

Table S1. The mean (\bar{X}), standard error (SE) and phenotypic coefficient of variation (CV %) for perianth achromatic brightness and floral organs' sizes in distinct *I. pumila* color morphs. Different letters indicate significant differences between color morphs (all $P < 0.05$, one-way ANOVA).

Trait	Color morph	<i>n</i>	\bar{X}		SE	CV %
Achromatic brightness						
	violet	211	0.236	b	0.003	17.96
	blue	157	0.269	a	0.004	20.56
	yellow	15	0.465	c	0.018	14.89
Flower stem height						
	violet	211	94.54	a	1.30	19.94
	blue	157	89.57	a	1.70	23.82
	yellow	15	94.58	a	2.75	11.25
CS fall						
	violet	211	334.8	a	2.9	12.45
	blue	157	325.0	a	3.3	12.60
	yellow	15	320.6	a	6.7	8.09
CS style branch						
	violet	211	195.9	a	1.3	9.97
	blue	157	194.7	a	1.6	9.96
	yellow	15	193.0	a	5.2	10.36
CS standard						
	violet	211	329.4	a	3.1	13.63
	blue	157	320.4	a	3.4	13.41
	yellow	15	319.6	a	5.9	7.21
Fall-style branch CS ratio						
	violet	211	1.713	a	0.012	10.05
	blue	157	1.673	a	0.014	10.11
	yellow	15	1.666	a	0.024	5.50

Table S2. The perianth achromatic brightness in three distinct *I. pumila* color morphs. The mean (\bar{X}), standard error (SE) and phenotypic coefficient of variation (CV %) were calculated for each trait. The one-way ANOVA was used to compare the brightness between pollinated and non-pollinated flowers. For all ANOVAs the $df = 1$.

Color morph	Pollinated flower				Non-pollinated flower				ANOVA	
	<i>n</i>	\bar{X}	SE	CV %	<i>n</i>	\bar{X}	SE	CV %	<i>F</i>	<i>P</i>
Violet	110	0.239	0.004	19.04	101	0.232	0.004	16.53	1.05	0.306
Blue	74	0.282	0.007	20.65	83	0.258	0.006	19.46	7.86	0.006
Yellow	9	0.460	0.017	11.34	6	0.473	0.039	20.01	0.12	0.738

Table S3. Discriminant function analysis of the difference in the mean shape of all three floral organs for both symmetric and asymmetric components of shape variation among pollinated and non-pollinated *I. pumila* flowers.

Floral organ	Symmetric component		Asymmetric component	
	Procrustes distance	<i>p</i>	Procrustes distance	<i>p</i>
Fall	0.005	0.234	0.002	0.097
Style branch	0.006	0.131	0.001	0.924
Standard	0.007	0.269	0.002	0.961

Figure S1. The mean shape diagrams of floral organs: fall (a), style branch (b) and standard (c), in pollinated (black line) and non-pollinated (gray line) *I. pumila* flowers. All diagrams were exaggerated 10-fold to make them easily visible.

