



Fig. S2. Male germ cell-overexpressed *MIR159a* partially rescued fertility defects of the *mir159abc* mutant.

(a) Vegetative morphology of Col-0, *mir159abc*, and three independent T1 lines of *proHTR10::MIR159a mir159abc*. Bar=10 mm.

(b) Silique length of Col-0, *mir159abc*, and three independent T1 lines of *proHTR10::MIR159a mir159abc*. Bar=5 mm.

(c-d) Statistics of silique length (c) and seed set ratio (d) for each genotype. n indicates total seed number. *p*-values were calculated by one-way ANOVA Sidak's multiple comparison, ** *p* < 0.01.

(e) The schematic showing the mutant nature of the *myb33 myb65* double mutant.

(f) Morphology of the primary branch of Col-0 and *myb33 myb65*. Red arrowheads indicate abnormal siliques. Bar=10 mm.

(g) Percentage of viable seeds in the F1 siliques of indicated genotypes. n indicate total seed number.