Table S1. Physicochemical characterization of five different cultivars of mango samples

Cultivars	JM	QM	GF	HY	TN
TA(g/100g)	4.96±0.02^{e}	8.20±0.01^{b}	6.93±0.02^{d}	9.01±0.01^{a}	7.30±0.01^{c}
TSS (ºBrix)	12.38±0.12^{e}	14.81±0.01^{d}	16.02±0.20^{c}	17.91±0.03^{a}	16.54±0.12^{b}
pH	4.99±0.02^{a}	4.66±0.01^{c}	4.86±0.02^{b}	4.50±0.01^{d}	4.82±0.02^{b}
L	50.38±0.13^{c}	49.74±0.07^{b}	51.44±0.05^{a}	51.70±0.03^{d}	61.76±0.14^{cd}
a	4.64±0.02^{c}	-0.67±0.06^{b}	4.80±0.02^{b}	5.10±0.07^{c}	6.56±0.11^{a}
b	38.51±0.04^{a}	30.64±0.06^{b}	36.88±0.08^{e}	40.57±0.04^{c}	55.61±0.12^{d}
Total Sugar content (g/g d.w.)	8.43±0.05^{e}	10.18±0.25^{d}	14.81±0.07^{c}	17.23±0.22^{a}	14.97±0.12^{b}
Reducing sugar content (g/g d.w)	5.84±0.26^{c}	3.83±0.08^{e}	5.09±0.01^{d}	6.66±0.03^{b}	7.17±0.21^{a}
β-carotene (mg/g d.w.)	0.44±0.08^{b}	0.28±0.02^{d}	0.28±0.04^{e}	0.32±0.02^{c}	0.81±0.01^{a}
TPC (mg GAE/g d.w)	18.05±0.05^{a}	10.84±0.55^{c}	14.48±0.09^{e}	10.83±0.05^{b}	25.43±0.52^{d}
DPPH Scavenging activity (mg Vc/100g)	1.86±0.12^{e}	0.74±0.08^{c}	1.65±0.06^{d}	1.07±0.04^{b}	2.46±0.11^{a}

JM: Jinmang cultivar; QM: Qingmang cultivar；GF: Guifei cultivar; HY: Hongyu cultivar; TN: Tainong cultivar. The mean and standard deviation (n=3) were calculated for three replicates. Values in total data with different letters are significantly different ($p < 0.05$).

Table S2. Statistical analysis for flavor attributes of five varieties mango samples.

Cultivars	JM	QM	GF	HY	TN
overall aroma	1.85±0.88^{d}	1.55±0.44^{e}	2.00±0.66^{c}	2.10±0.55^{b}	2.4±0.39^{a}
tropical fruit	1.75±0.75^{c}	1.8±0.67^{b}	1.8±0.48^{b}	1.85±0.41^{a}	1.75±0.35^{c}
floral	1.35±0.82^{d}	1.40±0.61^{c}	1.55±0.69^{a}	1.45±0.64^{b}	1.2±0.42^{e}
honey/sweet	1.7±0.54^{c}	1.4±0.7^{d}	1.95±0.57^{a}	1.85±0.67^{b}	1.65±0.41^{c}
green	0.65±0.34^{d}	0.85±0.53^{c}	0.95±0.55^{b}	0.65±0.47^{d}	1.45±0.55^{a}
melon	0.9±0.52^{d}	1.4±0.66^{b}	1.55±0.55^{a}	1.15±0.24^{c}	1.55±0.6^{a}
wood	1.1±0.21^{d}	1.1±0.52^{d}	1.4±0.52^{b}	1.2±0.42^{c}	1.6±0.52^{a}
rosin	1.5±0.47^{b}	1.4±0.7^{c}	1.3±0.54^{d}	1.1±0.46^{e}	1.75±0.35^{a}

JM: Jinmang cultivar; QM: Qingmang cultivar； GF: Guifei cultivar; HY: Hongyu cultivar; TN: Tainong cultivar. The mean and standard deviation (n=10) were calculated for three replicates. Values in total data with different letters are significantly different ($p < 0.05$)