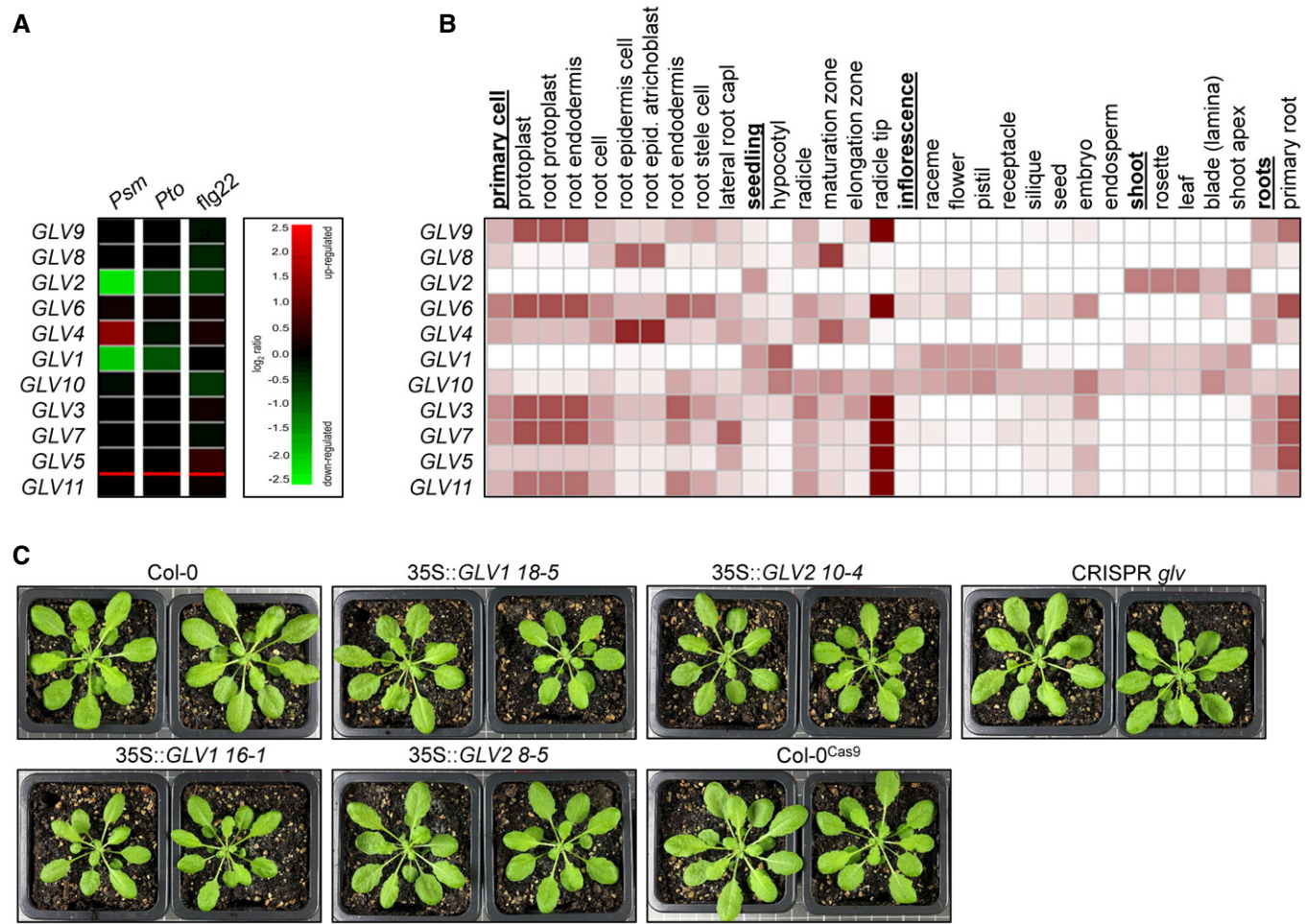


Expanded View Figures

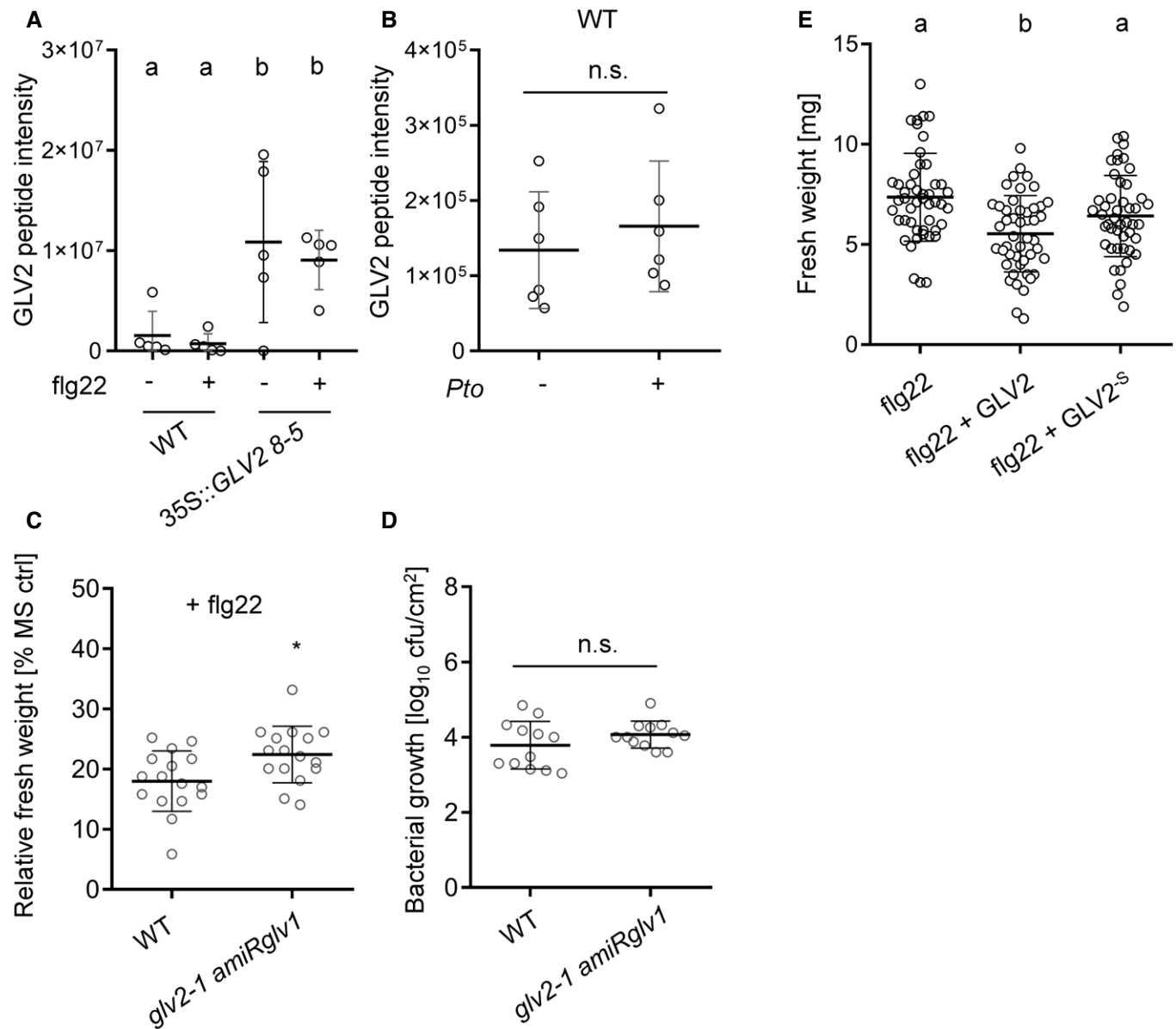


**Figure EV1. GLV peptide differential expression and morphology of GLV overexpression lines and CRISPR *glv*.**

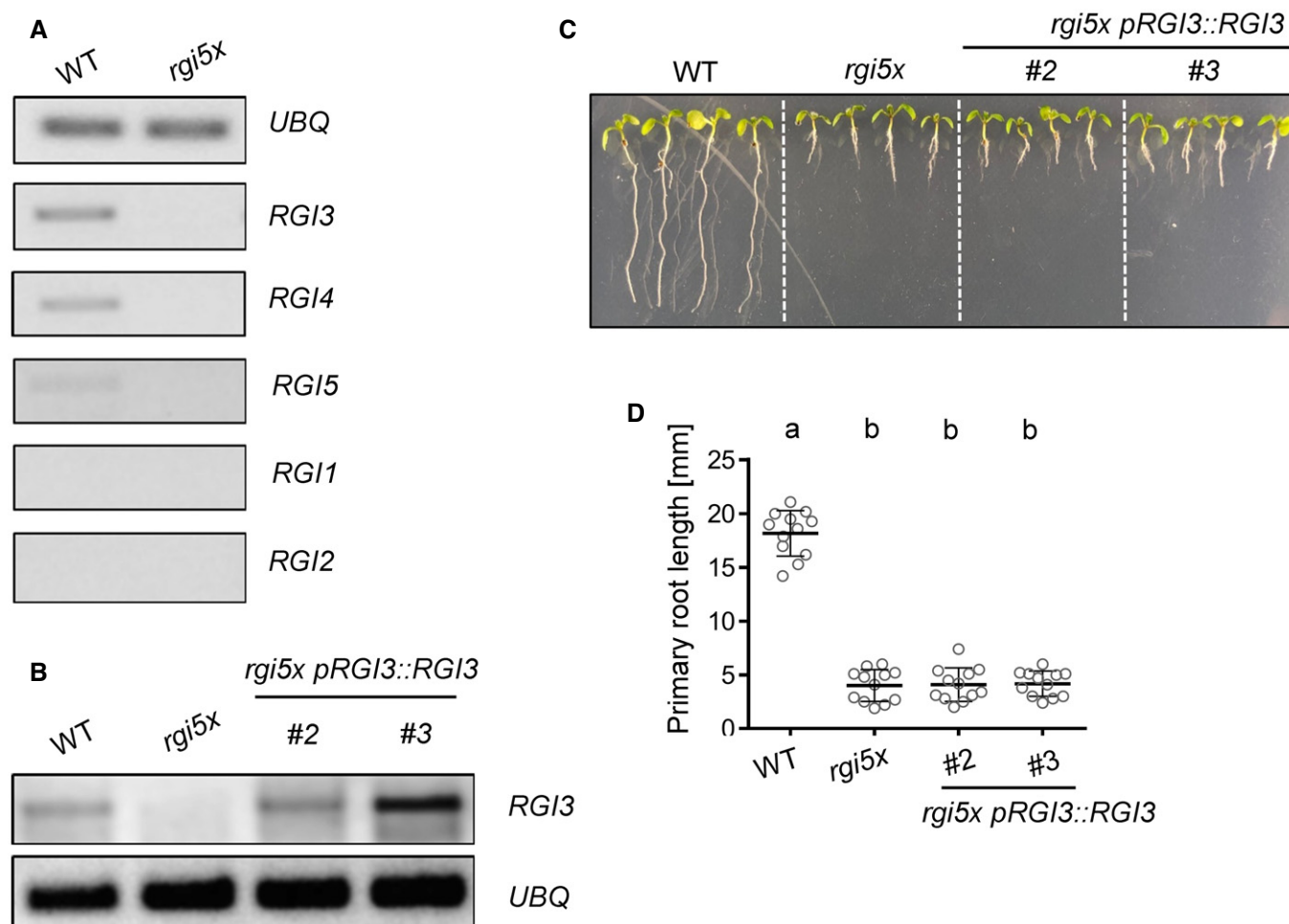
A Both GLV1 and GLV2 are transcriptionally downregulated after infection with *Psm* and to a lesser extent after infection with *Pto*. Treatment with *flg22* does not affect GLV gene expression. Data were obtained using Genevestigator software and are based on the AT\_nRNASeq\_ARABI\_GL-1 data set.

B Tissue-specific expression pattern of GLV family members. GLV2 is predicted to be the strongest expressed GLV member in *Arabidopsis* mature leaves. Data were obtained using Genevestigator software and are based on the AT\_mRNASeq\_ARABI\_GL-1 data set.

C Pictures of 6-week-old plants of the indicated genotypes.



Source data are available online for this figure.

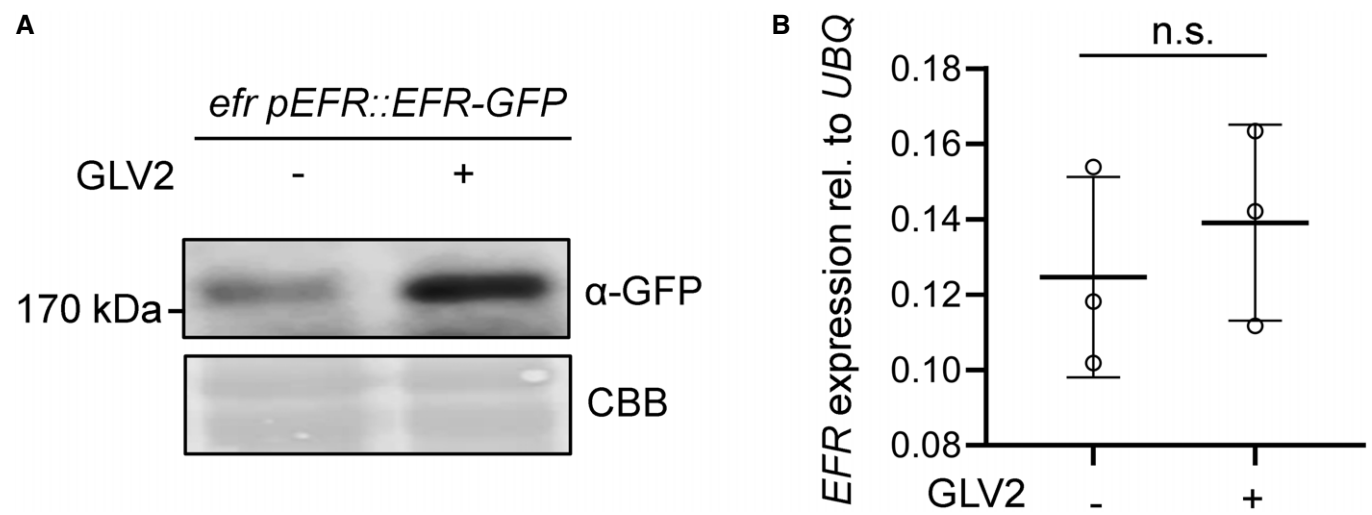


**Figure EV3. Characterization of *RGI* expression in mature leaves, *RGI3* expression in and phenotypic characterization of *rgi5x pRGI3::RGI3*.**

- A Semi-quantitative reverse transcription PCR showing expression of *RGI1-RGI5* in 6-week-old leaves of WT and *rgi5x*. *UBQ* was used as a control. *RGI3* and *RGI4* show comparable expression levels. *RGI5* shows weaker transcript levels and *RGI1* and *RGI2* expression was not detectable in mature leaves.
- B Semi-quantitative reverse transcription PCR showing expression of *RGI3* in transgenic *rgi5x pRGI3::RGI3* lines. *UBQ* was used as a control. Both lines of *rgi5x pRGI3::RGI3* show *RGI3* expression in mature leaves.
- C Representative pictures taken 7 days after vertical germination of the indicated genotypes on 1/2 MS Agar plates.
- D Quantification of main root length of seedlings shown in C. Shown is the mean of  $n = 12$  biological replicates  $\pm$  SD (one-way ANOVA, Tukey *post hoc* test, a-b  $P < 0.001$ ). Expression of *pRGI3::RGI3* does not complement the short root phenotype of the *rgi5x* mutant.

Data information: Similar results were obtained in three independent experiments.

Source data are available online for this figure.



**Figure EV4. GLV2 treatment promotes EFR abundance.**

A Twelve-day-old *efr pEFR::EFR-GFP* seedlings were treated with mock or 1  $\mu$ M GLV2 for 24 h before protein extraction. Western blots were probed with  $\alpha$ -GFP antibodies. CBB: Coomassie brilliant blue.

B Quantitative real-time PCR of *EFR* transcripts from 12-day-old *efr pEFR::EFR-GFP* seedlings treated with mock or 1  $\mu$ M GLV2 for 24 h,  $n = 3$  biological replicates  $\pm$  SD. *UBQ* was used as a house keeping gene. Student's t-test revealed no statistical difference.

Data information: Similar results were obtained in three independent experiments.

Source data are available online for this figure.