

Supplementary Tables**Table S1.** The P-values of post-hoc test of the studied vegetative characteristics.

Parameter	Conditions	WT	<i>phyA</i>	<i>phyB1B2</i>
Root surface area	Non-stress	4.5E-5	0.754	0.979
	Drought			
Root length	Non-stress	8.3E-4	9.1E-7	0.616
	Drought			
Stem height	Non-stress	4.7E-7	5.9E-7	6.1E-6
	Drought			
Stem thickness	Non-stress	0.002	0.00027	0.728
	Drought			
Plant fresh weight	Non-stress	3E-11	1.2E-7	0.42
	Drought			
Leaf fresh weight	Non-stress	8.9E-5	0.001	1.0
	Drought			
Leaves number	Non-stress	3E-5	2.4E-4	0.019
	Drought			

Supplementary Material

Table S2. The P-values of post-hoc test of the other studied parameters.

Parameter	Conditions		<i>phyA</i>	<i>phyB1B2</i>
Electrolyte leakage %	Drought	WT	5.399E-9	5.401E-9
Hydrogen peroxide concentration	Non-stress	WT	0.996	0.737
	Drought	WT	7.84E-12	2.34E-10
Malondialdehyde accumulation	Non-stress	WT	0.961	0.999
	Drought	WT	0.00032	0.00087
Free radical inhibition	Non-stress	WT	0.999	0.999
	Drought	WT	0.008	1.6E-6
Proline level	Non-stress	WT	1.0	
	Drought	WT	9.86E-13	1.05E-12
Leaf RWC	Non-stress	WT	1.0	0.995
	Drought	WT	2.75E-7	4.92E-7
Shoot water content	Non-stress	WT	0.906	0.926
	Drought	WT	0.009	0.006
Stomata pore area	Non-stress	WT	0.00015	8.7E-5
	Drought	WT	2.5E-11	7.8E-13
Xylem thickness	Non-stress	WT	1.9E-4	2.7E-7
	Drought	WT	5.1E-9	
Plant water uptake	Non-stress	WT	0.0003	7E-5

Table S3. The P-values of post-hoc test of the studied genes expressions.

Gene	Conditions		<i>phyA</i>	<i>phyB1B2</i>
<i>DREB2</i>	Non-stress	WT	0.506	0.531
	Drought	WT	3.6E-9	7.5E-9
<i>RD29a</i>	Non-stress	WT	0.0006	0.847
	Drought	WT	3E-5	2.3E-5
<i>RD29b</i>	Non-stress	WT	0.002	0.095
	Drought	WT	8.5E-13	8.4E-24
<i>ERD1</i>	Non-stress	WT	0.274	1.0
	Drought	WT	0.004	1.1E-12
<i>GRP</i>	Non-stress	WT	0.00024	0.015
	Drought	WT	1.1E-12	
<i>LEA</i>	Non-stress	WT	1.0	
	Drought	WT	0.01	1.05E-6
<i>DRCi7</i>	Non-stress	WT	1.0	3.8E-5
	Drought	WT	1E-10	5.9E-12
<i>ZEP</i>	Non-stress	WT	0.614	0.996
	Drought	WT	0.345	0.054
<i>NCED1</i>	Non-stress	WT	0.93	0.881
	Drought	WT	1.0	2.6E-7
<i>PP2C</i>	Non-stress	WT	1.0	0.972
	Drought	WT	1.4E-5	1.7E-7

Supplementary Material

<i>TIP1.1</i>	Non-stress	WT	2.4E-8	0.307
	Drought	WT	0.048	0.001
<i>TIP2.2</i>	Non-stress	WT	0.0001	0.001
	Drought	WT	4.8E-5	2.5E-7
<i>PIP2.5</i>	Non-stress	WT	0.403	0.00049
	Drought	WT	0.01	0.046
<i>APX1</i>	Non-stress	WT	0.806	0.085
	Drought	WT	5.7E-5	0.871
<i>APX2</i>	Non-stress	WT	1.0	0.601
	Drought	WT	7.49E-9	0.0009
<i>CAT1</i>	Non-stress	WT	0.996	0.927
	Drought	WT	0.089	9.5E-8
<i>CAT2</i>	Non-stress	WT	0.942	0.00026
	Drought	WT	0.408	9.1E-6
<i>P5CS</i>	Non-stress	WT	0.995	0.388
	Drought	WT	8.8E-8	8.1E-9
<i>P5CR</i>	Non-stress	WT	2.5E-6	5.8E-10
	Drought	WT	0.006	0.099

Table S4. The primers sequence used in quantitative RT-PCR test for analyzing the gene relative expression level.

Target gene	Sequence (5'-3')		Reference
<i>SIDREB2</i>	Forward	GCAAGAGGACTTCCACTTCT	[77]
	Reverse	GCCATGTTGCCAATGCACCAA	
<i>SIERD1</i>	Forward	TGGGTTTCTTGGTTCTCGAA	
	Reverse	CTGAGGTAGCTGAAGTGGAG	
<i>SIRD29A</i>	Forward	AAGGTGCAGGGAAGAGTATG	
	Reverse	CTAGTAGGAGTCTGTGCTGGT	
<i>SIRD29B</i>	Forward	GAATCCGAGCAATCCACAAG	
	Reverse	GAGGCCACAATGTTCTTAGC	
<i>SILEA</i>	Forward	CTGTTGTTTAATAAACATAAAGTTG	
	Reverse	TCACATAAACCTAACATCATCAAATC	
<i>SIDRCi7</i>	Forward	TTGTGTTCTGTGTTGTTG	[78]
	Reverse	GCACATACATATGCACCTACATACAG	
<i>SIGRP</i>	Forward	CCGGAAGTGTGTTCCCTAGA	
	Reverse	CAATAAGCTCCAAAAAGCAGC	
<i>SITIP1;1</i>	Forward	ATTGCTTGGCTCTGTTGTTG	
	Reverse	TTGCCTACACCAACTCCATT	
<i>SITIP2;2</i>	Forward	TCACGTTAACCCGCTGTTA	
	Reverse	CAGTCAATCCTCCGGTAACA	
<i>SIPIP2.5</i>	Forward	GGGATTCTGGTGGGCATAT	
	Reverse	CCTTCACTAACCAACGCC	

Supplementary Material

<i>S1ZEP</i>	Forward	CGGGTCCATCTCACATACAA	
	Reverse	CGTCTTGATGATATCCGG	
<i>S1NCED1</i>	Forward	CAACAGCAAGGAAGAAGACG	
	Reverse	TGCCTCCAACCTCAAACCTCA	
<i>S1PP2C</i>	Forward	TGCTAATGTCGGAGATTCTCGTGC	
	Reverse	CTACTGCTAAC TGCCC ATCAACCC	
<i>S1APX1</i>	Forward	CTCTCCTTGTGATCCTGCT	
	Reverse	CAGAAAGCTTCAAGTGAGCC	
<i>S1APX2</i>	Forward	TCATGGTCAAACAATGGTC	
	Reverse	ACTTCAACAGCAACAAACACC	
<i>S1CAT1</i>	Forward	ATCAGGGACATT CGTGGTT	
	Reverse	TCAGGGAACGACTTAGCATC	
<i>S1CAT2</i>	Forward	GAGGTGGATTATTGCCCTCGAGGTTG	
	Reverse	TACCTCTCCCCTGCCTGTTGAAGTTG	
<i>S1P5CS</i>	Forward	CTTGCAA ACTCAGTT CGTGT	
	Reverse	ATCCATCAGCAATCTCCGTT	
<i>S1P5CR</i>	Forward	GGTGTGGTTAAGTCTGGGAT	
	Reverse	GACTCAAAGCAGTACGACG	
<i>S1EXPRESSED</i>	Forward	GCTAAGAACGCTGGACCTAATG	[76]
	Reverse	TGGGTGTGCCTTCTGAATG	