

**Table S1.** The gene name, gene description, product size, reference number and oligonucleotide sequences used for qRT-PCR.

Gene name	Description	Primer sequence (5'-3')	Size (bp)	Accession
<i>Lsi2</i>	Silicon efflux transporter	F: GCTTCTTCCTGCGATGCTTG R: CGTCTTTGGCTGCTTGAACC	116	XM_026801795.1
<i>ALMT1</i>	Phoenix dactylifera aluminum-activated malate transporter 1-like	F: CAGCATCCTTGCTCTCACAA R: TATGAAGGGTCTCGCAATCC	105	XM_008787669.1
<i>ALMT2</i>	Phoenix dactylifera aluminum-activated malate transporter 1-like	F: GCTCTTTGGTGGCTCTTTTG R: CGAGAATATGTGGCCATTCC	103	XM_026805000.1
<i>PPMA1</i>	Phoenix dactylifera plasma membrane ATPase 1	F: GTGGGATGACTGGAGATGGAGT R: TGCACGGCTAGTTAAGACAGCA	120	XM_008800569.3
<i>PPMA3</i>	Phoenix dactylifera plasma membrane ATPase 3	F: CAGTCGTGCCATTTTTCAGA R: AAAATCTCAGCCAGCTTCCA	118	XM_008798430.2
<i>PYL4</i>	Absciscic acid receptor PYL4-like	F: CGTCGAGTCCTACGTTGTCG R: GCCAGGTTCTCGGAGGTATG	120	XM_008801643.3
<i>PYR1</i>	Absciscic acid receptor PYR1	F: ACGGTGGTGCTGGAATCGTA R: GAGGCGAGCTTCTGGAGGTT	110	NW_008246541.1
<i>ZEP</i>	Zeaxanthin epoxidase	F: CCACTCTTTCCTCGCCAATC R: GAATCTGGCAATGGGCTTTC	120	XM_008794293.2
<i>Cyt-Cu/Zn SOD</i>	superoxide dismutase [Cu-Zn]-like	F: AAGCCTCTCTGGCCTCGAA R: CACCGAGGGCATGAACATG	110	XM_008791563.3
<i>NCED1</i>	9-cis-epoxycarotenoid dioxygenase	F: GCCTCCTCGCACCACTATTC R: CGGGTCGATGAAGTTGTTGA	120	XM_008799733.3
<i>NCED6</i>	9-cis-epoxycarotenoid dioxygenase	F: GCCTCCTCGCACCACTATTC R: CGGGTCGATGAAGTTGTTGA	120	XM_008799733.3
<i>Act</i>	Housekeeping gene actin	F: TCAATGTGCCTGCCATGTATGT R: GCGGCCGCTAGCATAGAG	62	XM_008778129