Table S1. Quantitative parameters of organic acid standards.

NO.	Phase	standard curve	R^2	LOD (μg /L)	LOQ (μg /L)
1	Oxalic acid	Y=9027.17X+1641.59	0.9996	61.2	180.8
2	Tartaric acid	Y=7244.97X+1247.83	0.9998	360.8	987.5
3	Malic acid	Y=697.918X-375.840	0.9991	150.5	500.7
4	Lactic acid	Y=355.692X+4532.16	0.9999	600.7	1025.9
5	Acetic acid	Y=559.743X+223.794	0.9997	489.6	965.7
6	Citric acid	Y=849.085X+28895.2	0.9995	105.3	250.8
7	Succinic acid	Y=469.291X-120.784	0.9998	48.5	90.2

Note: LOD denotes limit of detection and LOQ denotes limit of quantification. Same as below.

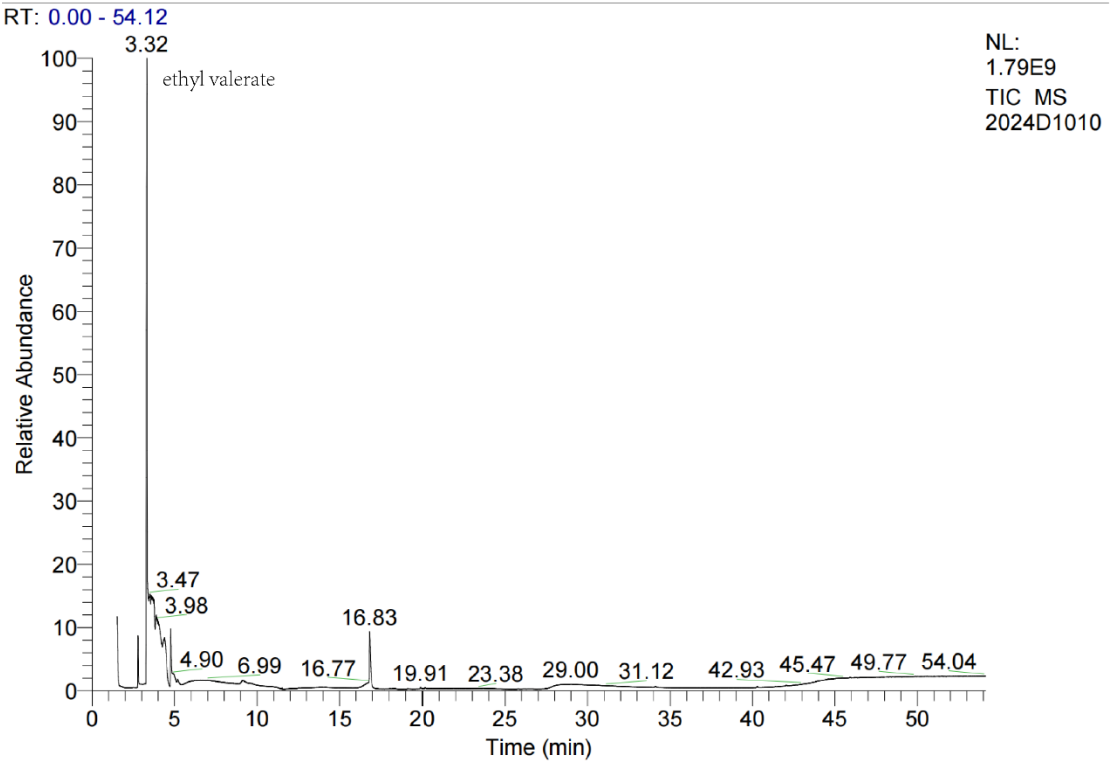
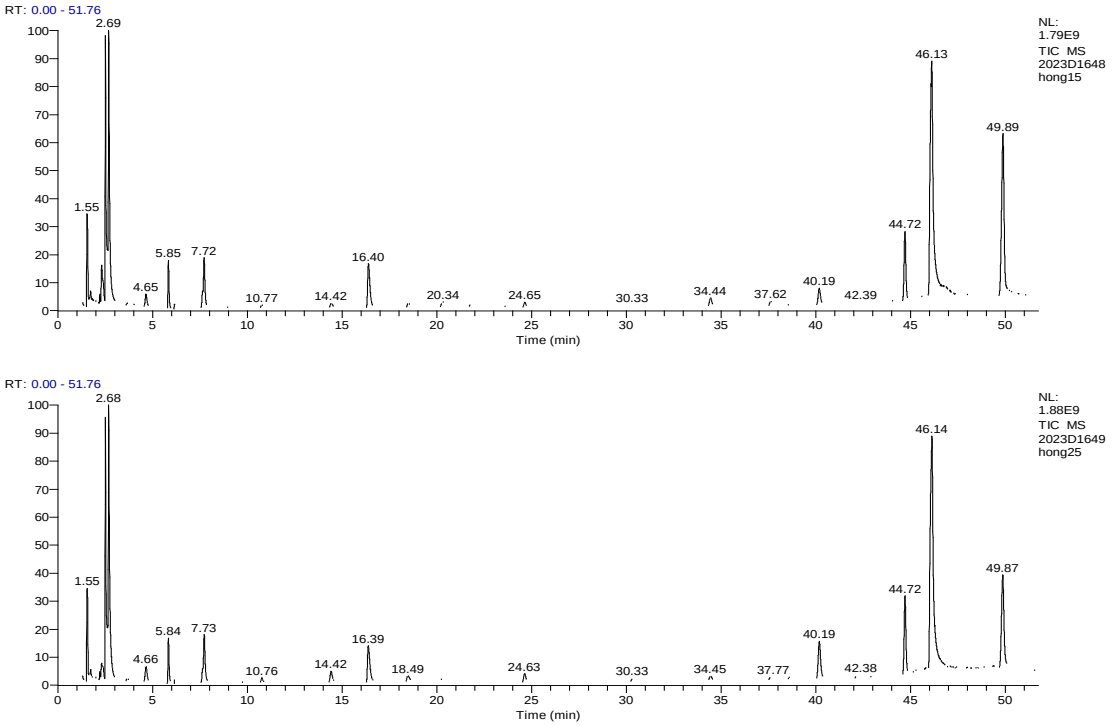


Figure S1. The internal standards of the flavouring substances investigated in this work.

Table S2. Quality analysis of sequencing data.

ID	Name	Primer name	Raw data	Clean data	Q30 (%)	Q20 (%)
MJ20240430215	Day0	ITS1F_ITS2R	50259	49756	98.66	99.8
MJ20240430215	Day0	338F_806R	50306	45341	96.59	99.09
MJ20240430215	Day2	ITS1F_ITS2R	56892	56167	98.82	99.84
MJ20240430215	Day2	338F_806R	54317	50331	96.67	99.12
MJ20240430215	Day5	ITS1F_ITS2R	150784	147794	99.34	99.94
MJ20240430215	Day5	338F_806R	50368	45814	96.14	98.98
MJ20240430215	Day8	ITS1F_ITS2R	168121	164656	99.66	99.96
MJ20240430215	Day8	338F_806R	44933	41558	97.07	99.21
MJ20240430215	Day11	ITS1F_ITS2R	153036	150082	99.44	99.95
MJ20240430215	Day11	338F_806R	48074	43765	96.12	98.97
MJ20240430215	Day14	ITS1F_ITS2R	149147	146297	99.44	99.95
MJ20240430215	Day14	338F_806R	45000	40900	96.53	99.07



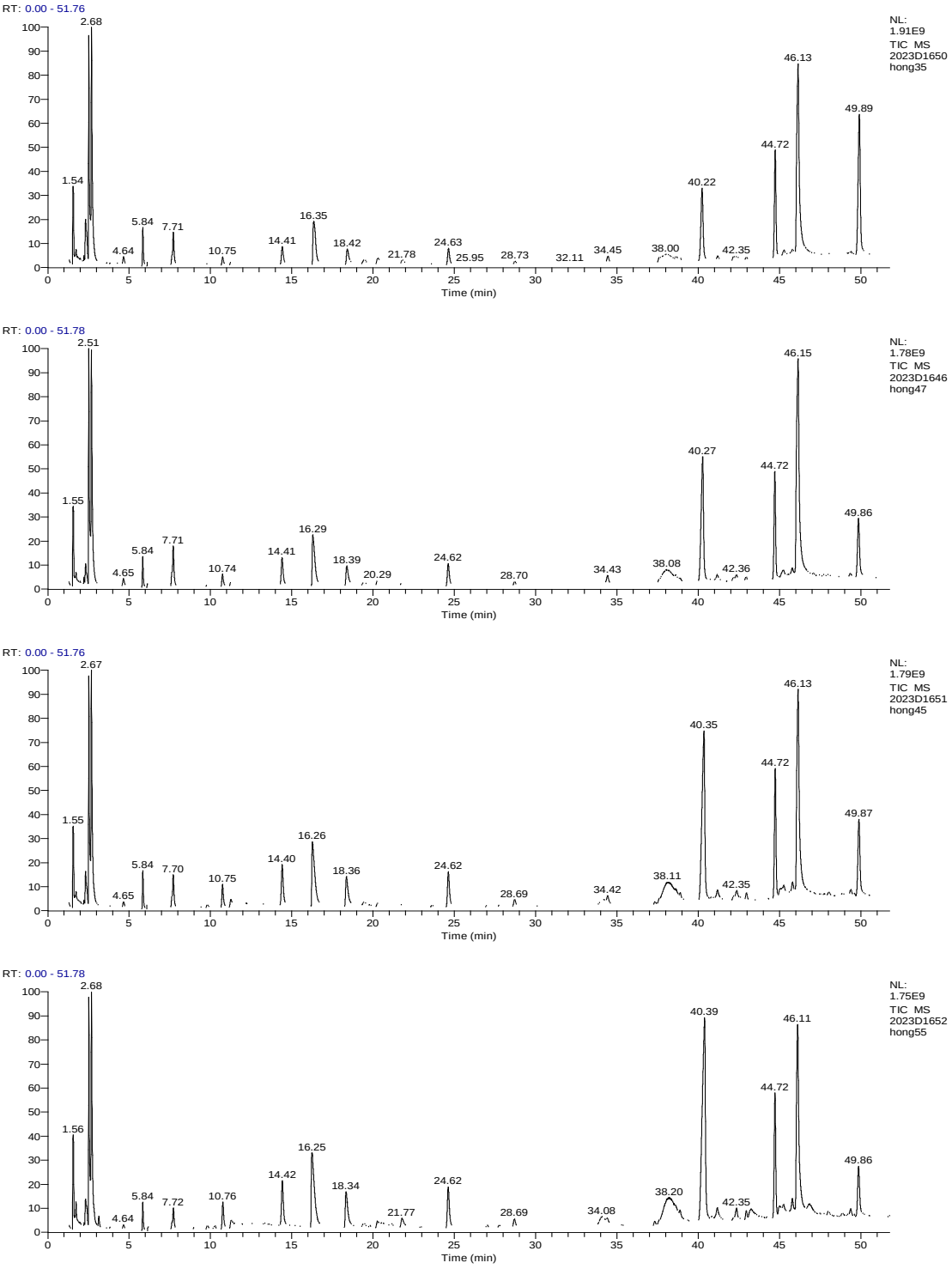


Figure S2. Chart of flavouring substance samples.