

**Table S2.** Characteristics detection and quality evaluation of fruit and juice for processing juice in apple varieties (strains) selected in this study.

No.	Variety (Strain)	Fruit Weight (g)	pH	Juice Yield (%)	TA (%)	TSS (°Brix)	Total Phenols (mg/L)	Color Value (L)
1	Fuji	155.73	3.90	62.08	0.377	11.40	1730.74	30.95
2	Fuli	239.80	4.43	67.94	0.280	16.70	2713.82	30.74
3	Fuxing	119.70	4.26	64.15	0.380	13.40	2020.21	33.62
4	2010-W17-1Z-N9	100.55	3.96	62.96	0.330	14.50	1112.32	28.52
5	2008-W18-N16	113.73	3.53	66.19	0.270	14.60	2862.32	30.02
6	2010-W14-11Z-N9	131.30	3.45	52.75	0.620	10.40	2605.74	30.78
7	2010-W14-12Z-N3	104.23	4.38	50.38	0.684	14.03	2303.11	34.69
8	2010-W14-3Z-N3	97.43	3.66	64.11	0.640	11.90	1566.26	31.51
9	2010-W10-3Z-N2	180.73	3.54	70.59	0.680	12.10	2980.74	33.44
10	2009-E11-S5	138.62	4.03	53.21	0.610	12.47	3243.89	36.99
11	2010-W5-N2	218.20	3.56	46.06	0.620	10.20	1586.00	30.19
12	2010-W7-8Z-N8	133.10	3.57	54.33	0.640	11.00	3901.79	37.40