

**Table S1. Dimensions of developing seeds in wild-type and *mnt* plants**

Stage	Length ( $\mu\text{m}$ )		Width ( $\mu\text{m}$ )		Area seed cavity ( $\mu\text{m}^2$ )	
	Wild type	<i>mnt</i>	Wild type	<i>mnt</i>	Wild type	<i>mnt</i>
Preglobular ( <i>n</i> =16 for wild type, 18 for <i>mnt</i> )	325 $\pm$ 8	472 $\pm$ 20	213 $\pm$ 5	279 $\pm$ 14	22 187 $\pm$ 1046	43 778 $\pm$ 4547
Globular ( <i>n</i> =25 for wild type, 14 for <i>mnt</i> )	391 $\pm$ 6	533 $\pm$ 12	250 $\pm$ 4	319 $\pm$ 6	30 160 $\pm$ 1570	59 857 $\pm$ 2436
Heart ( <i>n</i> =15 for wild type, 16 for <i>mnt</i> )	479 $\pm$ 7	659 $\pm$ 13	327 $\pm$ 6	408 $\pm$ 8	57 800 $\pm$ 2671	106 688 $\pm$ 5152
Torpedo ( <i>n</i> =20 for wild type, 16 for <i>mnt</i> )	534 $\pm$ 5	708 $\pm$ 9	367 $\pm$ 5	441 $\pm$ 11	86 000 $\pm$ 2198	154 125 $\pm$ 3453
Bent cotyledon ( <i>n</i> =11 for wild type, 18 for <i>mnt</i> )	542 $\pm$ 10	739 $\pm$ 11	376 $\pm$ 6	482 $\pm$ 7	96 091 $\pm$ 3206	170 000 $\pm$ 5333
Curled cotyledon ( <i>n</i> =7 for wild type, 28 for <i>mnt</i> )	513 $\pm$ 8	745 $\pm$ 9	369 $\pm$ 4	445 $\pm$ 10	93 286 $\pm$ 4487	170 536 $\pm$ 4549

Data represent mean $\pm$ s.e.m.