

## Supplementary Files

# Ectopic expression of *Jatropha curcas* *TREHALOSE-6-PHOSPHATE PHOSPHATASE J* causes late-flowering and heterostylous phenotypes in *Arabidopsis* but not in *Jatropha*

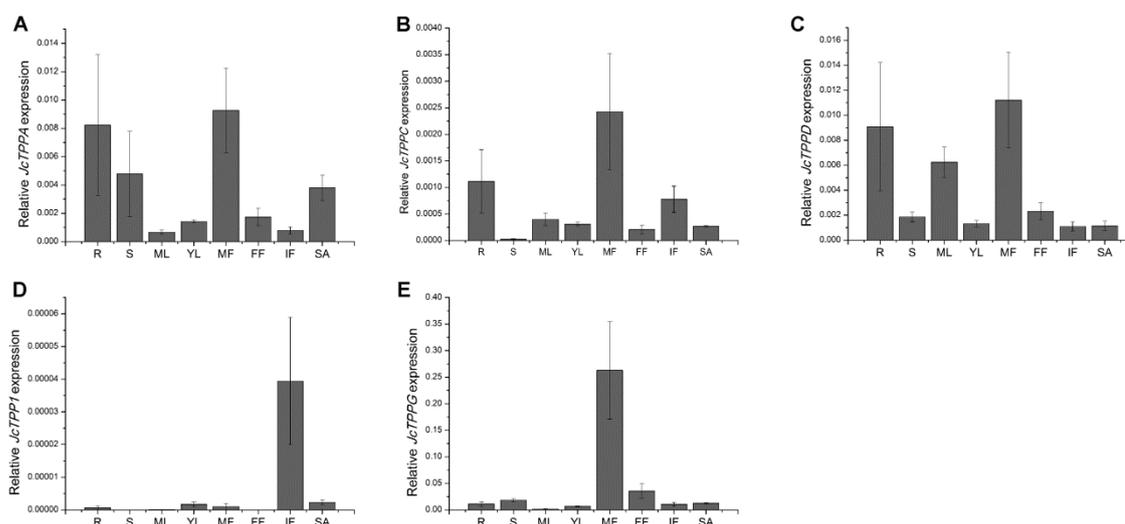
Mei-Li Zhao<sup>1,2</sup>, Jun Ni<sup>1</sup>, Mao-Sheng Chen<sup>1,\*</sup>, Zeng-Fu Xu<sup>1,\*</sup>

<sup>1</sup> CAS Key Laboratory of Tropical Plant Resources and Sustainable Use, Xishuangbanna Tropical Botanical Garden, The Innovative Academy of Seed Design, Chinese Academy of Sciences, Menglun, Mengla, Yunnan 666303, China

<sup>2</sup> College of Life Sciences, University of Chinese Academy of Sciences, Beijing 100049, China

[zhaomeili@xtbg.ac.cn](mailto:zhaomeili@xtbg.ac.cn) (M.-L. Z.); [nijun@ipp.ac.cn](mailto:nijun@ipp.ac.cn) (J. N.)

\* Correspondence: [chenms@xtbg.org.cn](mailto:chenms@xtbg.org.cn) (M.-S. C.); [zfxu@xtbg.ac.cn](mailto:zfxu@xtbg.ac.cn) (Z.-F. X.)



**Figure S1.** Relative expression levels of *JcTPPs* in various organs of adult *Jatropha*. Expression of *JcTPPA* (A), *JcTPPC* (B), *JcTPPD* (C), *JcTPP1* (D) and *JcTPPG* (E) in various organs of adult *Jatropha*. The qRT-PCR results were obtained from three independent biological replicates per sample. The levels of detected amplification were normalized using the amplified products of *JcGAPDH* genes as a reference. The error bars represent the standard error. R, roots; S stems; ML, mature leaves; YL, young leaves; FF, female flowers; MF, male flowers; IF, inflorescence buds, and SA, stem apices.

**Table S1.** GenBank accession numbers of the selected *TPP* genes in the phylogenetic analysis shown in Figure 1.

<b>Species</b>	<b>Protein</b>	<b>GenBank accession number</b>	<b>GenBank accession number of nucleotide sequences</b>
<i>Jatropha</i>	JcTPP1	XP 012083824.1	–
	JcTPPA	XP 020540837.1	–
	JcTPPC	XP 012067842.1	–
	JcTPPD	this paper	MK587442
	JcTPPG	this paper	MK587443
	JcTPPJ	this paper	MK587444
	JcTPS1	XP 012076095.1	–
<i>Arabidopsis</i>	AtTPS1	NP 001322932.1	–
	AtTPPA	NP 001332432.1	–
	AtTPPB	NP 177932.1	–
	AtTPPC	F4I1A6.1	–
	AtTPPD	NP 564464.1	–
	AtTPPE	Q67X99.1	–
	AtTPPF	Q9SU39.1	–
	AtTPPG	Q9SUW0.1	–
	AtTPPH	Q8GWG2.1	–
	AtTPPI	F4KFG5.1	–
	AtTPPJ	Q5HZ05.1	–
<i>Escherichia coli</i>	otsB	NP 416411.1	–

**Table S2.** Primers used in this study.

<b>Primer name</b>	<b>Primer sequence</b>	<b>Utility</b>
JcTPPA-fw	GTCTAATGCTATGCGTTCTGCTGTCA	qRT-PCR
JcTPPA-rev	CACCTTATCACGGCTTCTTCCACTAA	
JcTPPC-fw	ATTAGTGGTAGGAGCAGAGACAAGGT	
JcTPPC-rev	TGGTCTTGGTGGTGCCATAATGTC	
JcTPPD-fw	TAGTGAGATGCGAGAGGCTGTTAGA	
JcTPPD-rev	CCTTGTCTCTGCACCTTCCAGTAAC	
JcTPP1-fw	ACACCAATAGTTGATGATCCTGCTCG	
JcTPP1-rev	TTGTTGCGGCTCCTTCCACTTAC	
JcTPPG-fw	GTTGCTCCAATGGATGGCTTGA	
JcTPPG-rev	AGTAGTCGGCAATGTCAGTCTCATCT	
JcTPPJ-fw	TGGGACAAAGGGAAGGCTCTTGA	
JcTPPJ-rev	TCATCCGTGCGATCATCTCCGATA	
JcTPPJ-fw	CGGGATCCGAAATTAATTAGAGCCAAGATGAC	Amplification
JcTPPJ-rev	GCCGGAATTCTACTCTTTACATCCTTGGTTG	