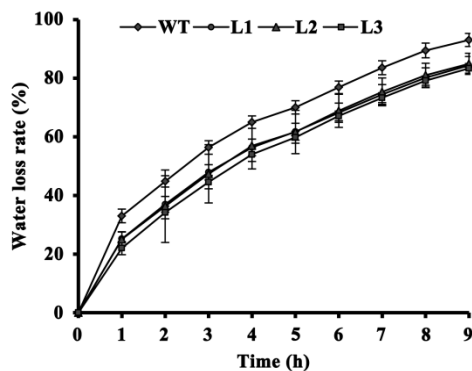
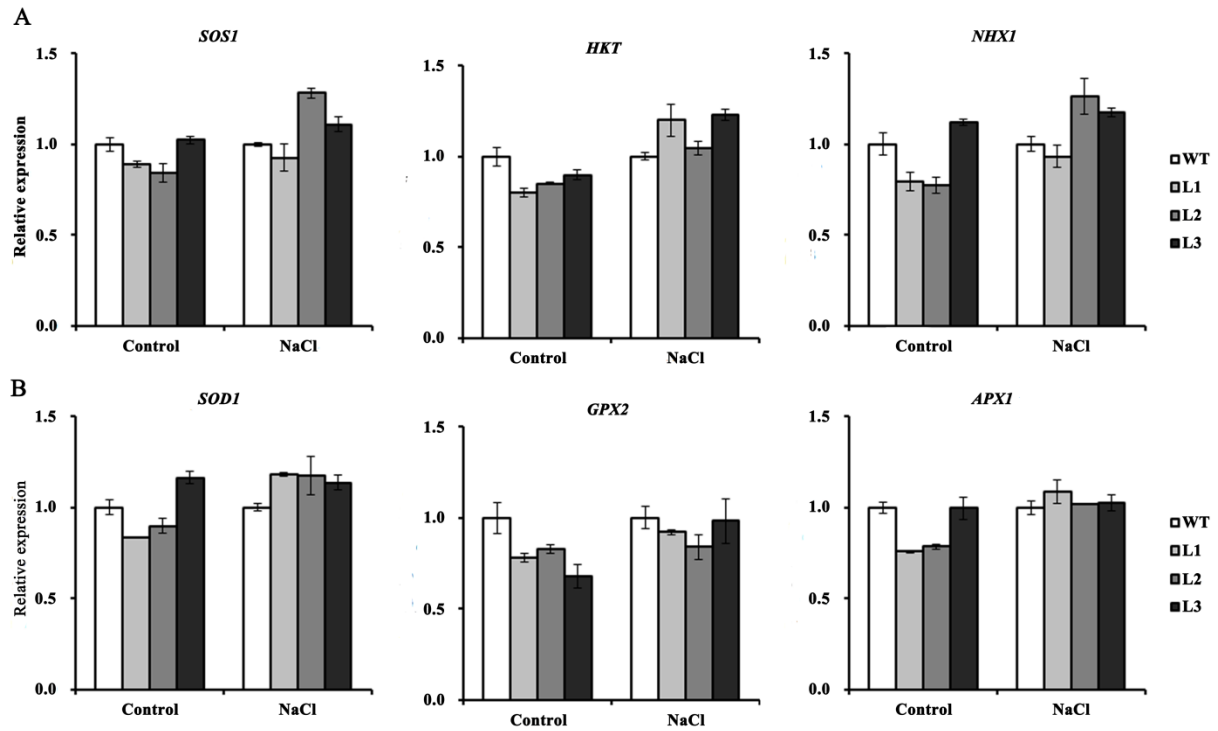


## Appendix A Stress-related gene primers used for qRT-PCR in *Arabidopsis*

| Primer             | Sequence (5'-3')         | Primer           | Sequence (5'-3')          |
|--------------------|--------------------------|------------------|---------------------------|
| <i>AtNCED3-F</i>   | CAGCTTGTAGCTTTTGGGCTGTA  | <i>AtZAT10-R</i> | GATCGGAGGGATGTTGAGG       |
| <i>AtNCED3-R</i>   | TAACAGAAACCAGCTGAGCTCGA  | <i>AtP5CS1-F</i> | TAGCACCCGAAGAGCCCCAT      |
| <i>AtAREB1-F</i>   | CGAGTTACAACGAAAGCAGGCAAG | <i>AtP5CS1-R</i> | TTTCAGTTCCAACGCCAGTAGA    |
| <i>AtAREB1-R</i>   | AGAAGATTCCTCATCTCCGTCTCC | <i>AtSOS1-F</i>  | TTCATCATCCTCACAATGGCTCTAA |
| <i>AtABI5-F</i>    | CAGCTGCAGGTTCACATTCTG    | <i>AtSOS1-R</i>  | CCCTCATCAAGCATCTCCCAGTA   |
| <i>AtABI5-R</i>    | CACCCTCGCTCCATTGTTAT     | <i>AtHKT-F</i>   | TCCCCAGCTATCTTGGTACTC     |
| <i>AtKIN1-F</i>    | AAGAATGCCTTCCAAGCCGGTCAG | <i>AtHKT-R</i>   | GCCAGATTTGACTGTGAACTG     |
| <i>AtKIN1-R</i>    | TACACTCTTTCCCGCTGTTGTGC  | <i>AtNHX1-F</i>  | CCGTGCATTACTACTGGAGACAAAT |
| <i>AtRD29B-F</i>   | AGAAGGAATGGTGGGGAAAG     | <i>AtNHX1-R</i>  | GTACAAAGCCACGACCTCCAA     |
| <i>AtRD29B-R</i>   | CAACTCACTTCCACCGGAAT     | <i>AtSOD1-F</i>  | TCAACTGGAAATATGCAAGCGAGGT |
| <i>AtALDH7B4-F</i> | TGGAAACAGTACATGCGTCGAT   | <i>AtSOD1-R</i>  | ACCACACAGCTGAGTTGAGCAAA   |
| <i>AtALDH7B4-R</i> | CCTTGCGCTAGAGGTAACTCGTT  | <i>AtAPX1-F</i>  | ACTACCCAACCGTGAGCGAA      |
| <i>AtMYB15-F</i>   | GGTGCGGATATCGATGAAAG     | <i>AtAPX1-R</i>  | TCAAACCTCATTGTTCCGAA      |
| <i>AtMYB15-R</i>   | CATTATTAGCGGAGCCCAAG     | <i>AtGPX2-F</i>  | TGGCGGATGAATCTCCAAAAGT    |
| <i>AtZAT10-F</i>   | CCGCCGTGACTACTGGAA       | <i>AtGPX2-R</i>  | GTTCTTGTAGTTCGCATCCG      |



**Appendix B** Comparison of CMS water loss rate of transgenic plants and WT plants under salt stress. WT, wild type; L1, Line 1; L2, Line 2; L3, Line 3. Data represent mean  $\pm$  SD (n=10) from three independent experiments.



**Appendix C** Expression level of abiotic stress-responsive genes in *TaSAP17-D* transgenic *Arabidopsis* and WT under salt-stressed conditions. (A) membrane transporter genes and (B) antioxidant enzyme gene. Relative expression levels of stress-responsive genes were determined by qRT-PCR. Data represent mean  $\pm$  SD from three independent experiments. \*, \*\* indicate significant difference levels at  $P < 0.05$ , and  $P < 0.01$ , respectively.