



Supplementary Materials

Research Article

A novel technique for extracting terpenoids from aromatic plant materials

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Table S1. Complete gas chromatography dataset.

Volatile compounds detected in at least one *Pinus monophylla* essential oil or DeepSpectra® sample. The compound name, KI, and relative area % are reported for each essential oil sample (A-C) and DeepSpectra® sample (A-C). KI is the Kovat's Index value and was either previously calculated by Robert Adams using a linear calculation on a DB-5 column [12] or, when indicated (*), were manually calculated using alkane standards (MilliporeSigma, Sigma-Aldrich, St. Louis, MS, USA).

Table S1. Complete gas chromatography dataset.

Compound Name	KI	Essential Oil			Deep Spectra Oil		
		A	B	C	A	B	C
tricyclene	921	0.060	0.065	0.068	0.062	0.072	0.066
alpha-thujene	924	5.236	5.274	5.100	5.163	5.116	5.059
alpha-pinene	932	38.938	41.198	39.275	38.948	40.781	40.078
camphene	946	0.871	0.954	0.987	0.882	0.953	0.965
thuja-2,4(10)-diene	953	0.404	0.490	0.489	0.400	0.480	0.500
sabinene	969	4.377	3.978	4.209	4.279	3.854	4.138
beta-pinene	974	1.244	1.319	1.260	1.224	1.272	1.237
myrcene	988	6.107	5.986	5.129	5.908	5.764	4.932
alpha-phellandrene	1002	1.824	1.581	1.709	1.822	1.566	1.648
delta-3-carene	1008	0.141	0.144	0.117	0.144	0.162	0.130
alpha-terpinene	1014	0.099	0.109	0.111	0.111	0.108	0.117
p-cymene	1020	5.508	5.708	6.046	5.527	5.564	6.037
limonene	1024	17.254	16.357	15.499	17.076	16.181	15.592
1,8-cineole	1026	0.001	0.001	0.001	0.001	0.001	0.001
gamma-terpinene	1054	0.192	0.216	0.216	0.233	0.208	0.210
(E)-thujone	1112	0.121	0.129	0.137	0.117	0.124	0.147
alpha-campholenal	1122	0.281	0.306	0.344	0.267	0.310	0.343
trans-pinocarveol	1135	0.370	0.436	0.462	0.308	0.453	0.520
cis-verbenol	1137	0.233	0.311	0.339	0.257	0.289	0.299
trans-verbenol	1140	1.072	1.188	1.457	1.045	1.180	1.391
pinocarvone	1160	0.150	0.167	0.187	0.140	0.178	0.191
p-mentha-1,5-dien-8-ol	1166	0.164	0.173	0.232	0.147	0.205	0.215
terpinen-4-ol	1174	0.261	0.302	0.298	0.254	0.260	0.303
alpha-terpineol	1186	0.099	0.083	0.112	0.101	0.111	0.109
myrtenol	1194	0.077	0.093	0.126	0.079	0.119	0.117
myrtenal	1195	0.144	0.157	0.201	0.155	0.190	0.209
verbenone	1204	0.418	0.455	0.541	0.384	0.521	0.591
cis-carveol	1226	0.101	0.109	0.156	0.104	0.125	0.151
carvone	1239	0.136	0.127	0.230	0.164	0.190	0.203
bornyl acetate	1284	0.300	0.322	0.381	0.307	0.319	0.357
alpha-cubebene	1348	0.129	0.140	0.132	0.159	0.131	0.121
alpha-copaene	1374	1.693	1.577	1.545	1.649	1.557	1.410
beta-elemene	1389	0.637	0.553	0.678	0.646	0.550	0.615
alpha-gurjunene	1409	0.001	nd	0.056	0.051	0.039	0.048
(E)-caryophyllene	1417	4.815	4.222	4.582	4.698	4.193	4.180
alpha-humulene	1452	1.155	0.976	1.062	1.177	0.972	0.942
9-epi-(E)-caryophyllene	1464	0.173	0.158	0.185	0.185	0.170	0.156
gamma-murolene	1478	0.309	0.275	0.331	0.301	0.298	0.310
germacrene D	1480	0.221	0.157	0.227	0.216	0.147	0.178
beta-selinene	1489	0.286	0.218	0.302	0.283	0.235	0.289
epi-cubebol	1493	0.233	0.202	0.265	0.254	0.230	0.261
alpha-murolene	1500	0.473	0.387	0.477	0.468	0.398	0.420
cubebol	1514	0.901	0.748	1.020	0.945	0.870	0.987
delta-cadinene	1522	1.199	1.058	1.174	1.200	1.077	1.068
caryophyllene oxide	1582	0.622	0.564	0.872	0.655	0.704	0.873
humulene epoxide II	1608	0.095	0.094	0.153	0.125	0.123	0.165
epi-alpha-cadinol	1638	0.177	0.164	0.253	0.197	0.219	0.261
alpha-phellandrene dimer	*1795	0.001	0.001	0.001	0.001	0.001	0.001
thunbergol	*2094	0.001	0.001	0.001	0.350	0.436	0.539
Total		99.304	99.233	98.735	99.169	99.006	98.680