ratio; VIP: variable influence on projection.