J. Braz. Chem. Soc., Vol. 25, No. 8, S1-S17, 2014.
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0103 - 5053 $6.00+0.00

Supplementary Information

Chemical Composition and Multivariate Analysis of the Volatile Oil of *Dalbergia frutescens* (Vell.) Britton (Fabaceae)

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Table S1. Comparative statistical analysis of the chemical composition of volatile oil samples from specimens BI, BII and BIII for the months from January to April

Constituint	Retention index		Relative percentage area / %[c]											
			January			February			March			April		
	LRI_C[a]	LRI_L[b]	BI	BII	BIII	BI	BII	BIII	BI	BII	BIII	BI	BII	BIII
(2E,4E)-hexadienal	910	910	n.d.	n.d.	n.d.	0.86B	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
n-heptanol	970	967	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	0.46B	n.d.	n.d.	n.d.	n.d.	n.d.
1-octen-3-ol	979	979	0.50B	n.d.	0.72C	1.06B	n.d.	1.05B	1.51B	n.d.	n.d.	n.d.	0.43B	n.d.
(2E,4E)-heptadienal	1016	1013	n.d.	n.d.	n.d.	0.28B	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	0.89B	n.d.
Phenyl acetaldehyde	1042	1042	n.d.	n.d.	n.d.	0.36B	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
(E)-β-ocimene	1048	1050	n.d.	n.d.	n.d.	0.53B	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
Trans-linalool oxide	1073	1073	n.d.	n.d.	n.d.	0.27B	n.d.	1.24C	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
Cis-linalool oxide	1088	1087	n.d.	n.d.	n.d.	n.d.	n.d.	0.46B	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
Linalool	1100	1097	8.47B	10.49C	0.73A	8.63C	4.75B	3.8A	10.43C	3.29B	0.52A	n.d.	0.34B	1.03C
n-nonanal	1103	1101	0.54B	3.92C	n.d.	1.11A	1.71B	1.75B	1.28B	1.49C	n.d.	n.d.	1.16B	n.d.
2-methyl-6-methylene-1,7-octadien-3-one	1119	1117	n.d.	n.d.	n.d.	0.68B	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
Cis, p-ment-2-en-1-ol	1124	1122	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	0.38B	n.d.	n.d.	n.d.	n.d.
Terpinen-4-ol	1178	1177	n.d.	n.d.	n.d.	n.d.	n.d.	0.64B	n.d.	1.81B	n.d.	n.d.	n.d.	n.d.
α-terpineol	1190	1189	0.83B	1.27C	n.d.	0.99B	0.46A	0.45A	0.50C	0.32B	n.d.	n.d.	n.d.	n.d.
Safranal	1201	1201	n.d.	n.d.	0.71B	n.d.	n.d.	1.18B	n.d.	0.29B	n.d.	n.d.	0.91B	n.d.
β-cyclo-citral	1219	1219	n.d.	n.d.	0.89B	0.79A	0.95C	0.88B	n.d.	n.d.	n.d.	n.d.	1.75B	n.d.
Cis, p-mentha-1(7)-,8-dien-2-ol	1234	1231	0.70B	1.59C	n.d.	n.d.	n.d.	n.d.	0.44B	n.d.	n.d.	n.d.	n.d.	n.d.
Pulegone	1242	1241	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	0.99B	n.d.
Geraniol	1256	1255	n.d.	n.d.	n.d.	0.86B	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
Dihydroedulan I	1292	1292	n.d.	n.d.	n.d.	n.d.	0.91B	n.d.	n.d.	0.79B	n.d.	n.d.	n.d.	n.d.
4-vinyl-guaiacol	1313	1309	n.d.	n.d.	3.94B	n.d.	n.d.	3.91B	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
α-copaene	1377	1377	1.84C	n.d.	0.94B	0.82C	0.21B	n.d.	0.41B	n.d.	n.d.	n.d.	n.d.	n.d.
(3Z)-hexenyl caproate	1383	1382	0.93B	n.d.	n.d.	n.d.	0.16A	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
(E)-β-damascenone	1385	1385	15.83A	19.18B	31.89C	10.98A	13.85B	41.06C	29.72C	14.30A	26.86B	21.70B	35.25C	5.60A
β-cubebene	1390	1390	2.43A	9.73C	8.68B	1.11A	4.40B	9.44C	2.67B	1.69A	3.73C	6.19B	10.18C	n.d.

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Table S1. continuation

Constituint	Retention index		Relative percentage area / %[c]											
			January			February			March			April		
	LRI_C[a]	LRI_L[b]	BI	BII	BIII	BI	BII	BIII	BI	BII	BIII	BI	BII	BIII
(E)-β-damascone	1415	1414	n.d.	n.d.	4.33B	n.d.	n.d.	2.71B	n.d.	n.d.	0.67B	n.d.	0.89	n.d.
α-cedrene	1415	1412	1.03A	1.18B	11.23C	1.57A	3.28B	10.64C	5.33B	4.9A	5.56C	23.26C	14.84B	n.d.
(E)-caryophyllene	1419	1419	1.76B	n.d.	3.06C	0.92B	0.96B	n.d.	n.d.	n.d.	1.11B	n.d.	n.d.	n.d.
(E)-α-ionone	1430	1430	6.47C	5.80B	n.d.	3.38B	3.86C	0.79A	5.88B	4.42A	13.05C	2.86A	5.03B	9.02C
Geranyl-acetone	1455	1455	3.00B	3.84C	2.32A	0.98A	2.77C	1.15B	2.41A	6.40C	6.34B	1.55A	6.49C	1.73B
(Allo)-aromadendrene	1460	1460	n.d.	n.d.	2.62B	n.d.	0.39B	1.24C	n.d.	0.46	n.d.	n.d.	n.d.	n.d.
Germacrene D	1480	1480	n.d.	n.d.	0.77B	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
(E)-β-ionone	1489	1489	21.84C	19.79B	3.45A	6.37B	12.77C	2.42A	13.92B	11.73A	18.69C	19.51C	10.31A	13.10B
10, 11-epoxy-calamenene	1494	1492	0.66B	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
δ-cadinene	1523	1523	n.d.	n.d.	0.74B	0.30B	0.20B	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
Trans-calamenene	1529	1529	0.96B	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
α-calacorene	1546	1546	3.57C	0.69B	n.d.	0.36B	0.71C	n.d.	0.67B	n.d.	n.d.	n.d.	n.d.	n.d.
Germacrene B	1557	1557	n.d.	n.d.	0.09A	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	1.26B	n.d.
(E)-nerolidol	1564	1563	1.16B	n.d.	n.d.	0.57B	1.06C	n.d.	0.44B	n.d.	n.d.	n.d.	n.d.	1.14B
(3Z)-hexenyl benzoate	1573	1573	3.41B	n.d.	n.d.	0.55B	3.31C	n.d.	14.32C	1.07B	0.84A	n.d.	n.d.	5.63B
Dendrolasin	1582	1582	2.06C	1.11B	n.d.	50.84C	25.07B	n.d.	1.14A	19.60C	6.27B	n.d.	n.d.	49.63B
Spathulenol	1585	1578	1.35B	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	10.79B	n.d.	n.d.
Caryophyllene oxide	1588	1587	1.27C	n.d.	1.01B	n.d.	0.91B	n.d.	n.d.	0.77B	1.10C	5.47C	0.69B	0.54A
α-cadinol	1654	1654	4.23C	1.50B	n.d.	0.80B	1.26C	n.d.	n.d.	n.d.	n.d.	0.71B	n.d.	n.d.
Cadalene	1678	1677	0.80B	1.05C	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
Tetradecanol	1681	1680	n.d.	n.d.	1.81B	n.d.	n.d.	1.14B	n.d.	n.d.	1.96B	n.d.	n.d.	2.12B
Pentadecanal	1712	1711	n.d.	2.97B	3.72C	n.d.	3.44C	1.57B	n.d.	n.d.	0.93B	n.d.	0.78B	n.d.
Pentadecan-2-one	1843	1841	1.56A	2.37B	6.41C	n.d.	1.43B	4.59C	0.66A	0.99B	1.89C	n.d.	1.09B	3.92C
(9Z,17Z)-octadecadienal	1886	1879	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	1.86B	n.d.	n.d.	n.d.	n.d.
Methyl-(9Z,12Z,15Z)-octadecatrienate	1894	1893	n.d.	n.d.	2.05B	n.d.	1.14B	n.d.	n.d.	7.37B	n.d.	n.d.	n.d.	n.d.
(5E,9E)-farnesyl acetone	1921	1921	3.49B	4.56C	n.d.	0.27B	2.80C	n.d.	1.01A	7.92C	5.18B	n.d.	3.14C	1.75B
Methyl hexadecanoate	1925	1925	n.d.	n.d.	n.d.	n.d.	0.85B	n.d.	n.d.	n.d.	n.d.	n.d.	0.67C	0.36B

[a]Retention index calculated based on a standard mixture of C_7-C_{30} hydrocarbons; [b]retention index from the literature,[1] obtained for an RTX-5MS column; [c]relative percentage areas, calculated based on the peak areas, and the average values of three injections. Means followed by a different letter between columns for each month indicate significant differences (Tukey's test at 5% probability); n.d.: not detected by the method employed.

Table S2. Comparative statistical analysis of the chemical composition of volatile oil samples from specimens BI, BII, and BIII for the months from May to August

Constituint	Retention index		Relative percentage area / %[c]											
			May			June			July			August		
	LRI_C[a]	LRI_L[b]	BI	BII	BIII	BI	BII	BIII	BI	BII	BIII	BI	BII	BIII
(2E)-hexenal	859	855	1.89B	n.d.	n.d.	n.d.	n.d.	n.d.	5.57C	1.51B	n.d.	n.d.	n.d.	n.d.
(3Z)-hexenol	861	859	11.73B	n.d.	n.d.	21.40B	n.d.	n.d.	7.69C	3.05B	1.09A	n.d.	n.d.	n.d.
1-hexanol	871	871	30.74B	n.d.	n.d.	51.31B	n.d.	n.d.	9.54C	0.94B	0.47A	n.d.	n.d.	n.d.
(2E,4E)-hexadienal	910	910	n.d.	n.d.	0.30B	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
1-octen-3-ol	979	979	0.57B	0.39A	0.75C	n.d.	0.86B	1.19C	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
6-methyl-hept-5-en-2-one	987	986	n.d.	n.d.	n.d.	n.d.	0.66B	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
(2E,4E)-heptadienal	1016	1013	n.d.	0.44B	0.88C	n.d.	n.d.	n.d.	1.00B	1.22C	n.d.	n.d.	n.d.	n.d.
Cis-sabinene hydrate	1073	1069	n.d.	n.d.	n.d.	n.d.	1.25B	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
Trans-linalool oxide	1073	1073	n.d.	0.84B	n.d.	n.d.	n.d.	0.88B	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
Linalool	1100	1097	3.54C	3.36B	0.70A	4.65C	4.18B	2.87A	4.72B	n.d.	n.d.	3.79B	12.57C	2.98A
n-Nonanal	1103	1101	n.d.	2.45C	1.12B	n.d.	n.d.	1.43B	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
(E)-2,6-dimethyl-1,3,7-octatrien-6-ol	1112	1101	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	1.39B	n.d.	n.d.	n.d.	n.d.	n.d.
Isophorone	1121	1121	n.d.	n.d.	n.d.	n.d.	2.32B	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.

Table S2. continuation

Constituint	Retention index		Relative percentage area / %[c]											
			May			June			July			August		
	LRI_C[a]	LRI_L[b]	BI	BII	BIII	BI	BII	BIII	BI	BII	BIII	BI	BII	BIII
Terpinen-4-ol	1178	1177	n.d.	n.d.	n.d.	n.d.	6.12B	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	1.07B
(3Z)-hexenyl butirate	1189	1187	n.d.	n.d.	1.58B	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
α-terpineol	1190	1189	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	0.64B	n.d.	n.d.	n.d.	n.d.	n.d.
Safranal	1201	1201	n.d.	0.92C	0.76B	n.d.	1.80C	0.87B	0.75B	n.d.	n.d.	n.d.	n.d.	1.23B
β-cyclo-citral	1219	1219	n.d.	1.03B	1.01B	n.d.	1.42C	0.71B	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
Dihydro-cumarone	1226	1224	n.d.	n.d.	n.d.	n.d.	n.d.	1.18B	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
Cis, p-mentha-1(7)-,8-dien-2-ol	1234	1231	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	0.81	0.89B	n.d.	n.d.	n.d.	n.d.
Pulegone	1242	1241	n.d.	n.d.	n.d.	6.87B	n.d.	n.d.	n.d.	1.43B	n.d.	n.d.	n.d.	n.d.
Dihydroedulan I	1292	1292	n.d.	2.67B	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
4-vynil-guaiacol	1313	1309	2.76B	n.d.	n.d.	n.d.	1.79B	5.99C	2.16B	n.d.	8.70C	n.d.	n.d.	9.90B
Citronellyl acetate	1340	1353	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	1.87B	n.d.	3.60C
Verbanol acetate	1349	1344	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	1.28B	n.d.	2.51C	n.d.	n.d.	n.d.
p-mentha-1,4-dien-7-ol	1345	1333	n.d.	0.49B	0.49B	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
Eugenol	1361	1359	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	1.53B
α-copaene	1377	1377	5.02B	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
(3Z)-hexenyl caproate	1383	1382	n.d.	n.d.	1.29	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
(E)-β-damascenone	1385	1385	16.26A	31.40B	36.87C	11.48B	8.82A	32.29C	23.58C	15.68A	23.00B	18.38C	n.d.	12.60B
7-epi-sesquithujene	1390	1387	n.d.	n.d.	n.d.	n.d.	1.38B	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
β-cubebene	1390	1390	1.63A	12.79C	10.35B	n.d.	n.d.	8.11B	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
β-longipinene	1402	1401	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	4.07A	6.95C	6.21B	5.29B	n.d.	n.d.
(E)-β-damascone	1415	1414	n.d.	n.d.	1.45B	n.d.	0.58B	1.97C	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
α-cedrene	1415	1412	7.70A	9.38B	14.60C	n.d.	1.07B	9.85C	14.08C	1n.d.	12.68B	11.37C	1.63A	10.83B
(E)-caryophyllene	1419	1419	n.d.	1.10B	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	4.62B	n.d.
(E)-α-ionone	1430	1430	1.46B	3.62C	1.05A	n.d.	1.99C	0.76B	2.53C	2.37B	1.95A	3.19C	n.d.	2.15B
Geranyl-acetone	1455	1455	0.71A	3.08C	2.55B	n.d.	8.84C	1.05B	2.16A	5.40C	2.28B	4.35B	6.92C	4.21A
(Allo)-aromadendrene	1460	1460	n.d.	0.70B	n.d.	n.d.	n.d.	1.56B	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
(4E)-(2,3,6-trimethyl-phenyl)-3-buten-2-one	1488	1475	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	1.78C	n.d.	1.54B
(E)-β-ionone	1489	1489	6.88B	8.66C	6.46A	n.d.	10.01C	2.25B	7.87B	7.91C	6.74A	9.54C	8.34B	7.97A
(E)-nerolidol	1564	1563	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	3.11C	n.d.	1.80B
(3Z)-hexenyl benzoate	1573	1573	n.d.	1.75B	2.37C	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	3.17B	n.d.	n.d.
Dendrolasin	1582	1582	n.d.	2.38B	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	4.68B	8.87C	n.d.	4.15B
Spathulenol	1585	1578	3.69B	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	2.08B	n.d.	4.68C
Caryophyllene oxide	1588	1587	n.d.	n.d.	n.d.	n.d.	1.34B	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
β-acorenol	1636	1636	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	15.79C	2.07B
Zingiberenol	1636	1635	n.d.	n.d.	n.d.	n.d.	1.40B	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
(E)-citronellyl tiglate	1671	1668	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	4.04B	n.d.
Tricoacorenol	1677	1673	n.d.	n.d.	n.d.	n.d.	7.51B	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
Tetradecanol	1681	1680	n.d.	n.d.	1.69B	n.d.	n.d.	2.73B	1.14A	1.61B	2.46C	3.23C	2.85B	1.86A
Acorenone B	1702	1696	n.d.	n.d.	n.d.	n.d.	3.45B	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
Pentadecanal	1712	1711	n.d.	1.60C	1.15B	n.d.	6.55C	4.51B	2.71A	17.27C	13.76B	3.68A	5.91B	5.92B
Benzyl benzoate	1772	1760	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	14.46B	n.d.
Pentadecan-2-one	1843	1841	n.d.	1.31B	1.52C	n.d.	6.33B	7.05C	1.04B	1.83C	n.d.	6.14B	13.79C	3.81A
Flourensadiol	1877	1870	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	0.23B	n.d.	n.d.	n.d.	0.86B
(9Z,17Z)-octadecadienal	1886	1879	n.d.	n.d.	n.d.	n.d.	1.05C	0.31B	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
Methyl-(9Z,12Z,15Z)-octadecatrienate	1894	1893	n.d.	1.85B	n.d.	n.d.	3.03C	2.33B	n.d.	19.82C	5.19B	n.d.	n.d.	1.40B
(5E,9E)-farnesyl acetone	1921	1921	n.d.	1.18B	1.99C	n.d.	7.25C	0.45B	n.d.	n.d.	n.d.	3.52B	n.d.	3.92C
Methyl hexadecanoate	1925	1925	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	4.94B	n.d.
8,12-octadecadienoic acid	2097	2094	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	1.74B	n.d.

[a]Retention index calculated based on a standard mixture of C_7-C_{30} hydrocarbons; [b]retention index from the literature,[1] obtained for an RTX-5MS column; [c]relative percentage areas, calculated based on the peak areas, and the average values of three injections. Means followed by a different letter between columns for each month indicate significant differences (Tukey's test at 5% probability); n.d.: not detected by the method employed.

Table S3. Comparative statistical analysis of the chemical composition of volatile oil samples from specimens BI, BII and BIII for the months from September to December

Constituint	Retention index		Relative percentage area / %[c]											
			September			October			November			December		
	LRI_C[a]	LRI_L[b]	BI	BII	BIII	BI	BII	BIII	BI	BII	BIII	BI	BII	BIII
α-thujene	934	930	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	0.72B	n.d.	n.d.
1-octen-3-ol	979	979	n.d.	n.d.	4.06B	n.d.	n.d.	n.d.	n.d.	n.d.	0.64B	n.d.	n.d.	1.14B
(2E,4E)-heptadienal	1016	1013	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	0.70B	n.d.	n.d.	n.d.
Limonene	1029	1029	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	2.89B	n.d.	n.d.
n-Octanol	1071	1068	0.66B	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
Trans-linalool oxide	1073	1073	0.74B	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	2.79B	n.d.	n.d.	n.d.	n.d.
Cis-linalool oxide	1088	1087	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	2.13B	n.d.	n.d.	n.d.	n.d.
Linalool	1100	1097	6.07B	9.64C	4.15A	12.43C	8.46B	2.59A	14.71C	12.18B	1.57A	13.76C	12.71B	5.12A
n-Nonanal	1103	1101	1.65C	n.d.	1.39B	n.d.	0.99A	2.05B	1.06A	1.16B	2.14C	n.d.	2.80C	0.60B
2,6-dimethyl-cyclo-hexanol	1106	1106	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	1.19B	n.d.	n.d.	0.58B
α-terpineol	1190	1189	n.d.	n.d.	n.d.	n.d.	1.77B	n.d.	1.30B	2.11C	n.d.	1.44B	1.56C	n.d.
Safranal	1201	1201	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	0.42B
β-cyclo-citral	1219	1219	n.d.	n.d.	1.78B	n.d.	n.d.	n.d.	n.d.	n.d.	2.12B	n.d.	n.d.	1.90B
Cis-(3Z)-hexenyl-2-methyl-butanoate	1231	1231	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	0.47B	n.d.	n.d.	n.d.
Cis, p-mentha-1(7)-,8-dien-2-ol	1234	1231	n.d.	n.d.	n.d.	n.d.	n.d.	0.47B	n.d.	n.d.	n.d.	1.45C	0.84B	n.d.
Pulegone	1242	1241	1.09B	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	2.22B	n.d.
Geraniol	1256	1255	n.d.	n.d.	n.d.	n.d.	1.69B	n.d.	n.d.	n.d.	n.d.	n.d.	1.09B	n.d.
p-mentha-1,4-dien-7-ol	1345	1333	n.d.	n.d.	n.d.	n.d.	1.40B	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
α-ylangene	1376	1375	n.d.	n.d.	1.15B	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	1.54B
2-butyl-2-octenal	1376	1378	1.75C	1.12B	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
α-copaene	1377	1377	0.93B	n.d.	n.d.	n.d.	0.99B	1.64C	0.65B	n.d.	n.d.	1.10B	n.d.	n.d.
(3Z)-Hexenyl caproate	1383	1382	n.d.	n.d.	n.d.	n.d.	5.74B	n.d.	0.55B	n.d.	0.69C	n.d.	n.d.	n.d.
(E)-β-damascenone	1385	1385	n.d.	2.50B	13.12C	4.50B	8.59C	1.73A	13.59C	1.51A	11.17B	21.39C	12.81A	21.24B
β-cubebene	1390	1390	n.d.	n.d.	n.d.	n.d.	4.13B	n.d.	n.d.	n.d.	n.d.	3.91B	7.67C	0.57A
(E)-β-damascone	1415	1414	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	0.46B	n.d.	n.d.	1.13B
α-cedrene	1415	1412	n.d.	n.d.	n.d.	n.d.	3.71B	n.d.	n.d.	n.d.	n.d.	n.d.	2.14C	0.56B
(E)-caryophyllene	1419	1419	n.d.	n.d.	1.97B	n.d.	1.82B	n.d.	n.d.	n.d.	1.18B	n.d.	n.d.	3.62B
(E)-α-ionone	1430	1430	2.52B	n.d.	15.04C	2.23B	2.06A	10.98C	2.46A	3.77B	20.87C	5.55B	2.36A	14.40C
(3Z)-Hexenyl -(2Z)-hexenoate	1435	1432	n.d.	n.d.	n.d.	n.d.	2.13B	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
Geranyl-acetone	1455	1455	1.44A	2.49B	2.82C	n.d.	2.66B	4.88C	1.77A	1.91B	3.46C	4.67C	3.15B	2.31A
(E)-β-ionone	1489	1489	20.50B	19.71A	29.43C	52.32C	12.76A	35.36B	16.43A	22.15B	32.27C	25.76B	13.75A	31.13C
10,11-epoxy-calamenene	1494	1492	1.42B	1.81C	n.d.	n.d.	n.d.	n.d.	n.d.	1.82B	n.d.	n.d.	n.d.	n.d.
Cubebol	1521	1518	1.21B	1.42C	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
δ-cadinene	1523	1523	n.d.	n.d.	0.91B	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
Trans-calamenene	1529	1529	1.73B	1.97C	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
(R)-5,6,7,7-α-tetrahydro-4-4-7a-trimethyl-2(4h)-benzofuranone	1531	1525	2.84B	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	2.00B	n.d.	n.d.	n.d.	n.d.
α-calacorene	1546	1546	n.d.	n.d.	n.d.	n.d.	2.15B	n.d.	1.57B	n.d.	n.d.	1.25C	1.06B	n.d.
Italicene epoxide	1552	1549	0.72B	1.18C	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
(E)-nerolidol	1564	1563	1.96B	1.94B	n.d.	n.d.	1.73B	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
(3Z)-Hexenyl-benzoate	1573	1573	n.d.	n.d.	1.08B	n.d.	5.65B	n.d.	12.48C	1.39A	1.76B	n.d.	5.07C	1.28B
Dendrolasin	1582	1582	n.d.	n.d.	n.d.	n.d.	n.d.	23.63B	16.96B	n.d.	n.d.	n.d.	3.83B	n.d.
Spathulenol	1585	1578	1.74B	n.d.	3.31C	n.d.	n.d.	n.d.	n.d.	n.d.	5.10B	n.d.	n.d.	0.95B
Caryophyllene oxide	1588	1587	5.48C	2.91B	2.73A	n.d.	n.d.	n.d.	n.d.	n.d.	2.25B	n.d.	n.d.	0.80B
β-acorenol	1636	1636	2.37C	2.05B	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
Cubenol	1650	1647	1.44B	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
α-cadinol	1654	1654	8.22B	8.30C	n.d.	7.45C	4.78B	3.81A	3.87B	4.22C	n.d.	4.04C	2.41B	n.d.
Cadalene	1678	1677	3.35B	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	4.53B	n.d.	n.d.	n.d.	n.d.
Tetradecanol	1681	1680	6.86C	6.38B	n.d.	n.d.	0.81B	n.d.	n.d.	5.54B	n.d.	n.d.	n.d.	n.d.
Pentadecanal	1712	1711	n.d.	n.d.	0.81B	1.39B	3.68C	n.d.	n.d.	11.26C	1.66B	n.d.	5.03B	n.d.
(2E, 6E)-farnesol	1726	1725	n.d.	5.45B	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
Farnesal	1746	1737	n.d.	n.d.	n.d.	n.d.	n.d.	3.20B	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.

Table S3. continuation

Constituint	Retention index		Relative percentage area / %[c]											
			September			October			November			December		
	LRI_C[a]	LRI_L[b]	BI	BII	BIII	BI	BII	BIII	BI	BII	BIII	BI	BII	BIII
Pentadecan-2-one	1843	1841	6.54C	6.22B	3.20A	4.66B	6.93C	3.72A	1.90A	10.88C	2.17B	1.64A	2.15C	2.01B
Methyl-(9Z,12Z,15Z)-octadecatrienate	1894	1893	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	3.40B	n.d.
(5E,9E)-farnesyl acetone	1921	1921	0.92A	3.11C	1.97B	n.d.	3.72C	1.95B	0.99A	1.62B	2.56C	3.19C	2.78B	0.85A
Methyl hexadecanoate	1925	1925	9.78B	14.01C	2.95A	10.32C	2.80B	1.19A	0.58A	2.03B	2.69C	n.d.	1.77C	1.43B

[a]Retention index calculated based on a standard mixture of C_7-C_{30} hydrocarbons; [b]retention index from the literature,[1] obtained for an RTX-5MS column; [c]relative percentage areas, calculated based on the peak areas, and the average values of three injections. Means followed by a different letter between columns for each month indicate significant differences (Tukey's test at 5% probability); n.d.: not detected by the method employed.

Reference

1. Adams, R.; *Essential Oil Components by Quadrupole GC/MS*, Allured Publishing Corp.: Carol Stream, USA, 2001.

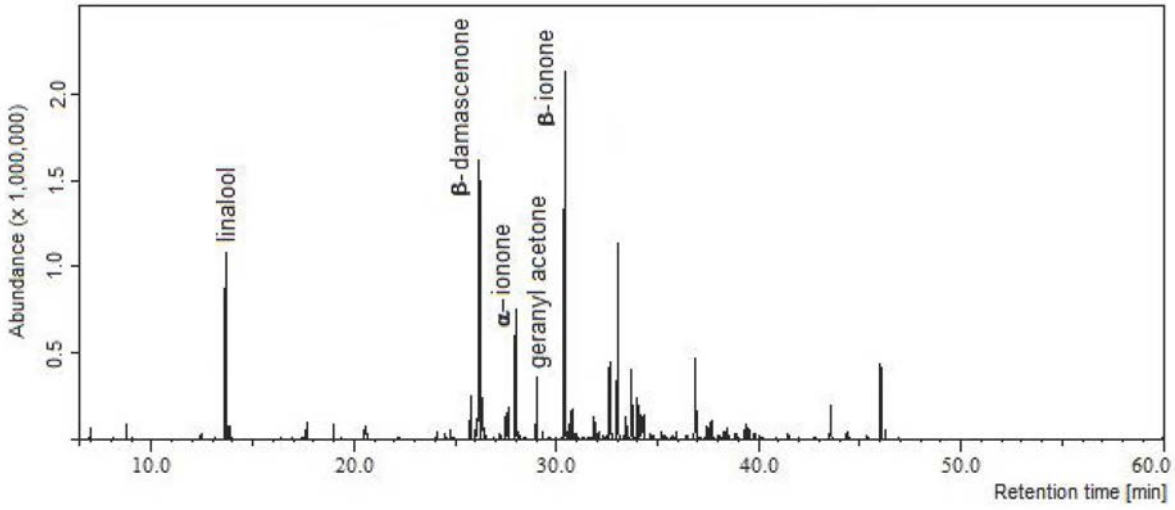

Figure S1. Total ion chromatogram of the volatile oil from leaves of the BI specimen of *D. frutescens* collected in January. Analysis conditions: RTX-5MS column; helium carrier gas; oven temperature 50 to 290 °C at 4 °C min^{-1}; injector temperature 240 °C; ion source temperature 260 °C; interface temperature 280 °C.

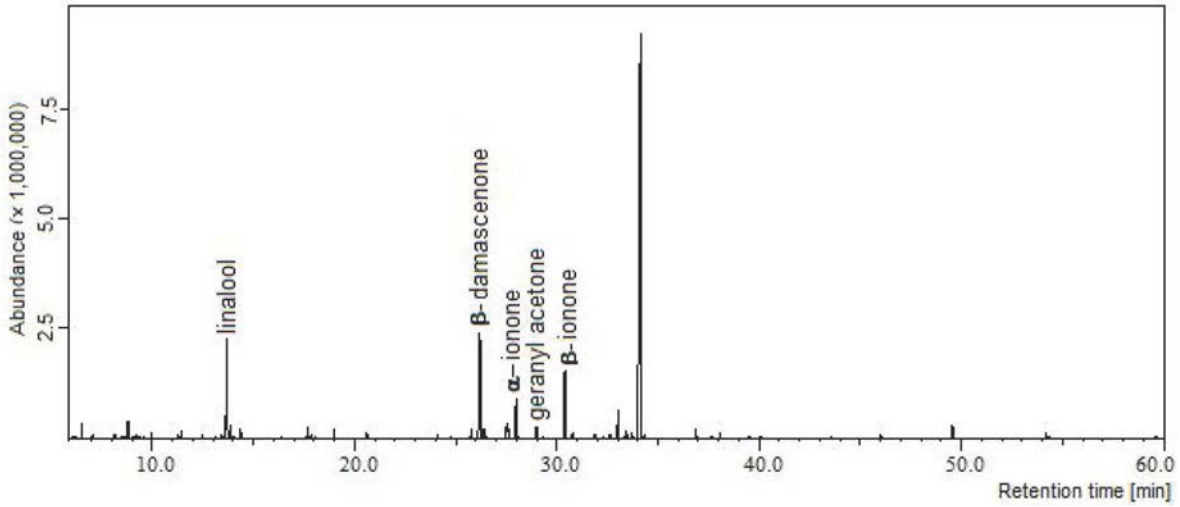

Figure S2. Total ion chromatogram of the volatile oil from leaves of the BI specimen of *D. frutescens* collected in February. Analysis conditions: RTX-5MS column; helium carrier gas; oven temperature 50 to 290 °C at 4 °C min^{-1}; injector temperature 240 °C; ion source temperature 260 °C; interface temperature 280 °C.

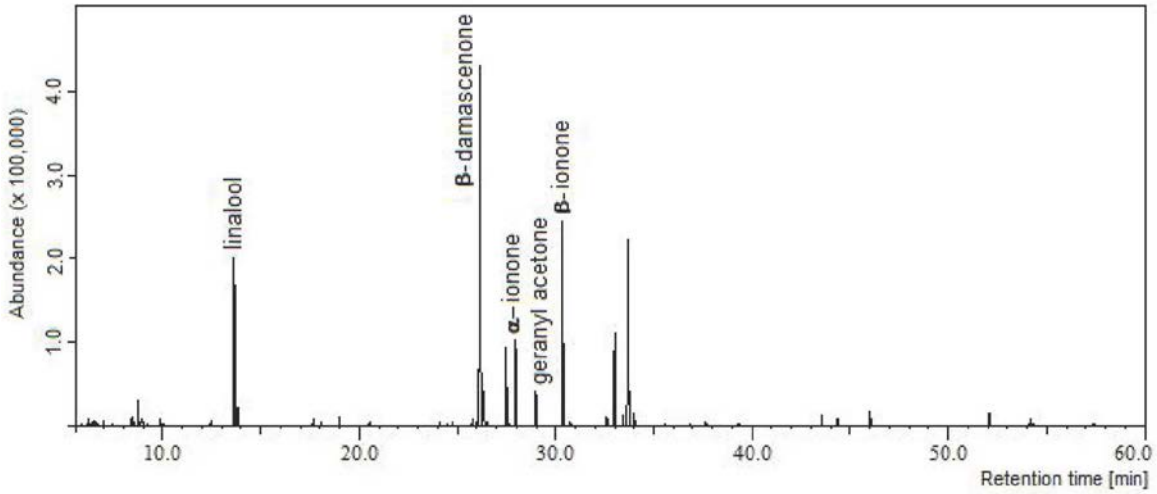

Figure S3. Total ion chromatogram of the volatile oil from leaves of the BI specimen of *D. frutescens* collected in March. Analysis conditions: RTX-5MS column; helium carrier gas; oven temperature 50 to 290 °C at 4 °C min^{-1}; injector temperature 240 °C; ion source temperature 260 °C; interface temperature 280 °C.

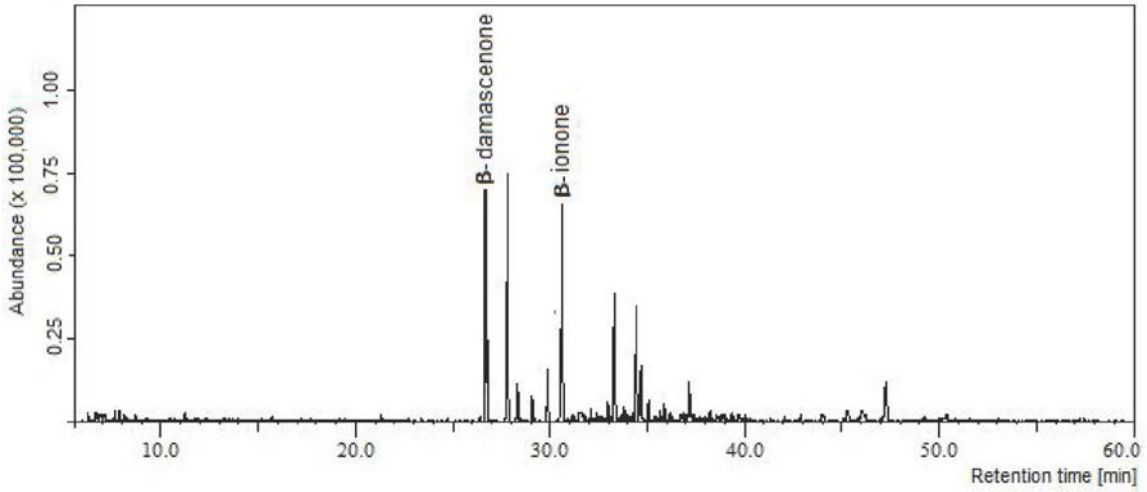

Figure S4. Total ion chromatogram of the volatile oil from leaves of the BI specimen of *D. frutescens* collected in April. Analysis conditions: RTX-5MS column; helium carrier gas; oven temperature 50 to 290 °C at 4 °C min^{-1}; injector temperature 240 °C; ion source temperature 260 °C; interface temperature 280 °C.

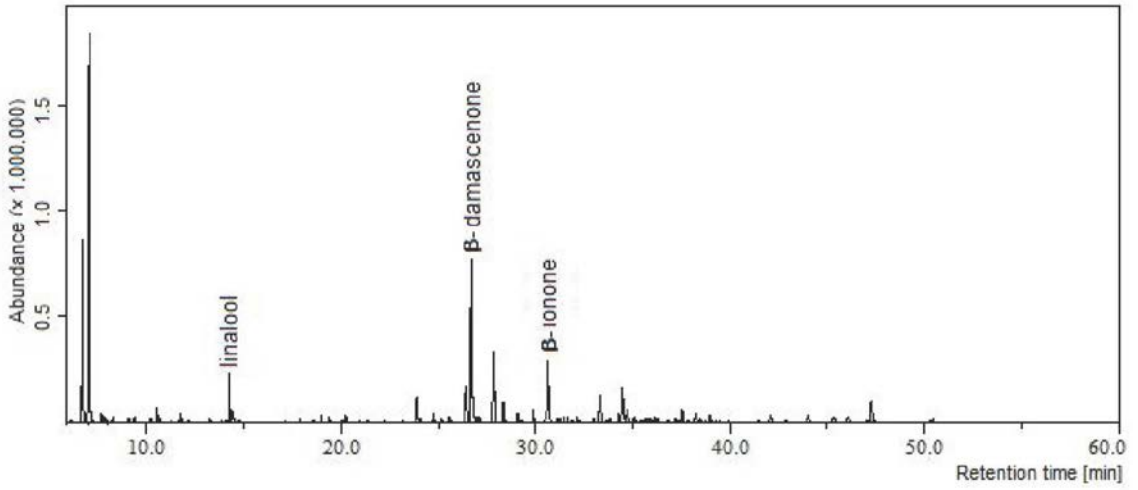

Figure S5. Total ion chromatogram of the volatile oil from leaves of the BI specimen of *D. frutescens* collected in May. Analysis conditions: RTX-5MS column; helium carrier gas; oven temperature 50 to 290 °C at 4 °C min^{-1}; injector temperature 240 °C; ion source temperature 260 °C; interface temperature 280 °C.

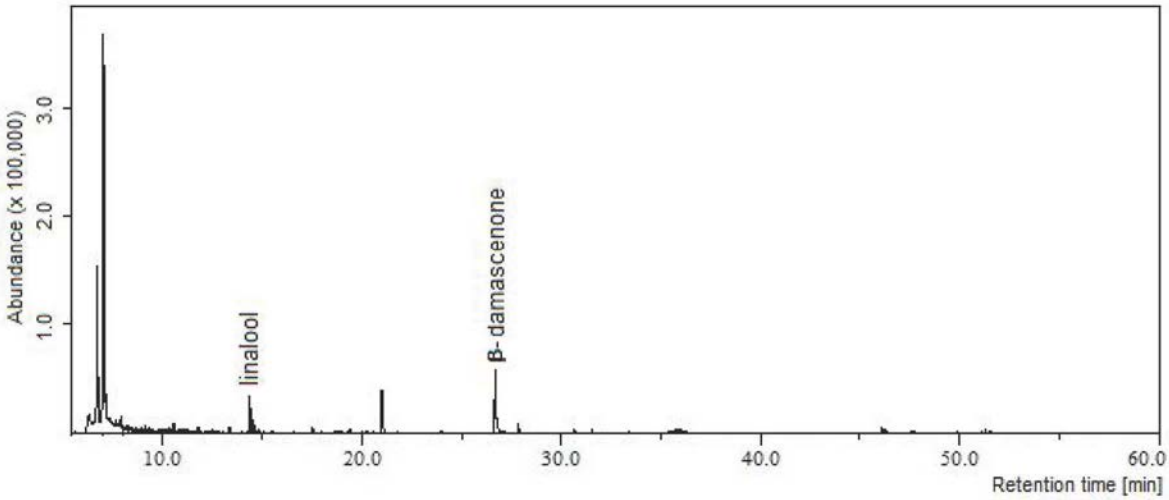

Figure S6. Total ion chromatogram of the volatile oil from leaves of the BI specimen of *D. frutescens* collected in June. Analysis conditions: RTX-5MS column; helium carrier gas; oven temperature 50 to 290 °C at 4 °C min^{-1}; injector temperature 240 °C; ion source temperature 260 °C; interface temperature 280 °C.

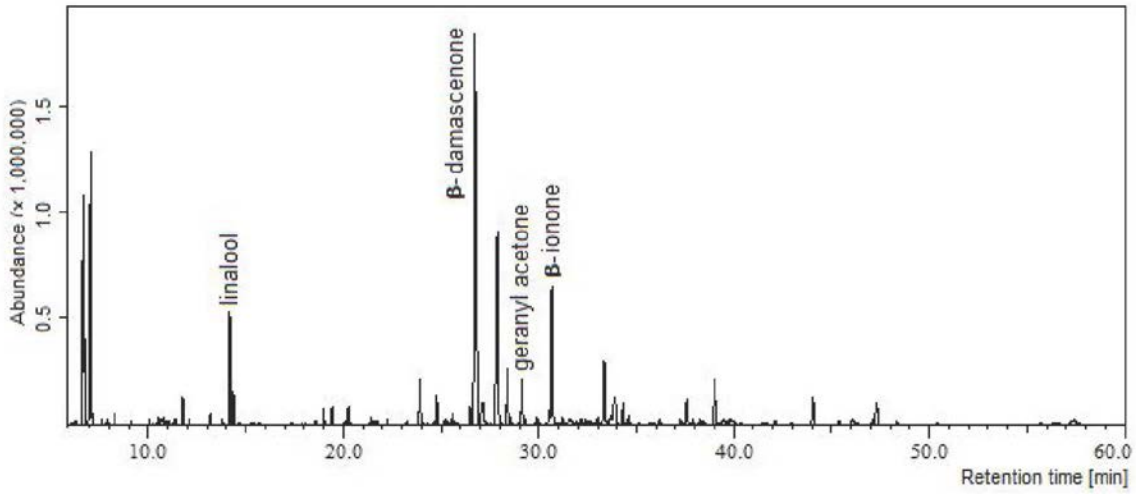

Figure S7. Total ion chromatogram of the volatile oil from leaves of the BI specimen of *D. frutescens* collected in July. Analysis conditions: RTX-5MS column; helium carrier gas; oven temperature 50 to 290 °C at 4 °C min^{-1}; injector temperature 240 °C; ion source temperature 260 °C; interface temperature 280 °C.

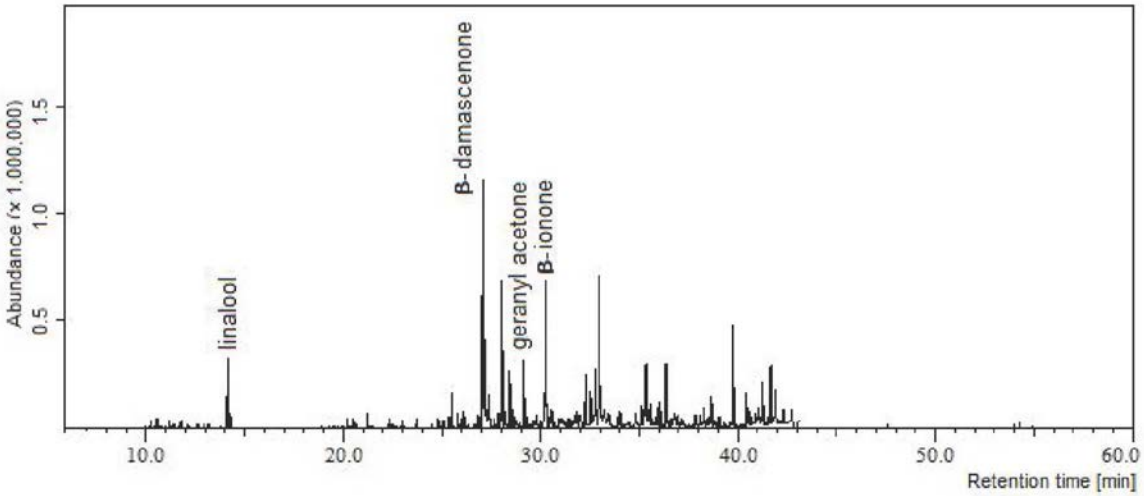

Figure S8. Total ion chromatogram of the volatile oil from leaves of the BI specimen of *D. frutescens* collected in August. Analysis conditions: RTX-5MS column; helium carrier gas; oven temperature 50 to 290 °C at 4 °C min^{-1}; injector temperature 240 °C; ion source temperature 260 °C; interface temperature 280 °C.

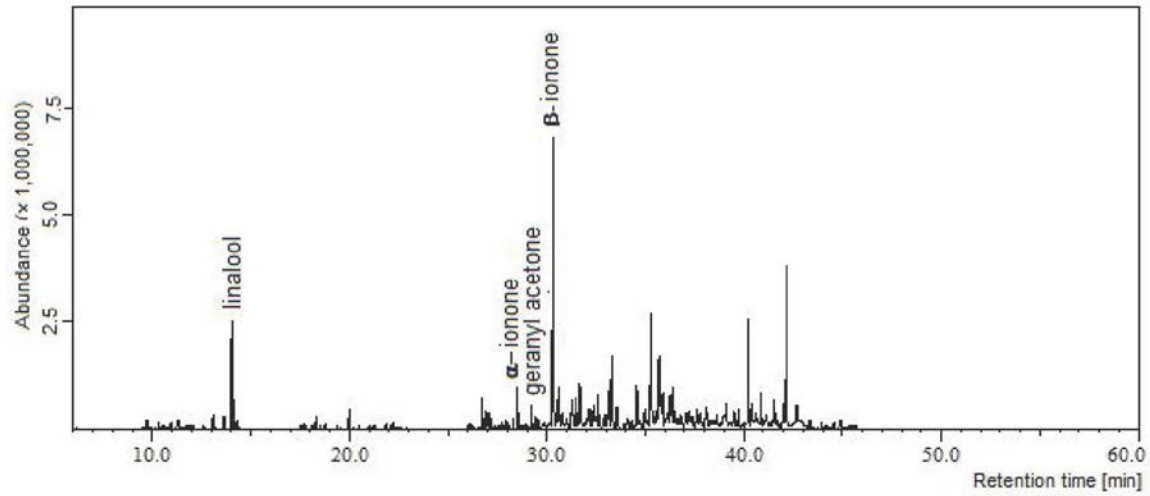

Figure S9. Total ion chromatogram of the volatile oil from leaves of the BI specimen of *D. frutescens* collected in September. Analysis conditions: RTX-5MS column; helium carrier gas; oven temperature 50 to 290 °C at 4 °C min^{-1}; injector temperature 240 °C; ion source temperature 260 °C; interface temperature 280 °C.

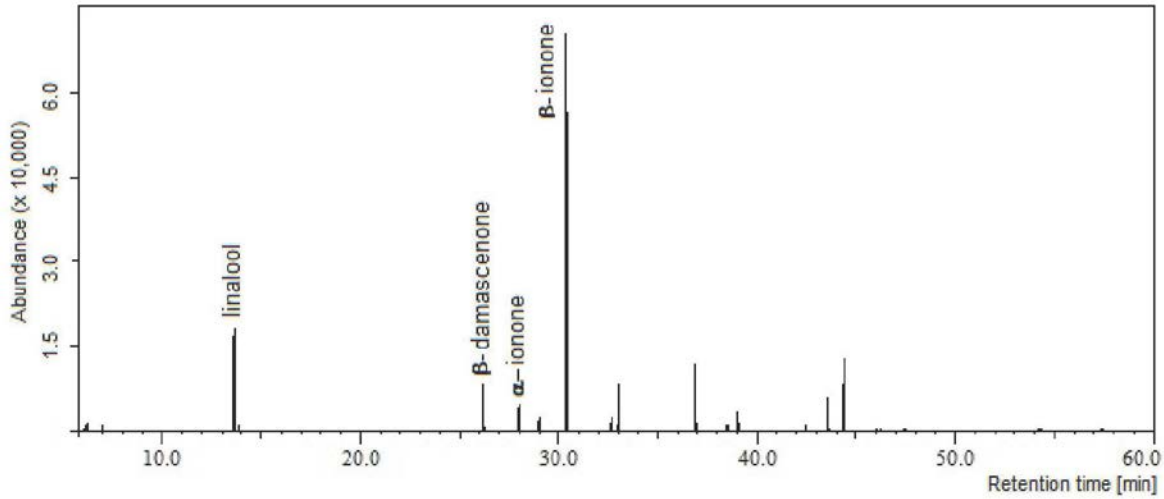

Figure S10. Total ion chromatogram of the volatile oil from leaves of the BI specimen of *D. frutescens* collected in October. Analysis conditions: RTX-5MS column; helium carrier gas; oven temperature 50 to 290 °C at 4 °C min^{-1}; injector temperature 240 °C; ion source temperature 260 °C; interface temperature 280 °C.

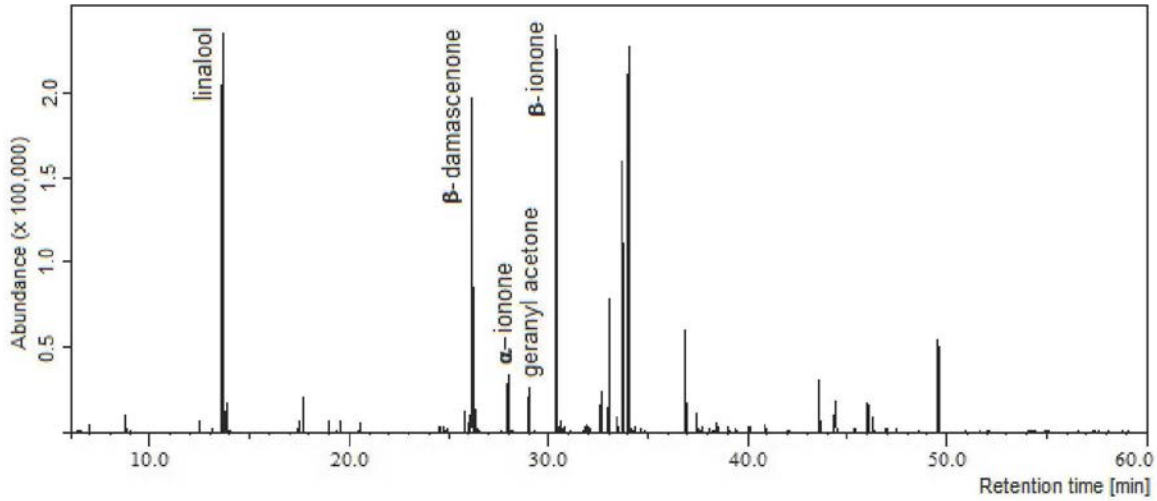

Figure S11. Total ion chromatogram of the volatile oil from leaves of the BI specimen of *D. frutescens* collected in November. Analysis conditions: RTX-5MS column; helium carrier gas; oven temperature 50 to 290 °C at 4 °C min^{-1}; injector temperature 240 °C; ion source temperature 260 °C; interface temperature 280 °C.

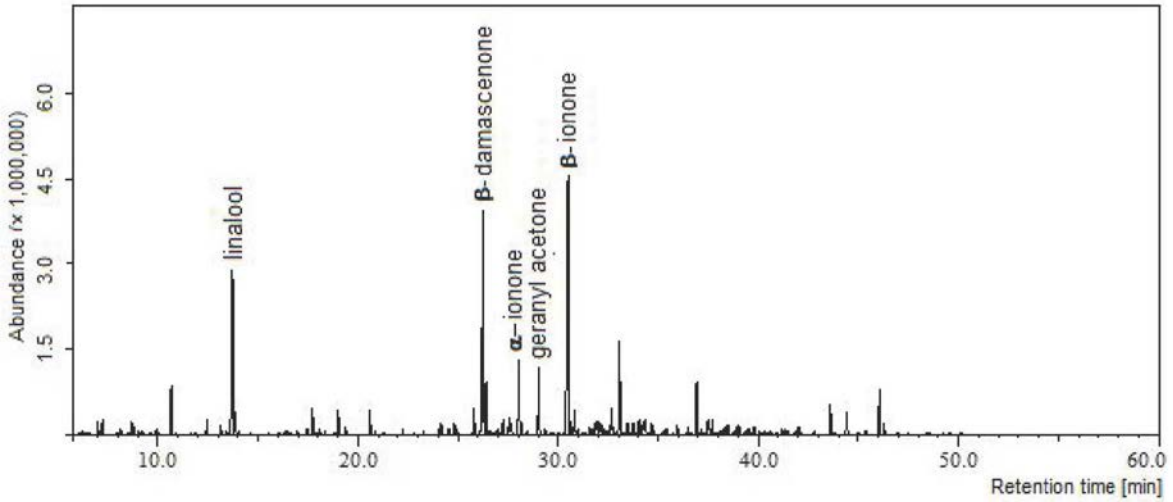

Figure S12. Total ion chromatogram of the volatile oil from leaves of the BI specimen of *D. frutescens* collected in December. Analysis conditions: RTX-5MS column; helium carrier gas; oven temperature 50 to 290 °C at 4 °C min^{-1}; injector temperature 240 °C; ion source temperature 260 °C; interface temperature 280 °C.

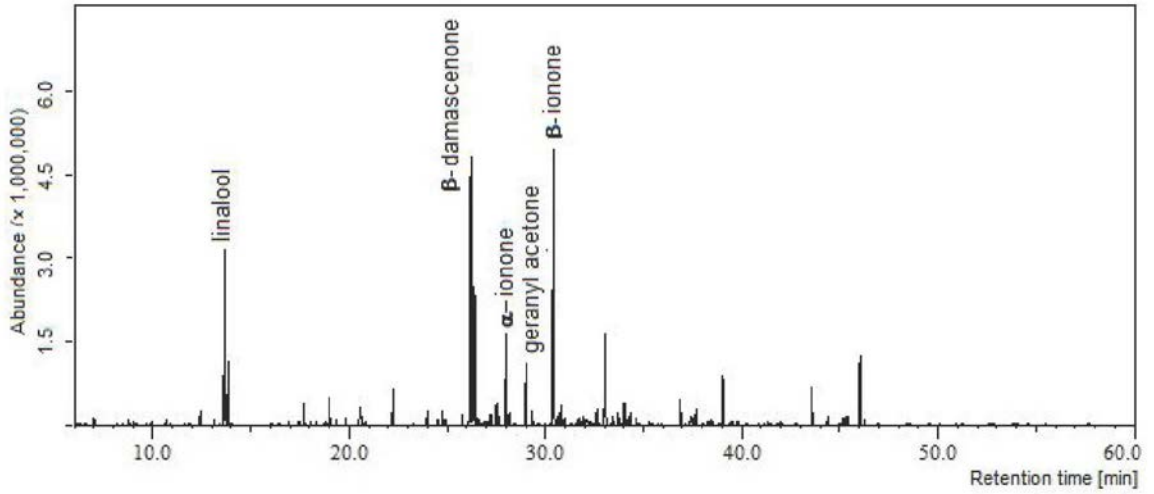

Figure S13. Total ion chromatogram of the volatile oil from leaves of the BII specimen of *D. frutescens* collected in January. Analysis conditions: RTX-5MS column; helium carrier gas; oven temperature 50 to 290 °C at 4 °C min^{-1}; injector temperature 240 °C; ion source temperature 260 °C; interface temperature 280 °C.

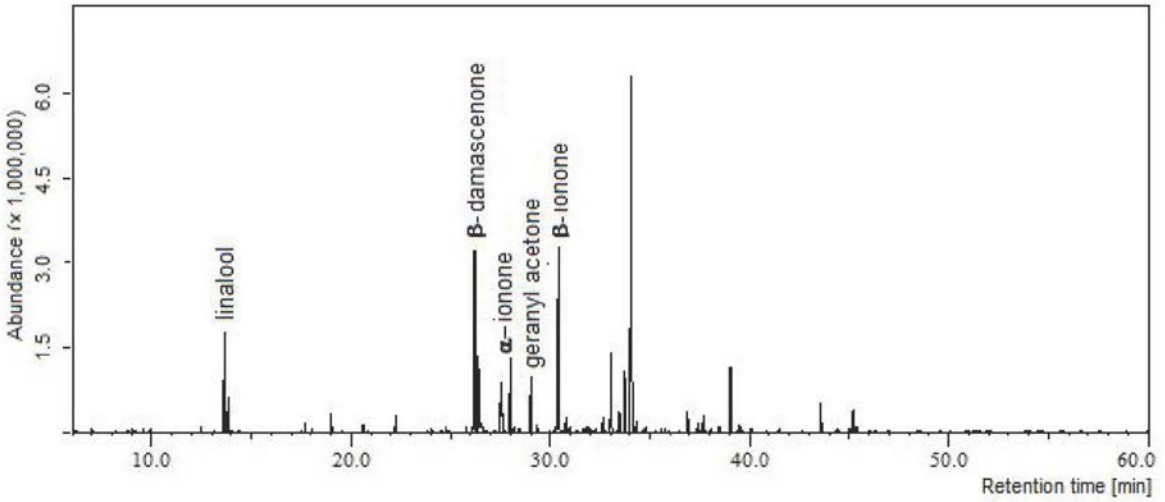

Figure S14. Total ion chromatogram of the volatile oil from leaves of the BII specimen of *D. frutescens* collected in February. Analysis conditions: RTX-5MS column; helium carrier gas; oven temperature 50 to 290 °C at 4 °C min^{-1}; injector temperature 240 °C; ion source temperature 260 °C; interface temperature 280 °C.

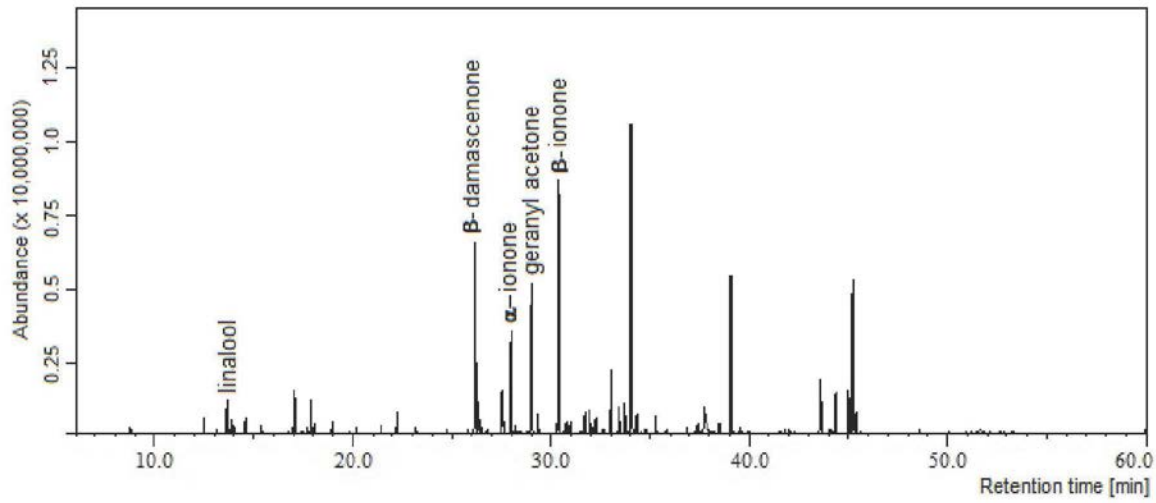

Figure S15. Total ion chromatogram of the volatile oil from leaves of the BII specimen of *D. frutescens* collected in March. Analysis conditions: RTX-5MS column; helium carrier gas; oven temperature 50 to 290 °C at 4 °C min^{-1}; injector temperature 240 °C; ion source temperature 260 °C; interface temperature 280 °C.

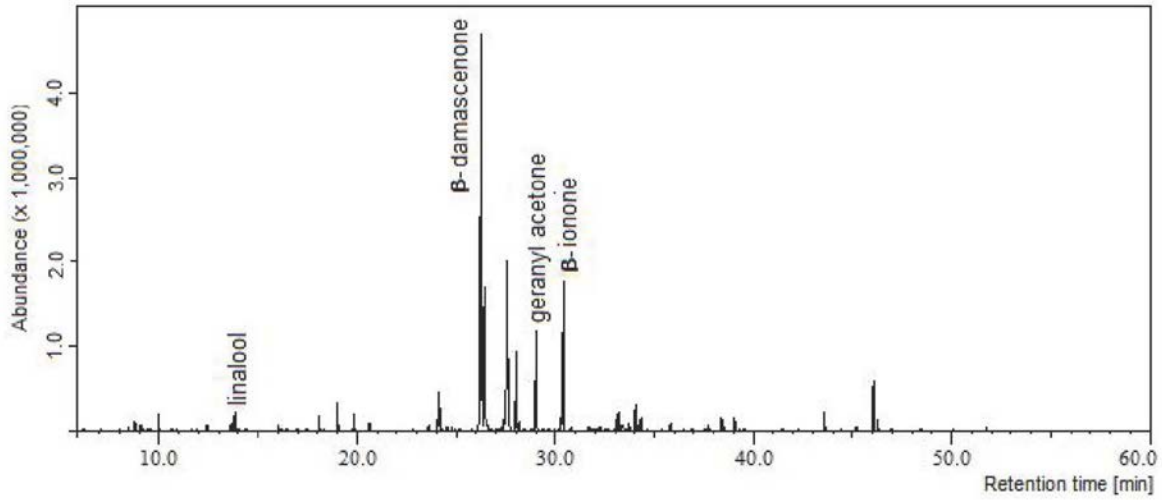

Figure S16. Total ion chromatogram of the volatile oil from leaves of the BII specimen of *D. frutescens* collected in April. Analysis conditions: RTX-5MS column; helium carrier gas; oven temperature 50 to 290 °C at 4 °C min^{-1}; injector temperature 240 °C; ion source temperature 260 °C; interface temperature 280 °C.

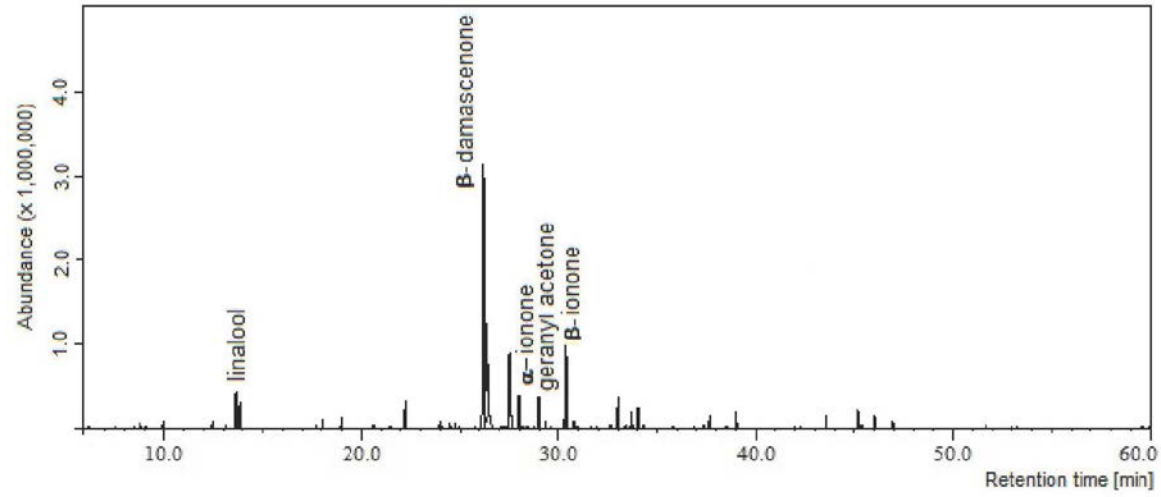

Figure S17. Total ion chromatogram of the volatile oil from leaves of the BII specimen of *D. frutescens* collected in May. Analysis conditions: RTX-5MS column; helium carrier gas; oven temperature 50 to 290 °C at 4 °C min^{-1}; injector temperature 240 °C; ion source temperature 260 °C; interface temperature 280 °C.

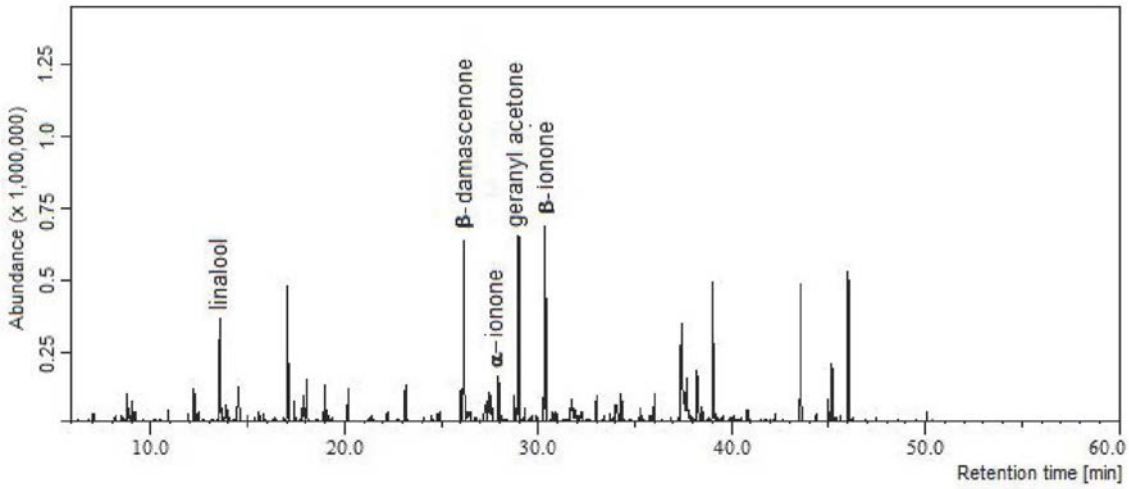

Figure S18. Total ion chromatogram of the volatile oil from leaves of the BII specimen of *D. frutescens* collected in June. Analysis conditions: RTX-5MS column; helium carrier gas; oven temperature 50 to 290 °C at 4 °C min^{-1}; injector temperature 240 °C; ion source temperature 260 °C; interface temperature 280 °C.

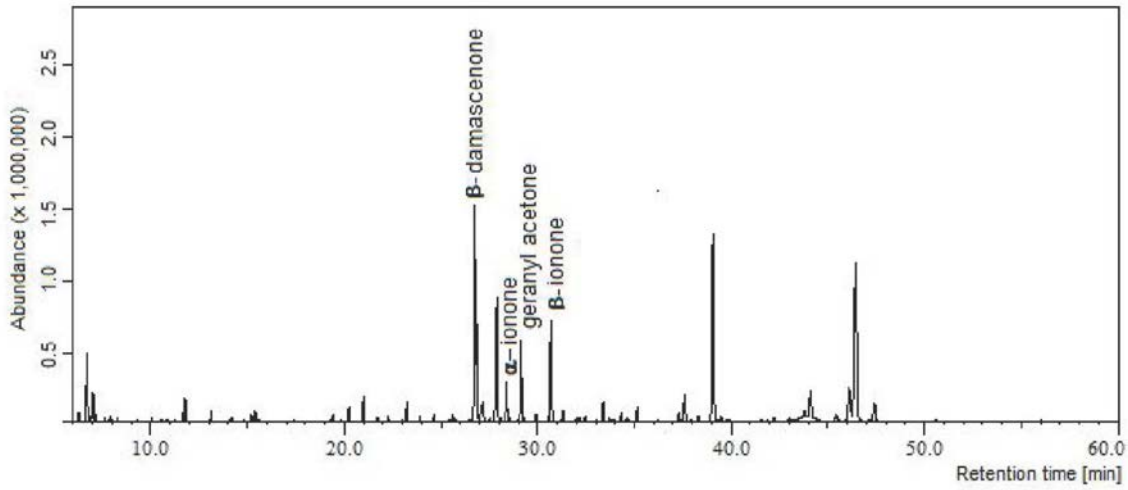

Figure S19. Total ion chromatogram of the volatile oil from leaves of the BII specimen of *D. frutescens* collected in July. Analysis conditions: RTX-5MS column; helium carrier gas; oven temperature 50 to 290 °C at 4 °C min^{-1}; injector temperature 240 °C; ion source temperature 260 °C; interface temperature 280 °C.

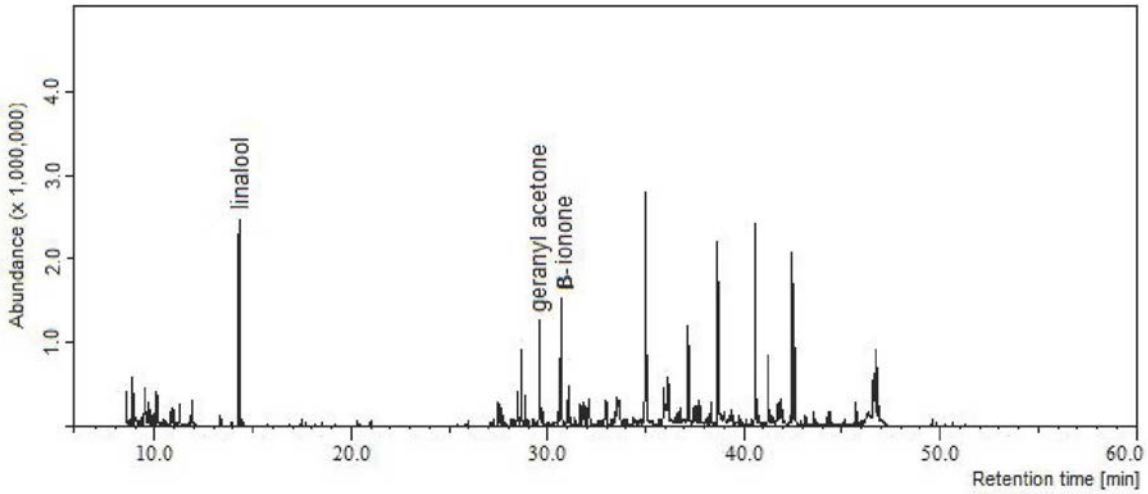

Figure S20. Total ion chromatogram of the volatile oil from leaves of the BII specimen of *D. frutescens* collected in August. Analysis conditions: RTX-5MS column; helium carrier gas; oven temperature 50 to 290 °C at 4 °C min^{-1}; injector temperature 240 °C; ion source temperature 260 °C; interface temperature 280 °C.

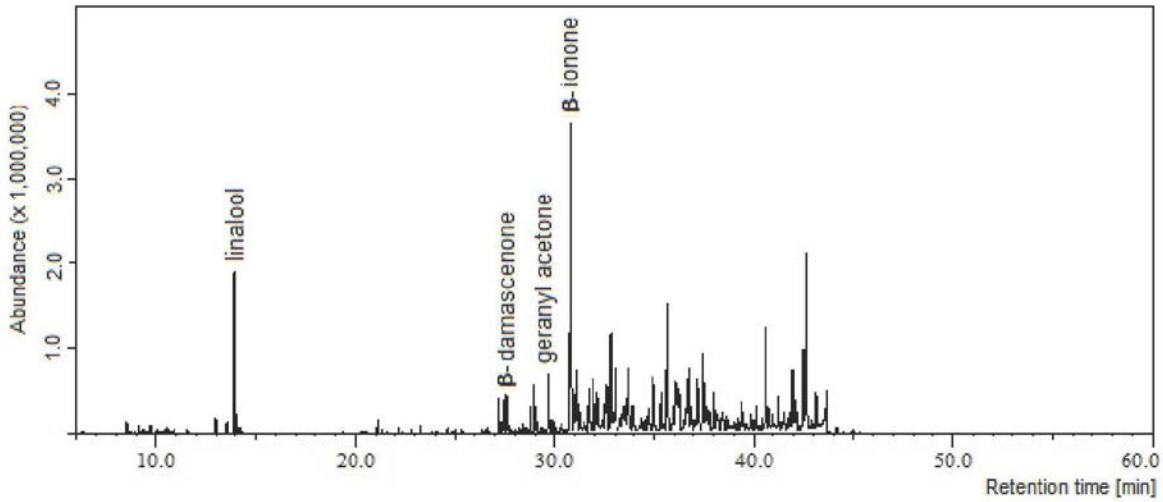

Figure 21. Total ion chromatogram of the volatile oil from leaves of the BII specimen of *D. frutescens* collected in September. Analysis conditions: RTX-5MS column; helium carrier gas; oven temperature 50 to 290 °C at 4 °C min^{-1}; injector temperature 240 °C; ion source temperature 260 °C; interface temperature 280 °C.

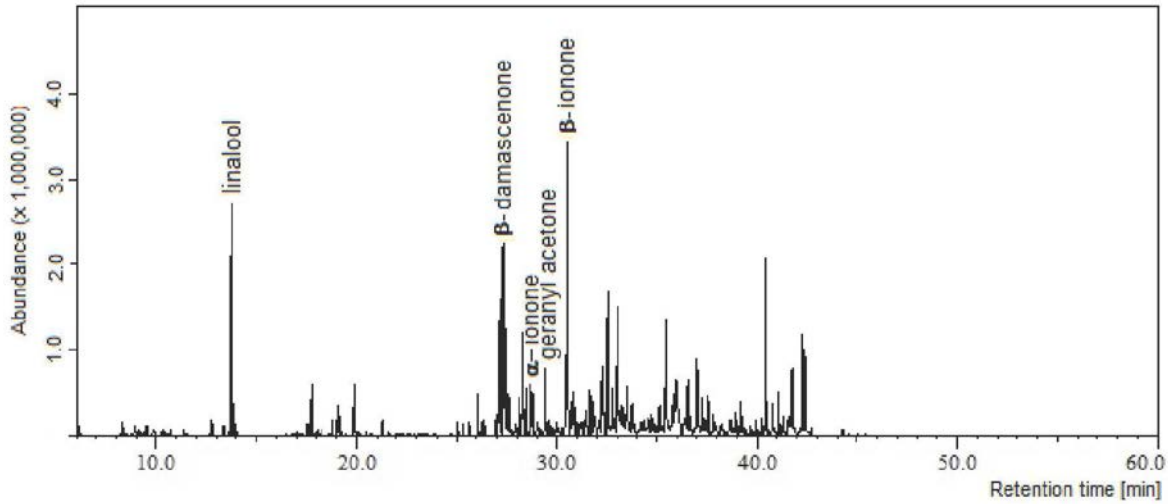

Figure S22. Total ion chromatogram of the volatile oil from leaves of the BII specimen of *D. frutescens* collected in October. Analysis conditions: RTX-5MS column; helium carrier gas; oven temperature 50 to 290 °C at 4 °C min^{-1}; injector temperature 240 °C; ion source temperature 260 °C; interface temperature 280 °C.

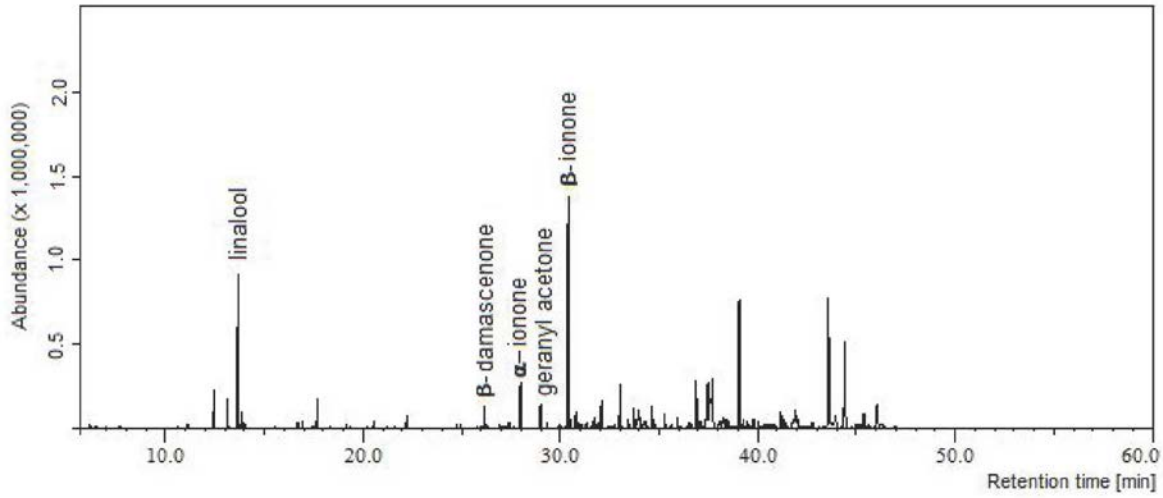

Figure S23. Total ion chromatogram of the volatile oil from leaves of the BII specimen of *D. frutescens* collected in November. Analysis conditions: RTX-5MS column; helium carrier gas; oven temperature 50 to 290 °C at 4 °C min^{-1}; injector temperature 240 °C; ion source temperature 260 °C; interface temperature 280 °C.

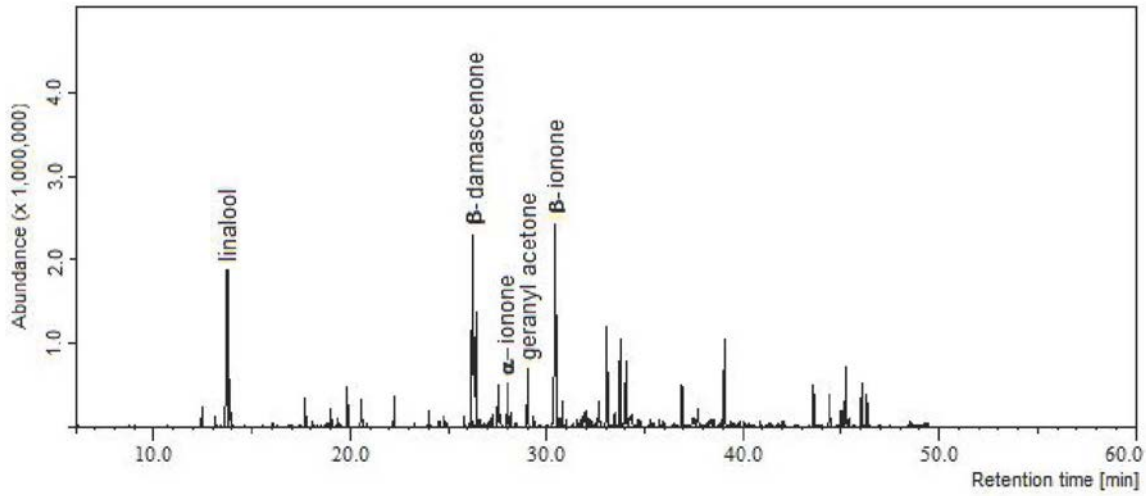

Figure S24. Total ion chromatogram of the volatile oil from leaves of the BII specimen of *D. frutescens* collected in December. Analysis conditions: RTX-5MS column; helium carrier gas; oven temperature 50 to 290 °C at 4 °C min^{-1}; injector temperature 240 °C; ion source temperature 260 °C; interface temperature 280 °C.

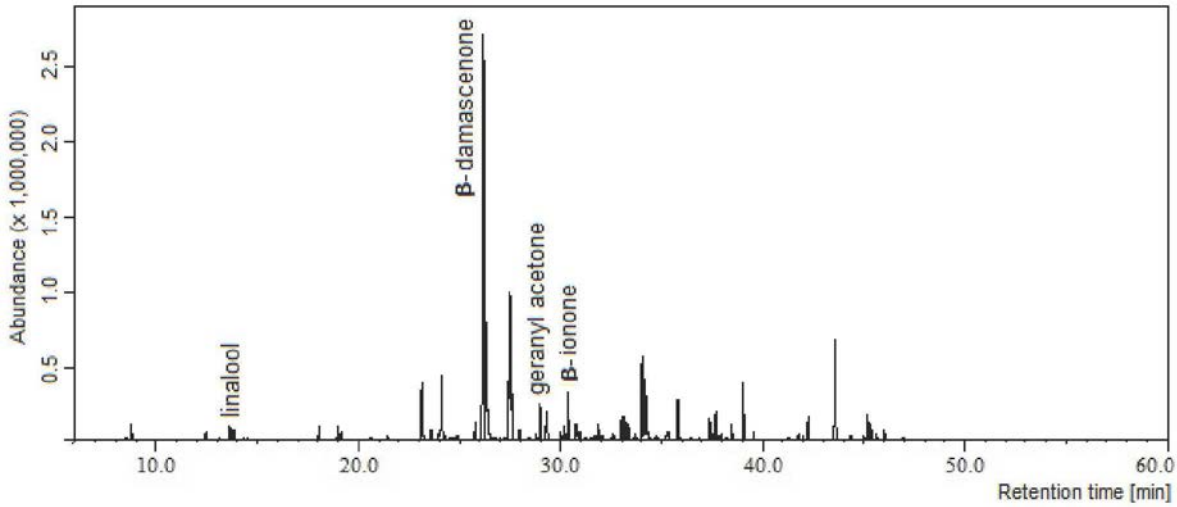

Figure S25. Total ion chromatogram of the volatile oil from leaves of the BIII specimen of *D. frutescens* collected in January. Analysis conditions: RTX-5MS column; helium carrier gas; oven temperature 50 to 290 °C at 4 °C min^{-1}; injector temperature 240 °C; ion source temperature 260 °C; interface temperature 280 °C.

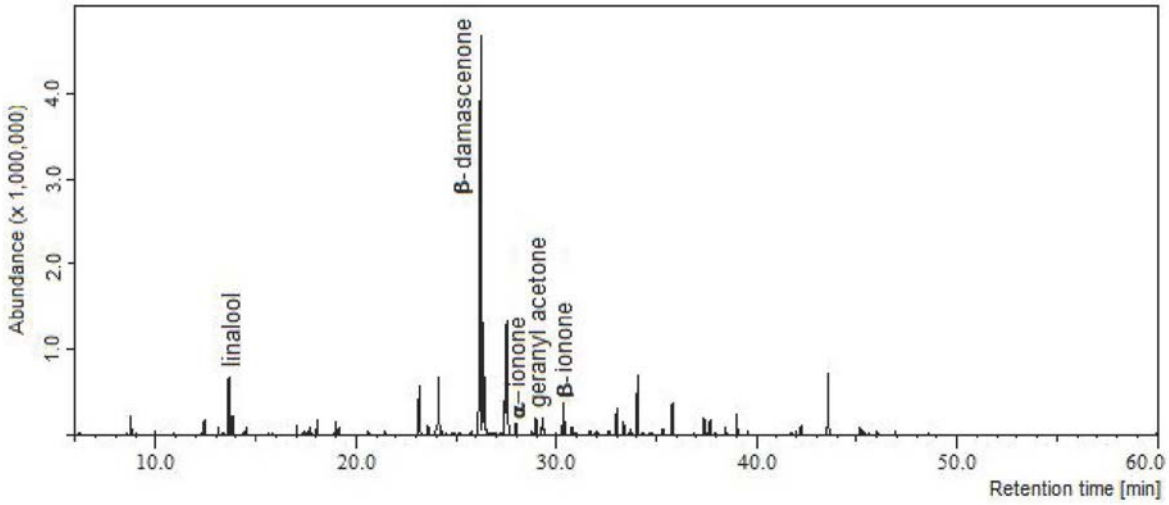

Figure S26. Total ion chromatogram of the volatile oil from leaves of the BIII specimen of *D. frutescens* collected in February. Analysis conditions: RTX-5MS column; helium carrier gas; oven temperature 50 to 290 °C at 4 °C min^{-1}; injector temperature 240 °C; ion source temperature 260 °C; interface temperature 280 °C.

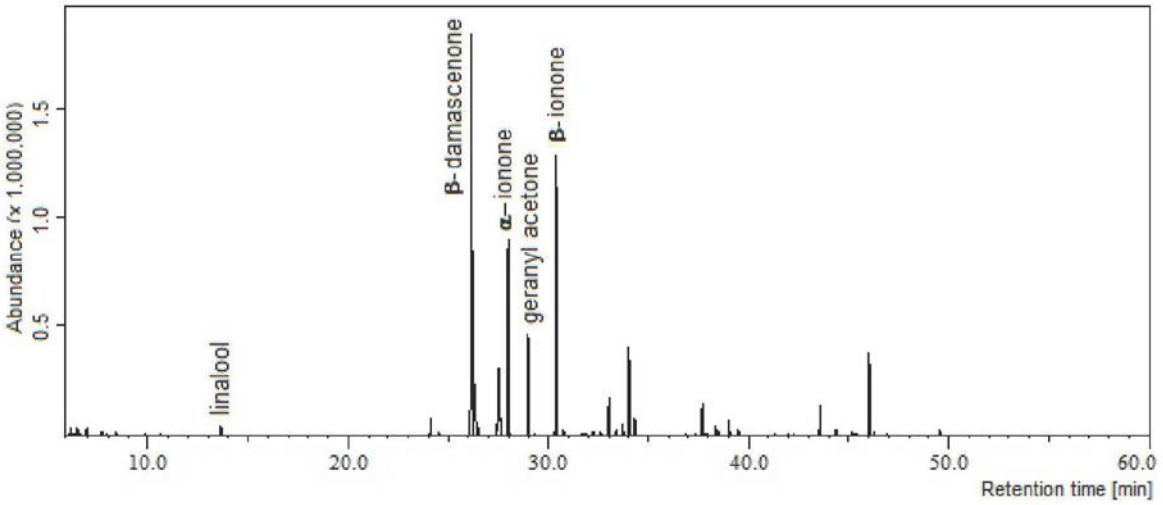

Figure S27. Total ion chromatogram of the volatile oil from leaves of the BIII specimen of *D. frutescens* collected in March. Analysis conditions: RTX-5MS column; helium carrier gas; oven temperature 50 to 290 °C at 4 °C min^{-1}; injector temperature 240 °C; ion source temperature 260 °C; interface temperature 280 °C.

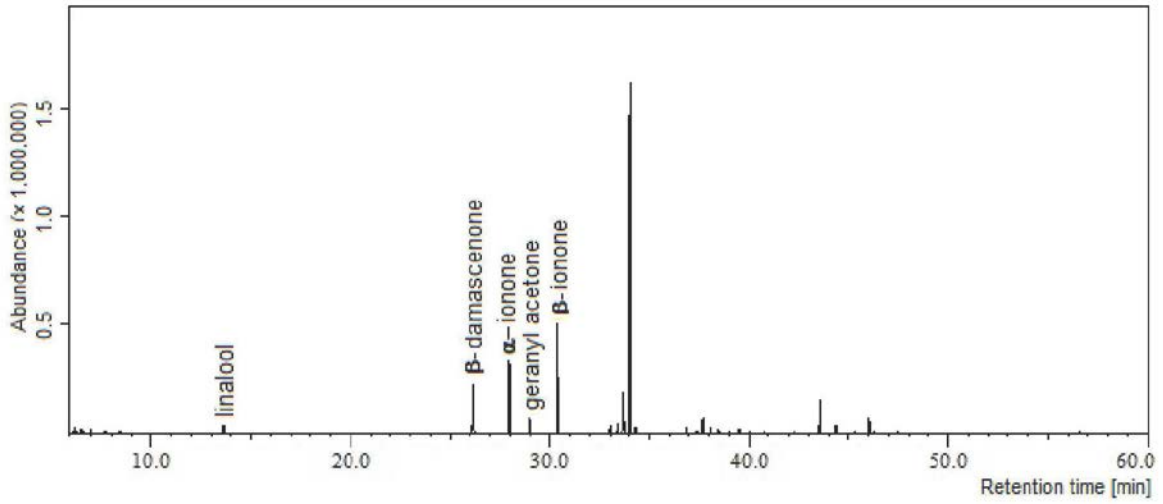

Figure S28. Total ion chromatogram of the volatile oil from leaves of the BIII specimen of *D. frutescens* collected in April. Analysis conditions: RTX-5MS column; helium carrier gas; oven temperature 50 to 290 °C at 4 °C min^{-1}; injector temperature 240 °C; ion source temperature 260 °C; interface temperature 280 °C.

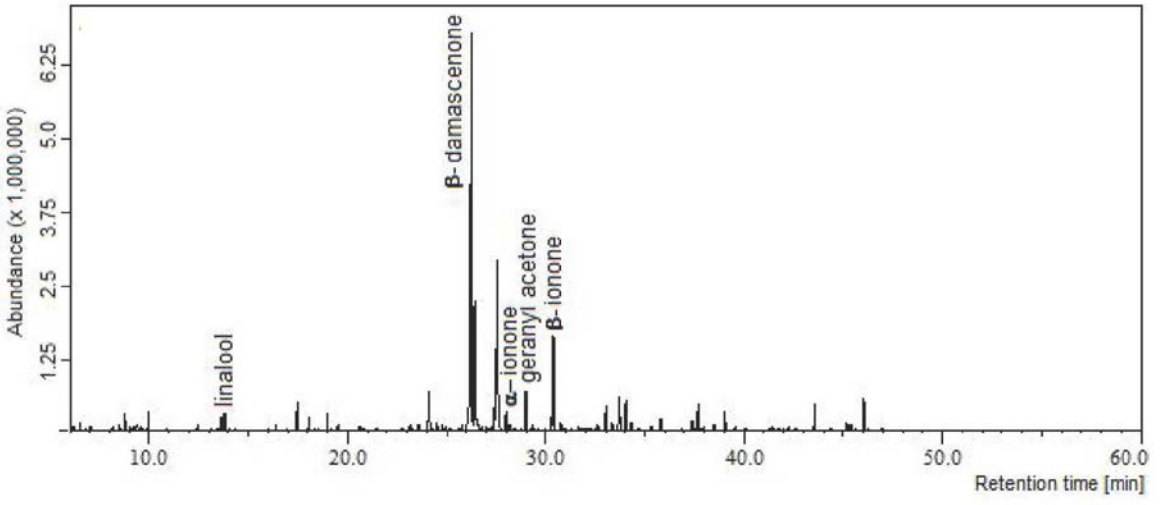

Figure S29. Total ion chromatogram of the volatile oil from leaves of the BIII specimen of *D. frutescens* collected in May. Analysis conditions: RTX-5MS column; helium carrier gas; oven temperature 50 to 290 °C at 4 °C min^{-1}; injector temperature 240 °C; ion source temperature 260 °C; interface temperature 280 °C.

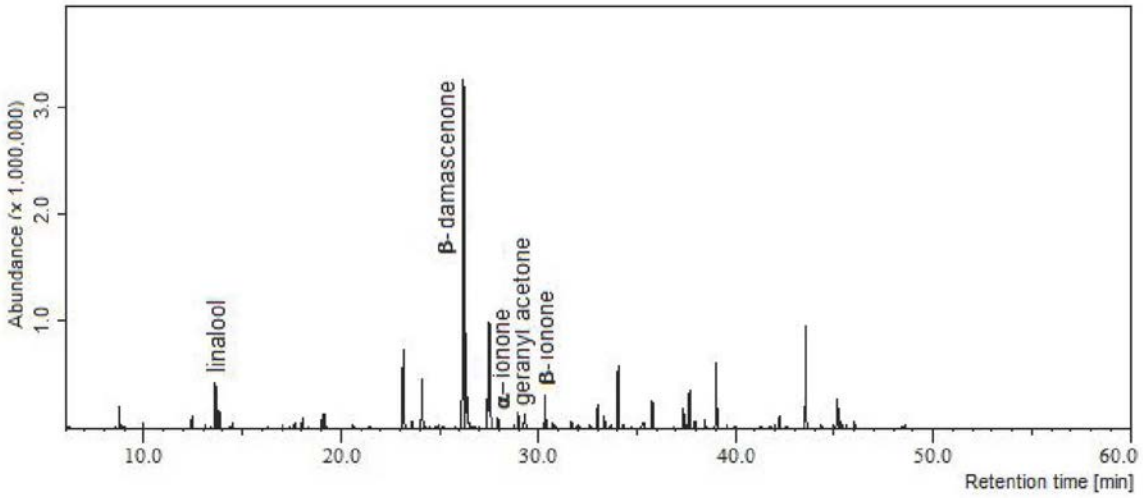

Figure S30. Total ion chromatogram of the volatile oil from leaves of the BIII specimen of *D. frutescens* collected in June. Analysis conditions: RTX-5MS column; helium carrier gas; oven temperature 50 to 290 °C at 4 °C min^{-1}; injector temperature 240 °C; ion source temperature 260 °C; interface temperature 280 °C.

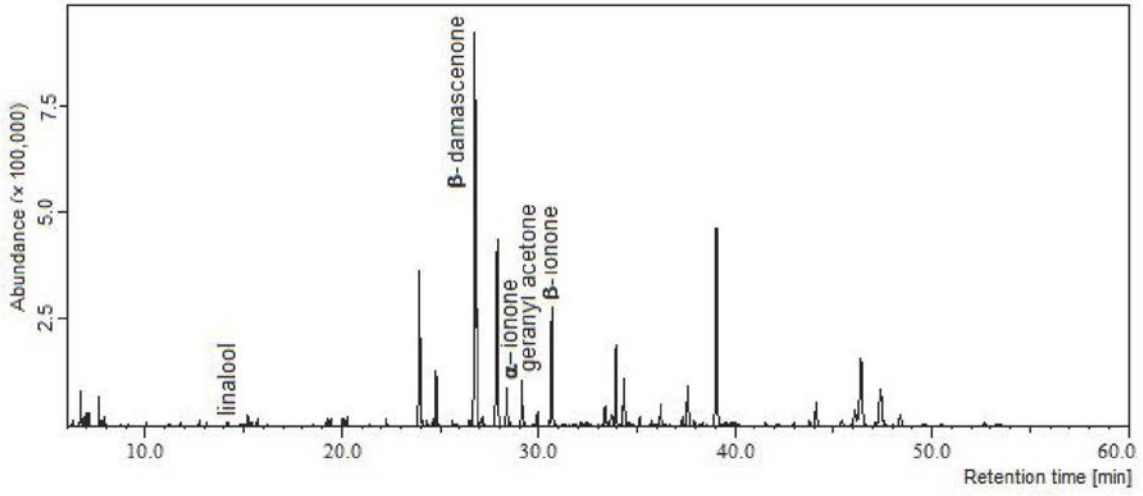

Figure S31. Total ion chromatogram of the volatile oil from leaves of the BIII specimen of *D. frutescens* collected in July. Analysis conditions: RTX-5MS column; helium carrier gas; oven temperature 50 to 290 °C at 4 °C min^{-1}; injector temperature 240 °C; ion source temperature 260 °C; interface temperature 280 °C.

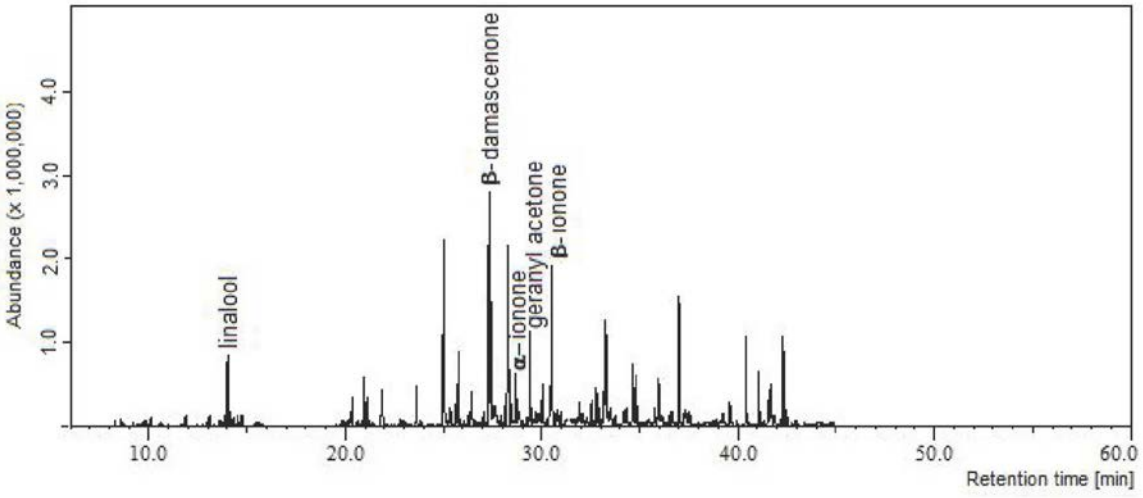

Figure S32. Total ion chromatogram of the volatile oil from leaves of the BIII specimen of *D. frutescens* collected in August. Analysis conditions: RTX-5MS column; helium carrier gas; oven temperature 50 to 290 °C at 4 °C min^{-1}; injector temperature 240 °C; ion source temperature 260 °C; interface temperature 280 °C.

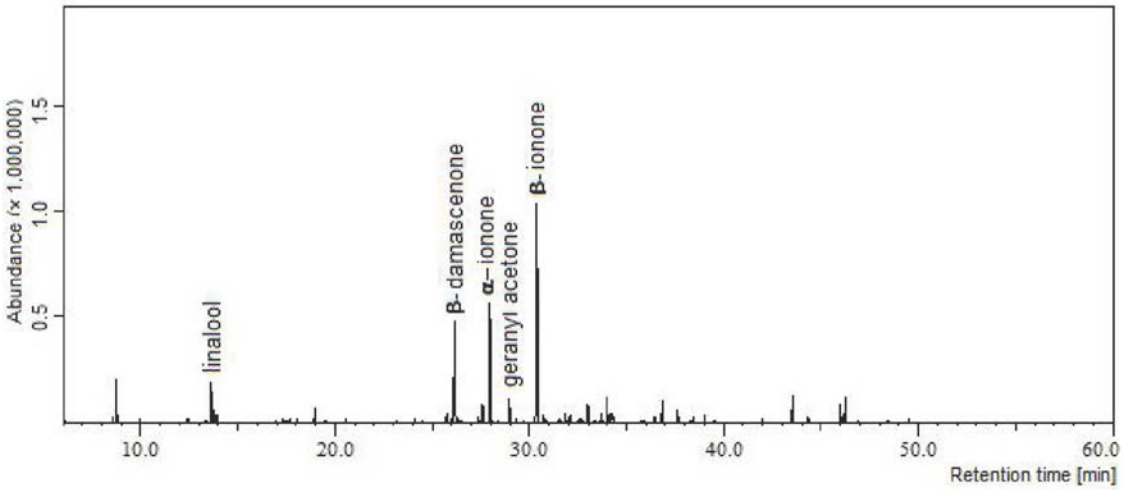

Figure S33. Total ion chromatogram of the volatile oil from leaves of the BIII specimen of *D. frutescens* collected in September. Analysis conditions: RTX-5MS column; helium carrier gas; oven temperature 50 to 290 °C at 4 °C min^{-1}; injector temperature 240 °C; ion source temperature 260 °C; interface temperature 280 °C.

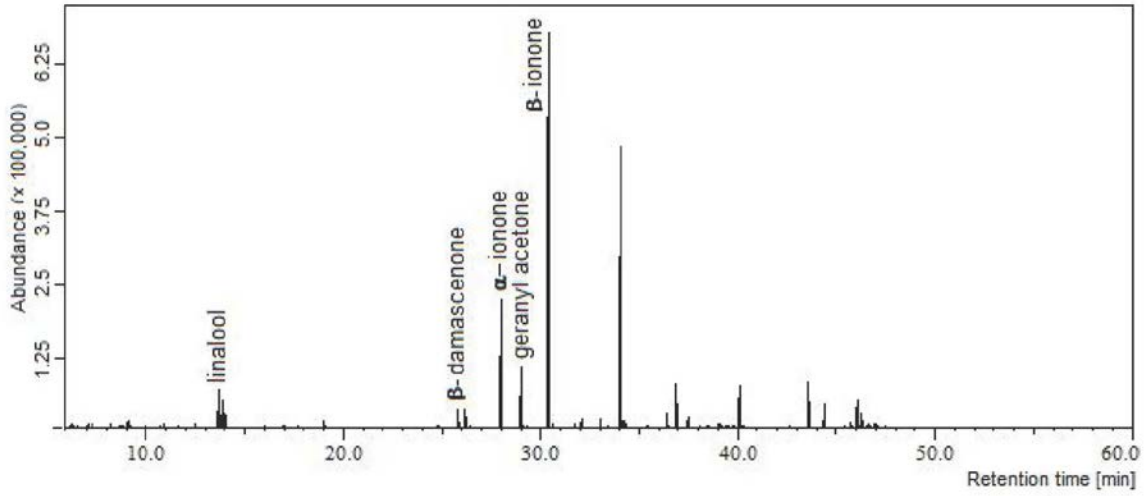

Figure S34. Total ion chromatogram of the volatile oil from leaves of the BIII specimen of *D. frutescens* collected in October. Analysis conditions: RTX-5MS column; helium carrier gas; oven temperature 50 to 290 °C at 4 °C min^{-1}; injector temperature 240 °C; ion source temperature 260 °C; interface temperature 280 °C.

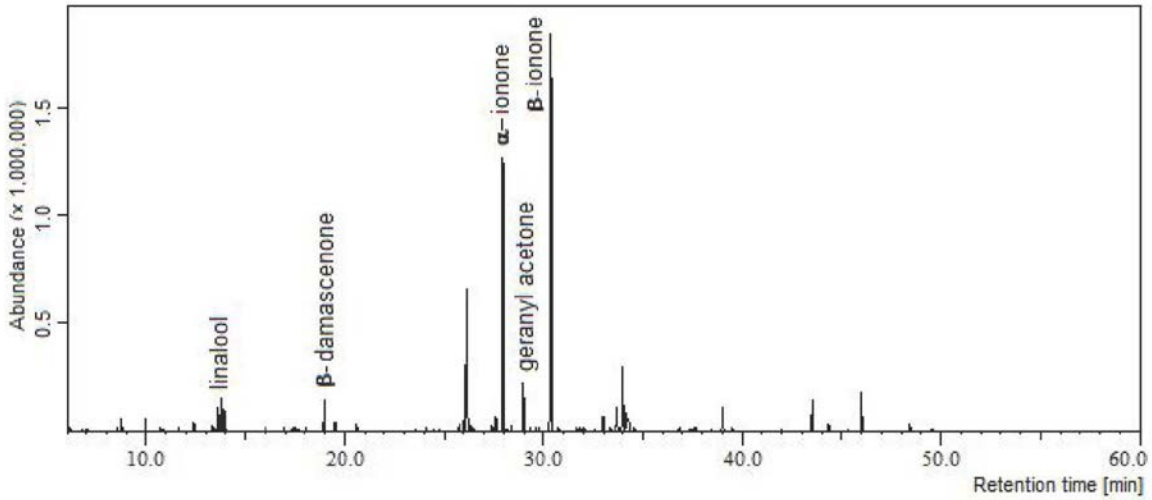

Figure S35. Total ion chromatogram of the volatile oil from leaves of the BIII specimen of *D. frutescens* collected in November. Analysis conditions: RTX-5MS column; helium carrier gas; oven temperature 50 to 290 °C at 4 °C min^{-1}; injector temperature 240 °C; ion source temperature 260 °C; interface temperature 280 °C.

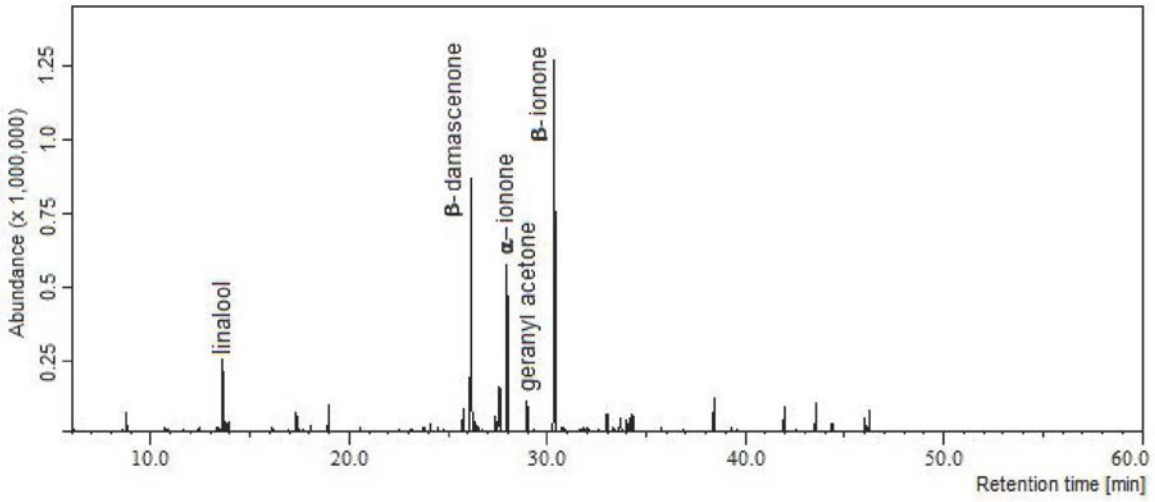

Figure S36. Total ion chromatogram of the volatile oil from leaves of the BIII specimen of *D. frutescens* collected in December. Analysis conditions: RTX-5MS column; helium carrier gas; oven temperature 50 to 290 °C at 4 °C min^{-1}; injector temperature 240 °C; ion source temperature 260 °C; interface temperature 280 °C.