

Supporting Information

Toledo-Ortiz et al. 10.1073/pnas.0914428107

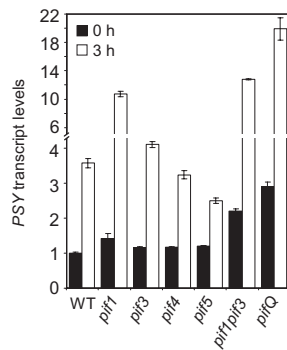


Fig. S1. *PSY* transcript levels in etiolated and deetioliating seedlings. RNA samples for qPCR analysis of *PSY* expression were collected from seedlings germinated and grown for 3 d in the dark (black columns) and illuminated with R light for 3 h (white columns). *PSY* transcript accumulation normalized to *APT* levels is expressed relative to that in WT seedlings before illumination. Data in the columns are mean \pm SD ($n = 3$).

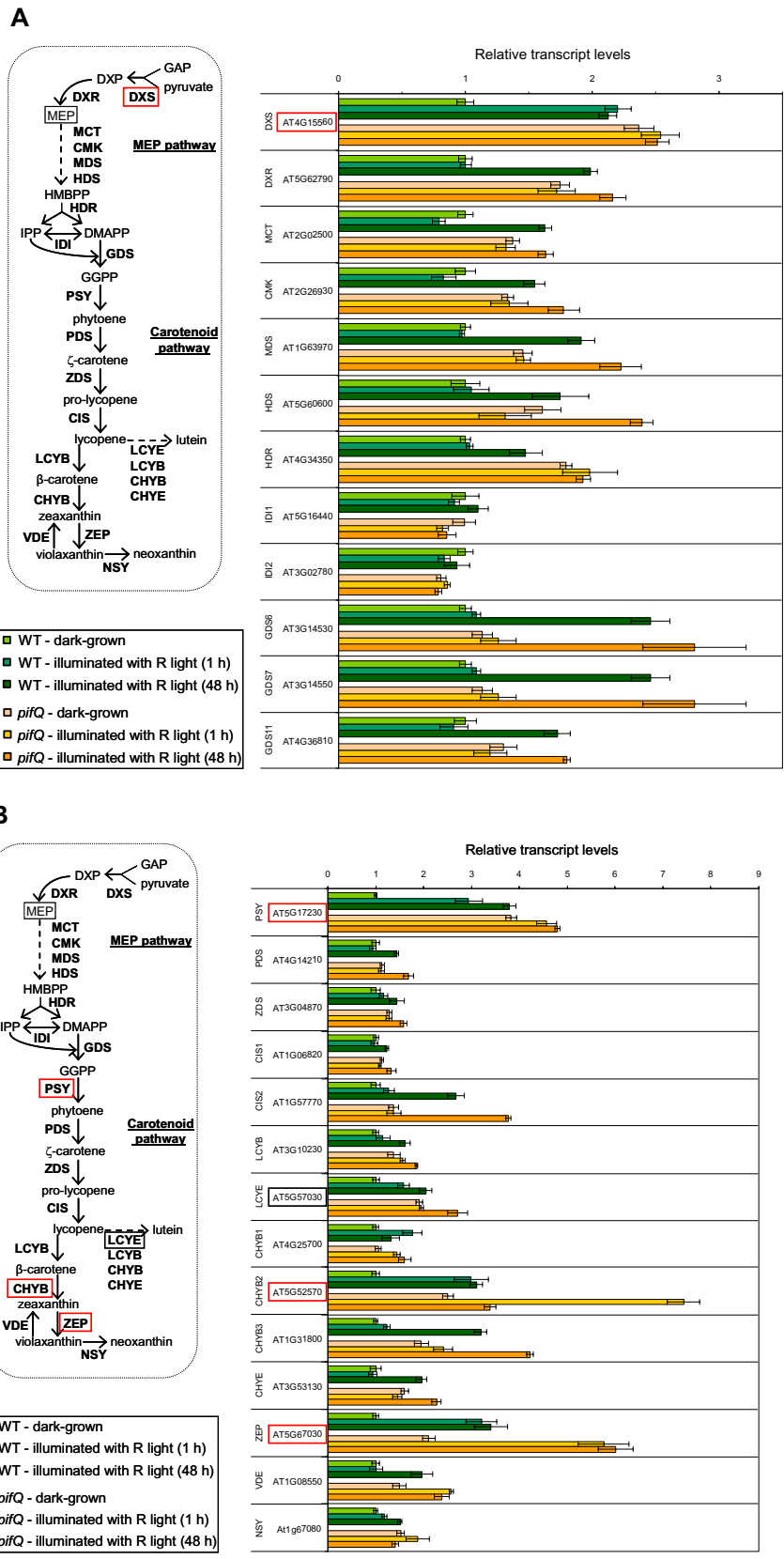


Fig. S2. Transcript levels of genes involved in plastidial isoprenoid and carotenoid biosynthesis in WT and *pifQ* seedlings. Expression data (mean and SE) from the experiments reported by Leivar et al. (1) are plotted relative to the levels in dark-grown WT seedlings. Red boxes denote potential PIF target genes according to these authors (class 7 genes), and black boxes denote genes with similar expression trends (i.e., higher expression in dark-grown mutant seedlings, rapid light up-regulation, and robust sustained expression under R light). The steps catalyzed by the enzymes encoded by the indicated genes (TAIR numbers)

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are shown in the cartoon on the left. In the case of geranylgeranyl diphosphate synthase (GDS), only isoforms induced by light are included. (A) Genes involved in the production of carotenoid precursors in plastids. (B) Genes specific to the carotenoid pathway.

1. Leivar P, et al. (2009) Definition of early transcriptional circuitry involved in light-induced reversal of PIF-imposed repression of photomorphogenesis in young *Arabidopsis* seedlings. *Plant Cell* 21:3535–3553.

Table S1. Oligos used for the experiments

QPCR	
qPSY F	GACACCCGAAAGGCGAAAGG
qPSY R	CAGCGAGAGCAGCATCAAGC
qGAI F	GCTTATGCAGGCTCTTGCG
qGAI R	AACCGGAAAAACAGGAGGACC
QPORC F	GGGCAAAACAGTTCAATGA
QPORC R	GGAAAAAGAAGCCGAAACAG
qAPT F	GTTGCAGGTGTTGAAGCTAGAGGT
qAPT R	TGGCACGAATAGCCAACGCAATAG
EMSA	
G-box I F	CCATTGGCCGTAGGCTCCACGTGGCATCTCTGATCT
G-box I R	AGATCAGAGAGATGCCACGTGGAGCCTACGGCCAATGG
G-mut I F	CCATTGGCCGTAGGCTCCTTTTGCATCTCTGATCT
G-mut I R	AGATCAGAGAGATGCCAAAAAGAGCCTACGGCCAATGG
G-box II F	TACCAATGAAACATTGACACGTGGAAAAGCAACGTCGC
G-box II R	GCGACGTTGCTTTTCCACGTGTCAATGTTTCATTGGTA
ChIP	
PSY(G+) F	TGGGACCCAAATACCGACTA
PSY(G+) R	cgaggggttgctagaaaact
PSY(G-) F	ttacgtggctgactctgtacg
PSY(G-) R	ttaattataatctttgccactg
CHYB2 F	tttgaaaatgcatggaacaa
CHYB2 R	tggagagagggccacatttt
PORC F	gggcaaaaacagttcaatga
PORC R	ggaaaaagaagccgaaacag
UBQ10 F	TTCGTGGTGGTTTCTAAATC
UBQ10 R	GGAAAAAGAAGCCGAAAGCG