

Table S2. The relative contents ($\mu\text{g/g DW}$) of aroma components in green tea products.

Compound Name	RT	RI	CK	LTD	LTY	LTCD
1-Pentanol	3.31	*	0.159 \pm 0.014 a	0.141 \pm 0.012 b	0.127 \pm 0.027 c	0.115 \pm 0.008 d
2-Hexenal, (E)-	3.7	832	0.064 \pm 0.007 a	0.029 \pm 0.002 b	0.021 \pm 0.001 bc	0.018 \pm 0.004 c
3-Hexen-1-ol	4.52	856	0.011 \pm 0.001 b	0.016 \pm 0.004 a	0.017 \pm 0.003 a	0.009 \pm 0.001 bc
2-Hexen-1-ol, (E)-	4.74	872	0.057 \pm 0.005 a	0.027 \pm 0.002 b	0.026 \pm 0.001 b	0.014 \pm 0.003 c
Benzaldehyde	6.74	962	0.075 \pm 0.01 b	0.078 \pm 0.002 b	0.103 \pm 0.011 a	0.079 \pm 0.006 b
2-Octen-1-ol,3,7-dimethyl-	7.46	970	0.05 \pm 0.004 a	0.035 \pm 0.003 b	0.031 \pm 0.004 b	0.028 \pm 0.002 bc
Octanal	7.83	1007	0.02 \pm 0.004 ab	0.025 \pm 0.001 a	0.014 \pm 0.003 c	0.011 \pm 0.002 c
2-Octen-1-ol	7.92	1010	0.029 \pm 0.003 a	0.014 \pm 0.003 b	0.013 \pm 0.003 b	0.012 \pm 0.002 b
3,4-Octadiene, 7-methyl-	8.06	1015	0.021 \pm 0.004 a	0.017 \pm 0 b	0.018 \pm 0.002 b	0.007 \pm 0.002 c
1-Hexanol,2-ethyl	8.58	1030	1.124 \pm 0.095 a	1.084 \pm 0.16 b	1.073 \pm 0.142 b	0.863 \pm 0.081 c
Citronellal	8.85	1040	0.012 \pm 0.003 bc	0.014 \pm 0.002 b	0.022 \pm 0.004 a	0.016 \pm 0.002 b
Benzene acetaldehyde	9.1	1047	0.012 \pm 0.001 c	0.014 \pm 0.004 bc	0.027 \pm 0.004 a	0.018 \pm 0.001 b
β -Ocimene	9.21	1049	0.048 \pm 0.001 c	0.059 \pm 0.006 bc	0.111 \pm 0.003 a	0.068 \pm 0.009 b
1-Octanol,3,7-dimethyl-	9.49	1058	0.011 \pm 0.001 b	0.024 \pm 0.003 a	0.027 \pm 0.005 a	0.026 \pm 0.005 a
Verbenol	9.63	1062	0.055 \pm 0.007 c	0.057 \pm 0.006 c	0.11 \pm 0.013 a	0.075 \pm 0.004 b
Linalool oxide I	10.09	1074	0.133 \pm 0.018 d	0.187 \pm 0.016 c	0.228 \pm 0.019 a	0.214 \pm 0.029 ab
Linalool oxide II	10.74	1086	0.06 \pm 0.006 c	0.076 \pm 0.002 b	0.093 \pm 0.001 a	0.077 \pm 0.002 b
Carvone oxide, cis-	10.96	1092	0.025 \pm 0.002 c	0.034 \pm 0.003 b	0.05 \pm 0.005 a	0.035 \pm 0.004 b
Linalool	11.27	1099	0.495 \pm 0.041 c	0.53 \pm 0.01 b	0.619 \pm 0.052 a	0.544 \pm 0.049 b
Hotrienol	11.42	1108	0.679 \pm 0.038 c	0.748 \pm 0.069 b	1.126 \pm 0.082 a	0.757 \pm 0.015 b
Phenylethyl Alcohol	11.77	1116	0.215 \pm 0.018 c	0.216 \pm 0.025 c	0.269 \pm 0.029 a	0.251 \pm 0.02 ab
Furan,3-(4-methyl-3-pentenyl)-	11.88	1119	0.029 \pm 0.003 d	0.045 \pm 0.006 c	0.109 \pm 0.005 a	0.077 \pm 0.004 b
Farnesene epoxide, E-	12.7	1137	0.039 \pm 0.005 c	0.046 \pm 0.004 b	0.079 \pm 0.008 a	0.03 \pm 0.005 c

Linalool oxide III	14.63	1173	0.012±0.002 d	0.078±0.006 c	0.113±0.009 a	0.096±0.019 b
Linalool oxide IV	14.85	1180	0.036±0.008 d	0.076±0.006 c	0.124±0.013 a	0.111±0.015 b
Butanoic acid,3-hexenyl ester, (Z)-	15.41	1187	0.081±0.002 a	0.038±0.004 c	0.051±0.001 b	0.033±0.007 c
Methyl salicylate	15.67	1192	0.066±0.006 c	0.079±0.003 b	0.114±0.007 a	0.051±0.005 d
Terpineol	15.89	1194	0.02±0.002 d	0.034±0.002 c	0.075±0.005 a	0.06±0.009 b
Caryophyllene	16.04	1201	0.022±0.005 b	0.025±0.003 b	0.051±0.004 a	0.022±0.005 b
2-Hexanol acetate	16.65	1213	0.115±0.005 a	0.064±0.004 bc	0.073±0.004 b	0.055±0.007 c
cis-β-Farnesene	16.99	1220	0.015±0.002 c	0.026±0.003 b	0.054±0.003 a	0.02±0.003 bc
Hexanoic acid,ethyl ester	17.23	1224	1.022±0.036 a	0.608±0.06 c	0.904±0.095 b	0.56±0.03 cd
trans-Farnesol	17.8	1235	0.008±0.001 b	0.009±0.002 b	0.012±0.003 a	0.011±0.004 a
Hexanoic acid,2-hexenyl ester, (E)-	18.42	1246	0.137±0.026 a	0.088±0.003 c	0.128±0.018 ab	0.078±0.007 cd
Geraniol	19.05	1255	0.089±0.006 bc	0.092±0.009 b	0.13±0.014 a	0.095±0.007 b
Isogeraniol	19.27	1261	0.01±0.001 b	0.011±0.001 b	0.017±0.001 a	0.013±0.003 ab
Butanoic acid,4-hexenyl ester, (Z)-	19.49	1265	0.034±0.005 a	0.02±0.002 bc	0.023±0.004 b	0.015±0.001 c
Citral	19.74	1269	0.018±0.003 c	0.024±0.003 bc	0.049±0.006 a	0.03±0.003 b
Indole	21.13	1295	0.064±0.006 c	0.148±0.025 b	0.183±0.022 a	0.023±0.001 d
2-Butyl-1-octanol	23.69	1329	0.038±0.003 a	0.015±0.001 b	0.017±0.003 b	0.013±0.001 bc
Hexanoic acid,3-hexenyl ester (Z)-	25.98	1370	0.236±0.024 a	0.166±0.018 c	0.208±0.016 b	0.061±0.004 d
jasmone	26.15	1394	0.022±0.001 a	0.022±0.001 a	0.023±0.003 a	0.012±0.002 b
Hexanoic acid, hexyl ester	26.25	1399	0.025±0.006 a	0.022±0.001 a	0.024±0.004 a	0.014±0.001 b
Caryophyllene oxide	26.38	1402	0.16±0.011 c	0.118±0.005 d	0.419±0.021 a	0.345±0.022 b
Dodecanal	27.64	1413	0.015±0.004 c	0.022±0.003 bc	0.055±0.003 a	0.031±0.008 b
α-Ionone	27.8	1426	0.014±0.002 c	0.014±0.004 c	0.031±0.002 a	0.021±0.002 b
Coumarin	28.16	1428	0.004±0.001 bc	0.007±0.001 b	0.017±0.002 a	0.015±0.001 a
Nerol	29.26	1434	0.05±0.004 d	0.072±0.002 c	0.14±0.018 a	0.112±0.005 b
Cedrene	31.82	1461	0.008±0.001 c	0.01±0.003 b	0.015±0.002 a	0.012±0.002 ab

δ -Cadinene (+)-	32.82	1508	0.007±0.002 c	0.01±0.002 b	0.015±0.002 ab	0.019±0.003 a
Nerolidol	34.97	1564	0.026±0.003 d	0.047±0.006 c	0.153±0.014 a	0.078±0.005 b
Isophytol	36.19	1598	0.028±0.006 a	0.021±0.008 b	0.03±0.006 a	0.014±0.001 c
Total			6.318±0.509 b	5.796±0.582 d	7.878±0.75 a	6.126±0.523 c

Note: The significance of difference was calculated *via* one-way analysis of variance (ANOVA, **Duncan test**) with a threshold $P < 0.05$; the relative content of compounds was expressed as average \pm standard error (n=5). RT, retention time; RI, retention index; CK, the control (natural withering); LTD, low temperature plus dark; LTY, low temperature plus yellow light; LTCD, low temperature plus CO₂.