

Table S1: List of identified volatile compounds between RC-R, RF-R, and quality control

Number	Compounds	Class	RC-R-1	RC-R-2	RC-R-3	RF-R-1	RF-R-2	RF-R-3	QC-1	QC-2	QC-3
1	(-)-Myrtenol	Terpenoids	1.49E+08	1.47E+08	1.61E+08	1.00E+00	1.00E+00	1.00E+00	1.26E+08	8.86E+07	1.07E+08
2	3,7-Dimethyl-2,6-octadien-1-ol	Terpenoids	6.20E+07	5.92E+07	6.61E+07	1.00E+00	1.00E+00	1.00E+00	5.19E+07	3.48E+07	4.03E+07
3	3-Carene	Terpenoids	2.86E+07	2.64E+07	2.96E+07	1.00E+00	1.00E+00	1.00E+00	3.87E+07	2.25E+07	2.43E+07
4	p-Cymene-7-ol	Terpenoids	1.94E+07	1.87E+07	2.07E+07	1.00E+00	1.00E+00	1.00E+00	1.85E+07	1.07E+07	1.21E+07
5	Citronellol	Terpenoids	1.95E+07	1.85E+07	2.07E+07	1.00E+00	1.00E+00	1.00E+00	1.84E+07	1.24E+07	1.40E+07
6	[1S-(1α,3α,5α)]-6,6-Dimethyl-2-methylene-bicyclo[3.1.1]heptane-3-ol	Terpenoids	1.19E+07	1.14E+07	1.17E+07	1.00E+00	1.00E+00	1.00E+00	9.95E+06	7.18E+06	8.53E+06
7	p-Mentha-1,8-dien-7-ol	Terpenoids	8.01E+06	7.29E+06	8.12E+06	1.00E+00	1.00E+00	1.00E+00	6.09E+06	3.90E+06	4.62E+06
8	6,6-Dimethyl-bicyclo[3.1.1]hepta-2-ene-2-carboxaldehyde	Terpenoids	4.36E+06	4.38E+06	4.86E+06	1.00E+00	1.00E+00	1.00E+00	4.61E+06	3.17E+06	3.82E+06
9	Carveol	Terpenoids	4.30E+06	3.87E+06	4.24E+06	1.00E+00	1.00E+00	1.00E+00	3.98E+06	2.89E+06	3.20E+06
10	[1aR-(1α,4β,4αβ,7β,7αβ,7ba)]-Decahydro-1,1,4,7-tetramethyl-1H-cycloprop[c]azulene	Terpenoids	2.55E+06	2.28E+06	2.63E+06	1.00E+00	1.00E+00	1.00E+00	2.11E+06	1.28E+06	1.33E+06
11	γ-Terpinene	Terpenoids	2.05E+06	1.78E+06	1.83E+06	1.00E+00	1.00E+00	1.00E+00	2.48E+06	1.43E+06	1.48E+06
12	2,6-Dimethyl-2,4,6-octatriene	Terpenoids	1.31E+06	1.19E+06	1.35E+06	1.00E+00	1.00E+00	1.00E+00	1.52E+06	8.41E+05	8.40E+05
13	Elemene isomer	Terpenoids	1.17E+06	9.37E+05	1.07E+06	1.00E+00	1.00E+00	1.00E+00	1.05E+06	6.79E+05	7.39E+05
14	4-(1-Methylethyl)-1,4-cyclohexadiene-1-methanol	Terpenoids	7.21E+05	6.53E+05	7.39E+05	1.00E+00	1.00E+00	1.00E+00	6.47E+05	4.47E+05	4.80E+05
15	1,3,3-Trimethyl-2-oxabicyclo[2.2.2]octan-6-ol	Terpenoids	5.66E+05	4.57E+05	4.69E+05	1.00E+00	1.00E+00	1.00E+00	6.15E+05	3.08E+05	5.27E+05
16	(Z)-3,7-Dimethyl-3,6-octadien-1-ol	Terpenoids	4.99E+05	4.74E+05	4.99E+05	1.00E+00	1.00E+00	1.00E+00	5.74E+05	3.25E+05	3.76E+05
17	2-Methyl-6-methylene-1,7-octadiene	Terpenoids	4.74E+05	4.28E+05	4.56E+05	1.00E+00	1.00E+00	1.00E+00	6.15E+05	4.36E+05	4.46E+05
18	(R)-1-Methyl-4-(1,2,2-trimethylcyclopentyl)-benzene	Terpenoids	5.28E+05	3.73E+05	4.36E+05	1.00E+00	1.00E+00	1.00E+00	6.70E+05	3.97E+05	4.29E+05
19	3,7,11-Trimethyl-2,6,10-dodecatrien-1-ol	Terpenoids	4.39E+05	3.67E+05	4.17E+05	1.00E+00	1.00E+00	1.00E+00	2.46E+05	1.06E+05	1.03E+05
20	cis-α-Bergamotene	Terpenoids	3.19E+05	2.52E+05	2.98E+05	1.00E+00	1.00E+00	1.00E+00	3.91E+05	2.45E+05	2.58E+05
21	Pinocarvone	Terpenoids	2.62E+05	2.42E+05	2.66E+05	1.00E+00	1.00E+00	1.00E+00	2.19E+05	1.58E+05	1.94E+05
22	p-Mentha-1(7),2-dien-8-ol	Terpenoids	2.39E+05	2.40E+05	2.82E+05	1.00E+00	1.00E+00	1.00E+00	2.81E+05	1.97E+05	2.62E+05
23	trans-Geranylgeraniol	Terpenoids	2.45E+05	2.34E+05	2.49E+05	1.00E+00	1.00E+00	1.00E+00	1.62E+05	1.01E+05	8.53E+04
24	endo-Borneol	Terpenoids	1.66E+07	1.79E+07	2.02E+07	2.95E+04	3.09E+04	2.06E+04	2.08E+07	1.50E+07	1.72E+07
25	(1S)-6,6-Dimethyl-2-methylene-bicyclo[3.1.1]heptane	Terpenoids	5.04E+07	4.70E+07	5.32E+07	1.02E+05	9.20E+04	1.02E+05	7.03E+07	4.35E+07	4.74E+07
26	Linalool	Terpenoids	1.12E+07	1.03E+07	1.18E+07	9.47E+04	7.34E+04	6.70E+04	1.27E+07	7.75E+06	8.71E+06
27	Eucalyptol	Terpenoids	3.12E+06	3.10E+06	3.64E+06	4.46E+04	4.09E+04	3.75E+04	2.67E+06	2.00E+06	2.39E+06
28	α-Phellandrene 1	Terpenoids	1.28E+07	1.22E+07	1.35E+07	2.45E+05	1.94E+05	1.25E+05	1.59E+07	9.67E+06	1.08E+07
29	Limonene	Terpenoids	5.71E+06	5.07E+06	5.61E+06	2.70E+05	1.79E+05	1.21E+05	7.65E+06	4.28E+06	4.67E+06
30	(Z)-3,7-Dimethyl-2,6-octadienal	Terpenoids	3.87E+05	3.45E+05	4.14E+05	9.33E+04	1.16E+05	1.00E+05	5.06E+05	3.91E+05	4.64E+05
31	(1α,2β,5α)-2,6,6-Trimethyl-bicyclo[3.1.1]heptane-3-one	Terpenoids	2.43E+05	2.03E+05	2.32E+05	8.39E+04	9.44E+04	9.26E+04	3.55E+05	2.20E+05	2.32E+05
32	(+)-4-Carene	Terpenoids	3.17E+06	2.66E+06	3.21E+06	2.53E+06	2.17E+06	1.79E+06	3.48E+06	2.04E+06	2.14E+06
33	4-(1-Methylethyl)-benzaldehyde	Aromatics	1.86E+06	1.73E+06	1.92E+06	1.00E+00	1.00E+00	1.00E+00	1.68E+06	1.10E+06	1.27E+06
34	2-Phenylpropenal	Aromatics	7.76E+05	7.23E+05	8.72E+05	1.00E+00	1.00E+00	1.00E+00	3.27E+05	1.64E+05	1.88E+05
35	1,4-Diethyl-benzene	Aromatics	7.98E+05	7.38E+05	8.11E+05	1.00E+00	1.00E+00	1.00E+00	1.05E+06	6.34E+05	6.66E+05
36	3-Methyl-phenol	Aromatics	2.24E+05	2.08E+05	2.40E+05	1.00E+00	1.00E+00	1.00E+00	6.71E+07	3.87E+07	4.78E+07
37	N-(1-Methylethyl)-benzenemethanamine	Aromatics	1.82E+06	1.62E+06	1.82E+06	4.88E+04	3.70E+04	3.03E+04	2.48E+06	1.42E+06	1.51E+06
38	2,3-Dihydro-1H-inden-5-ol	Aromatics	6.68E+06	5.52E+06	5.84E+06	1.21E+05	1.91E+05	1.38E+05	4.89E+06	2.79E+06	3.03E+06
39	1-Methyl-3-(1-methylethyl)-benzene	Aromatics	5.00E+06	4.33E+06	5.07E+06	1.54E+05	1.27E+05	8.26E+04	6.89E+06	4.20E+06	4.32E+06
40	1-Methyl-3-(1-methylethenyl)-benzene	Aromatics	9.65E+05	8.99E+05	1.00E+06	6.75E+04	6.21E+04	4.36E+04	3.06E+06	1.85E+06	1.97E+06
41	1-Ethyl-3,5-dimethyl-benzene	Aromatics	7.94E+05	7.30E+05	8.01E+05	5.99E+04	4.74E+04	3.74E+04	1.19E+06	6.63E+05	6.78E+05
42	1-Ethyl-4-methoxy-benzene	Aromatics	2.72E+05	2.75E+05	3.48E+05	1.39E+04	2.15E+04	2.15E+04	6.48E+05	4.78E+05	5.37E+05

43	1,2-Dimethyl-naphthalene	Aromatics	1.76E+05	1.49E+05	1.74E+05	2.53E+04	2.70E+04	2.51E+04	1.64E+05	1.04E+05	1.14E+05
44	2,4-Di-tert-butylphenol	Aromatics	5.62E+05	5.00E+05	4.35E+05	1.55E+05	4.97E+05	7.56E+05	1.30E+06	9.91E+05	1.21E+06
45	Eugenol	Aromatics	3.41E+06	2.76E+06	2.97E+06	3.54E+06	4.55E+06	3.88E+06	9.15E+06	5.73E+06	6.30E+06
46	1,2-Dichloro-benzene	Aromatics	9.94E+04	7.89E+04	8.95E+04	1.91E+05	1.48E+05	1.32E+05	1.75E+05	1.31E+05	1.31E+05
47	Toluene	Aromatics	9.41E+04	9.91E+04	1.24E+05	3.84E+05	2.51E+05	1.96E+05	1.97E+05	1.46E+05	1.54E+05
48	Styrene	Aromatics	5.52E+05	5.57E+05	6.00E+05	2.35E+06	2.00E+06	1.50E+06	1.22E+06	8.50E+05	9.58E+05
49	4,5-Dimethyl-1,3-benzenediol	Aromatics	1.90E+05	1.66E+05	1.52E+05	1.02E+06	1.12E+06	9.69E+05	1.14E+06	7.01E+05	8.15E+05
50	1-Methoxy-2-methyl-benzene	Aromatics	3.38E+05	2.99E+05	3.45E+05	4.99E+06	4.34E+06	3.56E+06	2.21E+06	1.39E+06	1.75E+06
51	3,4-Dimethoxytoluene	Aromatics	4.08E+04	3.06E+04	2.71E+04	9.83E+05	1.17E+06	9.88E+05	9.69E+05	6.47E+05	6.91E+05
52	Methyleugenol	Aromatics	6.46E+04	5.21E+04	5.58E+04	2.78E+06	3.73E+06	3.38E+06	4.87E+06	3.19E+06	3.33E+06
53	Phenylethyl Alcohol	Aromatics	1.88E+05	2.33E+05	2.65E+05	2.77E+07	3.45E+07	3.01E+07	3.90E+07	2.26E+07	2.91E+07
54	Carbonic acid, phenyl propyl ester	Aromatics	1.00E+00	1.00E+00	1.00E+00	2.12E+05	2.44E+05	2.11E+05	2.24E+05	1.50E+05	1.84E+05
55	1-Decanol	Alcohols	2.46E+07	2.30E+07	2.66E+07	1.00E+00	1.00E+00	1.00E+00	2.37E+07	1.54E+07	1.64E+07
56	Prenol	Alcohols	8.85E+06	8.95E+06	1.01E+07	1.00E+00	1.00E+00	1.00E+00	1.02E+07	6.57E+06	7.74E+06
57	1-Octanol	Alcohols	4.30E+05	4.46E+05	5.61E+05	1.00E+00	1.00E+00	1.00E+00	5.15E+05	3.61E+05	4.03E+05
58	Acetic acid, decyl ester	Alcohols	4.52E+05	3.37E+05	3.85E+05	1.00E+00	1.00E+00	1.00E+00	1.33E+06	8.70E+05	1.14E+06
59	2,3-Dimethyl-2,3-butanediol	Alcohols	3.58E+05	3.75E+05	4.08E+05	1.00E+00	1.00E+00	1.00E+00	4.73E+05	2.96E+05	3.70E+05
60	6-Methyl-5-hepten-2-ol	Alcohols	1.20E+08	1.18E+08	1.31E+08	1.02E+05	1.02E+05	8.56E+04	1.30E+08	8.25E+07	1.02E+08
61	1-Hexanol	Alcohols	1.64E+07	1.57E+07	1.72E+07	1.55E+05	1.59E+05	1.40E+05	1.77E+07	1.18E+07	1.39E+07
62	1-Octen-3-ol	Alcohols	3.66E+06	3.44E+06	3.74E+06	1.03E+05	1.06E+05	1.12E+05	3.17E+06	2.32E+06	2.73E+06
63	(1S)-2,6,6-Trimethylbicyclo[3.1.1]hepta-2-ene	Olefins	2.48E+07	2.27E+07	2.55E+07	1.00E+00	1.00E+00	1.00E+00	3.18E+07	1.93E+07	2.06E+07
64	(E,Z)-2,6-Dimethyl-2,4,6-octatriene	Olefins	1.71E+06	1.55E+06	1.68E+06	1.00E+00	1.00E+00	1.00E+00	2.21E+06	1.31E+06	1.32E+06
65	2-(p-Anisyl)-5-methyl-1-hexene	Olefins	6.30E+05	4.95E+05	5.52E+05	1.00E+00	1.00E+00	1.00E+00	4.13E+05	2.53E+05	2.95E+05
66	2,6,10,10-Tetramethyl-1-oxaspiro[4.5]dec-6-ene	Olefins	3.01E+06	2.86E+06	3.40E+06	1.20E+04	1.04E+04	8.80E+03	3.04E+06	2.13E+06	2.20E+06
67	Octanoic acid, octyl ester	Esters	2.03E+06	1.68E+06	1.80E+06	1.00E+00	1.00E+00	1.00E+00	1.58E+06	1.80E+06	1.36E+06
68	Hexanoic acid, octyl ester	Esters	1.43E+06	1.21E+06	1.23E+06	1.00E+00	1.00E+00	1.00E+00	1.67E+06	9.30E+05	9.19E+05
69	Octanoic acid, ethyl ester	Esters	2.35E+05	1.88E+05	2.68E+05	1.00E+00	1.00E+00	1.00E+00	3.50E+05	2.20E+05	2.94E+05
70	Heptanoic acid, octyl ester	Esters	1.91E+05	1.17E+05	1.14E+05	1.00E+00	1.00E+00	1.00E+00	3.13E+05	6.57E+05	6.02E+05
71	Acetic acid, octyl ester	Esters	1.38E+07	1.30E+07	1.54E+07	9.10E+04	6.95E+04	6.17E+04	1.93E+07	1.24E+07	1.43E+07
72	3,7-Dimethyl-6-octen-1-ol acetate	Esters	1.90E+06	1.64E+06	1.84E+06	4.82E+04	4.95E+04	4.17E+04	2.25E+06	1.43E+06	1.43E+06
73	(Z)-3,7-Dimethyl-2,6-octadien-1-ol acetate	Esters	7.92E+05	6.78E+05	7.40E+05	1.40E+05	1.74E+05	1.60E+05	9.06E+05	6.59E+05	5.64E+05
74	β-Phenylethyl butyrate	Esters	1.09E+06	9.08E+05	1.15E+06	9.14E+05	1.89E+06	2.30E+06	1.49E+06	1.26E+06	1.20E+06
75	5-Methyl-2-(1-methylethyl)-phenol acetate	Esters	1.00E+00	1.00E+00	1.00E+00	1.66E+06	1.38E+06	1.11E+06	7.49E+05	5.31E+05	5.92E+05
76	(E)-3,7-Dimethyl-2,6-octadienal	Aldehydes	1.92E+06	1.89E+06	2.09E+06	1.00E+00	1.00E+00	1.00E+00	2.71E+06	1.85E+06	2.16E+06
77	4-Isopropylcyclohexa-1,3-dienecarbaldehyde	Aldehydes	4.37E+05	3.78E+05	4.23E+05	1.00E+00	1.00E+00	1.00E+00	3.58E+05	2.21E+05	2.43E+05
78	Octanal	Aldehydes	7.59E+05	7.14E+05	8.44E+05	6.01E+04	4.73E+04	3.65E+04	2.74E+06	2.44E+06	2.93E+06
79	(E)-Cinnamaldehyde	Aldehydes	8.26E+05	6.34E+05	6.69E+05	8.97E+05	1.24E+06	1.01E+06	2.22E+06	1.40E+06	1.50E+06
80	Hexanal	Aldehydes	3.46E+04	3.11E+04	3.64E+04	5.74E+04	5.48E+04	5.26E+04	7.37E+04	4.54E+04	5.00E+04
81	1-(2,4-Dihydroxyphenyl)-ethanone	Ketones	1.05E+06	1.01E+06	1.15E+06	4.98E+04	5.25E+04	3.73E+04	4.77E+05	2.99E+05	3.26E+05
82	6-Methyl-5-hepten-2-one	Ketones	2.83E+06	2.89E+06	3.33E+06	1.80E+05	1.60E+05	1.63E+05	3.06E+06	2.20E+06	2.68E+06
83	1-(2-Hydroxy-4-methoxyphenyl)-ethanone	Ketones	7.59E+04	4.60E+04	4.53E+04	2.94E+04	3.07E+04	3.51E+04	7.06E+04	4.52E+04	4.83E+04
84	1-Phenyl-1,2-propanedione	Ketones	2.45E+05	2.70E+05	2.70E+05	3.10E+05	3.39E+05	3.11E+05	2.18E+05	1.66E+05	1.63E+05
85	2-Amino-2-methyl-3-butenic acid	Acids	2.31E+06	2.35E+06	2.40E+06	1.00E+00	1.00E+00	1.00E+00	3.13E+06	2.44E+06	2.50E+06
86	Hexadecane	Alkanes	2.86E+05	2.79E+05	2.84E+05	4.81E+04	8.43E+04	2.24E+05	2.30E+05	2.41E+05	2.88E+05

87	Tetradecane	Alkanes	7.60E+05	7.19E+05	7.69E+05	2.48E+05	2.91E+05	7.19E+05	8.22E+05	9.32E+05	9.52E+05
88	Nonadecane	Alkanes	4.88E+04	3.23E+04	3.83E+04	1.03E+05	1.32E+05	1.30E+05	2.24E+05	1.72E+05	1.47E+05
89	1,5-Diazabicyclo[3.1.0]hexane	Heterocyclic compounds	5.14E+05	5.03E+05	5.54E+05	1.00E+00	1.00E+00	1.00E+00	6.62E+05	4.64E+05	4.64E+05
90	3-Acetyl-1H-pyrroline	Heterocyclic compounds	4.92E+05	4.41E+05	6.15E+05	1.00E+00	1.00E+00	1.00E+00	5.02E+05	3.45E+05	4.14E+05
91	Pyridine	Heterocyclic compounds	8.18E+05	8.66E+05	8.65E+05	1.31E+06	1.62E+06	1.31E+06	8.30E+05	6.62E+05	7.75E+05
92	(E)-2-(1-Pentenyl)-furan	Heterocyclic compounds	8.30E+04	6.25E+04	8.00E+04	1.21E+08	1.16E+08	9.12E+07	9.86E+04	5.41E+04	5.96E+04