Table 1 Suppl. Experimental treatments for nitrogen and sulfur interactions.

Compound [mM]	Treatments														
	N1S0	N1S1	N1S2	N1S3	N1S4	N2S0	N2S1	N2S2	N2S3	N2S4	N3S0	N3S1	N3S2	N3S3	N3S4
$MgSO_4 \cdot 7\ H_2O$	-	1.25	2.50	2.50	2.50	-	1.25	2.50	2.50	2.50	-	1.25	2.50	2.50	2.50
$MgCl_2$	2.50	1.25	-	-	-	2.50	1.25	-	-	-	2.50	1.25	-	-	-
K_2SO_4	-	-	-	2.50	2.50	-	-	-	2.50	2.50	-	-	-	2.50	2.50
$CaSO_4$	-	-	-	-	2.50	-	-	-	-	2.50	-	-	-	-	2.50
KCl	5.00	5.00	5.00	-	-	5.00	5.00	5.00	-	-	5.00	5.00	5.00	-	-
$CaCl_2$	5.00	5.00	5.00	5.00	2.50	5.00	5.00	5.00	5.00	2.50	5.00	5.00	5.00	5.00	2.50
NH_4NO_3	2.50	2.50	2.50	2.50	2.50	7.50	7.50	7.50	7.50	7.50	12.50	12.50	12.50	12.50	12.50
KH_2PO_4	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00

Table 2 Suppl. Primer sequences of genes using for real-time quantitative PCR.

Gene symbol	Gene length [bp]	Description	Primer sequence	Amplicon length [bp]
NR	1353	nitrate reductase [NADH] 2 [*Eutrema salsugineum*]	TTGCCTTAGAGCTTACACG AGATCCGATAACCAACGAG	148
GS	1065	glutamine synthetase [*Raphanus sativus*]	CCAACAAGAGGCACAACGC CAGGGAAGCCACCAACAGG	144
GDH	1077	glutamate dehydrogenase 2 [*Arabidopsis thaliana*]	GGCAAAGTTCATTGTAGAAGC AACCCACTCAAAGTAACTCACC	139
GOGAT	1614	DHFS-FPGS homolog D [*Arabidopsis thaliana*]	GCAACAGAACAGGTGGATG AAATACCGCAGACGATAGG	97
ATPS	1416	ATP sulfurylase [*Brassica juncea*]	AGGAGACTTCTTGAGATGGGATA TTCGGTTGGACCAGCGTAA	196
APR	1053	sulfotransferase 5b [*Brassica rapa subsp.* pekinensis]	AAGACCTAATCGCCTCGTT AGCTTTGAGCCAAGTGGTA	191
OAS-TL	576	hypothetical protein EUTSA_v10021399mg [*Eutrema salsugineum*]	CTCTGGGAGGTTGGCTACA AACGTGCTTATGGTAATCTGG	118
Actin	1137	actin [*Isatis tinctoria*]	ATTGTCTTGGACTCTGGAGATGGTGT CGGCTGTGGTGGTGAATGAGTAA	158

Table. 3. The correlation analysis of indigo and indirubin content and related gene expressions in leaf of *I. indigotica* seedlings (* and ** - significant differences among treatments at 0.05 and 0.01 levels, respectively). For gene abbreviations, see Table 2 Suppl.

	NR	*GS*	*GDH*	*GOGAT*	*ATPS*	*APR*	*OAS-TL*	Indigo	Indirubin
NR	1.000								
GS	-0.553*	1.000							
GDH	-0.166	0.313	1.000						
GOGAT	-0.633*	0.615*	-0.259	1.000					
ATPS	0.375	0.140	0.160	-0.335	1.000				
APR	-0.550*	0.272	-0.534*	0.650*	-0.285	1.000			
OAS-TL	-0.243	0.128	0.238	0.024	-0.087	-0.004	1.000		
Indigo	-0.363	0.406	-0.330	0.365	-0.003	0.692*	0.297	1.000	
Indirubin	-0.317	0.607*	-0.057	0.285	0.213	0.430	0.220	0.869*	1.000

Fig. 1 Suppl. Specific quantitative PCR products of expected size for each gene shown on a 2 % (m/v) agarose gel. For gene abbreviations, see Table 2 Suppl.