

Supplementary Information

Table S1. Species and ploid of studied mulberry leaves.

Sample	Species	Ploid	Characteristics
Da 10	<i>Morus. atropurpurea</i> Roxb.	triploid	High productivity for both leaf and seedless fruit
Kangqing 10	<i>Morus. atropurpurea</i> Roxb.	diploid	High resistance against <i>Pseudomonas solanacearum</i>
Yuesang 10	<i>Morus. atropurpurea</i> Roxb.	tetraploid	Particular high productivity of leaf
Nongsang 14	<i>M. multicaulis</i> Perr.	diploid	High productivity of leaf and high resistance against to <i>Mycoplasma</i> -like organism
Yu 7803	<i>M. alba</i> Linn.	diploid	High productivity of leaf and high resistance against to <i>Pseudomonas syringae</i> pv. <i>mori</i>
Beidong 2	<i>M. australis</i> Poir.	diploid	High productivity of leaf

Table S2. Effect of cultivar on the content of phenolic compounds in mulberry leaves.

Cultivar	Individual Phenolic Compound (mg/g DW)													Percent of the four main individual phenolic compounds (100%)	
	ChA	Rut	BeA	Ast	GeA	Cat	VaA	CaA	SyA	Epi	GaA	Hyp	Que	Sum	
Da 10	1.5 ±	0.4 ±	0.1 ±	0.3 ±	0.1 ±	0.06 ±	0.02 ±	-	0.1 ±	0.3 ±	0.01 ±	0.07 ±	0.05 ±	3.01	76.4
	0.6 ^a	0.3 ^{a,b}	0.1 ^a	0.2 ^a	0.02 ^a	0.005 ^c	0.005 ^a	-	0.06 ^{a,b}	0.04 ^b	0.005	0.05	0.04		
Kq 10	2.2 ±	1.2 ±	0.3 ±	0.3 ±	0.1 ±	-	0.05 ±	-	0.1 ±	0.2 ±	0.02 ±	0.06 ±	-	4.53	88.3
	0.6 ^a	0.4 ^c	0.2 ^{a,b}	0.2 ^{a,b}	0.03 ^a	-	0.006 ^b	-	0.06 ^{a,b}	0.04 ^a	0.008	0.05	-		
Ns 14	2.0 ±	0.2 ±	0.5 ±	0.3 ±	0.02 ±	0.05 ±	0.1 ±	0.03 ±	0.06 ±	0.4 ±	0.03 ±	0.1 ±	0.07 ±	3.86	77.7
	0.3 ^a	0.1 ^a	0.2 ^b	0.2 ^{a,b}	0.005 ^b	0.008 ^c	0.005 ^c	0.06	0.008 ^a	0.06 ^c	0.01	0.09	0.05		
Yu 7803	1.6 ±	0.1 ±	0.5 ±	0.5 ±	0.02 ±	0.02 ±	-	0.04 ±	0.2 ±	0.2 ±	-	0.09 ±	0.08 ±	3.35	80.6
	0.4 ^a	0.2 ^a	0.1 ^b	0.2 ^{a,b}	0.005 ^b	0.005 ^b	-	0.01	0.1 ^b	0.05 ^a	-	0.06	0.06		
Ys 10	2.1 ±	0.7 ±	0.8 ±	0.6 ±	0.03 ±	0.01 ±	-	-	0.2 ±	0.3 ±	-	0.2 ±	0.09 ±	5.03	83.5
	0.6 ^a	0.2 ^b	0.2 ^c	0.2 ^b	0.002 ^c	0.002 ^a	-	-	0.1 ^b	0.1	-	0.1	0.03		
Bd 2	2.3 ±	0.4 ±	0.5 ±	0.5 ±	0.05 ±	0.02 ±	-	0.03 ±	0.3 ±	0.5 ±	0.01 ±	-	0.05 ±	4.66	79.4
	0.4 ^b	0.2 ^a	0.2 ^b	0.2 ^{a,b}	0.006 ^d	0.001 ^b	-	0.008	0.1 ^b	0.2 ^{b,c}	0.01	-	0.02		

Values (mean ± SD, n = 3) with no letters in common are significantly different ($p < 0.05$) within a column. “-” means the corresponding compound is not detected.

The four main individual phenolic compounds are ChA, Rut, BeA and Ast. Abbreviations: ChA, Chlorogenic Acid; Rut, Rutin; BeA, Benzoic acid; Ast, Astragalin; GeA, Gentianic Acid; Cat, Catechin; VaA, Vanillic Acid; CaA, Caffeic Acid; SyA, Syringic Acid; Epi, Epicatechin; GaA, Gallic Acid; Hyp, Hyperoside; Que, Quercetin.