

Figure S1

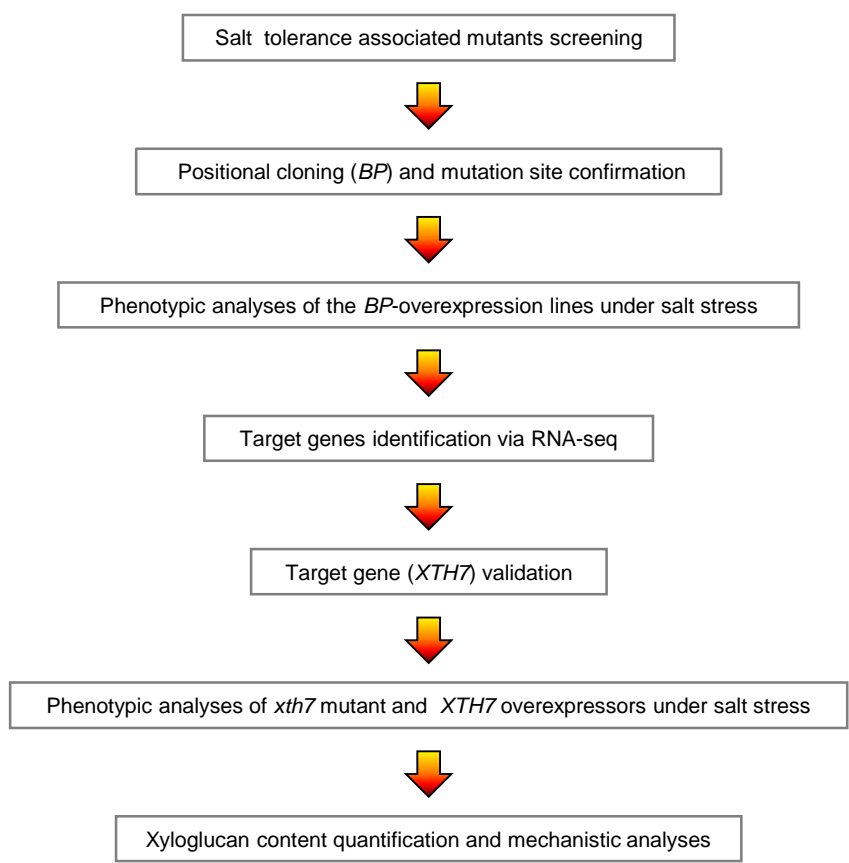


Figure S1. A framework of this study.

Figure S2

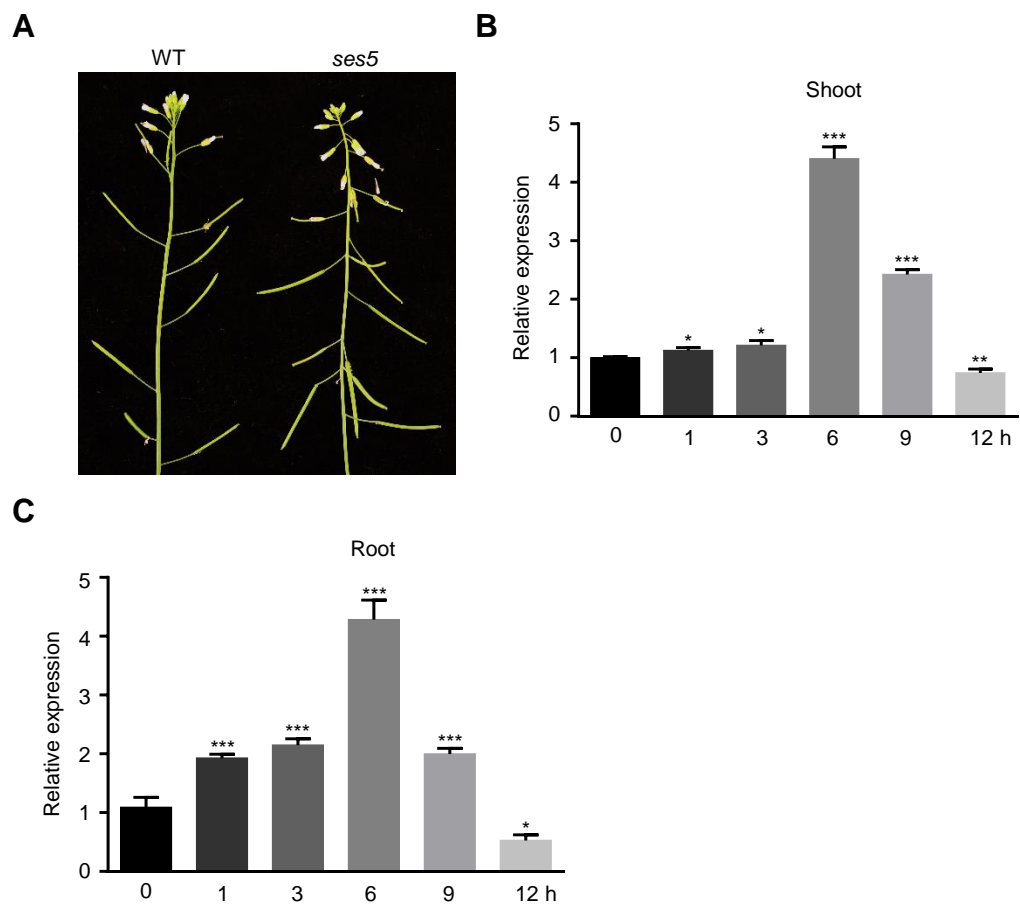


Figure S2. Characterization of *ses5* and expression pattern of *BP*. **(A)** Close-ups of floral nodes with siliques from WT and *ses5*. **(B,C)** Responsiveness of *BP* to salt stress. RNA was extracted from 7-day-old WT seedlings treated with 200 mM NaCl for 0, 1, 3, 6, 9 and 12 h. The data were normalized against the expression of *GAPDH* and *UBQ10*. The means were calculated from three independent replicates and compared with the no-treatment condition (0 h). The bars indicate means \pm sd of three independent replicates. *, $P < 0.05$, **, $P < 0.01$, ***, $P < 0.001$ (Student's *t* test).

Figure S3

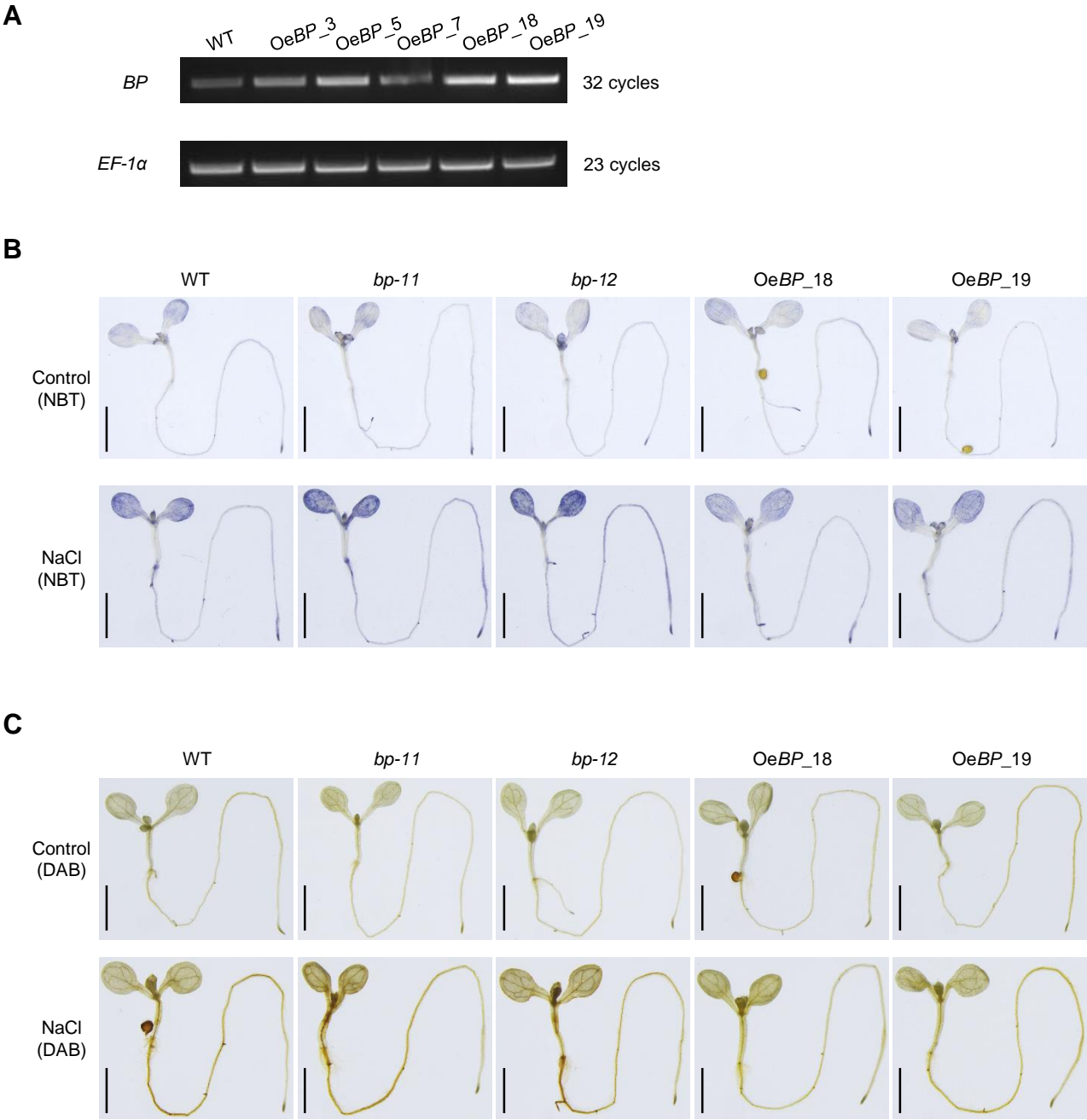


Figure S3. RT-PCR analysis of the *BP* transcripts and ROS levels in the WT, mutants and overexpression lines plants. **(A)** RT-PCR analysis of the *BP* transcripts in the WT and *BP*-overexpression lines. *EF-1α* was used as control. **(B)** NBT staining of O_2^- in 7-day-old WT, mutants and overexpression lines plants exposed to either 0 mM (Control) (top panel) or 150 mM NaCl for 24 h (bottom panel). **(C)** DAB staining of H_2O_2 in 7-day-old WT, mutants and overexpression lines plants exposed to either 0 mM (Control) (top panel) or 150 mM NaCl for 24 h (bottom panel). Scale bar = 5 mm.

Figure S4

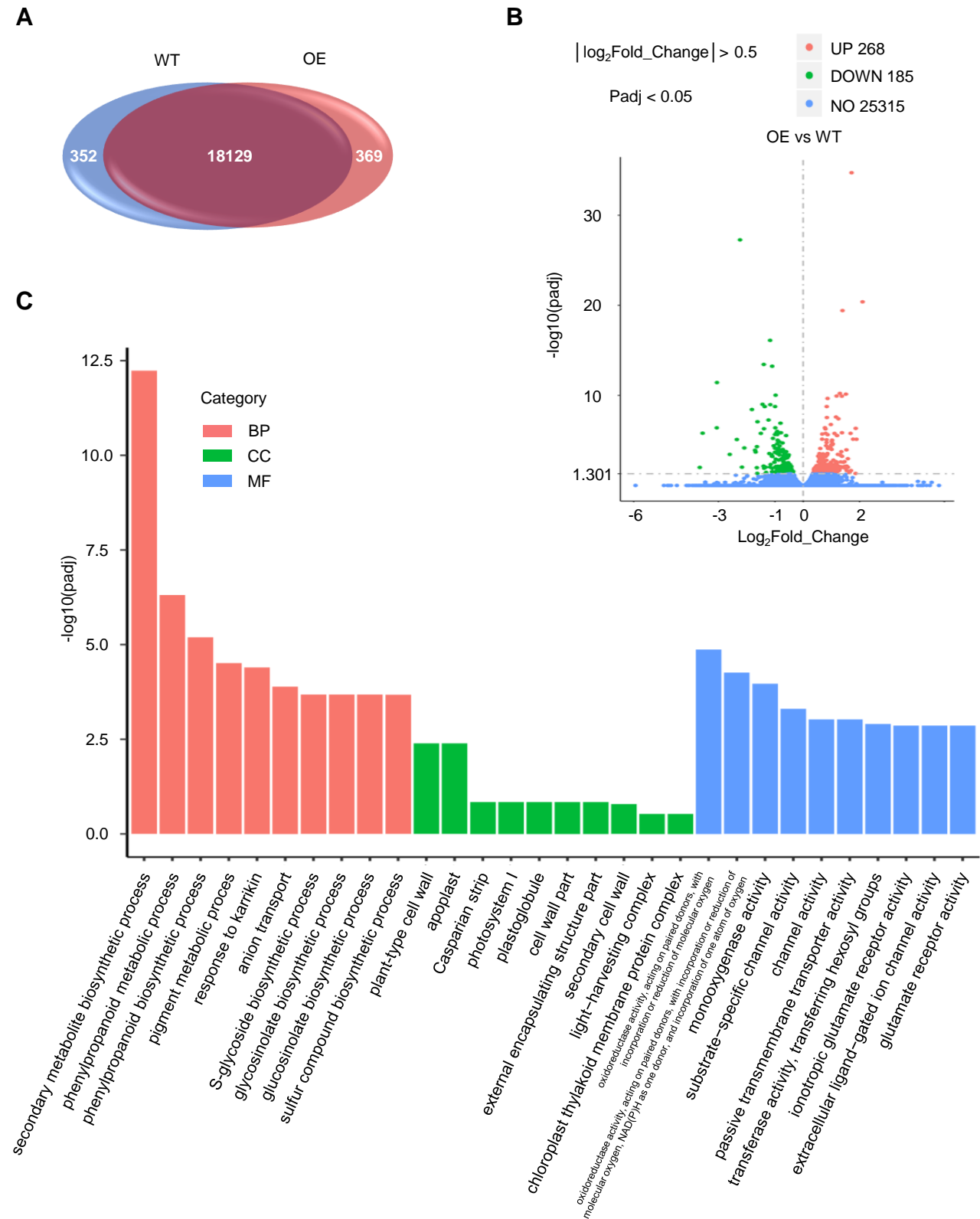


Figure S4. RNA-seq analyses. **(A)** Venn diagram of the differentially expressed genes (DEGs) in WT and *BP*-overexpression line (OeBP_18). **(B)** Significance analysis of the DEGs in WT and *BP*-overexpression line. **(C)** GO enrichment analysis of DEGs. BP, biological process; CC, cellular component; MF, molecular function.

Figure S5

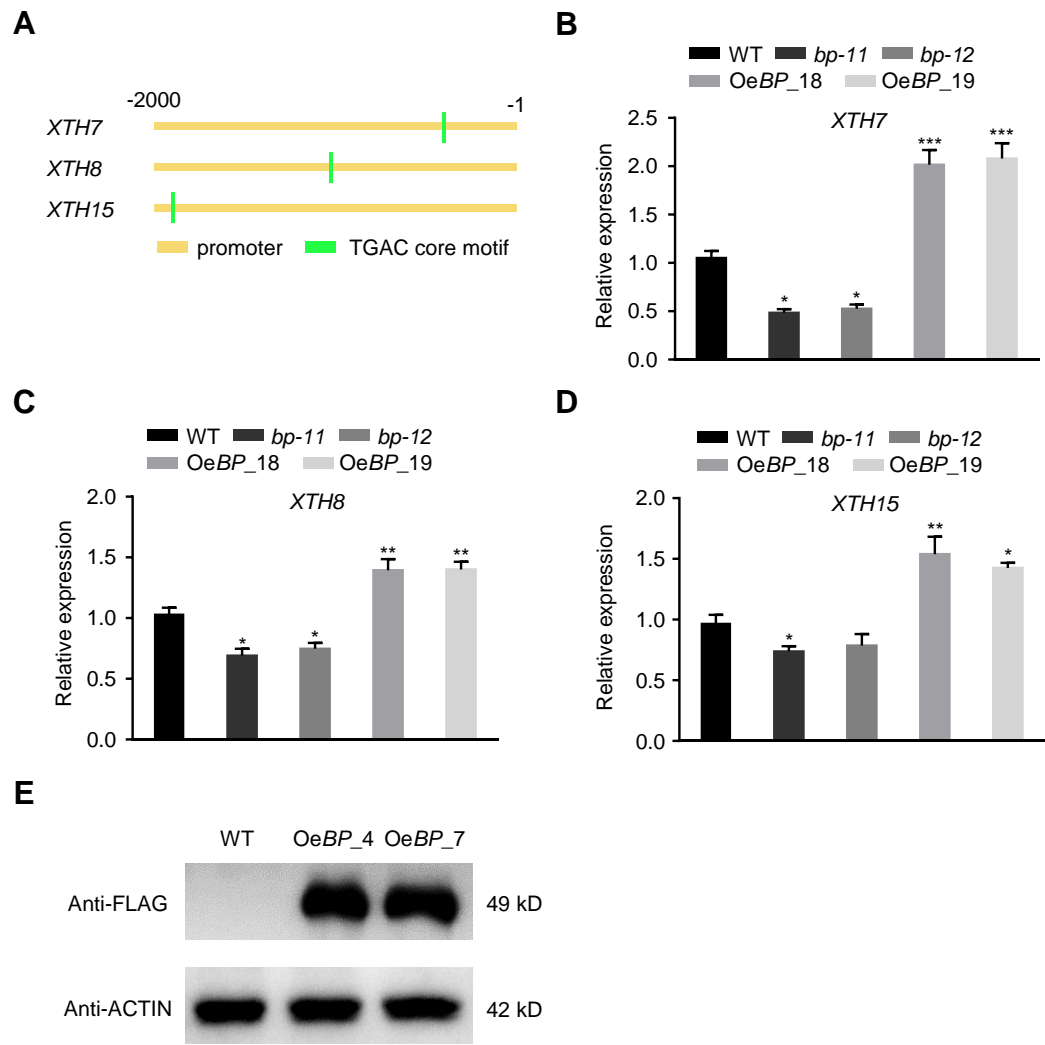


Figure S5. Expression analyses of *XTHs*. **(A)** Diagrams of the promoters. **(B-D)** The expression level of *XTH7*, *XTH8* and *XTH15* in the WT, *bp-11*, *bp-12*, *OeBP_18* and *OeBP_19* plants. The data were normalized against the expression of *GAPDH* and *UBQ10*. The bars indicate means \pm sd of three independent replicates. *, $P < 0.05$, **, $P < 0.01$, ***, $P < 0.001$ (Student's t test). **(E)** The protein level of BP in transgenic lines (*OeBP_4* and *OeBP_7*). Seven-day-old seedlings were used for protein extraction. BP was detected by anti-FLAG antibody. Anti-ACTIN antibody was used to quantify actin (loading control).

Figure S6

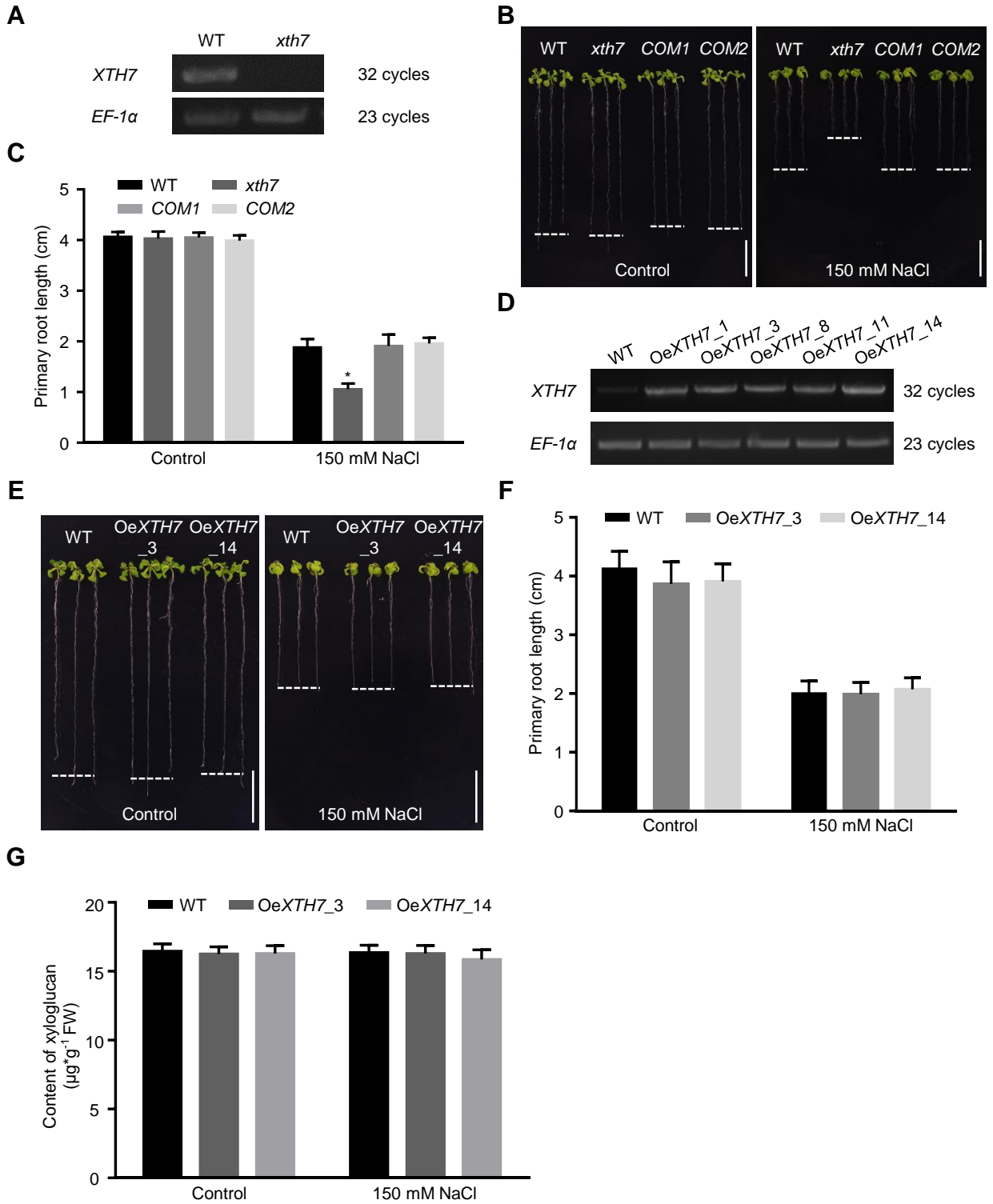


Figure S6. Phenotype analysis of *xth7* and *XTH7*-overexpression lines. **(A)** RT-PCR analysis of the *XTH7* transcripts in the WT and *xth7* plants. *EF-1α* was used as control. **(B)** Photographs of WT, *xth7* and complementary lines (*COM1* and *COM2*) seedlings grown vertically on control or salt-containing medium. Three-day-old seedlings grown on 1/2 MS medium were transferred to 1/2 MS medium with or without 150 mM NaCl for another 10 d. Scale bar = 1 cm. **(C)** Primary root length of the seedlings in B. The bars indicate means \pm sd of three independent replicates. **(D)** RT-PCR analysis of the *XTH7* transcripts in the WT and *XTH7*-overexpression lines. *EF-1α* was used as control. **(E)** Photographs of WT and *XTH7*-overexpression seedlings grown vertically on control or salt-containing medium. Three-day-old seedlings grown on 1/2 MS medium were transferred to 1/2 MS medium with or without 150 mM NaCl for another 10 d. Scale bar = 1 cm. **(F)** Primary root length of the seedlings in E. The bars indicate means \pm sd of three independent replicates. **(G)** Extractable xyloglucan content of WT and *XTH7*-overexpression lines by iodine staining with or without 150 mM NaCl treatment. The bars indicate means \pm sd of three independent replicates. *, $P < 0.05$, (Student's *t* test).

Figure S7

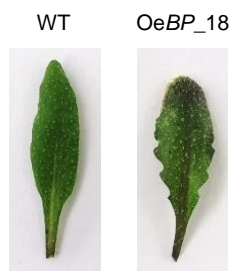


Figure S7. Representative rosette leaves of WT and *BP*-overexpression line (OeBP_18).

Figure S8

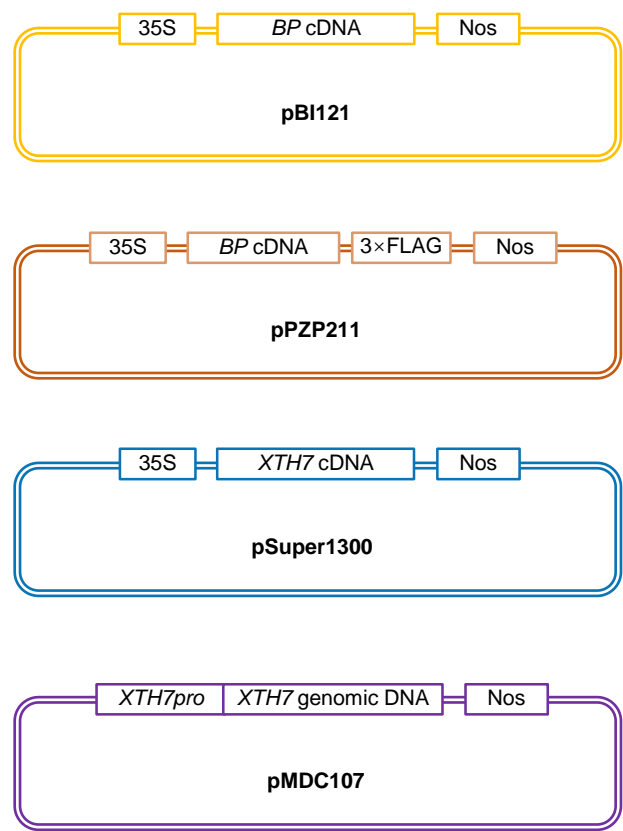


Figure S8. Vector constructs used in this study.