

Figure S1. Number and location of sampled *Guanxi* pomelo orchards in Pinghe County, Fujian Province, China.

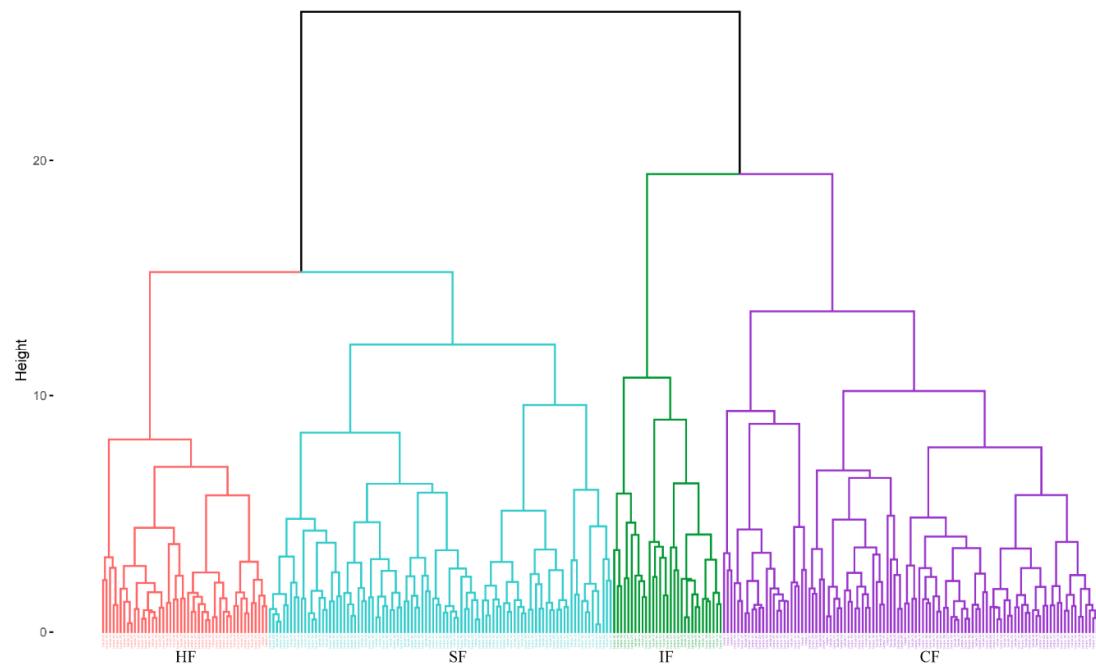


Figure S2. Cluster analysis of fruit quality in 281 orchards. HF (47 samples): high-quality fruit, SF (97 samples): sub-quality fruit, CF (106 samples): Common fruit, and IF (31 samples): inferior fruit.

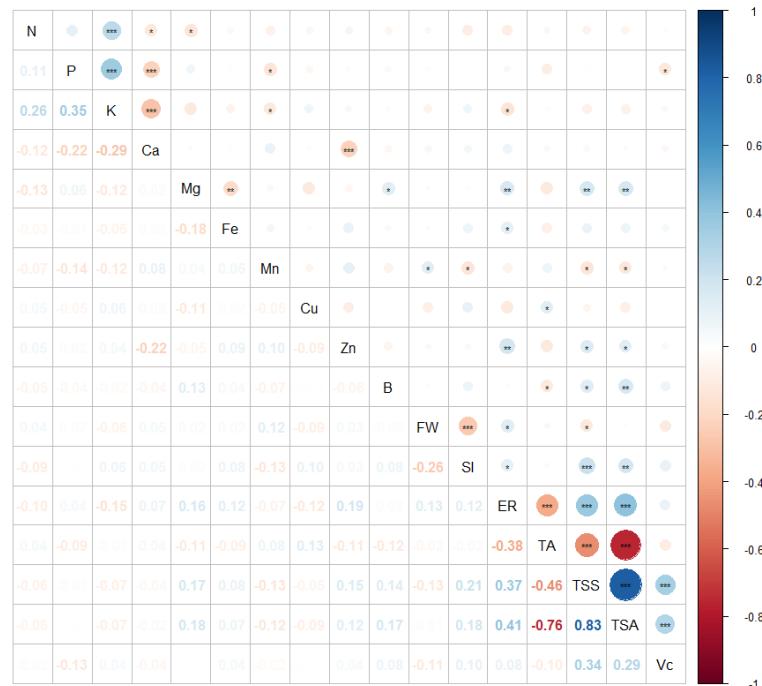


Figure S3. Correlation analysis of leaf nutrients and fruit quality ($n = 281$). *: $p < 0.05$, ** $p < 0.01$, ***: $p < 0.001$. FW: Single fruit weight; SI: Fruit shape index; ER: Edible rate; TA: Titratable acidity; TSS: Total soluble solids; TSA: Total soluble solids/Titratable acidity; VC: Vitamin C. N: nitrogen, P:

phosphorus, K: potassium, Ca: calcium, Mg: magnesium, Fe: iron, Mn: manganese, Zn: zinc, B: boron.

Table S1. Details the sampling locations in Pinghe County, Fujian Province.

Sample Sites	Longitude	Latitude	Area (km ²)
Jiufeng	116°97'-117°04'24"22'-24°28'	203.54	
Yiling	117°04'-117°11'24"29'-24°44'	127.99	
Banzai	117°24'-117°37'24"24'-24°34'	133.67	
Guoqiang	117°00'-117°26'24"20'-24°29'	144.09	
Luxi	116°96-117°10'24"4'7-24°56'	307.40	
Nansheng	117°35'-117°40'24"17'-24°28'	127.1	
Shange	117°19'-117°50'24"39'-24°48'	117.72	
Xiazhai	117°13'-117°40'24"35'-24°44'	203.9	
Xiaoxi	117°17'-117°36'24"17'-24°40'	137.19	
Wenfeng	117°39'-117°48'24"34'-24°51'	246.1	

Note: Data courtesy of the Baidu Encyclopedia.