

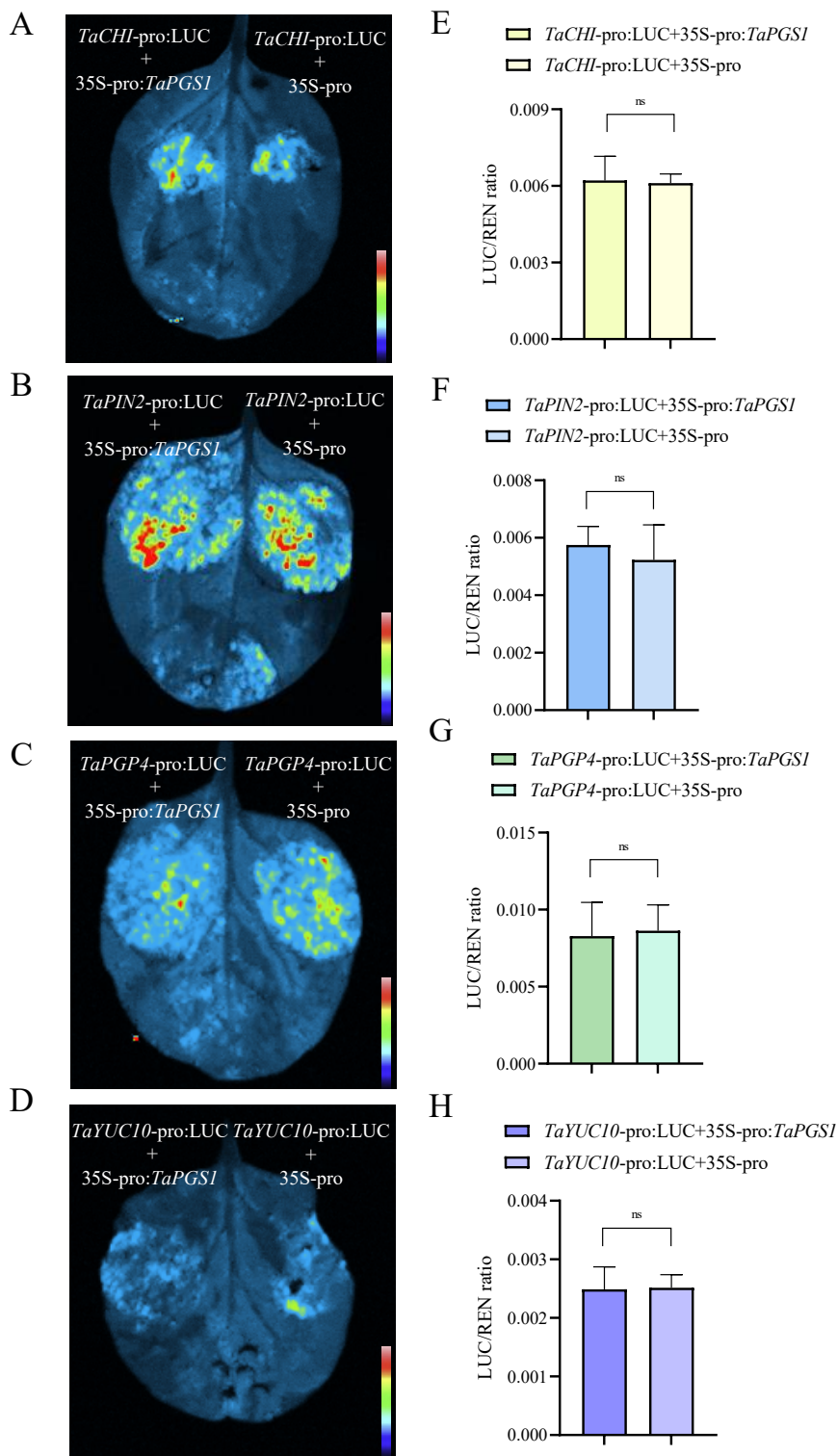


Fig.S5. Validation of downstream transcriptional activation of *TaPGS1*. A-D. Luminescence images of *TaCHI*-pro:LUC(A), *TaPIN2*-pro:LUC(B), *TaPGP4*-pro:LUC(C), *TaYUC10*-pro:LUC(D) co-expressed with 35S-pro:*TaPGS1* (left) or empty effector (35S:Pro, right) in tobacco leaves. E-H. Quantification of relative promoter activity (LUC/REN) for *TaCHI*-pro:LUC (E), *TaPIN2*-pro:LUC (F), and *TaPGP4*-pro:LUC (G), *TaYUC10*-pro:LUC (G). Bars show mean  $\pm$  SD; significance: (mean  $\pm$  SD; \*  $P < 0.05$ ; \*\*  $P < 0.01$ , student's t-test).