

Supplementary Files

Table S1 Morphological characteristics of *M. maudiae* 'Rubicunda' flowers at five development stages.

Stage	flower length (mm)	flower width (mm)	Length of petal (mm)	Width of petal (mm)	RWC of Petal (%)
S1	38.62±3.31d	11.75±0.73c	39.24±2.57e	23.16±1.65c	72.8±0.00e
S2	46.74±2.73c	15.29±0.77c	48.77±2.14d	25.86±2.36bc	75.8±0.01d
S3	56.49±3.46b	33.7±5.17b	61.55±2.09c	31.63±1.78a	78.8±0.00c
S4	71.78±4.18a	37.98±2.98b	71.90±1.21b	28.19±2.63b	83.2±0.01b
S5	58.72±8.53b	45.22±6.72a	78.96±0.71a	33.85±1.56a	84.9±0.00a

RWC, relative water content. $n = 3$. S1, green bud stage. S2, mature flower bud stage. S3, early blooming stage. S4, fully opened flower stage. S5, senescent flower stage.

Table S2. Correlation coefficients of C, N, P and NSCs contents as well as C:N:P ratio variables of *M. maudiae* 'Rubicunda' flowers at five developmental stages

	Glu	Fru	Suc	Starch	NSCs	C	N	P	C:N	C:P	N:P
S	0.01*	0.00**	0.00**	0.00**	0.00**	0.514	0.00**	0.031*	0.00**	0.08	0.00**
O	0.00**	0.00**	0.01*	0.00**	0.00**	0.804	0.00**	0.00**	0.00**	0.00**	0.00**
S*O	0.01*	0.00**	0.00**	0.00**	0.00**	0.626	0.00**	0.00**	0.797	0.048*	0.752

Data are Pearson correlation coefficients. **indicates an extremely significant correlation at the 0.01 level, *indicates a significant correlation at the 0.05 level. S: Stage, O: Organ, C: Carbon, N: nitrogen, P: phosphorus. Glu, glucose. Fru, fructose. Suc, sucrose. NSCs, non-structural carbohydrates. $n = 3$.