

	sample1		sample2		sample3		sample4		sample5		sample6	
Qualitativated compounds	<i>Tilia amurensis</i> <i>Rupr</i>		<i>Acanthopanax</i> <i>senticosus</i>		<i>Ulmus</i> <i>laciniata</i>		<i>Euonymus</i> <i>verrucosus</i> <i>Scop</i>		<i>Saliz</i> <i>matsudana</i> <i>leaves</i>		<i>Actinidia</i> <i>kolomikta</i> <i>(Maxim. et</i> <i>Rupr.) Maxim</i>	
	PA (%)	CPA (%)	PA (%)	CPA (%)	PA (%)	CPA (%)	PA (%)	CPA (%)	PA (%)	CPA(%)	PA (%)	CPA (%)
Acetic acid,1,7,7-trimethyl-bicyclo [2.2.1]hept-2-yl ester	0.06	-	0.15	-	0.75	-	0.10	-	0.05	-	0.02	-
.gamma.-Elemene	-	-	-	-	-	-	-	-	-	-	-	-
Caryophyllene	0.25	-	0.23	-	1.00	0.99	0.16	-	0.12	-	-	-
.alpha.-Caryophyllene	0.07	0.22	-	-	0.19	-	-	-	-	-	-	-
1,6-Cyclodecadiene,1-methyl-5- methylene-8-(1-methylethyl)-, [s-(E,E)]-	-	-	-	-	0.29	-	-	-	-	-	-	-
Naphthalene,1,2,3,4,4a,5,6,8a-octahydro- 7-methyl-4-methylene-1-(1-methylethyl)-, (1.alpha.,4a.alpha.,8a.alpha.)-	0.14	-	0.11	-	0.53	0.82	0.08	-	0.07	-	-	-
Naphthalene, 1,2,3,5,6,8a-hexahydro-4,7- dimethyl-1-(1-methylethyl)-, (1S-cis)-	0.14	-	0.13	-	0.65	0.75	0.07	-	0.08	-	-	-
2(4H)-Benzofuranone, 5,6,7,7a- tetrahydro-4,4,7a-trimethyl-, (R)-	0.28	-	0.18	-	0.22	-	0.10	-	0.15	-	0.06	-
1H-Cycloprop[e]azulen-7-ol,decahydro- 1,1,7-trimethyl-4-methylene-,[1ar- (1a.alpha.,4a.alpha.,7.beta.,7a.beta.,7b.alp ha.)]-	0.21	-	-	-	0.35	-	0.17	-	0.32	-	-	-

Caryophyllene oxide	0.21	-	0.18	-	0.23	-	0.09	-	-	-	-	-
1-Naphthalenol,1,2,3,4,4a,7,8,8a- octahydro-1,6-dimethyl-4-(1- methylethyl)-, [1R- (1.alpha.,4.beta.,4a.beta.,8a.beta.)]- .tau.-Cadinol	0.12	-	0.14	-	0.35	-	0.07	-	-	-	-	-
.alpha.-Cadinol	-	-	-	-	0.39	-	-	-	-	-	-	-
2-Undecene, 6-methyl-, (Z)-	0.57	-	0.36	-	-	-	0.17	-	-	-	-	-
Benzyl Benzoate	-	-	-	-	-	-	-	-	-	-	-	-
1,2-Benzenedicarboxylic acid, bis (2-methylpropyl) ester	0.81	-	0.35	-	0.47	-	0.19	-	0.25	-	0.08	-
Phthalic acid, isobutyl octadecyl ester	-	-	-	-	-	-	-	-	-	-	-	-
Dodecanal	-	-	-	-	-	-	-	-	0.06	-	-	-
1,2-Benzenedicarboxylic acid, butyl octyl ester	0.36	-	0.14	-	0.28	-	0.11	-	0.19	-	0.03	-
Tetradecanal	-	-	-	-	-	-	-	-	-	-	-	-
Thunbergol	-	-	-	-	-	-	0.05	-	-	-	-	-
Oleanitrile	0.50	-	-	-	0.42	-	0.17	-	0.76	-	0.06	-
Phytol	1.21	-	0.41	-	0.71	-	0.44	-	2.53	-	0.25	-
Hexadecanamide	0.59	-	0.43	-	0.28	-	0.22	-	0.42	-	0.04	-
Nonadecane	-	-	-	-	-	-	0.13	-	0.38	-	0.18	-
9-Octadecenamide, (Z)-	8.91	-	2.66	-	5.04	-	3.23	-	2.95	-	0.65	-
Hexadecanal	-	-	-	-	-	-	-	-	0.16	-	-	-
Heneicosane	0.42	-	0.19	0.13	0.49	0.69	0.37	1.56	2.71	-	1.80	-
Di-n-octyl phthalate	0.17	-	-	-	-	-	0.08	-	0.56	-	-	-
Hexacosane	-	-	-	-	-	-	0.25	1.58	-	-	0.11	-

Octadecanal	0.22	-	0.20	-	0.64	-	0.41	-	2.65	-	0.30	-
Hentriacontane	1.83	-	0.97	-	1.99	2.87	0.85	5.67	10.00	19.68	2.91	-
13-Docosenamide, (Z)-	0.91	-	0.25	-	0.42	-	0.47	-	-	-	-	-
1-Octacosanol	-	-	-	-	-	-	-	-	0.96	6.38	-	-
Hexacosanol, acetate	-	-	-	-	-	-	-	-	-	-	-	-
Squalene	14.33	70.54	9.89	58.61	24.89	68.43	6.65	34.71	4.82	37.3	0.92	4.65
Geranylgeraniol	-	-	-	-	-	-	-	-	-	-	-	-
Tetratriacontane	5.12	-	8.13	0.00	8.21	18.15	2.23	20.56	4.11	16.52	8.95	32.75
Tetracosanoic acid, 2,9-dimethyl-, methyl ester, [S-(R*,S*)]-	-	-	-	0.00	-	-	-	-	-	-	-	-
Pentatriacontane	-	-	0.29	0.00	-	-	-	-	-	-	1.75	3.64
Z-2-Octadecen-1-ol	4.56	8.96	1.99	4.67	0.98	-	4.38	-	10.24	-	-	-
Tetracontane	-	-	6.19	1.97	-	-	2.17	28.16	-	-	17.26	48.15
1-Octacosanol	-	-	-	-	-	-	-	-	-	-	-	-
Methyl octacosanoate	-	-	-	-	-	-	-	-	-	-	-	-
dl-.alpha.-Tocopherol	-	-	-	-	-	-	-	-	-	-	-	-
Tritetracontane	-	-	-	-	-	-	-	-	-	-	0.54	3.34
Stigmasterol	-	-	2.02	-	-	-	-	-	-	-	0.27	-
Tetratetracontane	-	-	-	-	-	-	-	-	-	-	1.21	5.66
.gamma.-Sitosterol	-	-	-	-	-	-	-	-	-	-	-	-
4,4,6a,6b,8a,11,11,14b-Octamethyl-1,4,4a,5,6,6a,6b,7,8,8a,9,10,11,12,12a,14,14a,14b-octadecahydro-2H-picen-3-one	-	-	-	-	5.00	-	15.54	-	-	-	10.25	-
Lanosterol	-	-	6.38	-	-	-	-	-	-	-	-	-
Urs-12-ene-3.beta.,11.beta.-diol, diacetate	33.32	-	-	-	13.45	-	33.22	-	-	-	2.48	-
Octacosyl acetate	-	-	6.96	10.02	-	-	-	-	-	-	-	-

3,11-Dihydroxy-12-ketocholanic acid	-	-	-	-	-	-	-	-	-	5.57	-	-	-
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Qualitativated components in tree leaves (PA is the percent peak area of lipids in leaves extract; CPA is the percent peak area of lipids in leaves extract after cleanup; – means that there is no corresponding compound detected in the corresponding tree leaves)

	<i>sample13</i>		<i>sample14</i>		<i>sample15</i>		<i>sample16</i>		<i>sample17</i>		<i>sample18</i>		<i>sample19</i>	
	<i>Rhamnus</i>		<i>Corylus</i>		<i>Fraxinus</i>		<i>Populus</i>		<i>Betula</i>		<i>Pinus</i>		<i>Korean Pine</i>	
	<i>ussuriensis J.</i>		<i>heterophylla</i>		<i>mandshurica</i>		<i>koreana</i>		<i>platyphylla</i>		<i>tabuliformis</i>		<i>Carrière</i>	
Qualitativated compounds	<i>Vass</i>		<i>Fisch</i>		<i>Rupr</i>									
	PA	CPA	PA	CPA	PA	CPA	PA	CPA	PA	CPA	PA	CPA	PA	CPA (%)
	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	
Acetic acid,1,7,7-trimethyl-bicyclo[2.2.1]hept-2-yl ester	0.19	-	-	-	0.26	-	-	-	0.04	-	1.57	-	3.53	-
.gamma.-Elemene	-	-	-	-	-	-	-	-	-	-	0.11	-	0.72	3.13
Caryophyllene	0.51	-	-	-	0.34	-	-	-	0.09	-	2.37	15.67	5.31	18.62
.alpha.-Caryophyllene	0.11	0.13	-	-	-	-	-	-	-	-	0.35	4.32	0.85	11.44
1,6-Cyclodecadiene,1-methyl-5-methylene-8-(1-methylethyl)-, [s-(E,E)]-	0.08	-	-	-	-	-	0.10	-	-	-	0.29	-	1.43	2.37
Naphthalene,1,2,3,4,4a,5,6,8a-octahydro-7-methyl-4-methylene-1-(1-methylethyl)-	0.36	0.10	0.10	-	0.32	-	0.14	-	0.06	-	2.25	8.00	3.35	11.84
, (1.alpha.,4a.alpha.,8a.alpha.)-														
Naphthalene,1,2,3,5,6,8a-hexahydro-4,7-dimethyl-1-(1-methylethyl)-, (1S-cis)-	0.32	0.08	-	-	-	-	0.56	-	0.06	-	0.94	6.30	3.20	9.78

2(4H)-Benzofuranone,5,6,7,7a-tetrahydro-4,4,7a-trimethyl-, (R)-	0.35	-	-	-	-	-	0.20	-	0.14	-	-	-	-	-
1H-Cycloprop[e]azulen-7-ol,decahydro-1,1,7-trimethyl-4-methylene-,[1ar-(1a.alpha.,4a.alpha.,7.beta.,7a.beta.,7b.alpha.)]-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Caryophyllene oxide	0.42	-	-	-	-	-	-	-	0.10	-	1.84	-	0.37	-
1-Naphthalenol,1,2,3,4,4a,7,8,8a-octahydro-1,6-dimethyl-4-(1-methylethyl)-,[1R-(1.alpha.,4.beta.,4a.beta.,8a.beta.)]-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
.tau.-Cadinol	0.20	-	-	-	-	-	-	-	-	-	2.87	-	1.77	-
.alpha.-Cadinol	0.28	-	-	-	-	-	-	-	-	-	2.51	-	1.81	-
2-Undecene, 6-methyl-, (Z)-	0.08	-	0.17	-	-	-	-	-	-	-	-	-	-	-
Benzyl Benzoate	-	-	-	-	-	-	-	-	-	-	0.11	-	-	-
1,2-Benzenedicarboxylic acid, bis(2-methylpropyl) ester	0.56	-	0.26	-	0.44	-	1.18	-	0.26	-	-	-	-	-
Phthalic acid, isobutyl octadecyl ester	-	-	-	-	-	-	-	-	-	-	0.79	-	0.11	-
Dodecanal	0.13	-	-	-	-	-	0.42	-	-	-	-	-	-	-
1,2-Benzenedicarboxylic acid, butyl octyl ester	0.32	-	0.15	-	-	-	0.15	-	0.14	-	-	-	-	-

[illegible]

[illegible][illegible]

Acetic acid,1,7,7-trimethyl-bicyclo[2.2.1]hept-2-yl ester	0.10	-	-	-	0.55	-	0.32	-	0.82	-	0.38	-
.gamma.-Elemene	-	-	-	-	0.08	0.36	-	-	-	-	-	-
Caryophyllene	0.13	-	0.11	-	0.79	0.50	0.46	0.19	1.08	0.46	0.48	0.93
.alpha.-Caryophyllene	-	-	-	-	0.15	0.95	0.08	0.12	0.17	0.82	0.09	0.61
1,6-Cyclodecadiene,1-methyl-5-methylene-8-(1-methylethyl)-, [s-(E,E)]-	-	-	-	-	0.13	0.27	0.07	-	0.20	-	0.10	-
Naphthalene,1,2,3,4,4a,5,6,8a-octahydro-7-methyl-4-methylene-1-(1-methylethyl)-,	-	-	0.31	-	0.58	0.15	0.16	0.14	0.31	-	0.28	-
(1.alpha.,4a.alpha.,8a.alpha.)-Naphthalene,1,2,3,5,6,8a-hexahydro-4,7-dimethyl-1-(1-methylethyl)-, (1S-cis)-	-	-	-	-	0.59	0.34	0.21	0.18	0.43	0.25	0.26	0.85
2(4H)-Benzofuranone,5,6,7,7a-tetrahydro-4,4,7a-trimethyl-, (R)-	0.22	-	-	-	0.25	-	0.21	-	0.23	-	0.15	0.89
1H-Cycloprop[e]azulen-7-ol,decahydro-1,1,7-trimethyl-4-methylene-,[1ar-(1a.alpha.,4a.alpha.,7.beta.,7a.beta.,7b.alpha.)]-	-	-	-	-	0.30	-	-	-	-	-	-	-
Caryophyllene oxide	0.11	-	-	-	-	-	-	-	0.07	-	0.13	-
1-Naphthalenol,1,2,3,4,4a,7,8,8a-octahydro-1,6-dimethyl-4-(1-methylethyl)-,[1R-(1.alpha.,4.beta.,4a.beta.,8a.beta.)]-	-	-	-	-	-	-	-	-	-	-	-	-
.tau.-Cadinol	-	-	-	-	0.39	-	-	-	-	-	0.18	-

.alpha.-Cadinol	-	-	-	-	0.48	-	-	-	-	-	0.24	-
2-Undecene, 6-methyl-, (Z)-	0.07	-	-	-	0.13	-	0.16	-	0.09	-	0.07	-
Benzyl Benzoate	-	-	-	-	-	-	-	-	-	-	-	-
1,2-Benzenedicarboxylic acid,bis (2-methylpropyl) ester	0.36	-	0.51	-	0.39	-	0.38	-	0.38	-	0.18	-
Phthalic acid, isobutyl octadecyl ester	-	-	-	-	-	-	-	-	-	-	-	-
Dodecanal	-	-	-	-	-	-	0.04	-	-	-	-	-
1,2-Benzenedicarboxylic acid, butyl octyl ester	0.21	-	0.33	-	0.17	-	0.09	-	-	-	0.12	-
Tetradecanal	-	-	-	-	-	-	-	-	-	-	-	-
Thunbergol	-	-	-	-	-	-	-	-	-	-	-	-
Oleanitrile	0.21	-	0.54	-	0.31	0.45	-	-	-	-	0.15	-
Phytol	0.70	-	0.66	-	1.27	-	5.27	-	4.06	-	1.33	-
Hexadecanamide	0.44	-	0.46	-	0.82	-	-	-	-	-	0.38	-
Nonadecane	-	-	-	-	-	-	-	-	-	-	1.00	-
9-Octadecenamide, (Z)-	-	-	7.76	-	9.35	-	0.45	-	0.29	-	4.67	-
Hexadecanal	-	-	-	-	-	-	-	-	-	-	-	-
Heneicosane	0.28	-	-	-	-	-	0.43	-	0.93	-	3.04	-
Di-n-octyl phthalate	0.09	-	0.41	5.62	0.25	-	-	-	-	-	0.06	-
Hexacosane	-	-	-	0.00	-	-	-	-	-	-	0.32	0.41
Octadecanal	0.64	-	0.56	2.07	-	-	2.80	-	0.23	-	3.71	-
Hentriacontane	1.24	-	-	-	2.27	-	2.59	-	3.29	-	12.20	13.27
13-Docosenamide, (Z)-	1.06	-	1.63	-	1.21	-	1.94	-	1.79	-	-	-
1-Octacosanol	-	-	-	-	-	-	-	-	-	-	-	-
Hexacosanol, acetate	-	-	-	-	-	-	-	-	-	-	0.39	-
Squalene	7.59	74.70	6.81	67.99	10.38	76.19	9.77	37.67	15.29	73.77	0.69	11.33

Geranylgeraniol	-	-	-	-	-	-	-	-	-	-	-	-
Tetratriacontane	-	-	7.19	-	18.11	0.36	20.71	12.18	4.30	-	6.16	52.39
Tetracosanoic acid, 2,9-dimethyl-, methyl ester, [S-(R*,S*)]-	-	-	-	-	-	-	1.52	-	-	-	-	-
Pentatriacontane	1.78	1.42	0.74	-	2.58	-	0.48	0.94	-	-	-	-
Z-2-Octadecen-1-ol	4.18	6.80	-	-	0.73	2.84	4.28	-	-	-	-	-
Tetracontane	27.9 2	1.32	22.01	-	20.62	-	19.59	35.88	3.24	-	0.53	7.04
1-Octacosanol	-	-	-	-	-	-	-	-	-	-	-	-
Methyl octacosanoate	-	-	-	-	-	-	0.89	-	-	-	-	-
dl-.alpha.-Tocopherol	-	-	-	-	-	-	-	-	-	-	-	-
Tritetracontane	1.59	-	1.84	-	1.17	-	-	-	-	-	-	-
Stigmasterol	-	-	-	-	1.16	-	-	-	-	-	-	-
Tetratetracontane	8.34	4.98	19.35	12.87	2.36	-	0.79	2.23	-	-	-	-
.gamma.-Sitosterol	-	-	-	-	2.73	-	-	-	-	-	-	-
4,4,6a,6b,8a,11,11,14b-Octamethyl- 1,4,4a,5,6,6a,6b,7,8,8a,9,10,11,12,12a,1 4,14a,14b-octadecahydro-2H-picen-3- one	-	-	-	-	5.24	-	1.62	-	-	-	-	-
Lanosterol	-	-	-	-	-	-	-	-	-	-	-	-
Urs-12-ene-3.beta.,11.beta.-diol, diacetate	-	-	-	-	1.33	-	-	-	-	-	-	-
Octacosyl acetate	-	-	-	-	-	-	-	-	-	-	-	-
3,11-Dihydroxy-12-ketocholanic acid	-	-	-	-	-	-	-	-	-	-	-	-

Table S1 continued

