

Title: Acclimation responses of *Arabidopsis thaliana* to sustained phosphite treatments

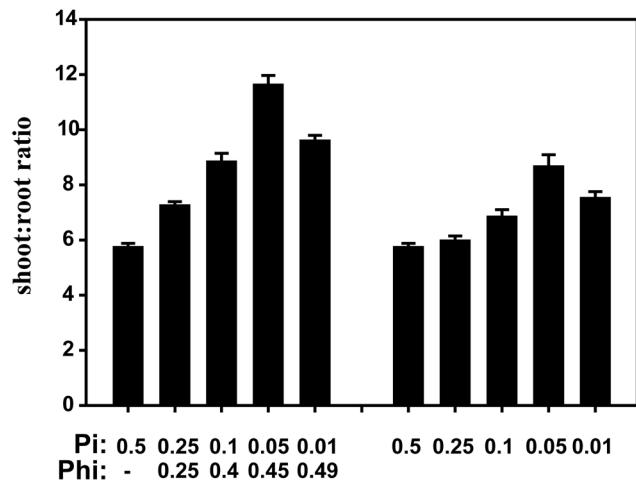
Oliver Berkowitz^{1,2}, Ricarda Jost², Daniel O. Kollehn¹, Ricarda Fenske³, Patrick M. Finnegan², Philip A. O'Brien¹, Giles E.St.J. Hardy¹, Hans Lambers²

¹Centre for Phytophthora Science and Management, School of Biological Sciences & Biotechnology, Murdoch University, Murdoch WA 6150, Australia; ²School of Plant Biology and Institute of Agriculture, The University of Western Australia, Crawley WA 6009, Australia; ³Metabolomics Australia, The University of Western Australia, Crawley WA 6009, Australia

Supporting Data**Table S1:** Sequences of primers used for gene expression analyses

Target gene	forward primer sequence (5' – 3')	reverse primer sequence (5' – 3')
<i>PDF2</i> (At1g13320)	TTGGCCACGTTAAATTGATGTT	GCAGCATATAGTCCTCAGGTTCTAGA
<i>UBC9</i> (At4g27960)	GCAACGGGTCTCGCTACA	CCATTGGATTGGTTTCGATTGCAGA
<i>UPL7</i> (At3g53090)	GGATAAAAGGTCTAGGTGCATAACAAGATGA	TCTACGTGCTACAATACTCTTAAGCTTCCA
<i>At4</i> (At5g03545)	GATCGAAGTTGCCAACACGA	GAGCGATGAAGATTGCATGAAG
<i>miRNA399d</i> (At2g34202)	CTCCTTGGCAGAGAACGATTT	GGTTGGATTACTGGGCGAATACT
<i>PHO1</i> (At3g23430)	GTGCTCATTCTCCACTCTGTAAAAGT	GGGTCACTCCTGTTCACTCTCAT
<i>PHO2</i> (At2g33770)	CATCTCAAATGCTTGGAGGC	CGAGCCGAGGGAGAGAAAAAA
<i>PHR1</i> (At4g28610)	TGTAATACCTATCCCACCTTCAAATC	ATATCGGCCAGAACCATCAGAAAC
<i>PHT1;1</i>	CCAAAGGCAAGTCCCTGAAGAACT	AACAAAACCAAACATCGCACTCAAATAA
<i>PHT1;4</i>	TTGCTCCTAATTTCCGTATGCT	TGTGCCGGCCGAAATCT
<i>PAPI</i>	TTGAAGATCAGAGAATTCAAGCAAGA	CCGGTTTACCAAGAGTGTATGCA
<i>NMT3</i> (At1g48600)	TGCTGGCTTGCTTGGATATGT	GCACCAAGAAGGAGTATCCTGATAA
<i>SQD2</i> (At5g01220)	ATCCGGTTTCCCTCCTGATC	CCTTGTGGTTCTGAAGCAATGT
ASK11	TTCGTAAGGAGAATCAATGGGCT	CATAATAAGATGTAGACAAAGTTATCATAATCGA

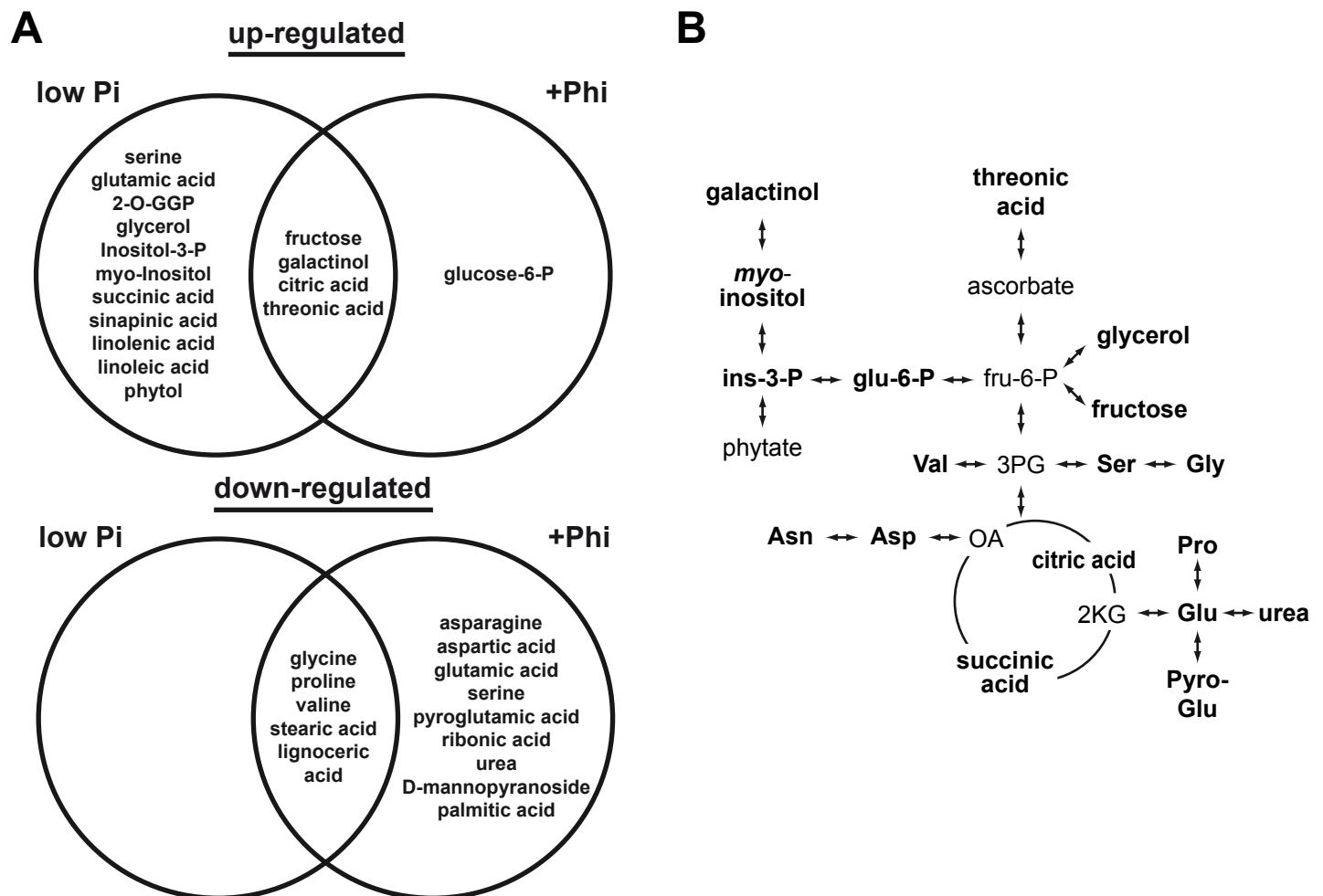
Supporting Figure 1



Shoot : root ratios of plants under +Phi and -P treatments.

The increase in shoot:root ratio observed for Phi treated plants is caused by the strong reduction in primary root biomass (Fig. 1). The slight increase also observed for the -P treatment is likely caused by the reduction in primary root growth characteristic under low P supply while the lateral roots were still developing. Therefore the laterals contributed little to overall root biomass at the time when tissue harvest was necessary.

Supporting Figure S2



A) Representation of metabolites with overlapping and contrasting changes in Phi-treated and Pi-limited *Arabidopsis* plants. B) Simplified metabolic pathways showing interconnections of metabolites with altered abundance (in bold) under Phi treatment or Pi limitation.

Abbreviations: 2KG, 2-ketoglutarate; 2-O-GGP, 2-O-Glycerol- α -D-galactopyranoside; 3PG: 3-phosphoglycerate; ins-3-P, inositol-3-phosphate; OA, oxaloacetate