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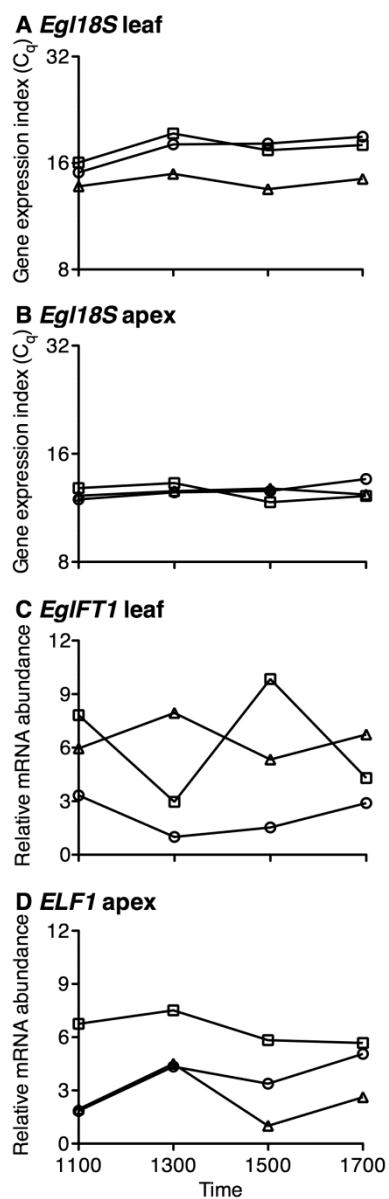
4 **Supplementary material**

5 Supplementary material Fig. 1. Alignment of several plant *FT/TFL1*-like genes and the *E.*
6 *globulus* putative homologues of *FT* and *TFL1* (*EglFT1* and *EglTFL1*). Shading levels
7 indicate degree of conservation among amino acids: black = 90%, dark grey = 70%, light
8 grey = 50%. Black triangles indicate positions of introns. NCBI/TAIR accession numbers of
9 sequences are given in Accessory Publication Table 1.

10 At, *Arabidopsis thaliana*; Ci, *Citrus unshiu*; Cm, *Cucurbita maxima*; Cr, *Chenopodium rubrum*; Egl, *Eucalyptus globulus*;
11 Eo, *E. occidentalis*; In, *Ipomoea nil*; Le, *Lycopersicon esculentum*; Mc, *Metrosideros collina*; Me, *M. excelsa*; Md, *Malus x*
12 *domestica*; Mt, *Medicago truncatula*; Pd, *Populus deltoides*; Pn, *P. nigra*; Pt, *P. tremula*; P, *P. trichocarpa*; Ps, *Pisum*
13 *sativum*; Vv, *Vitis vinifera*.

Eg1TFL1	*	20	*	40	*	60	*	80	*	
LeSP3D	---	WERE-RD-VLV-GRVVVGVVV	F	TRG-C[5]-GDR--S-N	-C-E-R-Q-IHQ-[5]-D	D-L-E-S-TYFLVM	D-P[5]-F	P2D-LR2L1	:	29
PnTFL3b	---	WERD-RD-VLV-GRVVVGVVV	F	TRG-C[5]-GDR--S-N	-C-E-K-Q-AHQ-[5]-D	D-L-E-S-TYFLVM	D-P[5]-F	P2D-LR2L1	:	86
PnTFL4	---	WERD-RD-VLV-GRVVVGVVV	F	TRG-C[5]-GDR--S-N	-C-E-K-Q-AHQ-[5]-D	D-G-E-D-S-TYFLVM	D-P[5]-F	P2D-LR2L1	:	86
PtTFL1	---	WERD-RD-VLV-GRVVVGVVV	F	TRG-C[5]-GDR--S-N	-C-E-K-Q-AHQ-[5]-D	D-G-E-D-S-TYFLVM	D-P[5]-F	P2D-LR2L1	:	86
PnTFL1a	---	WERD-RD-VLV-GRVVVGVVV	F	TRG-C[5]-GDR--S-N	-C-E-K-H-VHQ-[5]-D	D-G-E-D-S-TYFLVM	D-P[5]-F	P2D-LR2L1	:	86
PnTFL2a	---	WERD-RD-VLV-GRVVVGVVV	F	TRG-C[5]-GDR--S-N	-C-E-K-H-VHQ-[5]-D	D-G-E-D-S-TYFLVM	D-P[5]-F	P2D-LR2L1	:	86
PdTFL1	---	WERD-RD-VLV-GRVVVGVVV	F	TRG-C[5]-GDR--S-N	-C-E-K-H-VHQ-[5]-D	D-G-E-D-S-TYFLVM	D-P[5]-F	P2D-LR2L1	:	86
AtTFL	---	WERD-RD-VLV-GRVVVGVVV	M	TRG-C[5]-GDR--S-T-LD-Q-QHQ-[5]-D	-C-E-K-H-VHQ-[5]-D	D-G-E-D-S-TYFLVM	D-P[5]-F	P2D-LR2L1	:	87
AtTFL	---	WERD-RD-VLV-GRVVVGVVV	M	TRG-C[5]-GDR--S-T-LD-Q-QHQ-[5]-D	-C-E-K-H-VHQ-[5]-D	D-G-E-D-S-TYFLVM	D-P[5]-F	P2D-LR2L1	:	87
LeSP5A	---	WFRV-D-VLV-GRVVVGVVV	F	TRG-C[5]-GDR--S-N	-ACV-Q-VHQ-[5]-D	D-G-E-D-S-TYFLVM	D-P[5]-F	P2D-LR2L1	:	85
LeSP5G	---	WFRD-D-VLV-GRVVVGVVV	F	TRG-C[5]-GDR--S-N	-VHQ-[5]-D	D-G-E-D-S-TYFLVM	D-P[5]-F	P2D-LR2L1	:	64
Eg1TFL1	*	100	*	120	*	140	*	160	*	180
AtCBN	---	MARISSE-LM-GRVVVGVVV	NCLQH-[5]-MSD-[5]-Q	-P[5]-E-V-TIK-[5]-G	-V-D[5]-F	D-P[5]-F	P2D-LR2L1	:	20	
LeSP	---	MARISSE-LM-GRVVVGVVV	PAL-CPS-[5]-Q-BNN-[5]-Q	-P[5]-E-V-TIK-[5]-G	-V-D[5]-F	D-P[5]-F	P2D-LR2L1	:	88	
RoTFL1	---	MARISSE-LM-GRVVVGVVV	PAL-CPS-[5]-Q-BNN-[5]-Q	-P[5]-E-V-TIK-[5]-G	-V-D[5]-F	D-P[5]-F	P2D-LR2L1	:	88	
McTFL1	---	MARISSE-LM-GRVVVGVVV	PAL-CPS-[5]-Q-BNN-[5]-Q	-P[5]-E-V-TIK-[5]-G	-V-D[5]-F	D-P[5]-F	P2D-LR2L1	:	21	
MeTFL1	---	MARISSE-LM-GRVVVGVVV	PAL-CPS-[5]-Q-BNN-[5]-Q	-P[5]-E-V-TIK-[5]-G	-V-D[5]-F	D-P[5]-F	P2D-LR2L1	:	21	
PnTFL1	---	WA-KNGS-LM-GRVVVGVVV	H-ZAN-K-T-LOSSRSD-[5]-P[5]-E-V-TIK-[5]-G	-D[5]-F	D-P[5]-F	P2D-LR2L1	:	88		
PnTFL3a	---	WA-KNGS-LM-GRVVVGVVV	H-ZPN-K-T-LOSSRSD-[5]-P[5]-E-V-TIK-[5]-G	-D[5]-F	D-P[5]-F	P2D-LR2L1	:	87		
LeSP9D	---	MARISSE-LM-GRVVVGVVV	NPP-C[5]-Q-BNN-[5]-Q	-P[5]-E-V-TIK-[5]-G	-V-D[5]-F	D-P[5]-F	P2D-LR2L1	:	86	
AtTFL1	---	MED9977RVIS-LM-GRVVVGVVV	NPP-C[5]-Q-BNN-[5]-Q	-P[5]-E-V-TIK-[5]-G	-V-D[5]-F	D-P[5]-F	P2D-LR2L1	:	90	
AtBFT	---	MSEREIS-LM-GRVVVGVVV	EN-MPS-[5]-Q-BNN-[5]-Q	-P[5]-E-V-TIK-[5]-G	-V-D[5]-F	D-P[5]-F	P2D-LR2L1	:	87	
PnTFL1	---	MSEREIS-LM-GRVVVGVVV	EN-MPS-[5]-Q-BNN-[5]-Q	-P[5]-E-V-TIK-[5]-G	-V-D[5]-F	D-P[5]-F	P2D-LR2L1	:	87	
AtMFT	---	MASRAVE-LM-GRVVVGVVV	H-IPRN-[5]-Q-GPK-[5]-T-C-E-K-TAVNP-[5]-N	-P[5]-E-V-TIK-[5]-G	-V-D[5]-F	D-P[5]-F	P2D-LR2L1	:	85	
PnTFL4a	---	MASRAVE-LM-GRVVVGVVV	H-YPA-[5]-Q-BNN-[5]-Q	-P[5]-E-V-TIK-[5]-G	-V-D[5]-F	D-P[5]-F	P2D-LR2L1	:	85	
LeSP2G	---	MESARSVAE-LM-GRVVVGVVV	H-YPA-[5]-Q-BNN-[5]-Q	-P[5]-E-V-TIK-[5]-G	-V-D[5]-F	D-P[5]-F	P2D-LR2L1	:	91	
Eg1TFL1	*	200	*	220	*	240	*	260	*	280
LeSP3D	---	MIVVOLG-D-GR-V-EV-CIMPRN-GDRH-	C[5]-I-LV-F-GLD-GLD-[5]-Q	TAP-GN-CM-TWFD	D-LHN-GV-VAAVTF	C[5]R2D-----	:	113		
PnTFL3b	---	MIVVOLG-D-GR-V-EV-CIMPRN-GDRH-	C[5]-I-LV-F-GLD-GLD-[5]-Q	TAP-GN-CM-TWFD	D-LHN-GV-VAAVTF	C[5]R2D-----	:	177		
PnTFL4	---	MIVVOLG-D-GR-V-EV-CIMPRN-GDRH-	C[5]-I-LV-F-GLD-GLD-[5]-Q	TAP-GN-CM-TWFD	D-EVN-GV-VAAVTF	C[5]R2D-----	:	174		
PtTFL1	---	MIVVOLG-D-GR-V-EV-CIMPRN-GDRH-	C[5]-I-LV-F-GLD-GLD-[5]-Q	TAP-GN-CM-TWFD	D-EVN-GV-VAAVTF	C[5]R2D-----	:	174		
PnTFL1a	---	MIVVOLG-D-GR-V-EV-CIMPRN-GDRH-	C[5]-I-LV-F-GLD-GLD-[5]-Q	TAP-GN-CM-TWFD	D-EVN-GV-VAAVTF	C[5]R2D-----	:	174		
PnTFL2a	---	MIVVOLG-D-GR-V-EV-CIMPRN-GDRH-	C[5]-I-LV-F-GLD-GLD-[5]-Q	TAP-GN-CM-TWFD	D-EVN-GV-VAAVTF	C[5]R2D-----	:	174		
PdTFL1	---	MIVVOLG-D-GR-V-EV-CIMPRN-GDRH-	C[5]-I-LV-F-GLD-GLD-[5]-Q	TAP-GN-CM-TWFD	D-EVN-GV-VAAVTF	C[5]R2D-----	:	174		
AtTFL	---	MIVVOLG-D-GR-V-EV-CIMPRN-GDRH-	C[5]-I-LV-F-GLD-GLD-[5]-Q	TAP-GN-CM-TWFD	D-EVN-GV-VAAVTF	C[5]R2D-----	:	175		
AtTFL	---	MIVVOLG-D-GR-V-EV-CIMPRN-GDRH-	C[5]-I-LV-F-GLD-GLD-[5]-Q	TAP-GN-CM-TWFD	D-EVN-GV-VAAVTF	C[5]R2D-----	:	175		
LeSP5A	---	MIVVOLG-D-GR-V-EV-CIMPRN-GDRH-	C[5]-I-LV-F-GLD-GLD-[5]-Q	TAP-GN-CM-TWFD	D-EVN-GV-VAAVTF	C[5]R2D-----	:	140		
LeSP5G	---	MIVVOLG-D-GR-V-EV-CIMPRN-GDRH-	C[5]-I-LV-F-GLD-GLD-[5]-Q	TAP-GN-CM-TWFD	D-EVN-GV-VAAVTF	C[5]R2D-----	:	175		
Eg1TFL1	*	300	*	320	*	340	*	360	*	380
AtCBN	---	MIVVOLG-D-GR-V-EV-CIMPRN-GDRH-	C[5]-I-LV-F-GLD-GLD-[5]-Q	TAP-GN-CM-TWFD	D-EVN-GV-VAAVTF	C[5]R2D-----	:	53		
LeSP	---	MIVVOLG-D-GR-V-EV-CIMPRN-GDRH-	C[5]-I-LV-F-GLD-GLD-[5]-Q	TAP-GN-CM-TWFD	D-EVN-GV-VAAVTF	C[5]R2D-----	:	175		
RoTFL1	---	MIVVOLG-D-GR-V-EV-CIMPRN-GDRH-	C[5]-I-LV-F-GLD-GLD-[5]-Q	TAP-GN-CM-TWFD	D-EVN-GV-VAAVTF	C[5]R2D-----	:	61		
McTFL1	---	MIVVOLG-D-GR-V-EV-CIMPRN-GDRH-	C[5]-I-LV-F-GLD-GLD-[5]-Q	TAP-GN-CM-TWFD	D-EVN-GV-VAAVTF	C[5]R2D-----	:	58		
MeTFL1	---	MIVVOLG-D-GR-V-EV-CIMPRN-GDRH-	C[5]-I-LV-F-GLD-GLD-[5]-Q	TAP-GN-CM-TWFD	D-EVN-GV-VAAVTF	C[5]R2D-----	:	58		
PnTFL1	---	MIVVOLG-D-GR-V-EV-CIMPRN-GDRH-	C[5]-I-LV-F-GLD-GLD-[5]-Q	TAP-GN-CM-TWFD	D-EVN-GV-VAAVTF	C[5]R2D-----	:	174		
PnTFL3a	---	MIVVOLG-D-GR-V-EV-CIMPRN-GDRH-	C[5]-I-LV-F-GLD-GLD-[5]-Q	TAP-GN-CM-TWFD	D-EVN-GV-VAAVTF	C[5]R2D-----	:	171		
LeSP9D	---	MIVVOLG-D-GR-V-EV-CIMPRN-GDRH-	C[5]-I-LV-F-GLD-GLD-[5]-Q	TAP-GN-CM-TWFD	D-EVN-GV-VAAVTF	C[5]R2D-----	:	172		
AtTFL1	---	MIVVOLG-D-GR-V-EV-CIMPRN-GDRH-	C[5]-I-LV-F-GLD-GLD-[5]-Q	TAP-GN-CM-TWFD	D-EVN-GV-VAAVTF	C[5]R2D-----	:	177		
AtBFT	---	MAYVOLG-D-GR-V-EV-CIMPRN-GDRH-	C[5]-I-LV-F-GLD-GLD-[5]-Q	TAP-GN-CM-TWFD	D-EVN-GV-VAAVTF	C[5]R2D-----	:	177		
PnTFL1	---	MAYVOLG-D-GR-V-EV-CIMPRN-GDRH-	C[5]-I-LV-F-GLD-GLD-[5]-Q	TAP-GN-CM-TWFD	D-EVN-GV-VAAVTF	C[5]R2D-----	:	173		
AtMFT	---	MAYVOLG-D-GR-V-EV-CIMPRN-GDRH-	C[5]-I-LV-F-GLD-GLD-[5]-Q	TAP-GN-CM-TWFD	D-EVN-GV-VAAVTF	C[5]R2D-----	:	173		
PnTFL4a	---	MAYVOLG-D-GR-V-EV-CIMPRN-GDRH-	C[5]-I-LV-F-GLD-GLD-[5]-Q	TAP-GN-CM-TWFD	D-EVN-GV-VAAVTF	C[5]R2D-----	:	173		
LeSP2G	---	MAYVOLG-D-GR-V-EV-CIMPRN-GDRH-	C[5]-I-LV-F-GLD-GLD-[5]-Q	TAP-GN-CM-TWFD	D-EVN-GV-VAAVTF	C[5]R2D-----	:	178		

1 Supplementary material Fig. 2. Variation in expression of reference and flowering genes in
 2 three genotypes (LateA from this study plus two additional genotypes) of *E. globulus*
 3 harvested from 1100 h to 1700 h during flower bud initiation in spring 2007: a) *Egl18S* in
 4 Leaf 2; b) *Egl18S* in apex; c) *EglFT1* mRNA abundance, relative to *Egl18S*, in Leaf 2; d)
 5 *ELF1* mRNA abundance, relative to *Egl18S*, in apex.



6
 7

1 **Table 1. Genes used for phylogenetic analyses of the *FT/TFL1* gene family. Accession**
2 **numbers are NCBI or TAIR accession numbers.**

3 At, *Arabidopsis thaliana*; Ci, *Citrus unshiu*; Cm, *Cucurbita maxima*; Cr, *Chenopodium rubrum*; Egl,
4 *Eucalyptus globulus*; Eo, *E. occidentalis*; In, *Ipomoea nil*; Le, *Lycopersicon esculentum*; Mc, *Metrosideros*
5 *collina*; Me, *M. excelsa*; Md, *Malus x domestica*; Mt, *Medicago truncatula*; Pd, *Populus deltoides*; Pn, *P.*
6 *nigra*; Pt, *P. tremula*; P, *P. trichocarpa*; Ps, *Pisum sativum*; Vv, *Vitis vinifera*.

7

Gene	Accession number
EglFT1	HQ453992
LeSP3D	AY186735
PnFT3b	AB110612
PnFT4	AB369074
PtFT1	DQ387859
PnFT1a	AB106111
PnFT2a	AB109804
PdFT1	AY515152
AtFT	AT1G65480
AtTSF	AT4G20370
LeSP6A	AY186737
LeSP5G	AY186736
EglTFL1	HQ385322
AtCEN	AT2G27550
LeSP	U84140
EoTFL1	EU573981
McTFL1	AY170873
MeTFL1	AY170872
PnTFL1	AB181183
PnTFL3a	AB181185
LeSP9D	AY186738
AtTFL1	AT5G03840
AtBFT	AT5G62040
PnTFL1	AB161110
AtMFT	AT1G18100
PnTFL4a	AB181241
LeSP2G	AY186734