

SUPPLEMENTARY MATERIAL

GENUS-LEVEL CHEMICAL DIFFERENTIATION OF LEAF VOLATILE PROFILES IN *RIBES* AND *RUBUS* REVEALED BY STANDARDISED HYDRODISTILLATION–GC–MS ANALYSIS

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Table S1. Content of volatile fractions hydrodistilled from leaves of selected *Ribes* and *Rubus* spp.

Compound	RI Exp	RI Lib	<i>Ribes nigrum</i> 1	<i>Ribes nigrum</i> 2	<i>Ribes nigrum</i> 3	<i>Ribes nigrum</i> 4	<i>Ribes nigrum</i> 1-4*	<i>Ribes rubrum</i>	<i>Rubus idaeus</i>	<i>Rubus fruticosus</i>
2-Hexenal	848	851	0.07 ± 0.00	0.25 ± 0.01	0.12 ± 0.00	1.03 ± 0.06	0.37 ± 0.02	0.86 ± 0.03	1.35 ± 0.06	1.79 ± 0.18
(<i>E</i>)-2-Hexenol	862	862	nd	0.12 ± 0.00	0.05 ± 0.00	0.52 ± 0.03	0.17 ± 0.01	0.43 ± 0.01	0.15 ± 0.01	0.07 ± 0.00
1-Hexanol	865	868	0.01 ± 0.00	0.04 ± 0.00	0.02 ± 0.00	0.07 ± 0.00	0.04 ± 0.00	0.06 ± 0.00	0.15 ± 0.01	0.19 ± 0.01
2-Heptanone	890	891	nd	nd	0.01 ± 0.00	0.02 ± 0.00	0.01 ± 0.00	0.01 ± 0.00	2.53 ± 0.06	0.48 ± 0.01
Heptanal	902	901	nd	0.03 ± 0.00	0.02 ± 0.00	0.04 ± 0.00	0.02 ± 0.00	0.03 ± 0.00	2.16 ± 0.04	2.29 ± 0.06
2-Heptanol	902	900	nd	0.01 ± 0.00	0.01 ± 0.00	0.01 ± 0.00	0.01 ± 0.00	0.01 ± 0.00	23.93 ± 0.48	8.05 ± 0.15
α-Thujene	926	929	1.97 ± 0.04	1.26 ± 0.02	3.25 ± 0.03	0.14 ± 0.01	1.66 ± 0.02	1.54 ± 0.03	0.01 ± 0.00	0.01 ± 0.00
α-Pinene	933	937	0.68 ± 0.02	1.58 ± 0.07	1.31 ± 0.03	2.02 ± 0.13	1.40 ± 0.06	6.78 ± 0.13	0.01 ± 0.00	0.01 ± 0.00
(<i>E</i>)-2-Heptenal	955	958	nd	0.01 ± 0.00	0.01 ± 0.00	0.04 ± 0.00	0.02 ± 0.020	0.02 ± 0.00	0.13 ± 0.00	0.50 ± 0.01
Benzaldehyde	958	962	0.02 ± 0.00	0.04 ± 0.00	0.04 ± 0.00	0.12 ± 0.01	0.06 ± 0.00	0.16 ± 0.01	0.21 ± 0.01	0.55 ± 0.01
α-Sabinene	972	974	10.10 ± 0.07	1.58 ± 0.02	6.86 ± 0.09	0.09 ± 0.01	4.66 ± 0.05	1.42 ± 0.03	0.04 ± 0.00	0.08 ± 0.00
Matsutake alcohol	978	980	0.02 ± 0.00	0.08 ± 0.00	0.49 ± 0.01	2.62 ± 0.17	0.80 ± 0.05	0.05 ± 0.00	0.12 ± 0.00	0.37 ± 0.01
2,3-Octanedione	983	984	0.04 ± 0.00	0.12 ± 0.01	0.28 ± 0.01	0.26 ± 0.01	0.18 ± 0.01	0.19 ± 0.01	0.31 ± 0.01	0.45 ± 0.00
Sulcatone	986	986	0.04 ± 0.00	0.07 ± 0.00	0.07 ± 0.00	0.18 ± 0.00	0.09 ± 0.00	0.15 ± 0.01	0.22 ± 0.00	0.46 ± 0.00
β-Myrcene	991	991	1.27 ± 0.01	1.07 ± 0.38	0.48 ± 0.00	nd	0.70 ± 0.01	0.39 ± 0.00	nd	0.07 ± 0.00
2-Methyl-6-hepten-1-ol	992	994	0.01 ± 0.00	0.02 ± 0.00	0.02 ± 0.00	0.03 ± 0.00	0.02 ± 0.00	0.02 ± 0.00	0.15 ± 0.00	0.26 ± 0.00
Caprylic aldehyde	1002	1003	0.92 ± 0.01	1.60 ± 0.01	0.05 ± 0.00	0.12 ± 0.02	0.67 ± 0.01	0.57 ± 0.01	0.05 ± 0.00	0.32 ± 0.00
α-Phellandrene	1009	1005	0.48 ± 0.01	13.13 ± 0.06	0.35 ± 0.00	0.59 ± 0.04	3.64 ± 0.03	4.44 ± 0.08	nd	nd
(<i>E,E</i>)-2,4-Heptadienal	1010	1012	0.32 ± 0.00	0.67 ± 0.01	0.28 ± 0.00	0.67 ± 0.04	0.48 ± 0.01	0.65 ± 0.01	0.66 ± 0.03	1.88 ± 0.04
α-Terpinene	1016	1017	2.06 ± 0.01	0.66 ± 0.01	2.59 ± 0.03	0.19 ± 0.01	1.38 ± 0.02	0.83 ± 0.02	0.01 ± 0.00	0.05 ± 0.06
Cymene	1021	1022	14.99 ± 0.13	2.47 ± 0.12	19.62 ± 0.18	4.01 ± 0.21	10.27 ± 0.16	1.12 ± 0.01	0.02 ± 0.00	0.01 ± 0.00
Limonene	1029	1031	2.09 ± 0.04	1.11 ± 0.03	1.53 ± 0.02	1.85 ± 0.09	1.64 ± 0.04	1.68 ± 0.02	0.04 ± 0.00	0.03 ± 0.00
β-Ocimene	1037	1037	3.05 ± 0.06	nd	nd	0.15 ± 0.01	0.80 ± 0.02	0.17 ± 0.00	0.01 ± 0.00	0.01 ± 0.00
Hyacinthin	1042	1045	1.47 ± 0.02	0.41 ± 0.00	0.61 ± 0.01	0.48 ± 0.03	0.74 ± 0.02	0.77 ± 0.02	2.55 ± 0.08	6.66 ± 0.06
(<i>E</i>)-2-Octenal	1056	1060	nd	0.01 ± 0.00	0.03 ± 0.00	0.04 ± 0.00	0.02 ± 0.00	0.02 ± 0.00	0.05 ± 0.00	0.21 ± 0.01
γ-Terpinene	1058	1060	4.37 ± 0.08	1.55 ± 0.04	5.81 ± 0.07	0.33 ± 0.02	3.02 ± 0.05	1.86 ± 0.02	0.02 ± 0.00	0.04 ± 0.00

Compound	RI Exp	RI Lib	<i>Ribes nigrum</i> 1	<i>Ribes nigrum</i> 2	<i>Ribes nigrum</i> 3	<i>Ribes nigrum</i> 4	<i>Ribes nigrum</i> 1-4*	<i>Ribes rubrum</i>	<i>Rubus idaeus</i>	<i>Rubus fruticosus</i>
(E)-Sabinene hydrate	1071	1070	0.73 ± 0.01	0.28 ± 0.01	0.41 ± 0.00	0.02 ± 0.00	0.36 ± 0.00	0.26 ± 0.00	0.03 ± 0.03	0.03 ± 0.01
1-Octanol	1069	1070	0.01 ± 0.00	0.05 ± 0.00	0.04 ± 0.00	0.05 ± 0.00	0.04 ± 0.00	0.05 ± 0.00	0.18 ± 0.00	0.23 ± 0.00
m-Cymenene	1081	1082	0.44 ± 0.01	1.22 ± 0.02	0.37 ± 0.00	1.74 ± 0.07	0.94 ± 0.02	0.54 ± 0.02	0.01 ± 0.00	0.01 ± 0.00
(E)-Linalool oxide	1087	1086	0.02 ± 0.00	0.01 ± 0.00	0.01 ± 0.00	0.04 ± 0.00	0.02 ± 0.00	0.01 ± 0.00	0.08 ± 0.00	0.11 ± 0.01
Terpinolene	1087	1088	3.82 ± 0.01	0.47 ± 0.00	0.95 ± 0.02	0.25 ± 0.01	1.37 ± 0.01	0.40 ± 0.01	0.01 ± 0.00	3.02 ± 0.05
Linalool	1098	1099	0.70 ± 0.01	0.41 ± 0.00	0.09 ± 0.00	0.69 ± 0.04	0.47 ± 0.01	0.22 ± 0.00	0.24 ± 0.00	10.61 ± 0.16
Nonaldehyde	1103	1104	0.04 ± 0.00	0.16 ± 0.00	0.22 ± 0.01	0.12 ± 0.01	0.14 ± 0.00	0.06 ± 0.00	1.27 ± 0.08	1.57 ± 0.04
(E,E)-2,4-Octadienal	1107	1114	0.05 ± 0.00	0.03 ± 0.00	0.03 ± 0.00	0.07 ± 0.01	0.04 ± 0.00	0.05 ± 0.00	0.09 ± 0.00	0.28 ± 0.00
trans-Rose oxide	1109	1110	0.22 ± 0.01	0.04 ± 0.00	0.01 ± 0.00	0.08 ± 0.01	0.09 ± 0.00	0.04 ± 0.04	0.01 ± 0.00	0.30 ± 0.00
1,3,8-p-Menthatriene	1110	1113	0.11 ± 0.00	0.06 ± 0.00	0.04 ± 0.00	0.07 ± 0.00	0.07 ± 0.00	0.03 ± 0.00	nd	0.16 ± 0.00
β-Thujone	1115	1114	0.32 ± 0.00	0.14 ± 0.00	0.41 ± 0.01	0.05 ± 0.00	0.23 ± 0.00	0.29 ± 0.01	0.02 ± 0.00	0.01 ± 0.00
(Z)-p-Mentha-2-en-1-ol	1119	1122	0.30 ± 0.00	0.10 ± 0.00	0.25 ± 0.01	0.03 ± 0.00	0.17 ± 0.00	0.16 ± 0.01	0.75 ± 0.04	0.90 ± 0.01
α-Campholenal	1125	1125	0.18 ± 0.00	0.34 ± 0.01	0.35 ± 0.00	0.45 ± 0.03	0.33 ± 0.01	1.53 ± 0.03	0.01 ± 0.00	0.03 ± 0.00
cis-Rose oxide	1126	1127	0.22 ± 0.01	0.02 ± 0.00	0.17 ± 0.01	0.04 ± 0.00	0.11 ± 0.00	0.10 ± 0.00	0.01 ± 0.00	0.15 ± 0.00
Neo-allo-ocimene	1128	1131	1.60 ± 0.02	0.12 ± 0.01	0.10 ± 0.00	0.11 ± 0.01	0.48 ± 0.01	0.12 ± 0.00	nd	0.01 ± 0.00
(Z)-p-Mentha-2,8-dien-1-ol	1133	1133	0.17 ± 0.00	0.13 ± 0.00	0.06 ± 0.00	0.09 ± 0.00	0.11 ± 0.00	0.32 ± 0.38	0.01 ± 0.00	0.03 ± 0.02
trans-Pinocarveol	1137	1139	0.24 ± 0.00	0.20 ± 0.00	0.29 ± 0.00	0.10 ± 0.01	0.21 ± 0.00	1.17 ± 0.00	nd	0.01 ± 0.00
Lilac aldehyde A	1143	1145	0.12 ± 0.00	0.03 ± 0.00	0.02 ± 0.00	0.03 ± 0.00	0.05 ± 0.00	0.14 ± 0.01	0.05 ± 0.00	0.31 ± 0.00
(E)-Verbenol	1143	1144	0.06 ± 0.01	0.10 ± 0.00	0.07 ± 0.00	0.09 ± 0.01	0.08 ± 0.00	0.46 ± 0.00	0.02 ± 0.00	0.12 ± 0.00
Cucumber aldehyde	1152	1155	0.18 ± 0.10	0.10 ± 0.00	0.13 ± 0.04	0.19 ± 0.01	0.15 ± 0.04	0.11 ± 0.00	0.30 ± 0.01	1.82 ± 0.02
(E)-2-Nonenal	1158	1162	0.05 ± 0.00	0.02 ± 0.00	0.03 ± 0.00	0.05 ± 0.00	0.04 ± 0.00	0.09 ± 0.00	0.08 ± 0.00	0.19 ± 0.01
Pinocarvone	1161	1162	0.06 ± 0.00	0.11 ± 0.01	0.15 ± 0.00	0.07 ± 0.00	0.10 ± 0.00	0.90 ± 0.01	0.01 ± 0.00	0.03 ± 0.02
Lilac aldehyde D	1165	1169	0.18 ± 0.00	0.03 ± 0.00	0.14 ± 0.01	0.01 ± 0.00	0.09 ± 0.00	0.07 ± 0.01	0.03 ± 0.00	0.20 ± 0.01
α-Phellandren-8-ol	1166	1167	0.38 ± 0.01	0.29 ± 0.00	0.09 ± 0.00	0.23 ± 0.02	0.25 ± 0.01	0.24 ± 0.00	0.02 ± 0.00	0.10 ± 0.00
Terpinen-4-ol	1176	1177	4.28 ± 0.10	1.66 ± 0.01	4.85 ± 0.06	0.31 ± 0.01	2.78 ± 0.04	2.22 ± 0.03	0.02 ± 0.00	0.13 ± 0.00
m-Cymenol	1184	1180	0.49 ± 0.00	4.16 ± 0.04	1.31 ± 0.02	5.14 ± 0.23	2.78 ± 0.07	3.08 ± 0.03	0.01 ± 0.00	0.14 ± 0.01

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α -Terpineol	1189	1189	0.29 $\pm$ 0.01	0.22 $\pm$ 0.01	0.31 $\pm$ 0.01	0.38 $\pm$ 0.02	0.30 $\pm$ 0.01	0.38 $\pm$ 0.01	0.39 $\pm$ 0.01	2.68 $\pm$ 0.01
Methyl salicylate	1193	1192	0.10 $\pm$ 0.00	0.33 $\pm$ 0.01	1.24 $\pm$ 0.01	0.75 $\pm$ 0.04	0.60 $\pm$ 0.02	0.52 $\pm$ 0.01	3.66 $\pm$ 0.04	1.29 $\pm$ 0.02
p-1,5-Menthadien-7-ol	1192	1194	0.95 $\pm$ 0.02	0.13 $\pm$ 0.00	0.58 $\pm$ 0.01	0.14 $\pm$ 0.02	0.45 $\pm$ 0.01	0.15 $\pm$ 0.01	0.44 $\pm$ 0.03	0.58 $\pm$ 0.01
Myrtenol	1195	1195	0.13 $\pm$ 0.01	0.41 $\pm$ 0.01	0.40 $\pm$ 0.01	0.14 $\pm$ 0.02	0.27 $\pm$ 0.01	2.85 $\pm$ 0.06	0.44 $\pm$ 0.03	0.58 $\pm$ 0.01
Safranal	1198	1201	0.08 $\pm$ 0.01	3.28 $\pm$ 0.07	0.11 $\pm$ 0.01	5.49 $\pm$ 0.25	2.24 $\pm$ 0.08	1.14 $\pm$ 0.03	0.14 $\pm$ 0.00	0.32 $\pm$ 0.01
Capric aldehyde	1204	1206	0.01 $\pm$ 0.00	0.09 $\pm$ 0.00	0.07 $\pm$ 0.00	0.07 $\pm$ 0.00	0.06 $\pm$ 0.00	0.02 $\pm$ 0.00	0.51 $\pm$ 0.02	0.20 $\pm$ 0.00
β -Cyclocitral	1220	1220	0.08 $\pm$ 0.00	0.15 $\pm$ 0.00	0.22 $\pm$ 0.00	0.21 $\pm$ 0.01	0.16 $\pm$ 0.00	0.21 $\pm$ 0.03	0.08 $\pm$ 0.01	0.23 $\pm$ 0.01
Citronellol	1227	1228	0.13 $\pm$ 0.01	0.28 $\pm$ 0.01	0.07 $\pm$ 0.01	4.80 $\pm$ 0.28	1.32 $\pm$ 0.08	2.91 $\pm$ 0.03	0.10 $\pm$ 0.01	1.63 $\pm$ 0.04
Cuminal	1238	1239	0.91 $\pm$ 0.02	0.33 $\pm$ 0.01	0.81 $\pm$ 0.01	0.53 $\pm$ 0.02	0.64 $\pm$ 0.02	0.61 $\pm$ 0.01	0.02 $\pm$ 0.00	0.02 $\pm$ 0.00
Neral	1240	1240	nd	nd	nd	1.53 $\pm$ 2.17	0.38 $\pm$ 0.02	2.95 $\pm$ 0.02	0.03 $\pm$ 0.00	1.55 $\pm$ 0.00
(Z)-iso-Geraniol	1242	1240	0.02 $\pm$ 0.00	0.01 $\pm$ 0.00	0.03 $\pm$ 0.00	0.05 $\pm$ 0.00	0.03 $\pm$ 0.00	0.02 $\pm$ 0.00	0.07 $\pm$ 0.01	0.10 $\pm$ 0.00
Carvone	1243	1242	0.15 $\pm$ 0.00	0.24 $\pm$ 0.00	0.26 $\pm$ 0.01	0.54 $\pm$ 0.03	0.30 $\pm$ 0.01	0.53 $\pm$ 0.00	0.02 $\pm$ 0.00	0.02 $\pm$ 0.00
Spirovetivene	1251	1152	0.27 $\pm$ 0.00	0.54 $\pm$ 0.00	0.13 $\pm$ 0.00	0.61 $\pm$ 0.03	0.39 $\pm$ 0.01	0.26 $\pm$ 0.00	0.07 $\pm$ 0.00	3.40 $\pm$ 0.01
Geraniol	1254	1255	0.82 $\pm$ 0.04	2.84 $\pm$ 0.09	1.00 $\pm$ 0.00	4.81 $\pm$ 0.28	2.37 $\pm$ 1.62	2.95 $\pm$ 0.02	0.52 $\pm$ 0.01	21.34 $\pm$ 0.16
(E)-2-Decenal	1260	1263	nd	0.23 $\pm$ 0.00	0.02 $\pm$ 0.00	0.03 $\pm$ 0.00	0.07 $\pm$ 0.00	0.01 $\pm$ 0.00	0.14 $\pm$ 0.01	1.70 $\pm$ 0.02
(E)-Citral	1270	1270	0.84 $\pm$ 0.02	2.84 $\pm$ 0.09	0.40 $\pm$ 0.43	4.81 $\pm$ 0.29	2.22 $\pm$ 0.21	3.01 $\pm$ 0.03	0.27 $\pm$ 0.02	3.64 $\pm$ 0.02
Phellandral	1274	1276	0.23 $\pm$ 0.01	0.07 $\pm$ 0.00	0.17 $\pm$ 0.00	0.28 $\pm$ 0.01	0.19 $\pm$ 0.00	0.14 $\pm$ 0.00	0.01 $\pm$ 0.00	0.39 $\pm$ 0.00
Terpinen-7-al	1283	1283	0.52 $\pm$ 0.01	0.08 $\pm$ 0.02	0.43 $\pm$ 0.02	0.05 $\pm$ 0.00	0.27 $\pm$ 0.01	0.13 $\pm$ 0.03	0.05 $\pm$ 0.00	0.23 $\pm$ 0.00
Bornyl acetate	1285	1285	0.16 $\pm$ 0.00	0.38 $\pm$ 0.00	0.33 $\pm$ 0.00	0.32 $\pm$ 0.02	0.30 $\pm$ 0.00	10.21 $\pm$ 0.05	0.01 $\pm$ 0.00	0.04 $\pm$ 0.00
Cuminic alcohol	1289	1289	0.75 $\pm$ 0.02	0.38 $\pm$ 0.00	0.58 $\pm$ 0.02	0.42 $\pm$ 0.02	0.53 $\pm$ 0.02	0.29 $\pm$ 0.15	0.04 $\pm$ 0.00	0.95 $\pm$ 0.02
(E,Z)-2,4-Decadienal	1292	1295	0.02 $\pm$ 0.00	0.07 $\pm$ 0.00	0.10 $\pm$ 0.00	0.07 $\pm$ 0.00	0.06 $\pm$ 0.00	0.08 $\pm$ 0.01	0.12 $\pm$ 0.01	0.31 $\pm$ 0.02
Thymol	1294	1291	0.56 $\pm$ 0.00	1.07 $\pm$ 0.01	0.35 $\pm$ 0.01	0.60 $\pm$ 0.03	0.64 $\pm$ 0.01	0.43 $\pm$ 0.01	nd	nd
Carvacrol	1300	1299	1.07 $\pm$ 0.01	0.89 $\pm$ 0.01	0.95 $\pm$ 0.00	0.51 $\pm$ 0.03	0.86 $\pm$ 0.01	0.76 $\pm$ 0.01	nd	nd
Undecylic aldehyde	1305	1307	nd	0.02 $\pm$ 0.00	0.01 $\pm$ 0.00	0.01 $\pm$ 0.00	0.01 $\pm$ 0.00	nd	0.04 $\pm$ 0.00	0.05 $\pm$ 0.00
4-Vinylguaiaacol	1312	1316	0.05 $\pm$ 0.00	0.11 $\pm$ 0.00	0.07 $\pm$ 0.00	0.34 $\pm$ 0.02	0.14 $\pm$ 0.00	0.08 $\pm$ 0.00	0.34 $\pm$ 0.02	1.22 $\pm$ 0.02
2,4-Decadienal	1315	1317	0.04 $\pm$ 0.00	0.25 $\pm$ 0.00	0.30 $\pm$ 0.01	0.22 $\pm$ 0.01	0.20 $\pm$ 0.00	0.31 $\pm$ 0.00	0.47 $\pm$ 0.02	1.22 $\pm$ 0.02
p-1,4-Menthadien-7-ol	1328	1327	0.99 $\pm$ 0.02	0.15 $\pm$ 0.00	0.62 $\pm$ 0.00	0.03 $\pm$ 0.01	0.45 $\pm$ 0.01	0.26 $\pm$ 0.00	0.01 $\pm$ 0.00	0.01 $\pm$ 0.00

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δ-Eiemenene	1337	1338	2.47 ± 0.10	0.07 ± 0.01	0.05 ± 0.00	0.02 ± 0.00	0.65 ± 0.03	0.06 ± 0.00	0.26 ± 0.01	0.02 ± 0.01
α-Cubenene	1350	1351	0.06 ± 0.00	0.08 ± 0.00	0.02 ± 0.00	0.12 ± 0.01	0.07 ± 0.00	0.01 ± 0.00	0.19 ± 0.00	0.01 ± 0.00
Dehydro-ar-ionene	1352	1354	0.03 ± 0.00	0.20 ± 0.00	0.18 ± 0.00	0.33 ± 0.02	0.18 ± 0.00	0.28 ± 0.01	0.07 ± 0.00	0.02 ± 0.00
Eugenol	1357	1357	0.10 ± 0.00	0.20 ± 0.00	0.10 ± 0.00	0.29 ± 0.01	0.17 ± 0.00	0.14 ± 0.00	0.14 ± 0.00	0.12 ± 0.00
Caprinic acid	1372	1373	0.08 ± 0.00	0.08 ± 0.00	0.48 ± 0.00	nd	0.16 ± 0.00	nd	2.15 ± 0.06	0.66 ± 0.02
Copaene	1376	1376	0.26 ± 0.00	0.28 ± 0.01	0.07 ± 0.00	0.48 ± 0.02	0.27 ± 0.01	0.03 ± 0.00	0.51 ± 0.01	0.05 ± 0.00
(E)-Damascenone	1385	1386	0.19 ± 0.00	0.85 ± 0.00	0.60 ± 0.02	0.26 ± 0.02	0.48 ± 0.01	0.34 ± 0.00	0.69 ± 0.02	1.15 ± 0.03
β-Elemene	1390	1391	0.45 ± 0.01	nd	nd	0.14 ± 0.01	0.15 ± 0.00	nd	0.04 ± 0.01	nd
(Z)-Jasmone	1393	1394	0.31 ± 0.01	0.16 ± 0.00	0.09 ± 0.00	0.14 ± 0.01	0.18 ± 0.00	0.14 ± 0.00	0.01 ± 0.00	0.02 ± 0.00
Sibirene	1403	1400	nd	nd	nd	nd	nd	nd	0.50 ± 0.01	0.05 ± 0.00
Lauric aldehyde	1408	1409	0.01 ± 0.00	0.10 ± 0.00	0.02 ± 0.00	0.02 ± 0.00	0.04 ± 0.00	0.02 ± 0.00	0.04 ± 0.00	0.13 ± 0.00
Caryophyllene	1420	1419	nd	3.42 ± 0.02	2.50 ± 0.02	1.64 ± 0.11	1.89 ± 0.04	nd	0.02 ± 0.00	nd
γ-Elemene	1434	1434	1.47 ± 0.02	0.21 ± 0.00	0.16 ± 0.00	0.45 ± 0.02	0.57 ± 0.01	nd	nd	nd
Aromandendrene	1439	1440	0.27 ± 0.00	nd	nd	nd	0.07 ± 0.00	nd	nd	nd
Isoeugenol	1450	1450	0.01 ± 0.00	0.03 ± 0.00	0.02 ± 0.00	0.02 ± 0.00	0.02 ± 0.00	0.01 ± 0.00	0.46 ± 0.01	0.05 ± 0.00
trans-Geranylacetone	1453	1453	0.18 ± 0.01	1.16 ± 0.03	0.64 ± 0.00	0.71 ± 0.05	0.67 ± 0.02	0.95 ± 0.02	0.96 ± 0.05	0.54 ± 0.01
Humulene	1456	1454	3.37 ± 0.04	1.56 ± 0.01	3.40 ± 0.01	1.03 ± 0.07	2.34 ± 0.03	2.63 ± 0.07	0.04 ± 0.00	0.04 ± 0.00
Valerena-4,7(11)-diene	1461	1460	0.10 ± 0.00	0.08 ± 0.06	0.01 ± 0.00	0.02 ± 0.00	0.05 ± 0.02	0.04 ± 0.00	0.02 ± 0.00	nd
Alloaromadendrene	1463	1461	0.32 ± 0.20	0.33 ± 0.06	0.06 ± 0.01	0.06 ± 0.00	0.19 ± 0.07	0.11 ± 0.01	0.02 ± 0.00	0.52 ± 0.01
9-epi-(E)-Caryophyllene	1470	1466	0.61 ± 0.00	0.45 ± 0.01	0.03 ± 0.01	0.08 ± 0.01	0.29 ± 0.24	0.10 ± 0.01	0.01 ± 0.00	0.01 ± 0.00
Lauric alcohol	1474	1474	0.04 ± 0.00	0.12 ± 0.02	0.03 ± 0.00	0.06 ± 0.00	0.06 ± 0.00	0.08 ± 0.01	0.06 ± 0.01	0.03 ± 0.00
γ-Muurolene	1478	1477	0.24 ± 0.00	0.24 ± 0.00	0.05 ± 0.00	0.29 ± 0.02	0.20 ± 0.00	0.02 ± 0.01	0.07 ± 0.01	0.01 ± 0.00
trans-β-Ionone I	1488	1491	1.29 ± 0.03	1.54 ± 0.00	1.11 ± 0.01	1.93 ± 0.11	1.47 ± 0.04	1.55 ± 0.03	0.49 ± 0.02	1.04 ± 0.01
trans-β-Ionone II	1487	1486	1.29 ± 0.03	1.54 ± 0.00	1.11 ± 0.01	1.93 ± 0.11	1.47 ± 0.04	1.55 ± 0.03	0.49 ± 0.02	1.04 ± 0.01
α-Selinene	1498	1494	0.28 ± 0.01	0.27 ± 0.01	0.15 ± 0.00	0.18 ± 0.01	0.22 ± 0.01	0.11 ± 0.00	0.02 ± 0.01	0.01 ± 0.00
Bicyclogermacrene	1499	1496	2.36 ± 0.02	0.03 ± 0.00	0.05 ± 0.00	0.03 ± 0.00	0.62 ± 0.00	0.07 ± 0.00	0.05 ± 0.00	0.01 ± 0.00
α-Muurolene	1502	1499	0.86 ± 0.46	0.29 ± 0.01	0.05 ± 0.00	0.36 ± 0.03	0.39 ± 0.02	0.02 ± 0.00	0.04 ± 0.03	0.01 ± 0.00

Volatiles from *Ribes* and *Rubus* spp.

Compound	RI Exp	RI Lib	<i>Ribes nigrum</i> 1	<i>Ribes nigrum</i> 2	<i>Ribes nigrum</i> 3	<i>Ribes nigrum</i> 4	<i>Ribes nigrum</i> 1-4*	<i>Ribes rubrum</i>	<i>Rubus idaeus</i>	<i>Rubus fruticosus</i>
Tridecyl aldehyde	1511	1512	0.01 ± 0.00	0.13 ± 0.00	0.05 ± 0.01	0.07 ± 0.00	0.06 ± 0.00	0.03 ± 0.00	0.21 ± 0.01	0.08 ± 0.00
γ-Muurolene	1517	1513	1.44 ± 0.03	1.45 ± 0.03	0.19 ± 0.02	1.31 ± 0.09	1.10 ± 0.04	0.09 ± 0.01	0.32 ± 0.02	0.12 ± 0.00
Cubebol	1518	1515	0.44 ± 0.01	0.29 ± 0.01	0.05 ± 0.00	0.09 ± 0.00	0.22 ± 0.00	0.03 ± 0.00	0.32 ± 0.02	0.11 ± 0.00
δ-Cadinene	1525	1524	0.44 ± 0.00	0.74 ± 0.01	0.17 ± 0.01	1.58 ± 0.12	0.73 ± 0.03	0.12 ± 0.00	0.17 ± 0.01	0.02 ± 0.00
α-Calacorene	1546	1542	0.29 ± 0.01	0.39 ± 0.01	0.13 ± 0.00	0.94 ± 0.06	0.44 ± 0.02	0.08 ± 0.00	0.75 ± 0.02	0.49 ± 0.00
Elemol	1551	1549	0.13 ± 0.01	0.23 ± 0.00	0.13 ± 0.00	0.32 ± 0.02	0.20 ± 0.01	0.16 ± 0.01	0.13 ± 0.00	0.01 ± 0.00
Italicene epoxide	1552	1549	0.19 ± 0.00	0.31 ± 0.01	0.30 ± 0.04	0.44 ± 0.02	0.31 ± 0.02	0.23 ± 0.01	0.06 ± 0.00	0.01 ± 0.00
(E)-Nerolidol	1565	1564	nd	nd	nd	nd	nd	nd	0.41 ± 0.01	0.04 ± 0.00
Lauric acid	1571	1567	0.13 ± 0.00	0.46 ± 0.01	1.46 ± 0.02	0.02 ± 0.00	0.52 ± 0.01	nd	2.65 ± 2.88	1.16 ± 0.01
β-Calacorene	1566	1563	0.10 ± 0.00	0.17 ± 0.00	0.56 ± 0.01	0.20 ± 0.01	0.26 ± 0.00	0.03 ± 0.00	0.29 ± 0.10	0.48 ± 0.01
Palustrol	1571	1568	0.15 ± 0.00	0.36 ± 0.00	0.37 ± 0.00	0.21 ± 0.01	0.27 ± 0.00	0.23 ± 0.01	0.27 ± 0.15	0.07 ± 0.00
(Z)-3-Hexenyl benzoate	1572	1570	0.27 ± 0.01	0.37 ± 0.00	0.25 ± 0.01	0.17 ± 0.04	0.26 ± 0.02	0.37 ± 0.00	0.18 ± 0.01	0.03 ± 0.03
(E,E)-4,8,12-Trimethyl-1,3,7,11-tridecatetraene	1579	1577	nd	nd	nd	nd	nd	nd	0.14 ± 0.11	nd
Guaiol	1601	1596	0.56 ± 0.37	0.25 ± 0.00	0.17 ± 0.00	1.38 ± 1.64	0.59 ± 0.05	1.61 ± 1.04	2.95 ± 0.08	0.02 ± 0.00
Humulene epoxide I	1603	1604	0.58 ± 0.31	0.28 ± 0.01	0.40 ± 0.00	0.46 ± 0.16	0.43 ± 0.12	0.33 ± 0.01	0.76 ± 0.01	0.01 ± 0.00
Myristic aldehyde	1613	1613	0.06 ± 0.00	0.25 ± 0.01	0.12 ± 0.01	0.07 ± 0.01	0.12 ± 0.01	0.07 ± 0.00	0.05 ± 0.00	0.21 ± 0.00
Humulene epoxide II	1615	1606	0.16 ± 0.00	1.80 ± 0.02	2.57 ± 0.04	1.23 ± 0.08	1.44 ± 0.04	2.09 ± 0.03	0.17 ± 0.01	0.04 ± 0.02
1-epi-Cubenol	1632	1627	0.27 ± 0.01	0.27 ± 0.02	0.11 ± 0.00	0.15 ± 0.10	0.20 ± 0.03	0.32 ± 0.01	4.76 ± 0.19	0.38 ± 0.00
Isospathulenol	1637	1638	0.27 ± 0.01	0.27 ± 0.02	0.11 ± 0.00	0.19 ± 0.15	0.21 ± 0.04	0.32 ± 0.01	4.75 ± 0.20	0.38 ± 0.00
Caryophylladienol II	1637	1637	0.14 ± 0.01	0.30 ± 0.01	0.22 ± 0.01	4.23 ± 2.73	1.22 ± 0.09	0.24 ± 0.01	0.05 ± 0.05	0.03 ± 0.01
Caryophylladienol I	1641	1642	1.39 ± 0.03	4.04 ± 0.01	2.92 ± 0.04	6.39 ± 0.32	3.68 ± 0.10	3.19 ± 0.04	0.09 ± 0.10	0.03 ± 0.01
t-Muurulol	1646	1642	0.37 ± 0.03	0.30 ± 0.12	0.17 ± 0.15	0.33 ± 0.06	0.29 ± 0.09	0.54 ± 0.01	4.82 ± 0.16	0.27 ± 0.01
Bisabolol oxide B	1658	1656	0.01 ± 0.00	0.01 ± 0.00	1.41 ± 0.02	0.02 ± 0.00	0.36 ± 0.00	0.01 ± 0.00	0.02 ± 0.00	0.02 ± 0.00
α-Cadinol	1647	1653	0.70 ± 0.00	0.56 ± 0.02	0.33 ± 0.01	0.45 ± 0.04	0.51 ± 0.02	0.97 ± 0.01	4.83 ± 0.15	0.03 ± 0.00
14-Hydroxy-(Z)-caryophyllene	1667	1666	0.64 ± 0.06	1.97 ± 0.05	1.55 ± 0.00	3.19 ± 0.11	1.84 ± 0.06	1.59 ± 0.02	0.09 ± 0.01	0.02 ± 0.00

Compound	RI Exp	RI Lib	<i>Ribes nigrum</i> 1	<i>Ribes nigrum</i> 2	<i>Ribes nigrum</i> 3	<i>Ribes nigrum</i> 4	<i>Ribes nigrum</i> 1-4*	<i>Ribes rubrum</i>	<i>Rubus idaeus</i>	<i>Rubus fruticosus</i>
13-Methyltetradecanal	1679	1680	0.01 ± 0.00	0.30 ± 0.16	0.16 ± 0.00	0.30 ± 0.02	0.19 ± 0.04	0.26 ± 0.00	0.19 ± 0.01	0.01 ± 0.00
α-Bisabolol	1679	1684	0.56 ± 0.36	2.16 ± 0.04	3.80 ± 0.01	1.95 ± 0.12	2.12 ± 0.13	1.23 ± 0.02	0.05 ± 0.01	0.07 ± 0.01
Germacre-4(15),5,10 (14)-trien-1β-ol	1691	1690	0.02 ± 0.01	0.10 ± 0.00	0.06 ± 0.00	0.12 ± 0.01	0.08 ± 0.00	0.05 ± 0.00	0.12 ± 0.00	0.13 ± 0.01
Farnesol isomer A	1724	1724	2.03 ± 0.05	0.11 ± 0.02	0.10 ± 0.01	0.11 ± 0.07	0.59 ± 0.02	0.05 ± 0.01	0.14 ± 0.00	0.01 ± 0.00
Benzoic acid	1767	1763	0.09 ± 0.01	1.17 ± 0.03	1.03 ± 0.02	0.22 ± 0.02	0.63 ± 0.04	1.27 ± 0.03	0.81 ± 0.02	0.21 ± 0.00
Myristic acid	1765	1768	0.21 ± 0.00	0.69 ± 0.01	1.51 ± 0.02	0.27 ± 0.01	0.67 ± 0.02	0.05 ± 0.00	0.46 ± 0.03	0.06 ± 0.00
Dehydrofukinone	1813	1817	nd	0.20 ± 0.00	0.02 ± 0.00	0.01 ± 0.01	0.06 ± 0.01	0.02 ± 0.00	5.72 ± 0.15	0.02 ± 0.00
Palmitaldehyde	1818	1817	0.01 ± 0.00	0.27 ± 0.00	0.02 ± 0.00	0.04 ± 0.00	0.08 ± 0.00	0.01 ± 0.00	0.04 ± 0.00	0.19 ± 0.00
Palmitic acid	1969	1968	nd	nd	nd	nd	nd	nd	1.30 ± 0.03	nd
Epimanool	2058	2058	0.01 ± 0.00	0.02 ± 0.00	nd	0.01 ± 0.00	0.01 ± 0.00	nd	0.09 ± 0.00	0.02 ± 0.00
Phytol	2115	2114	2.70 ± 0.04	12.40 ± 0.31	3.79 ± 0.13	9.28 ± 0.42	7.04 ± 0.23	6.80 ± 0.10	8.06 ± 0.38	0.60 ± 0.02
Linolenic acid	2141	2139	0.50 ± 0.05	0.23 ± 0.02	0.50 ± 0.12	0.05 ± 0.02	0.32 ± 0.05	0.03 ± 0.00	0.21 ± 0.05	0.01 ± 0.01

Note: *Average of four samples from different growing places