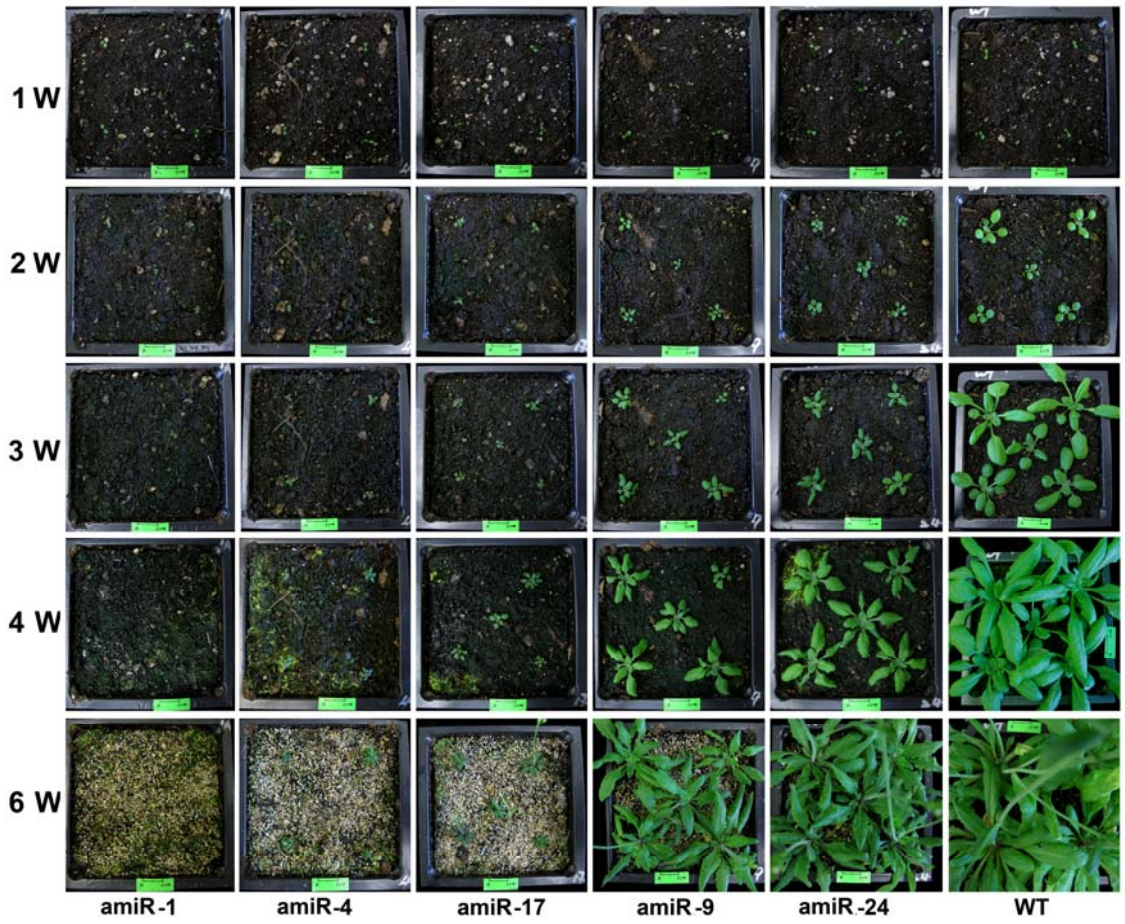
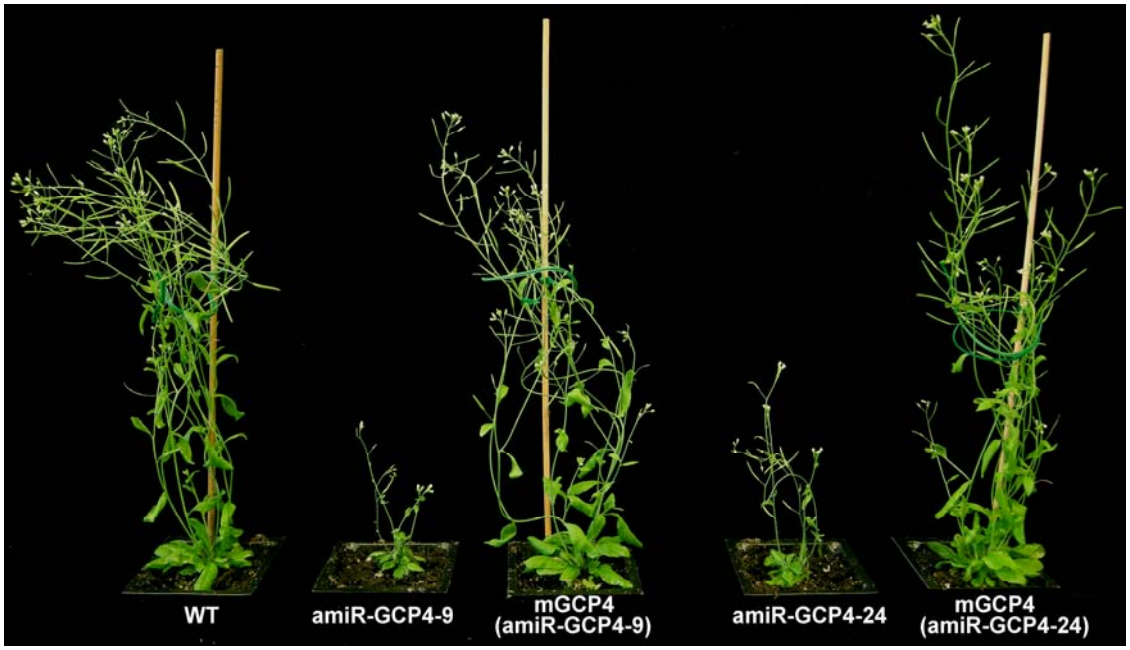
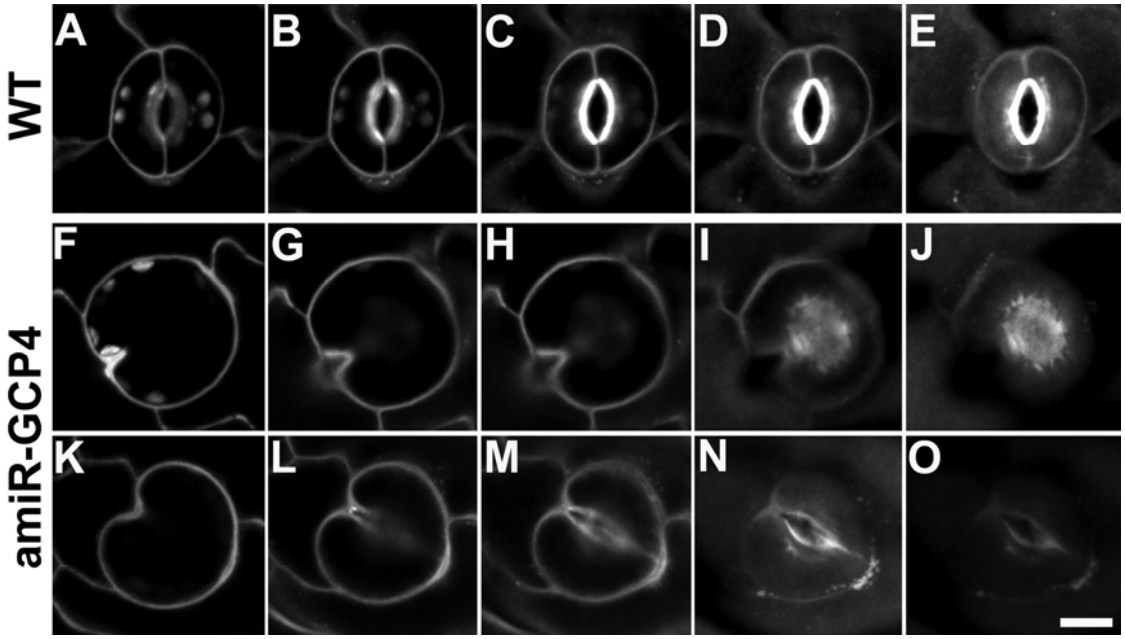


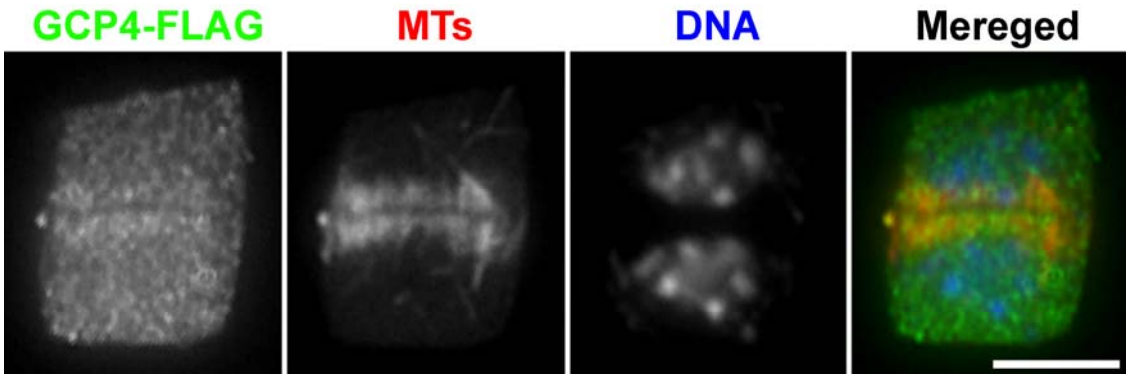
Supplemental Figure 1. Time-course of growth phenotype exhibited by the amiR-GCP4 lines 1, 4, 17, 9, and 24 compared to the wild-type control. Images were taken at one, two, three, four, and six weeks after germination. Note that growth retardation caused by amiR-GCP4 becomes clear two weeks after germination.



Supplemental Figure 2. Complementation of the amiR-GCP4 lines 9 and 24 by the P_{GCP4}:mGCP4 construct. Eight-week-old complemented plants are indistinguishable from the wild-type control at the same age.



Supplemental Figure 3. Failed stomatogenesis in amiR-GCP4 plants. Paired guard cells can be discerned in the wild-type control (A-E) through serial optical sections by confocal microscopy. After cytokinesis, typical stomatal pore was formed by ventral wall thickening. The mutant guard mother cells often failed in cytokinesis, leaving behind spherical cells with cell wall invaginations on sides of the cells (F-J and K-O). Abnormal accumulation of cell wall materials was also observed in mutant cells. Scale bar = 10 μm.



Supplemental Figure 4. Immunolocalization of a GCP4-FLAG Supplemental Data. Kong et al. (2009). Pl expressed in a cytokinetic cell. GCP4-FLAG was expressed under the control of its native promoter. Shown here are triple labeling of GCP4-FLAG by a mouse anti-FLAG monoclonal antibody, phragmoplast MTs by sheep anti-tubulin polyclonal antibodies, and daughter nuclei by the dye DAPI. Merged image has GCP4-FLAG in green, MTs in red, and DNA in blue. Scale bar = 5 µm.