

Supplementary figure 3.

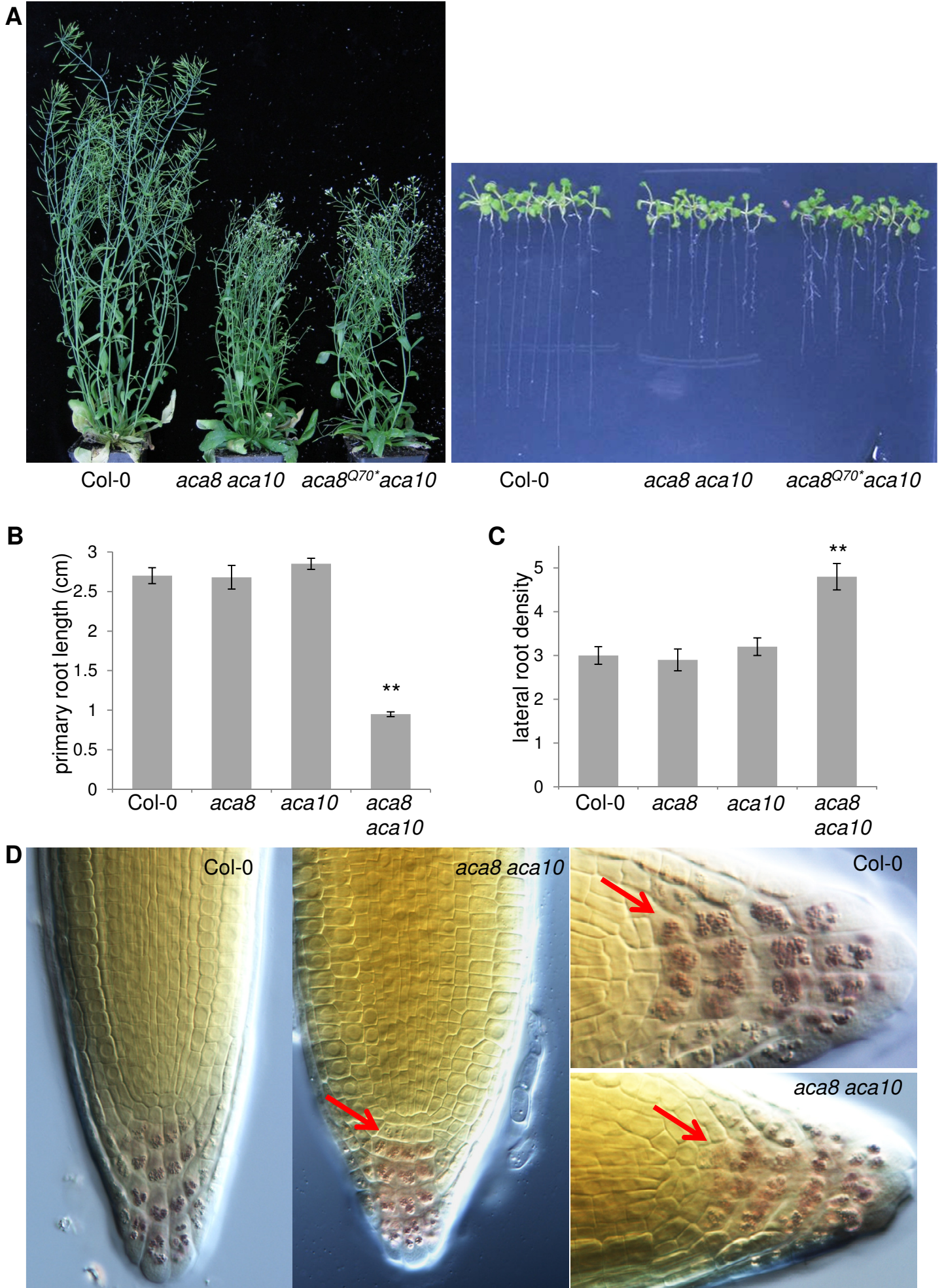


Figure S3. Developmental phenotypes of *aca* mutant plants. **A.** Photographs present inflorescence height and root growth of the indicated genotypes including the tilling allele *aca8Q70**. **B.** Measurement of primary root growth of 8 days old seedlings, and **C.** number of lateral roots per cm primary root of 14 days old in vitro-grown seedlings of the indicated genotypes. Error bars indicate standard error based on $n = 25$ samples, asterisks indicate significant differences at $p < 0.01$ based on T-test. **D.** Detailed view on the stem cell area of Col-0 wild type and *aca8 aca10* mutant root apical meristems, 3 days after germination. Starch granules in columella cells are visible as pink dots. Note the presence of starch granules in columella stem cells in the *aca8 aca10* meristem (arrow) as sign of perturbation of stem cell identity. For root phenotypic analysis, starch granules in the columella root cap were visualized with 1% Lugol solution (MERC, Germany). Seedlings were stained for 3 min, rinsed with water, cleared with chloral hydrate and analyzed using differential interference contrast optics on a Olympus BX53 light microscope and imaged using a Nikon DS-Fi1 digital camera ([Lee et al., 2007](#)).