



Supplemental Figure S5. WRKY6 and WRKY40 are non-redundant regulators of gene expression and GABA-shunt induction by *E*-2-hexenal in Arabidopsis. **(A-C)** Transcript levels of early time point (1h) *E*-2-hexenal responsive genes were determined by Q-RT-PCR in Arabidopsis leaves in response to 3 μ M aerial *E*-2-hexenal or to methanol (MeOH) as control treatment. Values are normalized to the expression of *SAND* and are the means of three independent biological replicates (2 pooled plants each). Error bars indicate SE; asterisks indicate significant change by *E*-2-hexenal treatment; different letters indicate significant differences in expression level between different genotypes (generalized linear model with γ error distribution, logarithmic link function and technical replicates nested to biological replicates, ** = $p \leq 0.01$ and different letters = $p \leq 0.05$ according to LSD post-hoc analysis). **(D)** GABA levels in wild-type and *gad4* Arabidopsis leaves after treatment with 3 μ M aerial *E*-2-hexenal or methanol (MeOH), as control treatment, for 3h. Values are normalized to the expression of *SAND* and are the means of six independent biological replicates (2 or 3 pooled plants each). Error bars indicate SE; letters indicate significant differences in expression level after log transformation of the data (ANOVA, $p \leq 0.01$ according to LSD post-hoc analysis).