

Supplementary materials

Table S1. GC-MS of the total identified components in *O. vulgare* EO.

Compound	K.I. exp	K.I. lit	Percentage ^a	Identification ^b
α -pinene	938	936	0.2 \pm 0.1	1,2,3
camphene	951	950	0.2 \pm 0.0	1,2
sabinene	976	973	0.1 \pm 0.0	1,2
β -pinene	980	978	0.3 \pm 0.0	1,2,3
α -terpinene	1016	1013	0.7 \pm 0.2	1,2,3
p-cymene	1020	1015	5.7 \pm 0.3	1,2,3
1,8-cineole	1033	1024	0.6 \pm 0.2	1,2,3
(Z)- β -ocimene	1035	1029	T	1,2,3
γ -terpinene	1060	1051	2.5 \pm 0.5	1,2,3
terpinolene	1088	1082	T	1,2,3
linalool	1098	1086	2.6 \pm 0.4	1,2,3
camphor	1121	1123	0.7 \pm 0.2	1,2,3
L-trans-pinocarveol	1130	1125	T	1,2
borneol	1152	1150	0.8 \pm 0.3	1,2,3
terpinen-4-ol	1160	1164	0.7 \pm 0.2	1,2
α -terpineol	1178	1176	0.4 \pm 0.1	1,2
carvone	1217	1214	T	1,2,3
carvotanacetone	1230	1220	T	1,2
thymol	1270	1267	76.0 \pm 0.5	1,2,3
carvacrol	1282	1278	3.2 \pm 0.4	1,2,3
eugenol	1333	1331	0.1 \pm 0.0	1,2
α -cubebene	1354	1355	0.3 \pm 0.1	1,2
α -gurjunene	1411	1413	T	1,2
α -himachalene	1449	1450	0.1 \pm 0.0	1,2
humulene	1454	1455	T	1,2
allo-aromadendrene	1461	1462	T	1,2
β -guaiene	1490	1488	T	1,2
valencene	1494	1494	0.1 \pm 0.0	1,2
α -muurolene	1495	1496	T	1,2
γ -cadinene	1512	1507	0.1 \pm 0.0	1,2
calamenene	1513	1517	T	1,2
β -cadinene	1520	1526	0.4 \pm 0.0	1,2
α -calacorene	1534	1527	0.1 \pm 0.0	1,2
elemol	1539	1541	T	1,2

caryophyllene oxide	1580	1578	0.4 ± 0.1	1,2
globulol	1583	1589	T	1,2
cedrol	1598	1603	T	1,2
γ-eudesmol	1620	1618	T	1,2
allo-aromadendrene epoxide	1621	1623	0.1 ± 0.0	1,2
tau.cadinol	1634	1633	T	1,2
tau.muurolol	1635	1633	T	1,2
cubenol	1636	1630	T	1,2
Total Identified (%)				96.4

^a T, trace, less than 0.05%. A dash indicates absent.

^b 1, Kovats retention index; 2, mass spectrum; 3, co-injection with authentic compound.

Table S2. GC-MS of the total identified components in *S. officinalis* EO.

Compound	K.I. exp	K.I. lit	Percentage ^a	Identification ^b
α -Thujene	930	1035	0.4 \pm 0.0	1, 2
α -Pinene	936	1032	4.4 \pm 0.3	1, 2, 3
(-)-Camphene	953	1076	4.1 \pm 0.0	1, 2, 3
Sabinene	972	1132	0.4 \pm 0.1	1, 2
Hepten-3-one	975		-	1, 2
β -Pinene	977	1118	2.5 \pm 0.0	1, 2, 3
Verbenene	981		T	1, 2
Myrcene	993	1174	0.5 \pm 0.2	1, 2, 3
α -Phellandrene	995	1176	T	1, 2, 3
Δ^3 -Carene	997	1153	-	1, 2, 3
α -Terpinene	1011	1188	T	1, 2
O-Cymene	1020	1187	2.5 \pm 0.3	1, 2, 3
ρ -Cymene	1023	1280	1.2 \pm 0.3	1, 2, 3
β -Phellandrene	1028	1218	1.0	1, 2, 3
Limonene	1031	1203	1.4 \pm 0.0	1, 2, 3
1,8-Cineole	1033	1213	4.2 \pm 0.5	1, 2
(Z)- β -Ocimene	1038	1246	T	1, 2, 3
(E)- β -Ocimene	1049	1280	T	1, 2
γ -Terpinene	1057	1255	0.1 \pm 0.1	1, 2, 3
Cis-Sabinene hydrate	1063	1556	0.1 \pm 0.0	1, 2, 3
Terpinolene	1086	1265	T	1, 2
Linalol	1096	1553	1.1 \pm 0.3	1, 2, 3
trans-Thujone	1116	1449	37.9 \pm 0.0	1, 2, 3
trans-Pinocarveol	1139	1654	0.2 \pm 0.3	1, 2
(-)-Citronellal	1143	1491	0.2 \pm 0.3	1, 2, 3
iso-Borneol	1143	1633	-	1, 2, 3
Camphor	1144	1532	13.9 \pm 0.0	1, 2, 3
iso-Pinocamphone	1153	1566	0.1 \pm 0.0	1, 2
trans-Pinocamphone	1159		0.3 \pm 0.3	1, 2, 3
Pinocarvone	1166	1587	T	1, 2, 3
Borneol	1167	1719	7.6 \pm 0.3	1, 2, 3
Terpinen-4-ol	1177	1611	0.5 \pm 0.0	1, 2, 3
Dihydrocarveol	1177		0.2 \pm 0.0	1, 2, 3
ρ -Cymen-8-ol	1186	1864	0.1 \pm 0.1	1, 2
α -Terpineol	1188	1706	0.3 \pm 0.2	1, 2, 3
Myrtenal	1193	1648	0.2 \pm 0.0	1, 2, 3
Estragole	1196	1670	T	1, 2, 3
Myrtenol	1196	1804	0.2 \pm 0.0	1, 2, 3

Isobornyl formate	1227		-	1, 2, 3
Linalyl acetate	1248	1565	1.5 ± 0.2	1, 2, 3
Geraniol	1256	1857	0.3 ± 0.2	1, 2
cis-Anethole	1262		-	1, 2, 3
(E)-Citral	1271	1727	-	1, 2, 3
Isobornyl acetate	1277		0.7 ± 0.3	1, 2, 3
Bornyl acetate	1284	1591	0.9 ± 0.3	1, 2, 3
Thymol	1291	1298	T	1, 2, 3
Carvacrol	1297	2239	0.3 ± 0.2	1, 2, 3
Myrtenyl acetate	1313		T	1, 2
Terpinyl acetate	1334		-	1, 2, 3
Methyl eugenol	1369	2023	-	1, 2
α-Copaene	1377	1497	T	1, 2, 3
Isolatedene	1383		T	1, 2, 3
β-Elemene	1387	1600	-	1, 2, 3
Longifolene	1412	1576	T	1, 2, 3
β-Caryophyllene	1418	1612	1.3 ± 0.3	1, 2, 3
β-Cedrene	1424	1638	1.0 ± 0.2	1, 2, 3
Aromadendrene	1437	1628	0.1 ± 0.3	1, 2, 3
α-Humulene	1456	1689	5.9 ± 0.3	1, 2, 3
allo-Aromadendrene	1463	1661	0.1 ± 0.2	1, 2
γ-Gurjunene	1474	1687	0.1 ± 0.2	1, 2
Bicyclogermacrene	1491	1756	-	1, 2, 3
cis-Muurolo-4(14),5-diene	1510	1675	T	1, 2, 3
α-7-epi-Selinene	1519	1740	0.1 ± 0.3	1, 2
Caryophyllene oxide	1581	2008	0.8 ± 0.3	1, 2, 3
Total identified (%)				98.7

^a T, trace, less than 0.05%. A dash indicates absent.

^b (1) Kovats retention index; (2) mass spectrum; (3) co-injection with authentic compound.