

Table S1. Detailed chemical composition of extracts from birch seedling leaves in the following experimental treatments: 1 – control; 2 - *Armillaria gallica*; 3 - *Phytophthora cactorum*; 4 - Defoliation 50%; 5 - *Armillaria gallica* + defoliation 50%; 6 - *Phytophthora cactorum* + defoliation 50%; 7 - *Armillaria gallica* + *Phytophthora cactorum* + defoliation 50%; 8 - *Armillaria gallica* + *Phytophthora cactorum*.

Group of Compounds	t _{ret.} ¹	Chemical Content (%) by Treatment							
		1	2	3	4	5	6	7	8
Monoterpenes, including:		15.95	19.23	17.42	18.50	15.19	21.59	15.46	14.22
Monoterpene C ₁₀ H ₁₆ ²	10.44	-	1.00	0.69	-	0.62	0.81	-	0.59
Limonene	11.01	0.33	0.49	0.39	trace ⁵	0.46	0.44	0.28	0.48
β-Ocimene	11.59	2.51	1.07	0.58	2.36	0.84	1.39	0.26	0.37
Monoterpene C ₁₀ H ₁₆ ²	11.86	0.42	0.53	-	0.42	-	-	-	-
trans-Furanolinalool oxide	12.32	0.44	-	-	0.69	-	-	-	-
cis-Furanolinalool oxide	12.79	0.15	-	-	0.15	-	-	-	-
Terpinolene	12.80	-	-	0.16	-	0.19	0.20	-	-
p-Cymenene	12.80	-	0.18	-	-	-	-	-	-
Linalool	13.14	3.80	2.66	2.70	4.00	2.15	3.34	4.17	2.96
cis-allo-Ocimene	14.02	0.37	0.24	-	0.33	-	0.24	-	-
trans-allo-Ocimene	14.35	0.11	-	-	0.26	-	-	-	-
Lilac aldehyde B	14.38	-	-	-	-	-	0.11	-	-
Monoterpene C ₁₀ H ₁₆ ²	14.39	0.16	0.15	-	-	-	-	-	-
Citronellal	14.67	0.25	0.30	0.40	0.36	0.33	0.56	0.41	0.36
cis-Pyranolinalool oxide	15.18	0.34	-	-	-	-	-	-	0.51
trans-Pyranolinalool oxide	15.29	0.29	0.31	0.28	0.28	0.33	0.37	-	-
α-Terpineol	15.76	-	-	-	-	-	-	0.24	-
Monoterpene C ₁₀ H ₁₆ ²	15.79	-	-	0.22	-	-	0.29	-	-
β-Cyclocitral	16.64	0.10	0.13	-	0.07	0.14	-	-	-
Citronellol	16.81	0.92	1.72	1.93	1.36	1.33	2.40	1.44	1.46
Neral	17.21	0.79	1.32	1.22	1.12	1.02	1.31	-	-
(E)-Geraniol	17.56	2.44	4.70	3.83	3.03	3.50	4.08	3.94	4.62
α-Citral	18.00	0.94	1.91	1.65	1.51	1.66	2.30	0.90	0.95
Eugenol	20.35	1.46	2.29	3.17	2.54	2.32	3.31	3.82	1.92
(Z)-Geraniol	20.65	-	0.07	-	-	0.09	-	-	-
Geranyl acetate	20.99	-	-	-	-	-	0.09	-	-
(E)-Isoeugenol	22.69	0.13	0.16	0.23	-	0.21	0.33	-	-
Sesquiterpenes, including:		7.57	6.16	18.34	19.20	14.95	11.31	1.49	1.48
δ-Elemene	19.86	-	-	0.05	-	-	-	-	-
α-Cubebene	20.18	0.21	0.21	0.51	0.59	0.56	0.42	-	-
Sesquiterpene C ₁₅ H ₂₄ ²	20.28	-	-	-	-	0.10	-	-	-
Cyclosativene	20.68	-	-	0.13	-	-	-	-	-

α -Ylangene	20.77	0.15	0.16	1.72	0.27	0.34	0.43	-	-
α -Copaene	20.89	1.42	1.32	2.27	3.36	3.64	2.10	0.26	0.51
β -Bourbonene	21.14	0.48	0.39	1.48	1.00	1.33	0.73	0.22	trace
Sesquiterpene C ₁₅ H ₂₄ ²	21.28	-	0.15	-	-	-	-	-	-
<i>cis</i> - α -Bergamotene	21.87	0.04	0.02	0.05	-	-	-	-	-
β -Ylangene	21.88	-	-	-	0.08	0.03	0.05	-	-
β -Caryophyllene	22.03	1.09	0.91	1.05	1.38	1.01	1.13	0.49	0.42
β -Copaene	22.26	0.15	0.13	0.35	0.57	0.39	0.25	-	-
<i>trans</i> - α -Bergamotene	22.38	0.18	0.14	0.30	0.30	0.18	0.25	-	-
Guaia-6,9-diene	22.60	0.23	0.25	3.62	0.45	0.35	0.84	0.20	0.25
<i>cis</i> -Muurolo-3,5-diene	22.70	-	-	-	0.37	-	-	-	-
Sesquiterpene C ₁₅ H ₂₄ ²	22.76	-	0.11	0.75	0.11	0.19	0.31	-	-
<i>trans</i> -Muurolo-3,5-diene	22.80	-	-	-	0.15	-	-	-	-
α -Humulene	22.88	0.17	0.16	0.28	0.72	0.30	0.30	-	-
Sesquiterpene C ₁₅ H ₂₄ ²	22.95	-	-	0.41	-	0.09	0.12	-	-
allo-Aromadendrene	23.07	0.30	0.25	0.61	0.66	0.71	0.36	-	-
<i>cis</i> -Muurolo-4(14),5-diene	23.12	-	-	-	0.50	-	0.22	-	-
<i>trans</i> -Cadina-1(6),4-diene	23.37	-	-	-	0.09	-	-	-	-
γ -Muurolole	23.43	0.29	0.30	1.37	1.17	1.28	0.67	-	-
α -Amorphene	23.53	-	-	-	-	0.13	-	-	-
Germacrene D	23.56	0.19	0.17	0.41	1.56	0.13	0.51	-	-
(<i>Z,E</i>)- α -Farnesene	23.80	0.15	0.07	0.09	-	-	-	-	-
α -Muurolole	24.00	0.16	0.16	0.40	0.66	0.50	0.29	-	-
(<i>E,E</i>)- α -Farnesene	24.13	1.49	0.55	0.23	1.26	0.71	0.57	0.32	0.30
Sesquiterpene C ₁₅ H ₂₄ ²	24.19	-	-	0.16	-	-	-	-	-
γ -Cadinene	24.35	0.28	0.26	0.72	1.19	1.06	0.52	-	-
δ -Cadinene	24.56	0.41	0.37	0.85	1.96	1.05	0.83	-	-
<i>trans</i> -Cadina-1,4-diene	24.79	-	-	0.04	0.09	0.04	0.04	-	-
α -Cadinene	24.90	0.03	0.03	0.10	0.18	0.09	0.07	-	-
α -Calacorene	25.05	0.03	0.03	0.14	0.15	0.08	0.08	-	-
Salviadienol	25.30	-	-	0.03	-	0.03	-	-	-
(<i>E</i>)-Nerolidol	25.45	-	-	-	-	-	0.08	-	-
β -Calacorene	25.53	-	-	0.03	0.03	0.42	-	-	-
Humulene epoxide II	26.63	-	-	-	0.05	0.04	-	-	-
Sesquiterpene C ₁₅ H ₂₄ ²	26.78	0.14	-	-	0.13	0.07	-	-	-
α -Corocalene	26.89	-	-	0.03	0.04	-	0.03	-	-
τ -Muurolol	27.31	-	-	0.05	0.05	0.05	-	-	-
Cadalene	28.07	-	-	0.04	0.04	0.06	0.04	-	-
Guaiazulene	30.27	-	-	0.08	-	-	0.06	-	-
Aromatic Esters, including:		5.52	5.91	8.05	3.96	7.12	6.68	4.98	4.66
Benzyl acetate	14.99	0.14	0.17	0.21	-	-	0.25	-	-
Methyl salicylate	15.90	4.97	5.27	7.46	3.26	6.87	5.91	4.67	4.40

(Z)-3-Hexenyl benzoate	25.64	0.36	0.30	0.23	0.42	0.14	0.33	0.32	0.26
Hexenyl benzoate	25.78	-	0.12	0.10	0.19	0.05	0.12	-	-
(E)-2-Hexenyl benzoate	25.95	0.05	0.04	0.05	0.09	0.06	0.06	-	-
Aromatic Carbonyls, including:		1.32	3.87	4.03	2.47	4.37	7.12	5.46	6.98
Benzaldehyde	8.98	0.68	3.03	3.20	2.03	3.66	6.28	4.49	5.44
Benzene acetaldehyde	11.43	0.64	0.84	0.83	0.44	0.71	0.84	0.97	1.54
Aromatic alcohols, including:		5.64	8.35	8.82	7.60	7.02	10.62	11.75	12.47
Benzyl alcohol	11.16	4.14	5.92	5.96	5.55	4.76	7.60	7.26	8.76
p-Cresol	12.35	-	0.63	0.77	-	0.42	0.90	0.41	0.48
2-Phenylethyl alcohol	13.51	1.50	1.80	2.09	2.04	1.85	2.12	4.08	3.23
Aliphatic Esters, including:		14.41	6.27	3.75	6.97	5.11	3.86	2.85	3.31
(Z)-3-Hexenyl acetate	10.37	3.42	1.17	0.80	1.53	0.87	1.07	trace	0.77
Hexyl acetate	10.55	1.62	0.30	0.59	0.78	0.36	0.36	0.24	0.26
(E)-3-Hexenyl acetate	10.64	4.23	0.77	0.56	0.77	-	0.43	-	0.69
(Z)-2-Hexenyl acetate	10.64	-	-	-	-	0.56	-	-	-
(Z)-3-Hexenyl butanoate	15.64	1.42	0.89	0.36	0.65	0.65	0.41	0.55	0.33
Hexyl butanoate	15.79	0.57	0.33	-	0.42	0.29	-	-	-
(Z)-3-Hexenyl 2-methylbutanoate	16.94	0.79	0.79	0.37	0.47	0.84	0.32	0.57	0.45
(Z)-3-Hexenyl (E)-2-butenate	17.03	0.84	0.64	0.36	0.67	0.41	0.50	0.44	0.36
(Z)-2-Hexenyl isovalerate	17.10	0.41	0.35	0.13	0.30	0.31	0.12	-	-
(Z)-3-Hexenyl pentanoate	18.35	0.04	-	-	-	-	-	-	-
Ethyl nonanoate	18.69	-	-	-	-	-	0.04	-	-
(E)-3-Hexenyl tiglate	19.16	0.03	-	-	0.02	-	-	-	-
(Z)-3-Hexenyl tiglate	19.45	0.48	0.45	0.28	0.59	0.27	0.33	0.51	0.45
Hexyl tiglate	19.60	0.14	0.11	-	0.19	0.12	-	-	-
(E)-2-Hexenyl tiglate	19.80	0.28	0.23	0.14	0.40	0.21	0.15	-	-
(Z)-3-Hexenyl hexanoate	20.93	-	-	-	-	-	-	0.31	-
(Z)-3-Hexenyl (Z)-3-hexenoate	21.06	0.15	0.23	0.15	0.18	0.21	0.13	0.23	trace
Aliphatic Acids, including:		1.12	-	-	0.38	-	0.17	11.85	9.68
Acetic acid	2.13	-	-	-	-	-	-	4.06	4.25
Hexanoic acid	9.60	0.57	-	-	-	-	-	2.05	1.60
3-Hexenoic acid ³	10.20	-	-	-	-	-	-	2.13	2.76
3-Hexenoic acid ³	10.32	-	-	-	-	-	-	2.57	-
2-Hexenoic acid ³	10.76	-	-	-	-	-	-	1.03	1.07
2-Hexenoic acid ³	12.57	0.11	-	-	-	-	0.13	-	-
Heptanoic acid	13.84	0.43	-	-	0.38	-	-	-	-
Dodecanoic acid	25.33	-	-	-	-	-	0.04	-	-
Aliphatic Carbonyls,		21.58	22.47	17.12	17.21	20.79	18.32	20.66	18.30

including:									
Acetone	1.73	-	-	-	-	-	-	0.81	1.70
2-Butenal	2.58	-	-	-	-	-	-	0.45	0.33
Acetoin	3.22	-	-	-	-	-	-	0.26	-
(E)-2-Pentenal	3.95	-	-	-	-	-	-	0.46	0.42
Hexanal	4.87	0.80	0.69	0.16	0.24	0.10	trace*	0.56	0.44
(Z)-2-Hexenal	5.86	-	-	-	-	-	-	0.13	-
(E)-2-Hexenal	6.15	16.78	15.97	12.19	13.48	15.18	12.24	11.70	9.27
Heptanal	7.29	-	-	-	-	-	-	-	0.24
(E,E)-2,4-Hexadienal	7.55	0.14	0.51	0.16	0.07	0.42	0.30	0.78	0.37
(Z)-2-Heptenal	8.87	-	-	0.03	-	-	-	0.19	-
2-Methyl-3-octanone	9.65	-	-	-	-	-	-	-	0.25
6-Methyl-5-hepten-2-one	9.77	1.51	1.85	1.28	1.16	1.31	1.34	0.84	0.95
(E,E)-2,4-Heptadienal	10.02	-	-	-	-	-	-	0.36	0.47
Octanal	10.23	-	0.47	-	-	0.49	0.59	-	-
(E,E)-2,4-Heptadienal	10.41	-	-	-	-	-	-	0.66	-
(E)-2-Octenal	11.84	-	-	-	-	-	-	0.37	-
(Z)-2-Octenal	11.87	-	-	0.42	-	0.48	0.49	-	0.47
Nonanal	13.25	1.18	1.38	1.35	1.16	1.30	1.59	2.28	2.86
(E)-2-Nonenal	14.85	0.12	0.15	0.14	0.14	0.15	0.18	0.23	trace
Decanal	16.17	0.51	0.71	0.69	0.36	0.65	0.74	0.38	0.54
(E)-2-Decenal	17.74	0.12	0.20	0.16	0.11	0.16	0.21	0.18	trace
Undecanal	18.98	0.13	0.15	0.14	0.11	0.14	0.16	-	-
Dodecanal	21.64	0.14	0.16	0.18	0.16	0.18	0.19	-	-
Tetradecanal	26.54	0.04	0.06	0.05	0.06	0.06	0.07	-	-
Pentadecanal	28.81	0.07	0.10	0.08	0.10	0.10	0.12	-	-
Hexadecanal	30.96	0.03	0.03	0.03	0.03	0.04	0.05	-	-
Hexahydrofarnesyl acetone	31.55	0.03	0.04	0.04	0.04	0.04	0.05	-	-
Aliphatic Alcohols,									
		15.36	15.31	12.76	13.38	15.78	8.43	17.13	21.41
including:									
(Z)-2-Penten-1-ol	4.22	-	-	-	-	-	-	0.73	0.70
(Z)-3-Hexen-1-ol	6.09	-	-	-	-	-	-	10.02	11.91
(Z)-2-Hexenol	6.46	12.54	10.58	7.79	9.45	11.68	2.26	1.85	2.17
1-Hexanol	6.48	-	-	-	-	-	-	1.77	2.08
Hexylene glycol	7.83	0.06	trace	0.17	0.28	0.25	0.21	0.42	1.14
6-Hepten-3-ol	7.84	-	0.40	-	-	-	-	-	-
1-Heptanol	9.25	-	-	0.77	-	-	1.24	-	0.36
6-Methyl-5-hepten-2-ol	9.93	2.53	3.54	3.15	2.76	3.01	3.55	1.53	2.51
(E)-2-Octen-1-ol	12.17	-	-	-	-	0.10	-	-	-
(Z)-2-Octen-1-ol	12.25	-	-	0.44	-	-	-	-	-
1-Octanol	12.25	0.22	0.46	trace	0.51	0.41	0.55	0.47	0.56
1-Nonanol	15.19	-	0.32	0.44	0.37	0.34	0.62	0.34	-
Alkanes and Alkenes,									
		7.12	8.65	7.04	7.44	6.62	9.62	2.73	1.83

including:									
1-Undecene	12.85	0.26	0.20	0.17	0.20	0.17	-	-	-
(E)-4,8-Dimethyl-1,3,7-nonatriene	13.61	1.26	1.14	0.86	0.48	1.36	1.78	0.34	0.31
<i>n</i> -Dodecane	16.00	1.04	1.18	-	0.73	-	1.26	0.32	-
1-Tridecene	18.55	0.36	0.44	0.38	0.33	0.36	0.40	-	-
<i>n</i> -Tridecane	18.78	0.67	1.34	0.52	0.65	0.57	0.72	0.42	0.77
1-Tetradecene	21.20	1.00	1.44	1.12	1.49	1.26	1.61	0.45	0.24
<i>n</i> -Tetradecane	21.40	0.59	0.82	0.72	0.71	0.70	0.85	0.34	0.27
1-Pentadecene	23.70	0.24	0.29	0.77	0.28	0.28	0.38	-	-
<i>n</i> -Pentadecane	23.89	0.51	0.66	1.01	1.05	0.82	0.93	0.33	0.25
1-Hexadecene	26.07	0.51	0.56	0.91	0.79	0.53	0.88	0.30	trace
<i>n</i> -Hexadecane	26.24	0.45	0.32	0.34	0.46	0.35	0.41	0.23	trace
1-Heptadecene	28.33	0.05	0.05	0.06	0.05	0.05	0.08	-	-
<i>n</i> -Heptadecane	28.48	0.16	0.16	0.16	0.16	0.15	0.22	-	-
1-Octadecene	30.47	-	-	-	0.02	-	0.03	-	-
<i>n</i> -Octadecane	30.61	0.03	0.04	0.03	0.04	0.04	0.05	-	-
<i>n</i> -Nonadecane	32.64	-	-	-	-	-	0.01	-	-
Other Compounds,									
including:		1.78	1.62	1.27	1.53	1.56	1.38	3.88	4.31
2-Ethylfuran	3.13	-	-	-	-	-	-	0.17	-
γ -Hexalactone	11.73	0.87	0.64	0.41	0.72	0.72	0.44	1.64	1.84
Naphtalene	15.54	0.06	-	-	-	-	-	-	-
1-(2-Butoxy-1-methoxy)-2-propanol, isomer 1 ⁴	17.19	-	-	-	-	-	-	1.17	1.34
1-(2-Butoxy-1-methoxy)-2-propanol, isomer 2 ⁴	17.33	0.71	0.80	0.74	0.81	0.68	0.81	0.89	1.13
(E)- β -Ionone	23.62	0.14	0.18	0.11	-	0.15	0.12	-	-
Unidentified Compounds		2.63	2.17	1.40	1.38	1.49	0.89	1.76	1.35

¹ Retention time (min); ² Based on the GC-MS analysis, the compound was identified as monoterpene/sesquiterpene with the chemical formula, but the chemical structure of compound was not specified; ³ isomer (*E*) or (*Z*); ⁴ *n*-butyl or *iso*-butyl; ⁵ trace – below 0.01%.

Table S2. The detailed chemical composition of extracts from birch seedling roots in the following experimental treatments: 1 – control; 2 - *Armillaria gallica*; 3 - *Phytophthora cactorum*; 4 - Defoliation 50%; 5 - *Armillaria gallica* + defoliation 50%; 6 - *Phytophthora cactorum* + defoliation 50%; 7 - *Armillaria gallica* + *Phytophthora cactorum* + defoliation 50%; 8 - *Armillaria gallica* + *Phytophthora cactorum*.

Group of Compounds	t _{ret.} ¹	Chemical Content (%) by Treatment							
		1	2	3	4	5	6	7	8
Phenolic Compounds, including:		0.87	15.35	5.02	11.91	4.83	4.36	7.85	13.32
(E)-p-Coumaric acid	46.38	-	-	-	-	-	-	-	0.12
(Z)-Caffeic acid	48.12	-	9.51	-	0.42	-	-	0.18	0.48
(E)-Caffeic acid	52.74	-	1.92	1.89	1.95	1.75	2.08	2.46	2.59
Catechin	72.47	0.87	1.34	0.98	0.89	0.98	0.87	3.35	2.70
Cirsimaritin	76.74	-	-	-	-	-	-	-	0.16
α-Tocopherol	77.01	-	0.44	0.31	0.65	0.31	0.31	0.23	0.51
Flavonoid glucoside ²	86.00	-	1.68	1.83	5.03	1.41	0.77	1.11	5.23
1-Eicosyl p-coumarate	88.19	-	-	-	0.24	-	-	-	-
1-Docosyl caffeate, isomer 1 ³	90.97	-	-	-	-	-	-	-	0.11
1-Docosyl caffeate, isomer 2 ³	94.24	-	-	-	0.88	-	-	-	0.75
1-Tetracosyl p-coumarate	95.07	-	-	-	0.26	-	-	-	-
Triterpenes, including:		1.25	3.63	2.73	8.64	4.46	3.69	4.82	10.25
Triterpene C ₃₀ H ₅₀ ⁴	74.28	0.72	-	-	-	-	-	-	-
Triterpenoid C ₃₀ H ₄₈ O ⁴	78.79	-	0.71	0.77	0.94	0.57	0.59	0.78	0.93
Triterpenoid C ₃₀ H ₄₈ O ⁴	78.95	-	0.36	-	0.44	-	0.33	0.38	0.42
Triterpenoid C ₃₀ H ₄₈ O ₂ ⁴	79.37	0.53	1.33	-	1.30	1.49	1.00	1.15	1.00
Triterpenoid C ₃₀ H ₄₆ O ₂ ⁴	79.52	-	0.48	1.02	0.57	1.17	0.31	0.39	0.41
Triterpenoid ²	80.22	-	-	-	-	-	-	0.75	-
Triterpenoid C ₃₀ H ₄₆ O ₂ ⁴	80.72	-	-	-	-	-	-	0.46	-
Lupeol	81.89	-	-	-	0.81	0.35	0.54	-	0.39
Triterpenoid ²	84.09	-	-	-	-	-	-	-	0.27
Triterpenoid C ₃₀ H ₄₆ O ₃ ⁴	84.42	-	-	-	-	-	0.27	-	-
Triterpenoid ²	84.54	-	-	-	-	-	-	-	0.47
Triterpenoid ²	84.93	-	-	-	0.68	-	-	-	-
Betulin	85.01	-	-	-	0.93	0.38	-	-	1.95
Oleanolic acid	85.26	-	-	-	0.49	-	-	-	-
Betulinic acid	85.56	-	-	-	0.91	-	-	-	1.39
Triterpenoid ²	86.39	-	-	-	0.74	-	-	-	-
Triterpenoid acetate ²	86.83	-	-	-	0.83	-	-	-	-
Methyl acetylbetulinate	86.84	-	0.75	0.93	-	0.51	0.65	0.90	3.03
Sterols,		33.53	39.58	28.37	41.83	28.94	29.61	23.30	35.80

including:									
Campesterol	79.18	1.00	1.61	1.13	1.88	1.31	1.18	0.95	1.50
Stigmasterol	79.81	3.51	4.87	2.53	4.81	3.02	3.28	2.72	3.41
β -Sitosterol	80.96	28.54	31.46	23.57	32.15	24.07	24.04	18.76	28.22
Stigmastanol	81.14	0.48	1.29	1.15	1.89	0.54	1.12	0.86	1.60
Avenasterol	81.27	-	-	-	-	-	-	-	0.32
Steroid C ₂₉ H ₄₈ O ⁴	82.73	-	0.35	-	1.09	-	-	-	0.75
Fatty Acids,		44.47	21.47	32.30	15.65	32.10	33.93	35.82	15.50
including:									
Hexanoic acid	12.73	-	-	-	0.10	0.21	0.20	-	0.10
Dodecanoic acid	36.53	-	-	-	-	-	-	-	0.18
Tetradecanoic acid	43.39	-	0.28	0.33	0.20	0.32	0.43	0.33	0.22
Pentadecanoic acid	46.59	-	-	-	-	-	0.27	0.27	0.13
Palmitelaidic acid	49.33	-	-	0.24	-	-	0.17	-	-
Palmitic acid	49.69	16.30	0.61	12.16	4.98	11.27	11.04	11.13	4.64
Heptadecanoic acid	52.64	-	-	0.20	-	-	0.16	0.24	0.08
Linoleic acid	54.52	15.04	10.22	9.32	3.52	9.53	10.73	11.14	4.00
Oleic acid	54.69	7.76	4.95	3.76	2.31	4.49	4.75	5.14	1.92
(E)-9-Octadecenoic acid	54.89	0.59	0.28	0.31	-	0.29	0.37	0.35	0.14
Stearic acid	55.47	3.48	2.96	3.46	1.68	3.31	3.33	3.24	1.53
Fatty acid ²	60.45	-	-	0.61	-	0.38	0.34	1.17	0.47
Eicosanoic acid	60.80	0.79	-	-	-	-	-	-	-
Docosanoic acid	65.79	0.51	0.76	0.67	0.77	0.79	0.59	0.57	0.41
Tricosanoic acid	68.15	-	1.07	0.92	0.81	1.14	1.20	2.00	1.18
Tetracosanoic acid	70.43	-	0.34	0.31	0.80	0.35	0.36	0.25	0.37
Hexacosanoic acid	74.78	-	-	-	0.46	-	-	-	0.13
Fatty Alcohols,		4.23	5.45	6.43	6.29	9.27	6.15	7.28	5.67
including:									
1-Hexadecanol	47.03	-	0.38	0.29	0.17	0.38	0.43	0.30	0.14
1-Octadecanol	53.00	-	0.36	-	0.15	0.32	0.79	-	0.19
1-Docosanol	63.61	3.09	3.09	2.68	3.65	5.38	3.30	3.99	2.32
1-Tricosanol	66.03	-	-	-	-	0.31	0.24	0.29	0.19
1-Tetracosanol	68.36	1.14	1.62	3.46	2.16	2.88	1.39	2.70	2.82
1-Hexacosanol	72.81	-	-	-	0.16	-	-	-	-
Other Compounds,		8.33	8.17	12.01	8.31	8.79	15.00	9.03	7.83
including:									
6-Methyl-5-hepten-2-one	9.39	0.48	-	-	0.43	-	0.33	-	-
Ethylene glycol	9.47	0.53	0.29	0.25	0.22	0.33	0.32	0.36	0.19
Boric acid	9.83	-	-	0.34	0.14	0.21	0.21	0.32	0.22
Lactic acid	12.43	0.63	0.28	0.38	0.17	0.50	0.29	0.29	0.20
Phosphoric acid	21.76	-	-	-	-	-	-	-	0.12
Glycerol	21.96	0.80	0.46	0.50	0.48	0.58	0.57	0.58	0.52
2-(2-Butoxyethoxy)ethyl	24.18	2.20	2.42	4.25	3.16	2.93	7.38	1.23	2.81

acetate, isomer 1 ⁵									
2-(2-Butoxyethoxy)ethyl	25.12	0.52	-	0.27	0.18	0.37	0.47	0.24	0.31
acetate, isomer 2 ⁵									
<i>n</i> -Tetradecane	26.46	-	-	-	0.13	-	-	-	0.17
<i>n</i> -Pentdecane	30.36	-	-	-	-	-	-	0.21	0.10
2-Butoxyethoxyethanol	34.92	-	-	-	-	-	-	0.42	-
<i>n</i> -Heptadecane	38.42	-	-	-	-	-	0.23	-	-
Methylbenzene-sulfamide	40.26	1.04	0.85	0.24	0.15	0.00	0.30	0.54	0.11
Azelaic acid	41.87	-	-	0.25	-	-	0.24	0.28	0.23
Octadecanenitrile	51.28	0.71	-	0.89	0.36	0.67	0.64	0.73	0.12
Hexadecanamide	55.32	0.34	0.44	0.55	0.40	0.40	0.38	0.43	0.21
Oleamide	59.99	-	-	0.39	-	-	-	-	0.17
Oleanitrile	59.99	-	0.33	-	-	-	0.27	-	-
Octadecanamide	60.77	0.56	1.72	1.93	1.53	1.63	1.52	1.60	0.96
1-Monopalmitin	64.94	0.53	0.84	1.21	0.37	0.75	1.11	1.26	0.42
1-Monolinolein	68.86	-	0.54	0.56	0.22	0.43	0.74	0.54	0.47
Heneicosanedioic acid	73.71	-	-	-	0.38	-	-	-	0.51
Unidentified									
Compounds		7.30	6.35	13.14	7.39	11.60	7.26	11.90	11.64

¹ Retention time (min).; ² Based on the GC-MS analysis, the compound was identified as flavonoid glucoside/triterpenoid/triterpenoid acetate/fatty acid, but the chemical formula and the chemical structure of compound were not specified; ³ isomer (*E*) or (*Z*); ⁴ Based on the GC-MS analysis, the compound was identified as triterpene/triterpenoid/steroid with the chemical formula, but the chemical structure of compound was not specified; ⁵ *n*-butyl or *iso*-butyl.



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