

<b>C x C</b> N <sub>cross</sub> = 17 N <sub>total</sub> = 76	206.03 ± 45.63								
<b>C x M</b> N <sub>cross</sub> = 5 N <sub>total</sub> = 22	39 8.5 <0.0001	5.28 ± 2.09							
<b>M x C</b> N <sub>cross</sub> = 4 N <sub>total</sub> = 17	65.01 16.42 <0.0001	0.60 -1.02 0.98	3.17 ± 0.97						
<b>M x M</b> N <sub>cross</sub> = 2 N <sub>total</sub> = 9	0.41 -1.89 0.62	0.01 -18.77 <0.0001	6.25e-03 -11.36 <0.0001	507.06 ± 214.34					
<b>M x T</b>									
<b>T x M</b> N <sub>cross</sub> = 4 N <sub>total</sub> = 11	42.3 7.97 <0.0001	1.08 0.34 1.0	0.65 -0.84 1.0	104.11 16.58 <0.0001		4.87 ± 2.02			
<b>T x T</b> N <sub>cross</sub> = 8 N <sub>total</sub> = 34	1.23 0.57 1.0	0.03 -6.97 <0.0001	0.02 -9.32 <0.0001	3.04 2.15 0.44		0.03 -7.46 <0.0001	167 ± 49.58		
<b>T x C</b> N <sub>cross</sub> = 9 N <sub>total</sub> = 43	4.47 8.80 <0.0001	8.72 4.68 0.0001	0.07 -9.92 <0.0001	0.09 -4.94 <0.0001		9.46 5.12 <0.0001	0.28 -3.89 0.0032	46.09 ± 11.02	
<b>C x T</b> N <sub>cross</sub> = 4 N <sub>total</sub> = 19	8.34 6.39 <0.0001	0.21 -3.30 0.027	0.13 -4.91 <0.0001	20.53 5.92 <0.0001		0.2 -3.22 0.034	0.15 -10.66 <0.0001	1.87 1.68 0.76	24.70 ± 7.06
	<b>C x C</b>	<b>C x M</b>	<b>M x C</b>	<b>M x M</b>	<b>M x T</b>	<b>T x M</b>	<b>T x T</b>	<b>T x C</b>	<b>C x T</b>

	Wald $\chi^2$	df	p
Maternal Species	294.77	2	< 2.2e-16
Paternal Species	90.35	2	< 2.2e-16
Maternal*Paternal	4896.76	3	< 2.2e-16

Table S15. Pairwise differences in F1 seed production assessed using a post-hoc Tukey method. Cross types involved *M. caespitosa* (C), *M. minor* (M), and *M. tilingii* (T), with the maternal parent in each cross listed first. N<sub>cross</sub> = number of unique maternal family combinations per cross type and N<sub>total</sub> = total number of fruits scored per cross type. Values on diagonal are lsmeans +/- standard error. In each box below the diagonal, the uppermost value is the model estimate, the middle value is the z-ratio, and the bottom value is the P-value. Upper right corner: GLMM type III ANOVA of F1 seed set Wald  $\chi^2$  values for “Maternal Species” and “Paternal Species” (fixed effects) and “Maternal\*Paternal” species interaction effect. Shades of light gray denotes a  $P < 0.05$ , medium gray denotes a  $P < 0.01$ , and dark gray denotes a  $P < 0.001$ .