

Figure S13. Yu et al.

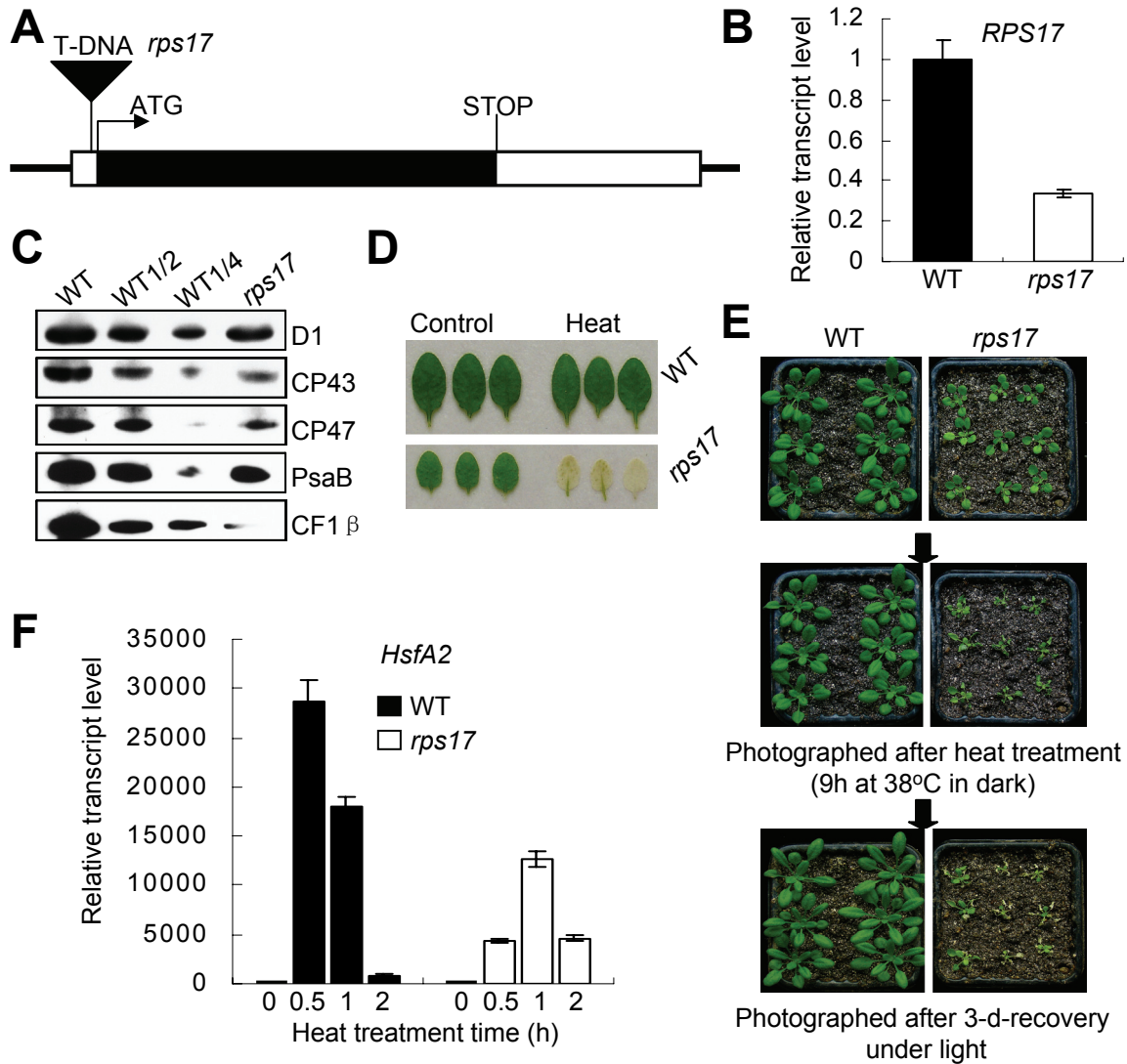


Figure S13. Knockdown of *RPS17* expression in *rps17* mutant plants leads to heat susceptibility.

(A) Schematic diagram of *RPS17* gene (At1g79850) showing the T-DNA insertion site. Open box indicates 5' or 3' UTR; Closed box indicates ORF. The T-DNA insertion site and positions of the start and stop codons are indicated (SALK_066943).

(B) *RPS17* mRNA levels in leaves of wild type and *rps17* mutant plants were analyzed by qRT-PCR. *Actin2* was used as the internal standard.

(C) Western blot analysis of thylakoid membrane proteins extracted from WT and *rps17* leaves. Equal protein loading was determined by contents (2 μ g) of chlorophyll in thylakoid membrane extracts according to (Peng et al., 2006).

(D) to (E) Heat-challenged phenotypes of wild type and *rps17* mutant as examined with detached leaf (D) and whole plant (E) assays performed as described in Methods.

(F) qRT-PCR analysis of mRNA levels of *HsfA2* in detached, fully-extended WT and *rps17* leaves challenged with heat treatment (38°C) for the indicated time in dark.

For qRT-PCR analysis, *Actin2* was used as the internal standard. Error bars indicate standard deviations of three technical replicates, and the results were consistent in three biological replicates.