

Supplementary table 1. Descriptive statistics of flower color phenotypic parameters and flower pigment content.

Traits	Minimum	Maximum	Mean	Standard Deviation	C.V%	<i>p</i> -value	
						Between strains	Within strains
<i>L</i> *	16.42	87.63	45.97	14.32	31.16	0.000**	0.027
<i>a</i> *	-8.30	53.30	25.63	11.72	45.72	0.000**	0.654
<i>b</i> *	-7.57	69.09	16.74	15.74	94.07	0.000**	0.486
<i>C</i> *	9.64	116.56	35.29	10.59	30.01	0.000**	0.470
<i>h</i> °	-89.50	89.05	28.52	31.02	108.77	0.000**	0.884
An (mg·g ⁻¹)	0.01	2.68	0.74	0.46	61.94	0.000**	0.530
Ca (g·ml ⁻¹)	2.11	59.78	13.39	10.05	75.05	0.000**	0.097
An/Ca	0.00	0.42	0.08	0.07	83.94	0.000**	0.166

Note: * indicate significant difference at 0.05 probability lever; ** indicate significant difference at 0.01 probability level; anthocyanin content (An); carotenoid content (Ca); anthocyanin content/carotenoid content (An/Ca). Same as tables below.