SUPPLEMENTARY DATA

FIG. S1. Chomosome locations of *Ta-PHR1-A1*, *B1* and *D1*. *Ta-PHR-A1*, *Ta-PHR-B1*and *Ta-PHR-D1* were located between 7AS8-0.45 and 7AL1-0.39 on chromosome 7A, between 4BS4-0.37 and 4BL-0.71 on chromosome 4B and between 4DL9-0.31-0.56 on chromosome 4D, respectively.

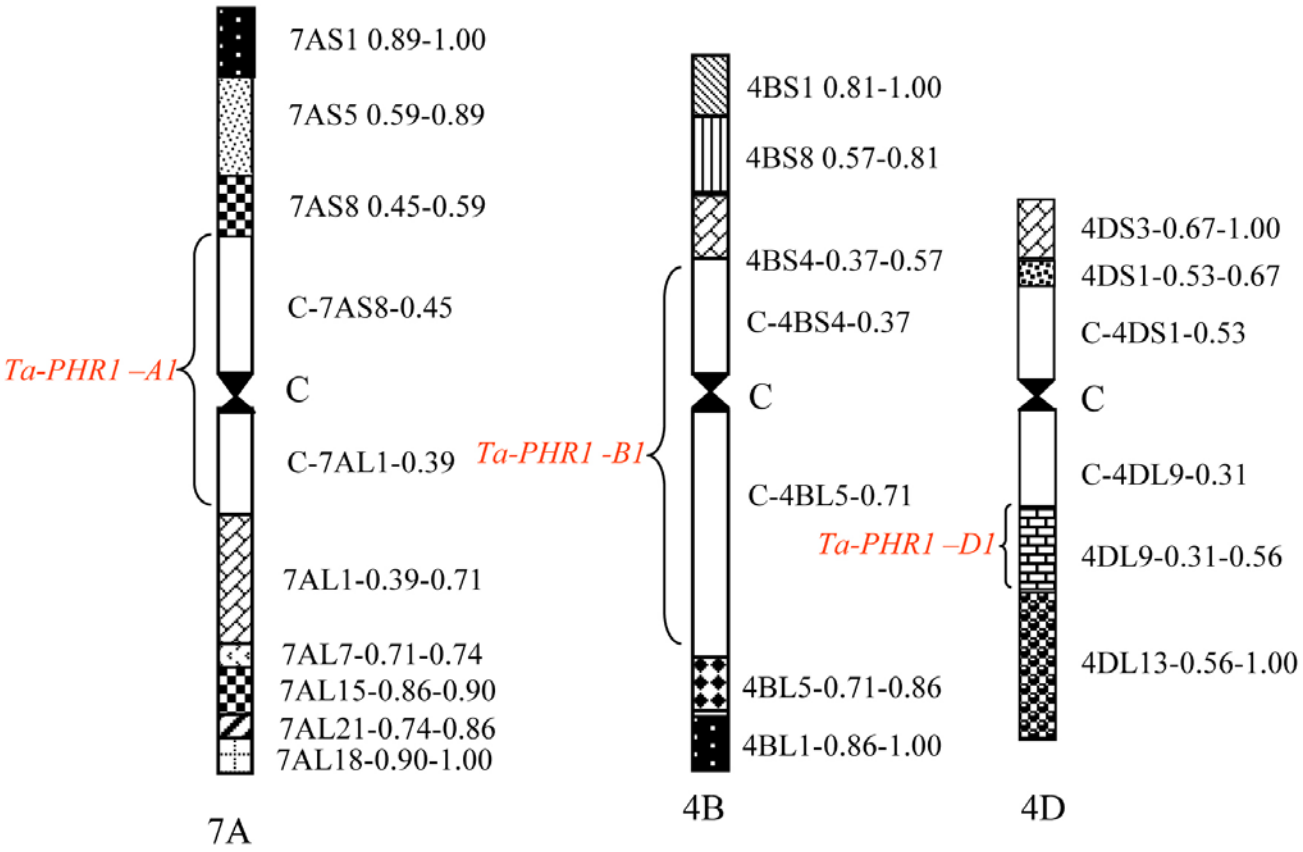

FIG. S2. Alignment of Ta-PHR1 protein sequences. MYB, MYB domain; C-C, CC domain. Multiple sequence alignment was carried out using the ClusTa-lX 1.81 program (Thompson *et al*., 1997) with default multiple alignment parameters.

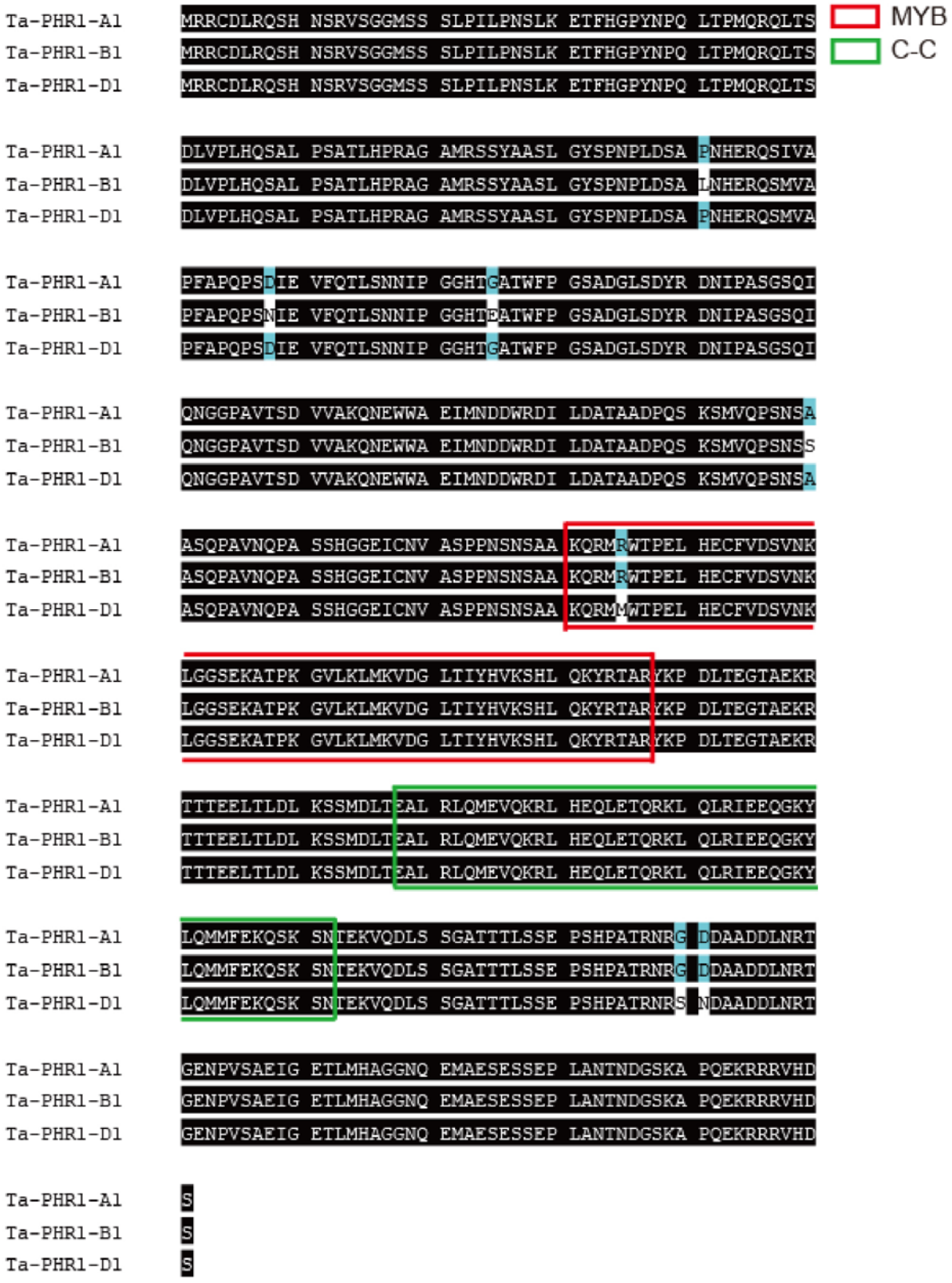

FIG. S3. Expression level of phosphate-starvation-inducible genes in wild-type (WT) and its *Ta-PHR1* transgenic lines under Pi-sufficient (200 μM Pi) and Pi-deficient (10 μM Pi) conditions. Seeds were germinated for 7 d, and then the germinated seeds with residual endosperm removed were transferred to nutrient solution containing 10 μM Pi and 200 μM Pi, respectively. After the plants were grown in the low and high P nutrient solutions for 7 d, the shoots and roots were collected separately for gene expression analysis. S, shoot; R, root; +P, 200 μM Pi; –P, 10 μM Pi. Values are mean ± s.e. of three replications.

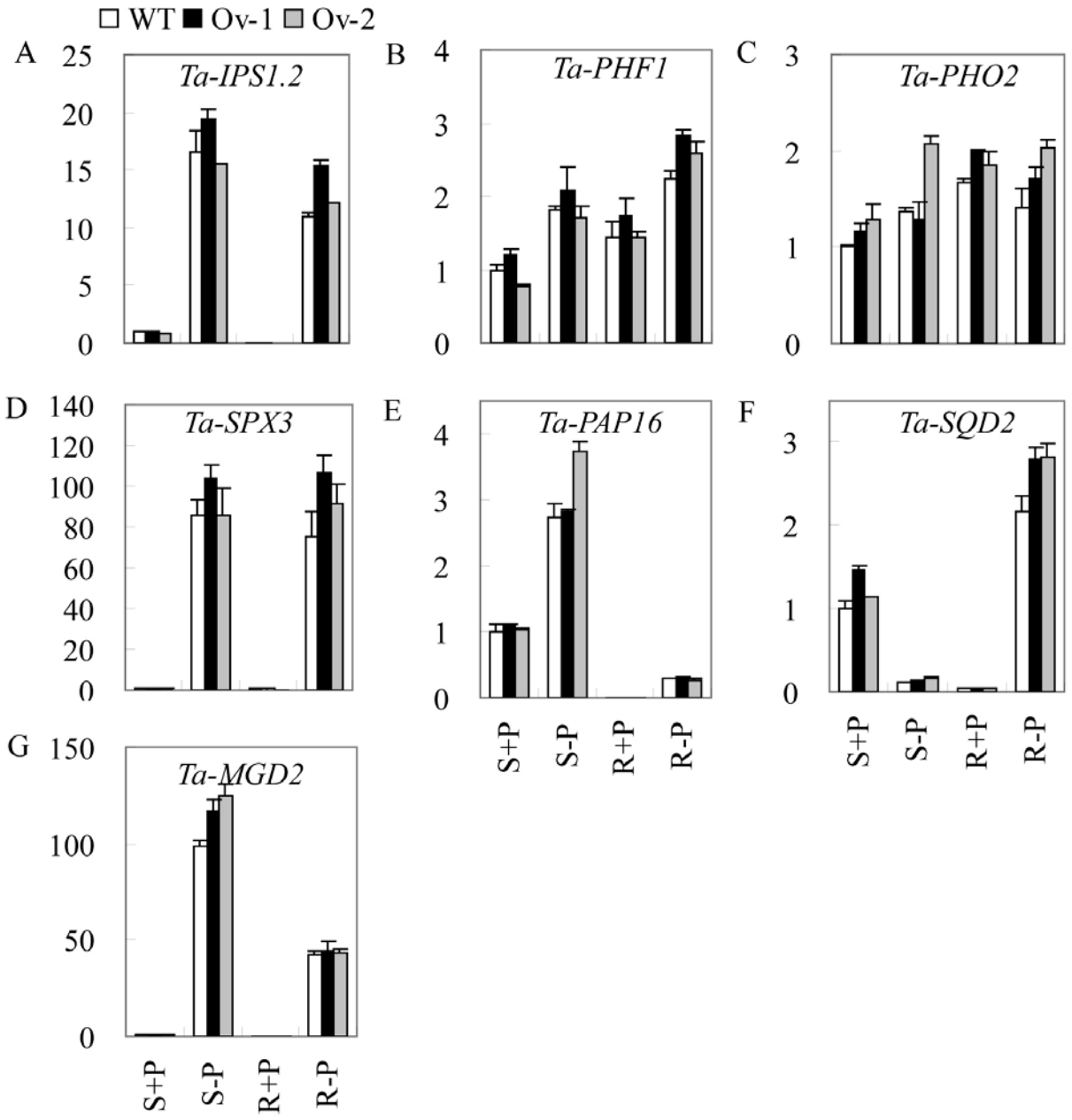

TABLE S1. Primers for RT-PCR or Real-time PCR analysis.

Gene	Forward primer sequence(5´-3´)		Reverse primer sequence(5´–3´)		Description
Ta-PHR1	*Ta-PHR1CF*	GAATGGTGGGCAGAAATa-ATG	*Ta-PHR1CR*	GGGGTTCTCTCCTGTTCTa-TTT	Amplify a fragment from wheat cDNA template
	Ta-PHR1FE	GAATTCATGAGGAGGTGTGATCTGAG	*Ta-PHR1RS*	GGTCGATTa-ACTa-TCATGCACCCTTCG	Amplify for coding sequences of Ta-PHR1-A1
	Ta-PHR1qF	TTCCCAGGTTCGGCTGATG	*Ta-PHR1qR*	CTGCCCACCATTCATTTTGTT	Real time PCR primer of Ta-PHT1.2
	Ta-PHR1_BiFC_F	GGGGACAAGTTTGTa-CAAAAAAGCAGGCTGCATGGAGTa-TCCATGGCTG	*Ta-PHR1_p101-CFP_R*	GGGGACCACTTTGTa-CAAGAAAGCTGGGTCTGATTGGCGTAATCCCAA	Amplify for coding sequences of Ta-PHR1-A1 for *BiCF*
Ta-PHT1.2 promoter	*proTa-PHT1.2FK*	GGTa-CCAGTa-CGGCATa-CGGATTTCAATGC	*proTa-PHT1.2RS*	GTCGACGGCCGCCGGCGATCTCTC	Amplify for coding sequences of Ta-PHT1.2
Ta-Actin	*Ta-Actin qF*	ACCTTCAGTTGCCCAGCAAT	*Ta-Actin qR*	CAGAGTCGAGCACAATa-CCAGTTG	Real time PCR primer of Ta-Actin
Ta-PHT1.2	*Ta-PHT1.2qF*	GCATCTa-CTa-CACCGACCCT	*Ta-PHT1.2qR*	ACGCGATGGAGCAGAGGAC	Real time PCR primer of Ta-PHT1.2
Ta-PHT1.6	*Ta-PHT1.6qF*	CAGCTCTTCTTCGGCTGGCT	*Ta-PHT1.6qR*	CCGAGCCAGAAGCGGAAGAA	Real time PCR primer of Ta-PHT1.6
Ta-PHF1	*Ta-PHF1qF*	GAAAGAATGGCAAATCTGGCTC	*Ta-PHF1qR*	TGCATGGCTTGGTa-GGTCG	Real time PCR primer of Ta-PHF1
Ta--IPS1.1	*Ta-IPS1.1qF*	ATGGATCCGGCGTTGGCTa-G	*Ta-IPS1.1qR*	AGTTGCCCTa-CCTTa-GTa-GAGGTGA	Real time PCR primer of Ta-IPS1.1
Ta-IPS1.2	*Ta-IPS1.2qF*	ATGGATCCGGCGTTGGCTa-G	*Ta-IPS1.2qR*	ATa-TTTa-TTGATGATTa-CACTa-GTCA	Real time PCR primer of Ta-IPS1.2
Ta-PHO2	*Ta-PHO2 qF*	AGTTTa-TGAGGAAAGGATGGACCT	*Ta-PHO2 qR*	ATa-GTGAACGGAAGGTGGTTCAT	Real time PCR primer of Ta-PHO2
Ta-SPX3	*Ta-SPX3 qF*	GTGGAAGGACGAGTTCCTGAGC	*Ta-SPX3 qR*	TCCCGGTGTGTGATGATGAAGAA	Real time PCR primer of Ta-SPX3
Ta-PAP16	*Ta-PAP16 qF*	CGTa-CGAGAAACTCTGGCTGTGT	*Ta-PAP16 qR*	AGAGAACGGCTTCTCGGCTa-TCT	Real time PCR primer of Ta-PAP16
Ta-SQD2	*Ta-SQD2 qF*	TGCCAGTGGAGATGTGTTTGTGAT	*Ta-SQD2 qR*	AAGCTGGTCTTTCCTTCCTGAT	Real time PCR primer of Ta-SQD2
Ta-MGD2	*Ta-MGD2 qF*	AGAGCTCCTa-CAAGTTCATGGTGAA	*Ta-MGD2 qR*	AGTGTTGAGGTCGGTGATGACAG	Real time PCR primer of Ta-MGD2
Ta-ASA1	*Ta-ASA1 qF*	ACGTTGAACGATa-TTCACATGTCA	*Ta-ASA1 qR*	AACCCCTCCAAAGCCACCACTGTa-	Real time PCR primer of Ta-ASA1
Ta-GH3.1	*Ta-GH3.1 qF*	TGTCCTa-CACCATCATGCCGA	*Ta-GH3.1 qR*	CTCGTCGGTCTTGTCGGACT	Real time PCR primer of Ta-GH3.1
Ta-CYCD2	*Ta-CYCD2 qF*	GAGGGACGCCATa-GATTGGATT	*Ta-CYCD2 qR*	TGAGCACCAAAAGCTCCATCCT	Real time PCR primer of Ta-CYCD2