

## FIGURE LEGENDS, SUPPLEMENT

### Table S1. Segregation of double mutants

Segregation of *mp pin1*, *mp pid* and *pid pin1* double mutants stemming from doubly heterozygous parental plants. Double mutant populations were identified first by screening for *mp* seedling phenotypes and *pin1* inflorescence phenotypes. In double mutant populations, seedlings with *mp* phenotypes were transferred to new petridishes and kept in short day conditions for observation of possible segregation of *mp* single and double mutant phenotypes in the vegetative meristem. Plants were scored for parental phenotypes (*mp*, *pin1*, *pid*), and for phenotypes different from parental phenotypes (novel; see figure 1 for description). Absolute numbers are followed by percentage of total number, given in brackets. Expected number is based on a 9:3:3:1 segregation of two unlinked loci. Statistical analysis of segregation ratios using Chi-square analysis resulted in no statistical difference between expected and observed numbers of individuals with novel phenotypes in the segregating population; *mp pin1* double mutant  $p = 0.75$ , *mp pid* double mutants  $p = 0.69$ , *pin1 pid* double mutants  $p = 0.88$ .

### Figure S1. Time series of *ASI* expression in leafless domes.

Whole mount in situ hybridization illustrating the switch of *ASI* expression which is initially expressed in a collar of cells surrounding the meristem at 3 and 4 DAG to simultaneous expression in the meristem at 6 DAG and is exclusive expression in the enlarging meristem from 9 DAG onwards. (A) 3 DAG, (B) 4 DAG, (C) 6 DAG, (D) 9 DAG, (E) 21 DAG, a = apex of meristem, scale bars are 50 $\mu$ m.

### Figure S2. Quantification of central zone and meristem areas.

Material grown on medium supplemented with 10 $\mu$ M NPA indicated as "+ NPA". Representative images of *Pro<sub>CLV3</sub>:GFP:ER* and *Pro<sub>STM</sub>:GUS* expression at 3, 10 and 21 DAG in *WT*, *mp*, *WT* +NPA, and *mp*+NPA meristems. Size bars are 50 $\mu$ m.