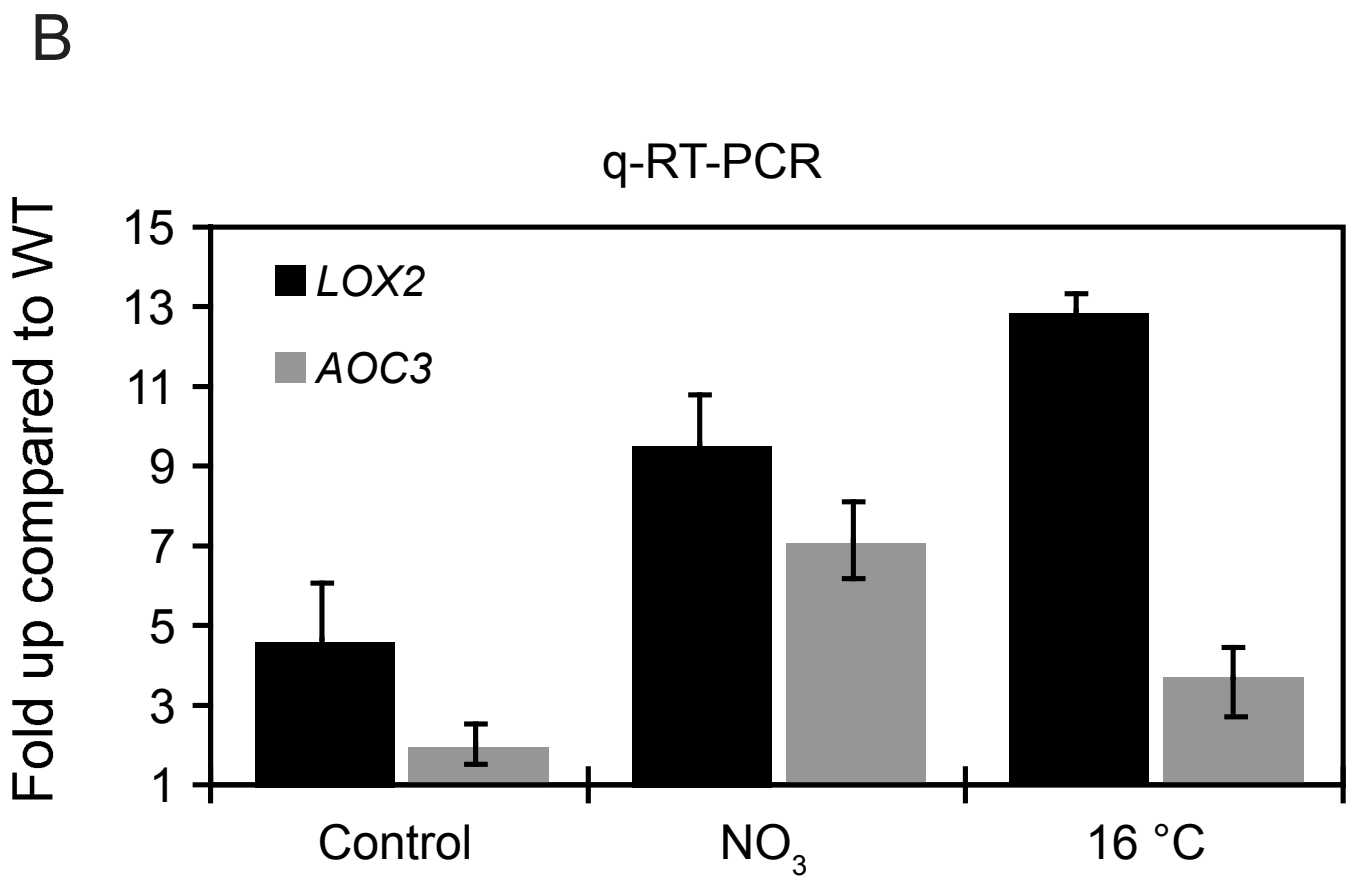
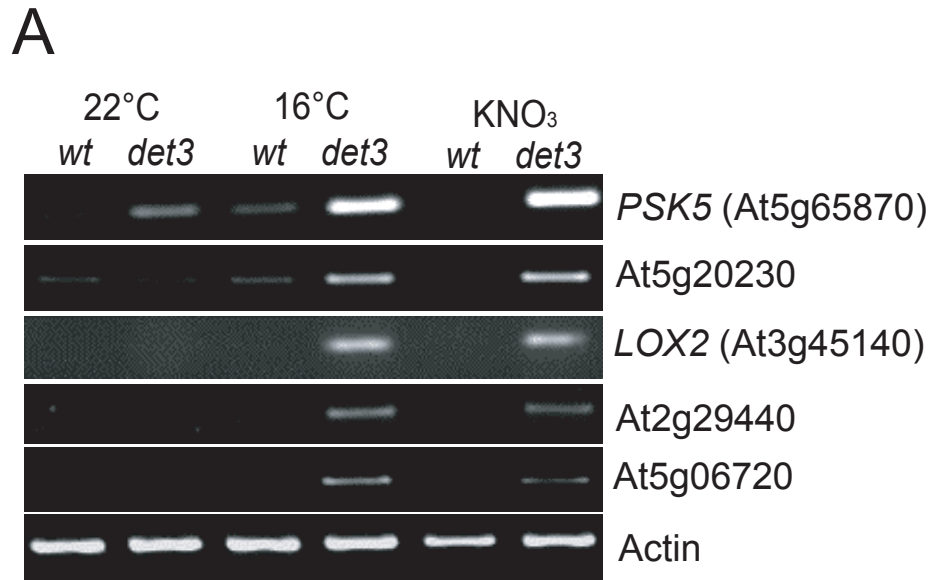


Supplemental Figure 1:

Hypocotyl length of 4d old etiolated seedlings grown at 22°C in the presence of K- salts or N- sources. At least 30 seedlings from each of three independent experiments were measured. Wt length was set to 100%, error bars represent SE.



Supplemental Figure 2:

(A) RT-PCR of selected genes upregulated in *det3* under permissive and restrictive conditions (At5g65870) or only under restrictive conditions. Primers for *Actin 2* served as a control.

(B) q-RT-PCR of *LOX2* and *AOC3*, error bars represent SD between 3 technical replicates

Supplemental Table 1: Oligonucleotides used in this study

PCR + RT-PCR

AGI code	Name	Sequence
At2g28520	a1.RNAi.FOR	GTGGTTTCCTTGTCTCAAGTAATAC
At2g28520	a1.RNAi.REV	CAACATTCTTTCAAACCTTAAGAAG
At3g45140	LOX2.FOR	AAGACTGACCAGCGGATTACG
At3g45140	LOX2.REV2	CTTGTTGGGTCAACGGACT
At5g20230	PCL.REV	CCA GCA GCG AAA TCA AAT TCG A
At5g20230	PCL.FOR	TGG CCG GAG TTT TCA AAA CG
At2g29440	GST.FOR	GAT GAA AAG ATA GTA AAT GTG GG
At2g29440	GST.REV	TTC ACC CAT TTG TTA TAT TC
At5g06720	ATP-A2.FOR	AGC CCT TGC CTC TGA GG
At5g06720	ATP-A2.REV	TAT GCG CAC CAG ATA AGG CTA CCA
At5g65870	PSK5.FOR	AAT TGA TCT CTG TCT CAT AGT TAT
At5g65870	PSK5.REV	CC TCT CCC TGT TCT AGT TTC TTG
At3g18780	ACT2.FOR	TCC AAG CTG TTC TCT CCT TG
At3g18780	ACT.REV	GAG GGC TGG AAC AAG ACT TC
At1G09540	MYB61.FOR3	GCA TTG CAG CTG TGA ATA ACT AA
At1G09540	MYB61.REV3	CTT CTT GAT GCT TGA GTT CCA T
At1g12840	VHA-C-intron1.FOR	GAATCGATTACAAGAGCAGATC
At1g12840	VHA-C-intron1.REV	GCC GAG AGC GAG TAG AGA ATC
	amiRNA-A.FOR	CTGCAAGGCGATTAAGTTGGGTAAC
	amiRNA-B.REV	GCGGATAACAATTTACACAGGAAACAG
At2g28520	AtVHA-a1miR.FOR	GATAGTTCGTTATATGTCTGCCCTCTCTCTTTTGTATTCC
At2g28520	AtVHA-a1miR*.FOR	GAGGACAGACATATATCGAACTTTACAGGTCGTGATATG
At2g28520	AtVHA-a1miR.REV	GAGGGCAGACATATAACGAACTATCAAAGAGAATCAATGA
At2g28520	AtVHA-a1miR*.REV	GAAAGTTCGATATATGTCTGTCTCTACATATATATTCT

qRT-PCR

At number	Name	Sequence
At2g28520	a1RT.FOR3	GTTCTTCTTCTTGCCTGGGG
At2g28520	a1RT.REV3	GGGATGTGCAAATGGCTGAGG
At2g21410	a2RT.FOR2	GGTCCTTCTTATGGCTTGGGG
At2g21410	a2RT.REV2	GCACACGCAGAAGAAGTC
At4g39080	a3RT.FOR2	GAGAAGGTCCTCCTTCTCGC
At4g39080	a3RT.REV2	GCAGAGGATGAGAGGAATG
At3g45140	LOX2-RT.FOR2	GACCAGGAAGGCTTACCC
At3g45140	LOX2-RT.REV2	CTCCGTGGCCTATGTTCCGC
At3g25780	AOC3-RT.FOR1	CTGGAATTGGGGCAAGAAGACC
At3g25780	AOC3-RT.REV1	CTAGCTTCGAATCTGTCACCGC
At5g62690	TUBULIN β -2.FOR	GAGCCTTACAACGCTACTCTGTCTGTC
At5g62690	TUBULIN β -2.REV	ACACCAGACATAGTAGCAGAAATCAAG

**Supplemental Table 2:
Absolute values for Figures 4 A+B, 5A and Supplemental Figure 1**

Figure 4 A + B

	1mM KCl		1mM KNO3		Control		16°C	
	Col-0	det3	Col-0	det3	Col-0	det3	Col-0	det3
Mean (mm)	11.24	9.77	11.35	5.04	10.1	9.42	9.910	5.34
SD	1.91	1.58	1.79	1.53	1.79	2.3	1.080	1.022
SE	0.43	0.35	0.4	0.34	0.4	0.53	0.240	0.23
Mean (μ mol ATP/ mg protein * h)	6.82	3.27	5.99	2.57	7.2	3.2	5.24	1.05
SD	0.28	0.26	0.31	0.34	0.21	0.22	0.27	0.29

Figure 5 A

22°C				
	Col-0	det3	myb61-1	myb61-1 det3
Mean (mm)	10.9	9.48	10.77	10.01
SD	1.34	2.31	1.45	2.04
SE	0.29	0.51	0.31	0.45
1mM KNO3				
	Col-0	det3	myb61-1	myb61-1 det3
Mean (mm)	11.57	6.22	12.29	5.94
SD	1.59	1.41	2.43	1.63
SE	0.35	0.3	0.54	0.36
16°C				
	Col-0	det3	myb61-1	myb61-1 det3
Mean (mm)	14.26	7.2	12.74	6.33
SD	2.21	1.82	1.45	1.74
SE	0.49	0.39	0.31	0.37

Supplemental Figure 1

	KH2PO4		K2SO4		NH4SO4		NH4NO3		KClO3	
	Col-0	det3	Col-0	det3	Col-0	det3	Col-0	det3	Col-0	det3
Mean (mm)	10.72	10.6	12.12	11.34	14.21	13.17	12.86	7.72	14.65	5.86
SD	1.47	1.34	1.25	1.32	1.49	1.58	1.78	1.63	1.92	1.39
SE	0.32	0.29	0.27	0.28	0.33	0.35	0.38	0.36	0.42	0.29