

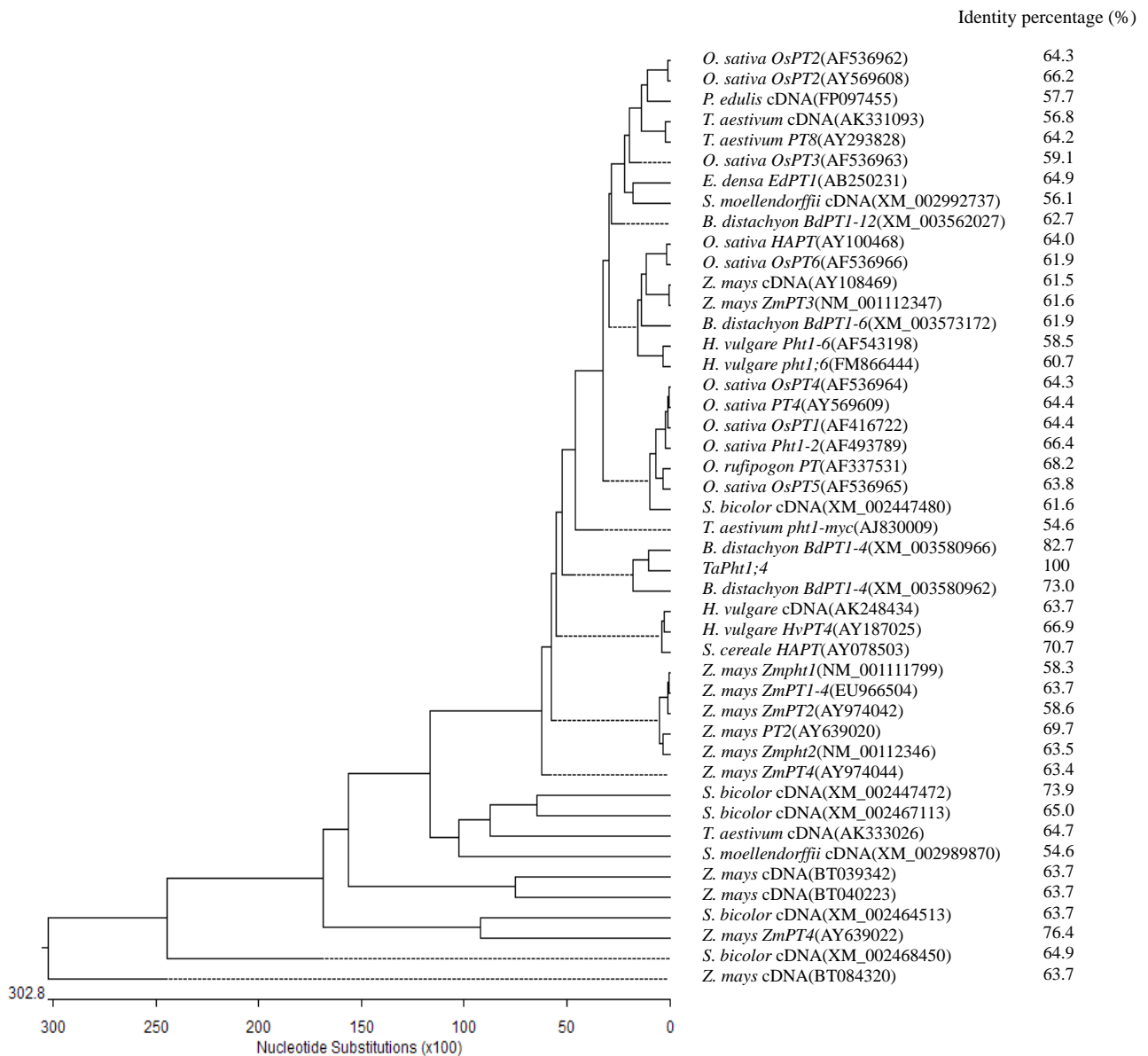
### Supplementary Material

ACCACTTCACCACCATCGTCATCGCCGGCATGGGCTTCTTCACCGATGCCTACGACCTGTTCTCG  
GCCTCCCTCATCGCCGACCTCCTGGGCCACATCTACTACCACTCGGCGGACGGCAAGTCCCCGG  
TCACGTCGCCGGCGCCGTCAGCGGCGTGGCGCTCTGCGGCACAGTCCTGGGGCAGCTTTCTTCG  
GCTGGCTCGGCGACAGGATGGGGCGGAAGCGGATCTACGGCGTCACGCTCAAGCTCATGGTGGTG  
TGCTCGCTCGCGTCCGGCCTCTCCTTCCACAACAAGCCCAAGTGCCTCGTGGCCACGTTGTGCTT  
CTTCCGCTTCTGGCTCGGCTTCGGCATCGGCGGCGACTACCCGCTCTCGGCGACTATCATGTCTG  
AGTATGCCAACAAGAGGACTCGCGGCGCCTTCATCGCAGCGGTCTTTGCTATGCAGGGTCTTGGG  
AACCTGGCTGCTGGGGCTGTTGTTCTGGTGCTCTCTGCGAGCTTCAAGAACACGGCCGCGT

**Fig. S1.** Expressed sequence tag (EST) sequence identified in a root subtractive suppression cDNA library upregulated by low-Pi stress.

GACCAATTCTGTTTACAGAAGAGGAAGTCGGAGCATGAGGACGTTGTGACACTCTATAGTGTCCCAATTGGGATTTTGGTG +3878  
GTGCCAGTGACCTTCCCTCCCTTGCCAATTTTCCCTCGTATGTGCGTTGGTGAGATCTTCGTGCTTCCGAGCCTTCGGTGGCCAT +3795  
CAATACTTGCTGCGGCTTGACTGTATGCTCGTGCGGGTATGGTCTTCACTGGCGTGGCATCTCACGTCAAGACTATGCAATAC +3712  
ACGTAGCTGTTGGGATCATGGAAAATGGTGATGACAAACATGATGACTTTGATTTGGTGGTGCTTCTCGAGTATTCGGCCTCGA +3629  
GCTCGAGTGAAAACCCAAGTTTTGAACCTAATTGGTTATACCTAGCAATGGCGGGATTTTACGTGGTTACATTGTTGAAAGCA +3546  
CTACTCGGATTTGCTCGACCTTATCTTCAGGGTGA AAAACCCATGATTTTCATCTTTCTGTGCTCAGATCCAGAGACATCAGCGCT +3463  
TGACTGGCTTCCCTGATCTCTCCATAACATGGTGTCCCGGTTTGGCCGTCGTGCTCCATGTTGCTACTTTTCCGATCTTTTC +3380  
CGATCTGGCAGCTATATGGTGATTCAGGCTCCAATCTGGATGATCTCCATGGCCTGGAGTGTAATCAGGGGAAATACACGGGG +3297  
CTGGTGCATGGAGGCATATGCAATACATGCGTGGACATGCATGCACATGATCGTTGGCCTCCAGGCTGCCGGCTAGCTACA +3214  
ACCCATGGTGTGGCTGTTGGCGTCCACCTAGGCTTTGGTGGCCAAATGGCATGGCCGGGTGGCACGGCTAGGCGGTGCTTTTG +3131  
ACCACGTGATGGGAAATGGATCTGGGACGGCGCGGCTGGCCATGGATTATGGTCTCCATCAAAAGATTGTGTGAGAGTTT +3048  
CATCTCTGCAAAATGTGATGATTGACTTCGGCGGCGAAAATGCAAACTGTGGATGATGCTTTGATGCGGAGGGATTGTTGTGCGG +2965  
TGGCGGCAGACATATTGCTGTAGCTACTGGGACCGTGAAAAAATGGCGGCGACAACACATGAATGACCTCGATGGTGGTGC +2882  
TACTTGAGCACCTAGTCTAGAGCTCCGGGGTGAAGCCCTTGATCTCGCCCGTGTGAGTATACCTAACAAATGGCGATGTTTTT +2799  
ACATCGTTACCTTGTAAAGGCATTTGTTGGAATGCTCGGACTGATTTTCAGGGTGA AAAACCTAGAAATATAGCCTTGGATGG +2716  
CTGGATCCGGTGACAGTGATACCTGAGTGTGCTCCCTTCTTAAGCGTTGCTGTTGAAGAACGTCATCATCCGCGTGGTGT +2633  
CATGAGATTGTTGGTGTAAATATGATCATTGTTATAGTTTGGCGATCATGATCTGATCGCTTTGGGGCTTTTTTTGATTTTTT +2550  
CTCGCTACGCATAGCTTTGGTCTAGTATGACTTTGCTATTTGTGCGCGTGTTTTTGTGTGTGCGTGGTGTGACTGTGT +2467  
GCATCTTAACATGACAGAGTGGGTGTGACTCATTGTTGTATCCTCTTGATGCTTCACTTTGAGTCAATAAAAATCCATC +2384  
CTTTAGCGAAAAAAGGTAAGAGTTTCGGTCTTGATGACTTAGCTCTTTGCTGACGCAATACTTTGTGTGTGTACGCGCGGT +2301  
CCATTAGTGTGGTGTGTGCATCTATTTATGCAAAAGACGGGTCTCTCATTGTGTTGTATCCTTGAGAATGAAAACAACC +2218  
TTTATCAAGAATGACTAATCAGATACCCTGATCTTGTGTTTCCGTCCTTTTGTCTCGATACGGAACAACCTGTAGTCGTCGTC +2135  
TTCAACAAACGTAGGGCTAAGCGAGTTTCGTGAGCAAGTTGTCAATTTTGTGTGTTCTTCGAGAAATGTAAGGTGGATGTGAT +2052  
GCGGTTGGGGCGCTGTCGTAATCATATTCCACGGGACATTCGTCCAGCTGTATACAGGGCAAAATCACTACGTTCTATATAT +1969  
GGCAACATGAAGCACTTGGTTTTCCAAGGGAATTTTTTTCGAGAGACTACCACGCACAATGTTTACGACCTGGCCTGCGAG +1886  
**GAGGCACGCGTGCAGCTCCCTCTTCTGCCACCTCCATGGCGCCGGGAGCGCCATGCTGTACCGCGTGTGGACGCGGTGACAT** +1803  
**CGGTGAAATGCGAGACCCGTCGGGCGCGCAAGCAGATCAAGGTGCTGGAGGCCCTGGACGTCGCGGGACGCAGCTGTACCAC** +1720  
**TTACCACCATCGTCATCGCCGGCATGGGCTTCTTACCAGATGCCTACGACCTGTTCTCGGCCTCCCTCATCGCCGACCTCCT** +1637  
**GGGCCACATCTACTACCACTCGGCGGACGGCAAGCTCCCCGGTCACGTCGCGCGCGGTGAGCGCGTGGCGCTCTGCGGCA** +1554  
**CAGTCTCGGGCAGCTCTTCTTCCGGTGGCTCGGCGACAGGATGGGGCGGAAGCGGATCTACGGCGTCACGCTCAAGCTCATG** +1471  
**GTGGTGTGCTCGTCCGCTCCGGCTCTCCTTCCACAACAAGCCCAAGTGCCTGCTGGCCACGTTGTGCTTCTTCCGCTCTG** +1388  
**GCTCGGCTTCCGCATCGGCGGCGACTACCCGCTCTCGGCGACTATCATGTCTGAGTATGCCAACAAGAGGACTCGCGGCGCCT** +1305  
**TCATCGCAGCGGTCTTTGCTATGCAGGTGTGTAAGTAAAACCATCACAATATTTTTTGGAGCCTGTGCTGCATCTCATTCTTA** +1222  
**ATCTACAACCTGCATTTCTTTTTTCTCGTCTAACTCAGTCGTCAAAGATAATATTTCTAATCCTTATCTTATTATGCTTGCCCT** +1139  
**GCATAAAGGGTCTTGGGAACCTGGCTGCTGGGGCTGTTGTTCTGGTGTCTCTGCGAGCTTCAAGAACACGGCCGCGTACGAT** +1056  
**ACTGACCATCTCGGGCAAGCAGACTACGTATGGCGCATAGTACTCATGCTCGGCGCCGTTCTGCCCCTGCTCACCTACTACTG** +973  
**GCCATGAAGATGCCGAGACGGCGCTACACCCGCTCATCGCCAAGAACCTCAAGCTAGCGGCGTCTGACATGGCCGAG** +890  
**TCCTCGACATCGACTTCGTGTCCGACATGGACGCAGAGGCCGTTGTTAAGCAGGACGAGTTTGGCCTCTTCTCCATGGAGTTC** +807  
**CTTCAACAGCATGGCCGCCAGCTCCTCGGAACCACTGTGTGCTGGTTCGTCTCGAGTCGTCTTCTACTCCCTCAACCTCTT** +724  
**CATGAAGGACATCTTCAACGGCATCGGCTGGTTTGGAGACCGGCGGAGATGAGCCCTCTCGAGCAGACCTACAAGATAGCCC** +641  
**GCACGCAGGCCATCATTGTGGTGGCGGTTCCCTACCAGGGTACTTCTCACTGTCTCTTCTGTTGACCGCATCGGCCGCATC** +558  
**AAGATCCAGCTCATGGGGTTACCATGATGACCATCTTATGATCGGGCTCGCCGCGCCCTACAAGTTCTGGTCAAACCCAG** +475  
**CATGCACGCAGGCTTCGCCATCATGTATGCATTGATCCTCTTCTTCGAAAACCTTCGGCCCAACTCCACCACCTTATCCTGC** +392  
**CCACCGAGATATCCCGACGCGGCTGCGGTGACGTGCAACGGCATATCGGCTGCCGGGGTAAGTGTGGTGCCATCATCGGT** +309  
**GTTCTCTGGTTCCAGTATTCTCATACGAGCATCCGGAGCTCTCTCTTCTTCTGCGAGGGTGAACCTCGTTGGAGTCATGTT** +226  
**CACTCTTGCTTGGCGAATCAAAGGGATGTCACTCGAGGATATCACCGGGGAAATGGAGGAAGAAAGCGAACCATCTCAAG** +143  
**AATCTACGGTTGTGAAGTTGAGTTCATCCACAGCGTGGAAATTTTGTAA**CCAGTACCACCCGGTTGCTGATTTTAGTGTCTT +60  
CTCAAAATTACTCAAACATTGGAAACTTGTATCTTTGAGATGTTTGGATTATATATAGT +1

**Fig. S2.** *TaPht1;4* sequence at the genomic level. The translation start codon ATG and the terminator codon TAA are boxed. Exon1 and exon2 are shown in bold font. The primers for the PCR amplification of the promoter region are underlined. The PIBS *cis*-regulatory element (ATATGCA) involved in gene regulation under low-Pi stress, highlighted by a gray background.



**Fig. S3.** Phylogenetic analysis of *TaPht1;4* and its homologous counterparts in diverse plant species.