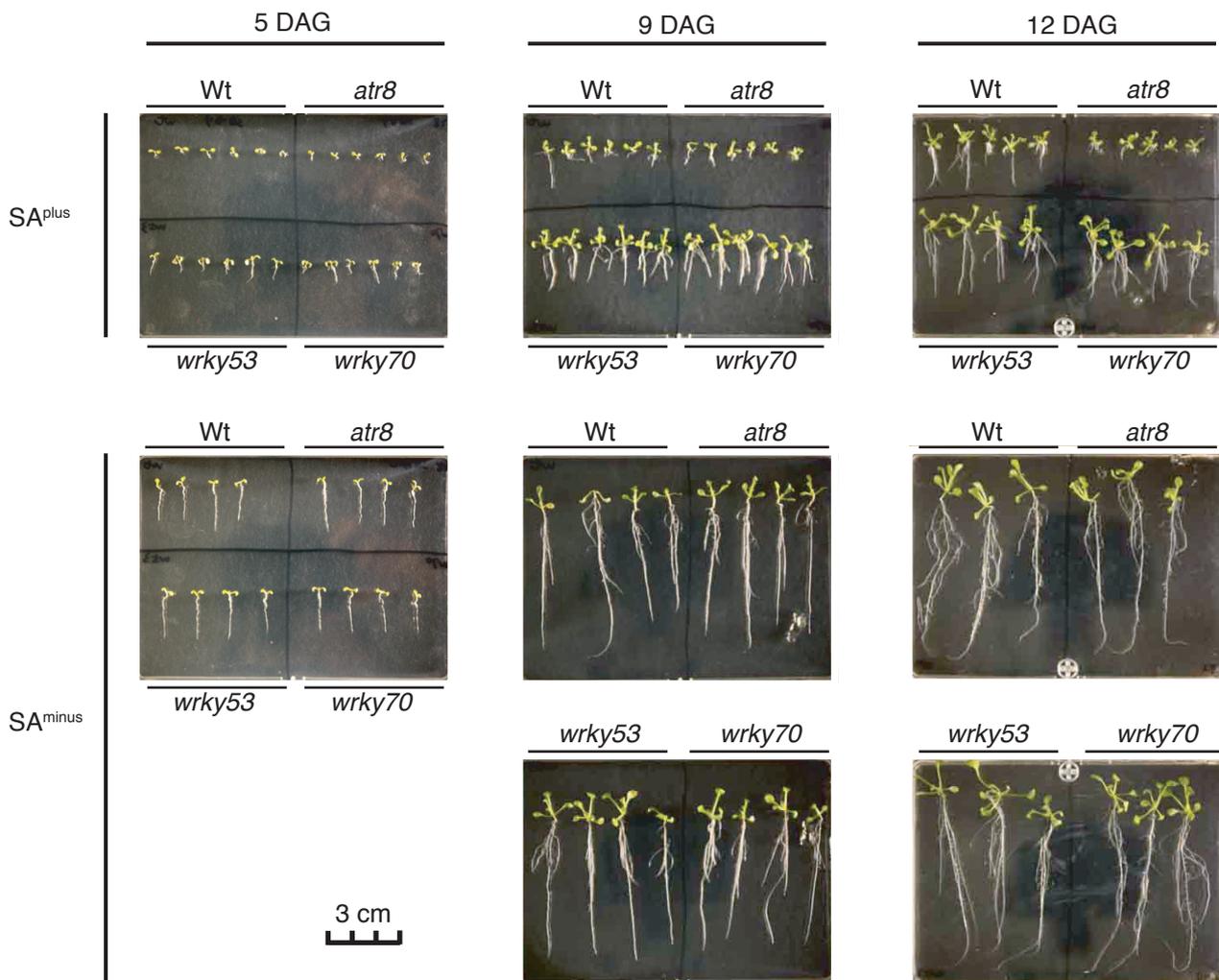
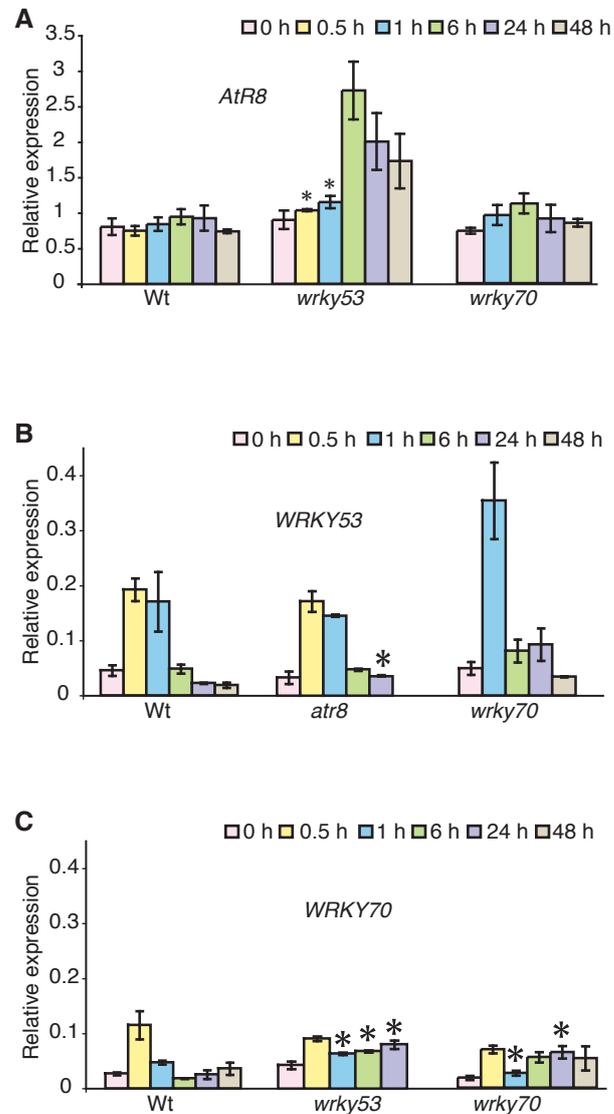


Supplemental Fig. S1. Inhibitory effects of root elongation under different SA conditions.

Root lengths of *Arabidopsis* seedling (Wt and *atr8*) were compared with different SA conditions. (A) Seedlings were germinated on horizontal growth media without SA, and transplanted to 10 mM SA at 9 days after germination, and grown for 13 days on vertical plane of medium with or without 10 mM SA (including 1.2% (w/v) agar, 1/2 MS and 2% (w/v) sucrose). (B) Seedlings were germinated on vertical growth media with or without 25 μ M SA (including 0.24% (w/v) gellan gum, 1/2 MS and 2% (w/v) sucrose), and then grown for 14 days. Any clear difference was not observed between Wt and *atr8* mutant under 10 mM and 25 μ M SA conditions.

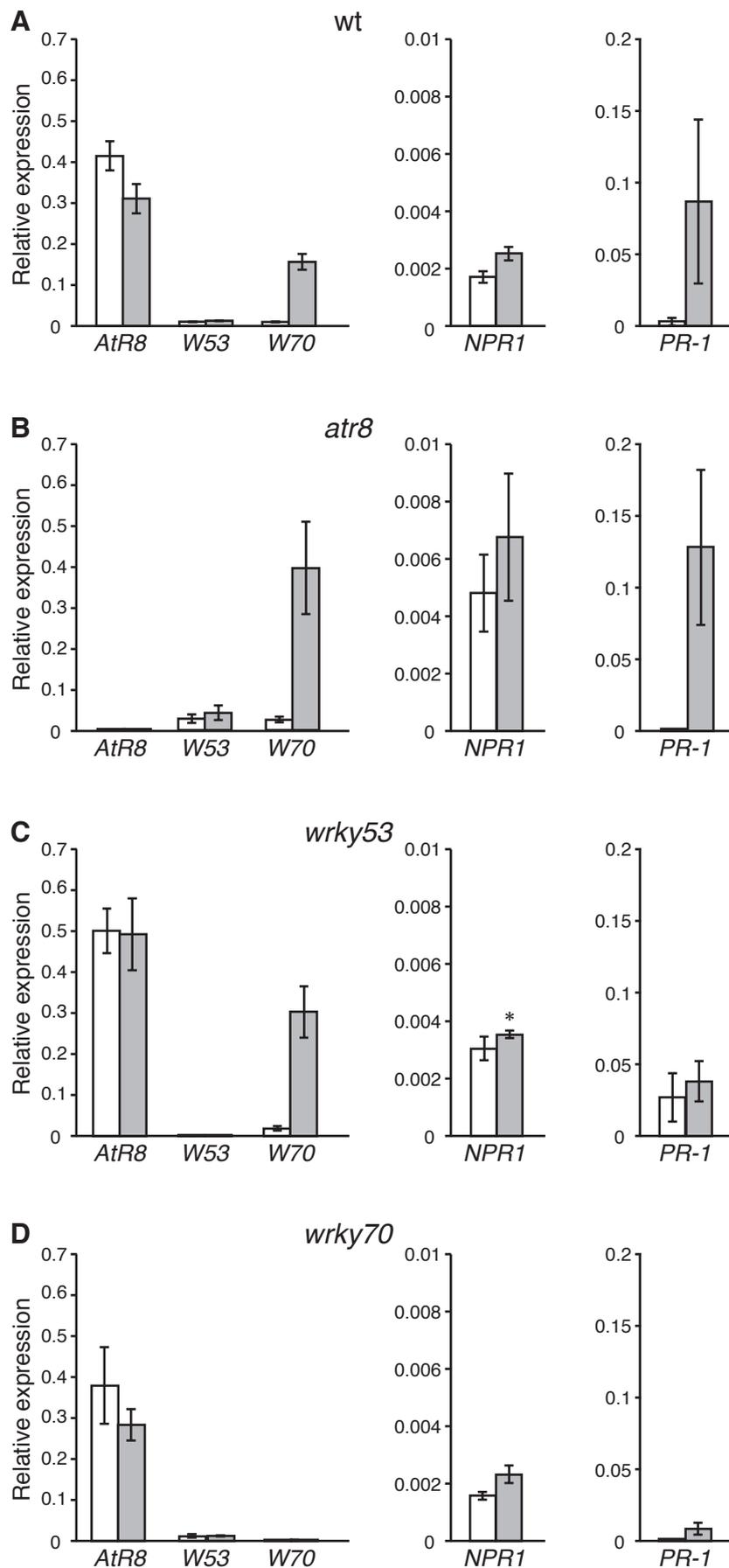


Supplemental Fig. S2. Inhibitory effects of root elongation with 20 μ M SA condition. Root lengths of Arabidopsis seedling were compared, which were grown on vertical 0.24% gellan gum media with (SA^{plus}) or without (SA^{minus}) 20 μ M salicylic acid for 5, 9, 12 days after germination (DAG).



Supplemental Fig. S3. Short-term time course of RNA levels induced by infection with *Pseudomonas syringae*. Expression levels of *AtR8* lncRNA as well as *WRKY53* and *WRKY70* in Arabidopsis plants treated with Ps, which were cultured with 500 μ L of King's liquid media and suspended in 50 mL of sterile water (100 times dilution). Gene expression levels with Ps or water control were compared by RT-qPCR. Bar graphs represent mean values of three independent assays (≥ 50 plants), and error bars represent \pm SE. (A): *AtR8*, (B): *WRKY53*, and (C): *WRKY70*. Significant differences in RNA accumulations levels between Wt and each of the mutants by (Welch's *t*-test) are indicated as * $p < 0.05$.

□ SA^{minus} ■ SA^{plus}



Supplemental Fig. S4. Expression levels of RNAs in Arabidopsis roots under continuous treatment with 20 μ M SA. Total RNAs were extracted from roots, 24 days after seeding (≥ 40 plants). Gene expression levels with (SA^{plus}) or without (SA^{minus}) SA were compared by RT-qPCR. Bar graphs represent mean values of three independent assays, and error bars represent \pm SE. W53: *WRKY53*, W70: *WRKY70*. (A): Wt, (B): *atr8*, (C): *wrky53*, and (D): *wrky70*. Significant differences in RNA accumulation levels between Wt and each of the mutants (Welch's *t*-test) are indicated as * $p < 0.05$.