

Figure S1. Diagram presentation of standard tea making processes for green tea, oolong tea, and black tea.

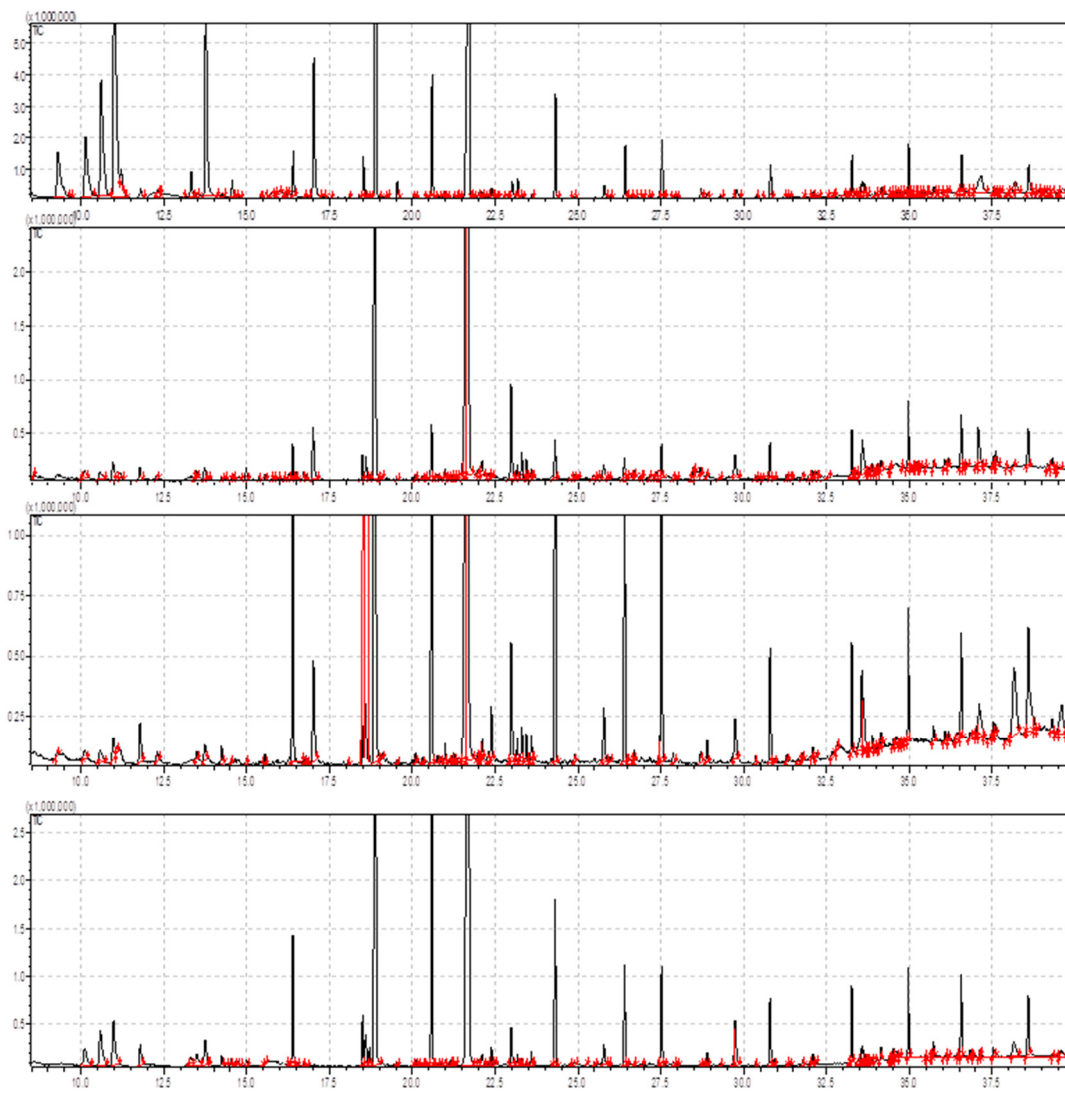


Figure S2. GC-MS chromatography of fresh tea leaves, green tea, oolong tea and black tea.

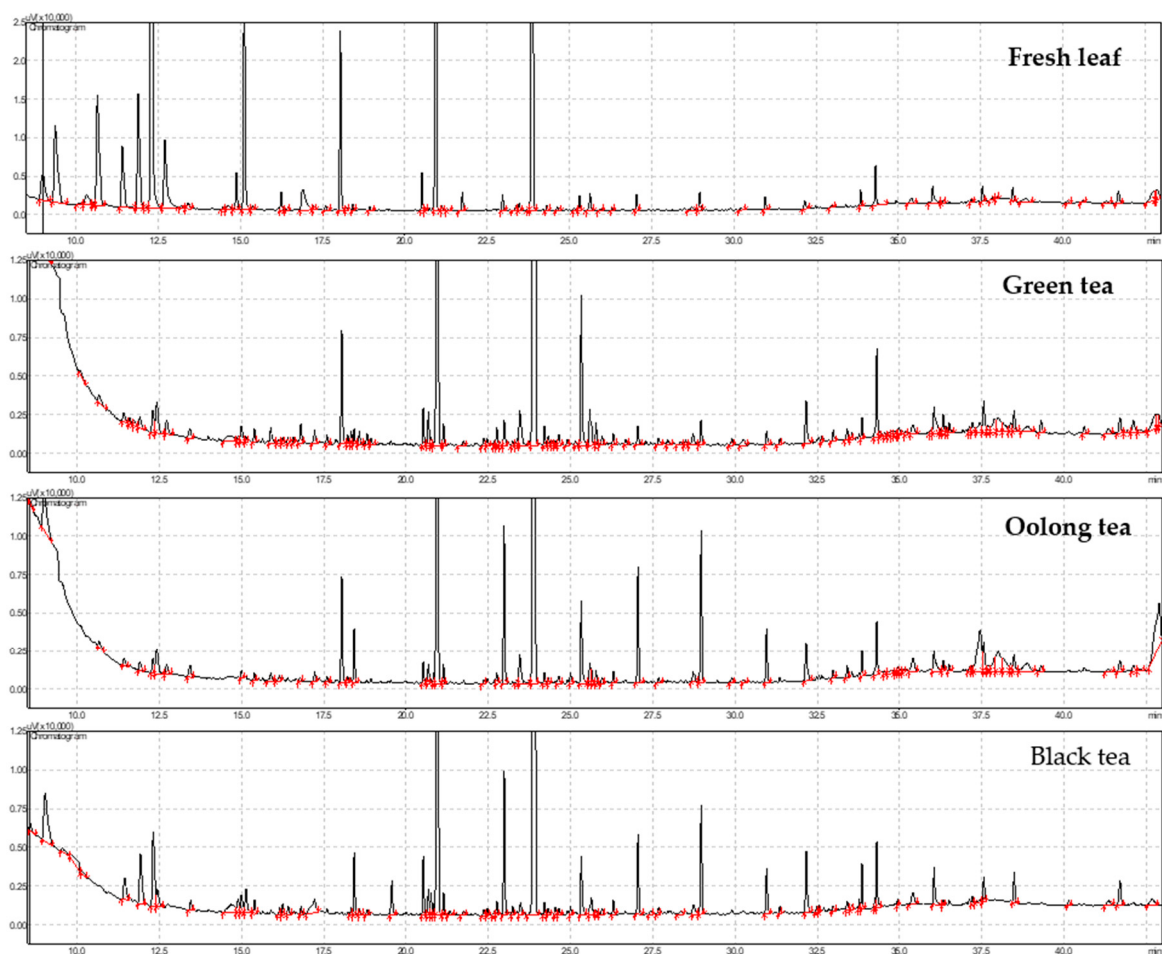


Figure S3. GC-FID chromatography of fresh tea leaves, green tea, oolong tea and black tea.



Figure S4. Venn diagram showing volatile distributions among fresh tea leaves, green tea, oolong tea, and black tea.

Table S1. FID response factor relative to ethyl caprate

Compound name	Molecular formula	Molecular weight	RF _{Dietz}
β -cis-ocimene	C ₁₀ H ₁₆	136.2	1.66
cis-linalool oxide (furanoid)	C ₁₀ H ₁₈ O ₂	170.2	1.27
trans-linalool oxide (furanoid)	C ₁₀ H ₁₈ O ₂	170.2	1.27
Linalool	C ₁₀ H ₁₈ O	154.2	1.46
Hotrienol	C ₁₀ H ₁₆ O	152.2	1.43
(E)-4,8-dimethylnona- 1,3,7-triene	C ₁₁ H ₁₈	150.3	1.67
Benzyl nitrile	C ₈ H ₇ N	117.1	1.34
Phenylethyl alcohol	C ₈ H ₁₀ O	122.2	1.51
(Z)-3-Hexenyl butanoate	C ₁₀ H ₁₈ O ₂	170.2	1.27
trans-pyranoid linalool oxide	C ₁₀ H ₁₈ O ₂	170.2	1.27
Dodecane	C ₁₂ H ₂₆	170.3	1.75
Methyl salicylate	C ₈ H ₈ O ₃	152.1	1.06
2,6-dimethyl-3,7- octadiene-2,6-diol	C ₁₀ H ₁₈ O ₂	170.2	1.27
Hexyl butanoate	C ₁₁ H ₂₂ O ₂	186.3	1.34
4-methylpentyl 2- methylbutanoate	C ₁₁ H ₂₂ O ₂	186.3	1.34
Hexyl 2-methyl butanoate	C ₁₁ H ₂₀ O ₂	184.3	1.31
(E)- geraniol	C ₁₀ H ₁₈ O	154.2	1.46

1,3-bis(1,1-dimethylethyl)benzene	C ₁₄ H ₂₂	190.3	1.68
2,5-dihydro-2,5-dimethoxyfuran	C ₆ H ₁₀ O ₃	130.1	0.82
Indole	C ₈ H ₇ N	117.1	1.56
cis-3-hexenyl hexanoate	C ₁₂ H ₂₂ O ₂	198.3	1.35
trans-2-hexenyl hexanoate	C ₁₂ H ₂₄ O ₂	200.3	1.37
Hexyl hexanoate	C ₁₂ H ₂₂ O ₂	198.3	1.35
cis-Jasmone	C ₁₁ H ₁₆ O	164.2	1.43
β-caryophyllen	C ₁₅ H ₂₄	204.4	1.69
(E)-caryophyllene	C ₁₅ H ₂₄	204.4	1.69
α-humulene	C ₁₅ H ₂₄	204.4	1.69
(E)-β-farnesene	C ₁₅ H ₂₄	204.4	1.69
(E)-2-dodecenal	C ₁₂ H ₂₂ O	182.3	1.51
1-dodecanol	C ₁₂ H ₂₆ O	186.3	1.56
Germacrene D	C ₁₅ H ₂₄	204.4	1.69
trans-β-ionone	C ₁₃ H ₂₀ O	192.3	1.62
α-farnesene	C ₁₅ H ₂₄	204.4	1.69
Nerolidol isobutyrate	C ₁₉ H ₃₂ O ₂	292.5	1.55
Tridecanal	C ₁₃ H ₂₆ O	198.3	1.55
γ-cadinene	C ₁₅ H ₂₄	204.4	1.68
cis-jasmin lactone	C ₁₀ H ₁₆ O ₂	168.2	1.24
δ-cadinene	C ₁₅ H ₂₄	204.4	1.69
trans-calamenene	C ₁₅ H ₂₂	202.3	1.79
Naphthalene	C ₁₁ H ₁₆ O ₂	180.2	1.54
1,8(2H,5H)-Naphthalenedione, hexahydro-8a-methyl-, cis-	C ₁₁ H ₁₆ O ₂	180.2	1.40
cis-cadina-1(2),4-diene	C ₁₅ H ₂₄	204.4	1.81
(E)-γ-bisabolene	C ₁₅ H ₂₄	204.4	1.93
(R)-4,4,7a-trimethyl-5,6,7,7a-tetrahydrobenzofuran-2(4H)-one	C ₁₁ H ₁₆ O ₂	180.2	1.26
α-cadinene	C ₁₅ H ₂₄	204.4	1.68
E-nerolidol	C ₁₅ H ₂₆ O	222.4	1.55
Germacrene B	C ₁₅ H ₂₄	204.4	1.68
(3E,7E)-4,8,12-trimethyltrideca-1,3,7,11-tetraene	C ₁₆ H ₂₆	218.4	1.69
cis-3-hexenyl n-octanoate	C ₁₄ H ₂₆ O ₂	226.4	1.40
(Z)-3-hexenyl benzoate	C ₁₃ H ₁₆ O ₂	204.3	1.41
Hexyl benzoate	C ₁₃ H ₁₈ O ₂	206.3	1.43
E-2-hexenyl benzoate	C ₁₃ H ₁₆ O ₂	204.3	1.41
Methyl jasmonate	C ₁₃ H ₂₀ O ₃	224.3	1.20
cis-3-hexenyl salicylate	C ₁₃ H ₁₆ O ₃	220.3	1.27
1-tetradecanol	C ₁₄ H ₃₀ O	214.4	1.59
α-cadinol	C ₁₅ H ₂₆ O	222.4	1.55
Neophytadiene	C ₂₀ H ₃₈	278.5	1.74

Hexadecanal	$C_{16}H_{32}O$	240.4	1.60	
				1
				9
Caffeine		$C_8H_{10}N_4O_2$		4
				.
				2
				2
				7
n-hexadecanoic acid methyl ester		$C_{17}H_{34}O_2$		0
				.
				5