

Table 2. Volatile Components identified in headspace of fresh apple juice, fresh kiwifruit juice and their pasteurized blend juice stored for 3 and 6 months at 4° and 25°C (*Values expressed as relative area percentage to total identified components)

Peak No	KI ^a	Components	Fresh apple juice	Fresh kiwi juice	Pasteurized blend juice				Methods of identification ^b	
					Zero time sample	Period of storage (months)				
						3 months		6 months		
4°C	25°C	4°C	25°C							
1	561	Acetaldehyde	*0.59	0.49	0.54	0.25	0.56	0.73	nd	MS, KI
2	584	2-Propanone	0.92	0.73	0.18	nd	0.06	0.11	0.41	MS, KI
3	598	Ethyl ethanoate	1.62	nd	2.54	9.12	2.20	0.74	0.59	MS, KI
4	614	Ethanol	23.94	18.21	21.49	12.70	17.10	14.42	22.62	MS, KI,St
5	647	Ethyl acetate	nd	8.51	nd	5.72	nd	nd	nd	MS, KI,St
6	656	Methyl propanoate	nd	2.47	18.63	19.15	8.49	6.12	nd	MS, KI,St
7	695	1-Butanol	31.31	nd	0.42	12.42	0.42	nd	20.73	MS, KI,St
8	699	Propyl acetate	0.66	0.26	0.38	1.75	0.40	0.16	1.43	MS, KI,St
9	730	1-Penten-3-ol	0.36	0.64	0.18	0.24	0.14	0.14	0.33	MS, KI
10	740	1-Penten-3-one	1.07	0.89	0.59	0.44	0.62	0.96	13.17	MS, KI
11	741	Ethyl propanoate	2.15	0.89	1.01	1.23	1.77	2.75	1.25	MS, KI
12	754	3-Methyl butanol	1.30	0.30	nd	0.39	0.06	0.21	8.26	MS, KI
13	756	Methyl butanoate	2.09	3.72	7.42	0.81	0.34	0.54	2.93	MS, KI
14	768	Isobutyl acetate	0.48	0.56	0.33	2.88	0.22	0.45	2.22	MS, KI
15	770	Hexanal	0.20	0.17	0.89	0.20	0.09	0.16	0.24	MS, KI
16	771	(E)-2-Hexenal	1.79	36.07	0.20	8.92	0.23	0.05	nd	MS, KI
17	797	(Z)-3-Hexen-1-ol	1.48	0.34	0.28	0.40	0.66	0.06	0.09	MS, KI
18	826	Butyl acetate	0.59	nd	0.09	0.23	nd	0.16	nd	MS, KI
19	847	Ethyl butanoate	14.49	13.27	8.87	3.28	46.51	33.24	3.24	MS, KI
20	866	1-Hexanol	0.33	nd	nd	0.78	nd	0.06	0.14	MS, KI

Table 2. Cont.

Peak No	KI ^a	Components	Fresh apple juice	Fresh kiwi juice	Pasteurized blend juice				Methods of identification ^b	
					Zero time sample	Period of storage (months)				
						3 months		6 months		
						4°C	25°C	4°C		25°C
21	876	Ethyl-2- methyl butanoate	0.42	nd	nd	4.83	nd	0.18	0.20	MS, KI
22	883	2- Methyl-1-butylacetate	1.22	nd	nd	0.72	0.30	0.13	0.14	MS, KI
23	899	Propyl butanoate	0.36	nd	nd	0.62	0.18	0.16	0.09	MS, KI
24	959	Ethyl pentanoate	0.37	nd	0.13	0.55	0.07	0.11	0.06	MS, KI
25	980	β-Pinene	0.20	1.44	nd	0.40	0.22	0.16	0.12	MS, KI,St
26	993	Myrcene	0.15	0.54	nd	1.26	0.31	nd	0.06	MS, KI,St
27	998	Butyl butanoate	0.48	nd	nd	0.84	0.20	0.24	0.05	MS,KI
28	1003	Ethyl hexanoate	2.25	3.14	1.00	0.55	2.29	3.96	1.08	MS,KI
29	1017	Hexyl acetate	3.50	1.43	1.25	0.94	2.53	4.40	1.21	MS,KI
30	1035	D- Limonene	1.98	1.96	21.67	4.42	12.56	27.16	15.45	MS, KI,St
31	1069	Hexanoic acid	0.54	nd	0.49	0.13	0.73	1.74	nd	MS,KI
32	1081	Methyl benzoate	2.63	3.28	9.7	3.20	0.41	0.45	3.25	MS,KI
33	1185	Hexyl butanoate	0.53	0.69	1.72	0.63	0.32	0.23	0.63	MS,KI

nd = not detected

Compounds listed according to their elution on DB5 column.

a: Kovats index.

b: Compound identified by GC-MS (MS) and / or by kovats index on DB5(KI) and / or by comparison of MS and KI of standard compound (St) run under similar GC-MS conditions