Supplementary Table. 2 Identification of Volatile Components in the Processing of SNXM by GC-IMS

No.	Compounds	RI	Rt [sec]	Dt [a.u.]	Peak intensity				
					FL	SPL	PL	SHL	DL
	Alcohols (13)								
1	Heptanol-M	974.2	351.878	1.39936	679.69 ± 32.89^{b}	811.51 ± 30.63^{a}	134.99 ± 22.17^{c}	116.87 ± 11.3^{c}	131.14 ± 16.5^{c}
2	Heptanol-D	976.8	354.433	1.76301	148.12 ± 12.28^{b}	200.96 ± 10.93^{a}	76.21 ± 4.36^{c}	85.05 ± 5.59^{c}	76.22 ± 5.75^{c}
3	Hexanol-M	867.8	264.432	1.32558	2579.79 ± 29.73^{a}	2500.39 ± 19.63^{a}	2083.63 ± 19.2^{b}	2082.72 ± 52.57^{b}	1997.92 ± 29.63^{b}
4	Hexanol-D	869.3	265.316	1.63997	607.56 ± 20.8^{b}	870.94 ± 22.53^{a}	448.44 ± 31.24^{d}	556.68 ± 59.21^{bc}	499.06 ± 44.02^{cd}
5	(*Z*)-3-Hexenol-M	856.5	257.607	1.23742	833.23 ± 7^{c}	1167.61 ± 50.97^{a}	969.35 ± 6.33^{b}	930.56 ± 3.54^{bc}	983.72 ± 79.15^{b}
6	(*Z*)-3-Hexenol-D	852.5	255.235	1.51551	3281.52 ± 217.99^{c}	4222.37 ± 132.89^{a}	2691.02 ± 57.97^{d}	3209.18 ± 204.01^{c}	3952.95 ± 128.6^{b}
7	3-Methyl-3-buten-1-ol-M	744.9	200.741	1.1568	236.6 ± 20.09^{ab}	247.13 ± 7.6^{a}	219.82 ± 20.99^{ab}	195.33 ± 9.36^{bc}	166.67 ± 14.66^{c}
8	3-Methyl-3-buten-1-ol-D	746.1	201.235	1.42648	301.05 ± 14.39^{b}	418.16 ± 20.23^{a}	207.36 ± 39.24^{c}	285.62 ± 36.84^{bc}	237.99 ± 45.35^{bc}
9	1-Pentanol-M	761.8	208.008	1.25634	880.49 ± 9.77^{ab}	914.92 ± 14.7^{ab}	1068.29 ± 57.99^{a}	988.06 ± 73.96^{b}	954.85 ± 123.52^{ab}
10	1-Pentanol-D	760	207.232	1.51759	524.38 ± 21^{d}	766.69 ± 23.3^{c}	966.21 ± 42.21^{b}	1208.36 ± 49.64^{a}	1165.17 ± 29.47^{a}
11	Linalool	1106.6	536.632	1.21675	235.45 ± 17.96^{a}	287.57 ± 15.51^{a}	143.65 ± 24.22^{b}	142.1 ± 28.56^{b}	248.25 ± 38.49^{a}
12	Linalool oxide	1073.7	481.909	1.26171	135.86 ± 9.12^{b}	216.77 ± 6.47^{a}	104.7 ± 6.51^{c}	130.63 ± 13.39^{bc}	147.33 ± 15.81^{b}
13	Ethanol	446.5	129.279	1.05918	6571.2 ± 322.89^{a}	6435.19 ± 138.24^{a}	7095.52 ± 323.24^{a}	6882.27 ± 295.98^{a}	6386.53 ± 600.4^{a}
14	(*Z*)-2-Penten-1-ol	761.4	207.814	1.45261	222.14 ± 14.15^{b}	260.24 ± 11.2^{ab}	279.21 ± 26.76^{ab}	338.14 ± 39.81^{a}	314.39 ± 60.41^{ab}
15	2-Ethyl-1-Hexanol	1035	424.68	1.41492	135.54 ± 4.59^{ab}	153.87 ± 14.73^{a}	115.73 ± 14.47^{b}	106.87 ± 14.59^{b}	106.11 ± 3.79^{b}
16	2-Methyl-1-propanol	618.6	162.506	1.17294	166.71 ± 16.6^{a}	189.77 ± 16.23^{a}	156.35 ± 2.29^{a}	83.2 ± 2.67^{b}	60.31 ± 8.67^{b}
17	2-Methyl-1-Butanol	727.9	193.702	1.47296	110.65 ± 6.06^{b}	161.93 ± 8.89^{a}	39.48 ± 4.17^{c}	38.43 ± 3.34^{c}	50.71 ± 5.61^{c}
18	5-Methyl-2-Furanmethanol	958.2	336.44	1.5642	51.43 ± 1.37^{d}	54.24 ± 1.05^{d}	106.58 ± 9.47^{c}	154.18 ± 20.2^{b}	215.6 ± 14.27^{a}
	Aldehydes (18)								
19	Heptanal-M	904.1	289.212	1.33526	1930.99 ± 30.76^{b}	1955.99 ± 14.57^{ab}	2092.94 ± 100.68^{a}	2013.06 ± 23.67^{ab}	2048.64 ± 75.11^{ab}
20	Heptanal-D	899.4	285.395	1.68184	10783.04 ± 216.5^{bc}	10498.28 ± 129.13^{c}	11985.03 ± 81.49^{a}	11995.62 ± 173.11^{a}	11148.05 ± 124.98^{b}
21	Benzaldehyde-M	961.1	339.211	1.15019	476.63 ± 41.44^{d}	495.81 ± 23.97^{d}	613.24 ± 3.03^{c}	704.49 ± 23.12^{b}	1047.57 ± 22.35^{a}
22	Benzaldehyde-D	960	338.155	1.46606	45.33 ± 5.02^{c}	42.67 ± 1.58^{c}	59.64 ± 9.93^{c}	88.27 ± 4.03^{b}	210.41 ± 17.94^{a}
23	Octanal-M	1007	387.616	1.40943	532.26 ± 26.07^{e}	623.24 ± 30.74^{d}	972.88 ± 24.76^{c}	1313.44 ± 35.51^{b}	1403.38 ± 11.31^{a}
24	Octanal-D	1005.4	385.56	1.82216	90.86 ± 14.27^{d}	130.32 ± 17.85^{d}	228.56 ± 9.94^{c}	352.11 ± 49.38^{b}	419.87 ± 26.19^{a}
25	Nonanal-M	1108.2	539.442	1.47856	1434.63 ± 50.41^{c}	1543.73 ± 87.5^{c}	2450.93 ± 15.7^{b}	2737.57 ± 154.07^{a}	2789.39 ± 83.48^{a}
26	Nonanal-D	1107.9	539.048	1.94132	154.96 ± 0.42^{c}	180.8 ± 31.17^{c}	293.06 ± 16.87^{b}	383.22 ± 32.22^{a}	404.06 ± 4.77^{a}
27	(*E*)-2-Heptenal-M	956.1	334.438	1.25843	230.13 ± 18.76^{c}	271.27 ± 17.84^{c}	702.97 ± 16.62^{b}	934.62 ± 70.32^{a}	797.19 ± 41.33^{b}

28	(*E*)-2-Heptenal-D	954.8	333.295	1.66361	55.41 ± 3.04^{d}	53.18 ± 2.44^{d}	172 ± 10.02^{c}	351.92 ± 42.63^{a}	280.91 ± 22.58^{b}
29	Hexanal-M	798.4	225.287	1.26716	473.92 ± 27.74^{a}	471.05 ± 23.63^{a}	474.65 ± 10.81^{a}	392.33 ± 23.88^{b}	406.65 ± 38.52^{ab}
30	Hexanal-D	794.1	223.062	1.56024	2821.15 ± 35.98^{d}	3326.58 ± 35.33^{c}	4809.64 ± 102.02^{a}	4141.22 ± 163.54^{b}	3401.36 ± 117.95^{c}
31	(*E*)-2-Pentenal-M	749.2	202.571	1.10748	737.44 ± 24.98^{ab}	716.49 ± 7.86^{b}	773.16 ± 36.85^{ab}	766.79 ± 9.94^{ab}	811.62 ± 45.1^{a}
32	(*E*)-2-Pentenal-D	750.6	203.155	1.36057	723.05 ± 35.35^{d}	959.62 ± 23.35^{c}	1011.81 ± 16.59^{c}	1431.18 ± 109.22^{b}	1616.07 ± 87.47^{a}
33	(*E*,*E*)-2,4-Heptadienal-M	999.8	378.608	1.20327	174.76 ± 13.05^{c}	194.84 ± 8.36^{c}	247.2 ± 12.22^{b}	370.62 ± 18.33^{a}	368.56 ± 18.37^{a}
34	(*E*,*E*)-2,4-Heptadienal-D	999.3	377.934	1.62181	110.09 ± 1.24^{c}	101.49 ± 11.57^{c}	123.56 ± 8.18^{bc}	170.14 ± 28.32^{a}	158.84 ± 2.65^{ab}
35	2-Hexenal	847.8	252.469	1.17767	1001.19 ± 38.78^{a}	588.77 ± 15.02^{c}	748.07 ± 37.65^{b}	755.62 ± 21.98^{b}	753.08 ± 45.29^{b}
36	(*E*)-2-Hexenal	835.7	245.531	1.52283	157.51 ± 33.25^{a}	70.17 ± 6.37^{b}	111.61 ± 19.5^{ab}	149.42 ± 26.21^{a}	154.2 ± 15.99^{a}
37	Butanal	593.6	157.192	1.28983	1197.46 ± 48.69^{a}	1105.32 ± 57.25^{a}	1265.63 ± 82.4^{a}	1182.32 ± 15.7^{a}	869.55 ± 69.72^{b}
38	(*E*)-2-Octenal	1059.6	460.284	1.33485	88.34 ± 0.44^{c}	102.67 ± 6.1^{c}	218.73 ± 18.31^{a}	229.47 ± 1.6^{a}	184.97 ± 5.39^{b}
39	n-Pentanal	700.2	182.77	1.42148	2345.52 ± 107.33^{b}	2364.41 ± 36.76^{b}	3454.25 ± 37.83^{a}	3293.91 ± 93.21^{a}	3314.81 ± 122.8^{a}
40	2-Methyl butanal	661.7	172.089	1.40051	2246.74 ± 46.11^{b}	2506.82 ± 70.5^{a}	2703.19 ± 154.34^{a}	2074.94 ± 39.99^{b}	1816.3 ± 81.4^{c}
41	3-Methyl butanal	645.3	168.366	1.20018	1349.17 ± 12.18^{d}	1303.56 ± 14.87^{d}	1943.41 ± 49.65^{c}	2786.64 ± 108.7^{b}	3127.8 ± 88.32^{a}
42	1-Methyl-1H-pyrrole-2-carboxaldehyde	1005	385.076	1.49979	58.05 ± 2.54^{c}	68.78 ± 3.75^{c}	93.15 ± 7.12^{b}	118.42 ± 6.8^{a}	111.51 ± 16.7^{ab}
43	3-Methyl-2-butenal	778.2	215.292	1.09282	82.67 ± 16.35^{c}	83.08 ± 6.68^{c}	110.16 ± 4.76^{b}	122.73 ± 1.93^{ab}	138.15 ± 3.36^{a}
44	2-Methyl-2-pentenal	824.8	239.413	1.16269	55.74 ± 11.83^{b}	102.09 ± 13.76^{a}	56.88 ± 4.66^{b}	52.39 ± 2^{b}	26.75 ± 4.94^{c}
	Esters (10)								
45	Methyl acetate-M	547.5	147.854	1.04815	1142.79 ± 23.9^{c}	941.63 ± 18.61^{c}	1636.45 ± 11.21^{b}	1994.94 ± 288.34^{a}	1840.56 ± 37.72^{ab}
46	Methyl acetate-D	541.8	146.738	1.18997	2575.47 ± 58.42^{b}	2920.43 ± 18.02^{a}	2390.18 ± 41.43^{b}	2093.72 ± 101.78^{c}	2485.5 ± 151.15^{b}
47	Butyl acetate-M	805.8	229.17	1.24009	826.5 ± 16.16^{b}	795.28 ± 22.83^{b}	1009.96 ± 40.71^{a}	842.46 ± 23.08^{b}	781.85 ± 46.06^{b}
48	Butyl acetate-D	805.8	229.141	1.61372	989.06 ± 3.93^{c}	783.89 ± 37.64^{d}	1489.93 ± 68.73^{a}	1183.74 ± 69.36^{b}	775.64 ± 98.03^{d}
49	Acetic acid ethyl ester-M	607.5	160.122	1.10036	224.73 ± 3.28^{b}	178.86 ± 2.59^{c}	564.19 ± 16.77^{a}	573.59 ± 15.86^{a}	573.38 ± 24.44^{a}
50	Acetic acid ethyl ester-D	601	158.744	1.33501	794.54 ± 52.97^{bc}	749.02 ± 29.99^{c}	1187.67 ± 67.78^{a}	914.12 ± 72.03^{ab}	709.25 ± 71.51^{c}
51	Hexanoic acid methyl ester	924.4	306.057	1.28557	92.79 ± 7.05^{b}	143.55 ± 9.11^{a}	57.71 ± 4.86^{d}	62.22 ± 3.17^{cd}	75.23 ± 2.12^{c}
52	Butyl propanoate	907	291.553	1.28486	470.23 ± 35.95^{ab}	364.51 ± 21.07^{c}	498.64 ± 42.33^{a}	463.04 ± 22.21^{ab}	394.05 ± 32.47^{bc}
53	Propyl butanoate	877.8	270.564	1.69949	741.32 ± 32.78^{a}	582.48 ± 31.65^{b}	240.2 ± 9.17^{c}	219.44 ± 28.62^{c}	176.3 ± 19.48^{c}
54	Ethyl hexanoate	998.3	376.759	1.34435	425.29 ± 16.18^{ab}	370.53 ± 7.37^{c}	435.37 ± 4.56^{a}	412.72 ± 16.16^{ab}	395.65 ± 6.61^{bc}
55	Ethyl propanoate	713.4	187.911	1.15465	321.48 ± 11.76^{a}	334.29 ± 24.8^{a}	299.89 ± 15.45^{a}	334.2 ± 4.6^{a}	323.82 ± 18.49^{a}
56	Ethyl 3-methylbutanoate	827.5	240.945	1.26991	117.96 ± 4.29^{c}	165.21 ± 6.15^{b}	205.22 ± 5.82^{a}	163.83 ± 10.64^{b}	114.73 ± 2.07^{c}
57	Methyl 3-methylbutanoate	782.7	217.324	1.19198	214.8 ± 7.14^{a}	234.52 ± 13.18^{a}	179.58 ± 7.56^{b}	135.8 ± 9.34^{c}	129.02 ± 14.43^{c}
	Ketones (10)								
58	1-Octen-3-one	979.3	356.891	1.27677	81.61 ± 3.28^{c}	104.91 ± 7.03^{bc}	138.67 ± 10.07^{b}	214.4 ± 20.32^{a}	196.63 ± 18.79^{a}

59	2-Heptanone	893.4	280.689	1.26347	1579.4 ± 14.75^{a}	1563.04 ± 6.46^{ab}	1580.55 ± 9.63^{a}	1508.06 ± 29.23^{ab}	1503.9 ± 52.26^{b}
60	2-Hexanone	792.7	222.321	1.49995	599.06 ± 28.56^{a}	609.29 ± 11.76^{a}	428.16 ± 55.21^{c}	463.74 ± 76.72^{bc}	565.25 ± 39.08^{ab}
61	2-Pentanone	699.2	182.382	1.38493	660.07 ± 7.35^{ab}	706.98 ± 72.19^{a}	509.2 ± 89.96^{ab}	482.2 ± 68.35^{b}	506.03 ± 128.25^{ab}
62	2-Butanone	587.4	155.905	1.24373	5088.97 ± 60.69^{b}	5714.27 ± 19.1^{a}	3016.03 ± 70.86^{c}	3169.45 ± 101.14^{c}	2957.13 ± 114.99^{c}
63	2-Propanone	491.3	137.204	1.12097	16471.94 ± 836.29^{a}	16468.48 ± 409.52^{a}	12884.76 ± 398.29^{b}	11298.71 ± 486.8^{b}	11346.57 ± 699.68^{b}
64	Cyclopentanone	799.8	226.028	1.10979	46.54 ± 5.52^{c}	93.11 ± 10.56^{a}	61.51 ± 2.01^{bc}	82.72 ± 19.63^{ab}	54.27 ± 4.79^{c}
65	3-Hydroxy-2-butanone	732.5	195.583	1.33214	207.64 ± 13.42^{b}	254.04 ± 4.27^{a}	110.4 ± 18.77^{d}	148.83 ± 7.23^{c}	173.26 ± 8.36^{c}
66	4-Methyl-3-penten-2-one	792.7	222.321	1.44259	543.24 ± 87.87^{a}	337.12 ± 25.63^{b}	177.82 ± 11^{c}	352.59 ± 19.6^{b}	637 ± 42.73^{a}
67	6-Methyl-5-Hepten-2-one	989	366.745	1.17538	620.34 ± 39.39^{a}	675.84 ± 59.89^{a}	346.43 ± 68.29^{b}	404.94 ± 100.31^{b}	592.94 ± 6.06^{a}
	Hydrocarbons (2)								
68	D-Limonene	1041.9	434.362	1.29535	43.26 ± 6.28^{ab}	47.98 ± 4.58^{a}	31.49 ± 2.47^{c}	32.65 ± 2.57^{bc}	29.33 ± 2.33^{c}
69	α-Pinene	933.4	313.92	1.19886	78.91 ± 6.43^{c}	109.87 ± 3.09^{b}	165.58 ± 9.23^{a}	129.1 ± 14.65^{b}	111.15 ± 6.69^{b}
	Acids (2)								
70	Acetic acid-M	668	164.554	1.04372	1257.5 ± 14.34^{c}	1114.7 ± 21.16^{d}	1356.07 ± 9.88^{b}	1652 ± 14.89^{a}	1642.14 ± 57.45^{a}
71	Acetic acid-D	666.2	159.85	1.15027	123.12 ± 11.34^{c}	87.02 ± 3.34^{c}	339.79 ± 8.67^{b}	404.57 ± 20.13^{a}	381.88 ± 22.38^{a}
72	2-Methylbutanoic acid	856.5	257.623	1.46557	227.11 ± 17.6^{b}	351 ± 22.01^{a}	205 ± 16.24^{b}	213.37 ± 7.95^{b}	216.53 ± 25.13^{b}
	Others (4)								
73	2-Ethyl furan	688	178.225	1.30591	1453.16 ± 93.18^{bc}	1724.81 ± 24.47^{ab}	1322.3 ± 108.11^{c}	1665.02 ± 107.88^{ab}	1778.75 ± 160.2^{a}
74	2,5-Dimethylfuran	692.2	179.721	1.35835	1615.39 ± 52.31^{b}	1941.02 ± 26.84^{a}	1399.83 ± 85.96^{c}	1537.7 ± 55.48^{bc}	1446.63 ± 20.72^{c}
75	2-Methylpyridine	810.6	231.742	1.04374	692.99 ± 42.05^{b}	752.55 ± 7.16^{ab}	692.17 ± 27.96^{b}	766.41 ± 17.82^{a}	756.96 ± 26.98^{ab}
76	2-Ethyl-5-methylpyrazine	1013.4	395.729	1.19355	203.22 ± 18.98^{c}	262.7 ± 9.84^{bc}	266.8 ± 3.8^{b}	374.78 ± 43.33^{a}	381.53 ± 19.49^{a}

Note: RI represents relative retention index; Rt represents retention time; Dt represents relative migration time; The suffixes -M represents monomer while the suffixes -D represents dimer. Data are “mean ±standard deviation”. Different superscript letters in the same row indicate significant differences in compound levels ($P < 0.05$). FL: Fresh Leaves; SPL: Spreading Leaves; PL: Fixation Leaves; SHL: Shaping Leaves; DL: Dried Leaves (representing the finished tea).