



**Figure S2. Expression of ADT3-GFP fusions in *adt3-1* and WT background and *ADT3::ADT3-GFP* in the SAM.**

ADT3-GFP transformed *adt3-1* seedlings or WT seedlings and *ADT3::ADT3-CFP* transformed *adt3-1* seedlings were grown for 4-d in complete darkness as described in Material and Methods. **A.** An optical slice of *adt3-1* seedling transformed with *ADT3::ADT3-GFP* captured on the 488nm LED SD confocal is shown. GFP signal accumulates in multiple cell types, in particular in the epidermis of leaf primordia and young cotyledons. Scale bar = 100 $\mu$ m. **B.** A WT seedling transformed with *35S::ADT3-GFP* revealed expression throughout the shoot, in particular (arrows) in the SAM, and in the epidermis. More intense expression is observed in the plastids of the developing GC (arrowheads) but not in mature GC which show characteristic autofluorescence (oval). n=3 sets of minimum 30 viewed. Images are representative. Scale bar = 50 $\mu$ m. **C.** Merged image of 445 and 488 from the apical region of a *adt3-1* seedling transformed with *ADT3::ADT3-CFP*. The signal from CFP (445-magenta) accumulates in the dome of the SAM and leaf primordial while the signal captured by 488 (green) is due to polyphenols (flavonoids) autofluorescence in the epidermis. Images are representative, 60X. n=20. Scale bar = 25 $\mu$ m.