

**Metabolome and molecular basis for carbohydrate increase
and nitrate reduction in burley tobacco seedlings by glycerol
through upregulating carbon and nitrogen metabolism**

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Supporting Table S1. The primers used for qRT-PCR in Experiment 1

No.	Gene Symbol	Forward primer	Reverse primer	Product length(bp)	Ta(°C)
1	WRKY70	TGCGAAGCAAACAAACAAGT	ATGTGTGATGACCATAGTACG	79	60
2	TIFY10A	AGAATTACTTCAACTGCACCA	CTAATCCAAGCCATGCCTTAT	88	60
3	EXO	CATTCCACCAGCCCATTAC	CATACCATCAACACCCACAT	77	60
4	XTH22	GATGATTGGGCTACAAGAGG	GCACTAAAGGGTGCTTTACT	62	60
5	MYB44	GCGGAGGTGAGGAACTAT	TTGCTGAAACTGCTGTTGTC	96	60
6	PGK	AAGCCACTTGTACCAAGAC	CCTCCTTCTGGTATTTCCGG	110	60
7	PPC16	ATGTCCTTGATGCCATTACC	GTTCCCTCAGACCACTCTCG	63	60
8	EGY1	TGCTACCAGTTGGATGTCTTG	AAGCCCAGAAGTGTGTATG	103	60
9	L25	CCCCTCACCACAGAGTCTGC	AAGGGTGTTGTTGTCCTCAATCTT	51	60

Supporting Table S2. The primers used for qRT-PCR in Experiment 2

No.	Gene Symbol	Forward primer	Reverse primer	Product length(bp)	Ta(°C)
1	PGK	AAGCCACTTGTACCAAGAC	CCTCCTTCTGGTATTTTCGG	110	60
2	GLPK	TGTTTCAGTGGCTTAGGGACA	GATGCCAACTCCTCGATTTC	66	60
3	NIA1	TTAGGGTCATTTCTCGACGTG	GAAATTGCCCTTTCCTGGTA	66	60
4	SPS	TCCATTGAGAGAGCTTGCTAA	AGGAGGACTGATGAATTTGTG	90	60
5	SUS2-2	TGAGATGCTCAAGCGCATA	CAGGCAGCAACCGAGTAA	77	60
6	NPF3.1	AGAACAGAGAGTTGGATGCTA	TGTCATCACCATCAACGACC	105	60
7	NLP7	GCTCAGACATGGCTACCT	AGCTCTGAACTCATAGCCT	105	60
8	gpmA	TATCTTCACAAGCCCATCCT	ATCCAGAGTTACCATTACTCG	117	60
9	NPF7.3	CTCTTTGTTGAGCAAGGTGA	ATATGACGCCTGCTACACTAA	106	60
10	PPC16	ATGCCTTGATGCCATTACC	GTCCTCAGACCACTCTCG	63	60
11	EGY1	TGCTACCAGTTGGATGTCTTG	AAGCCCAGAAGTGTGTATG	103	60
12	CP12-2	GATGTGGTTGAAGAGGCG	CAGTCTCAGGATTATCCTTGC	103	60
13	L25	CCCCTCACCACAGAGTCTGC	AAGGGTGTTGTTGTCCTCAATCTT	51	60