

Fig. S1 Effect of NO donor SNP on LR density of seminal root in cvs. Nanguang (B) and Eilo (C). (A) Appearance of seedlings treated with NH₄⁺, partial nitrate nutrition (PNN) and NH₄⁺+SNP. Seedlings were grown in nutrient solution that contained NH₄⁺-only and PNN with or without NO donor SNP for 14 days. Data are means ± SE and bars with different letters indicate significant differences at P < 0.05, as determined by ANOVA.

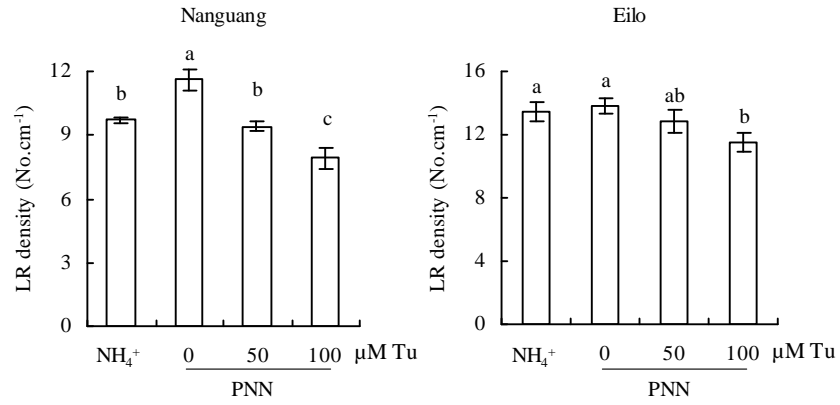


Fig. S2 Effect of NR inhibitor tungstate (Tu) on LR density of seminal root in cvs Nanguang and Elio. Seedlings were grown in nutrient solution that contained NH₄⁺-only and PNN with NR inhibitor tungstate varying from 0 to 100μM for 14 days. Data are means ± SE and bars with different letters indicate significant differences at P < 0.05, as determined by ANOVA.

Table S1 The primers for qRT-PCR of *OsNOA*, *OsNIA1*, *OsNIA2* genes and *OsActin*.

Gene	Accession number	Primer sequence
<i>OsNOA</i>	Os02g0104700	5'-TGCTTCTGTGGTTGGGAC-3'
		5'-TCTAAGGGCACGGTGTTT-3'
<i>OsNIA1</i>	AK102178	5'-CCAATTCTTTCATCGTGTCT-3'
		5'-CATGCAGCATTTCGTTTCT-3'
<i>OsNIA2</i>	AK102363	5'-ACTGGTGCTGGTGCTTCTGG-3'
		5'-CGGCTGGGTGTTGAGGGACT-3'
<i>OsACT</i>	LOC_Os03g50890	5'-CAACACCCCTGCTATGTACG-3'
		5'-CATCACCAGAGTCCAACACAA-3'

Table S2 The primers for qRT-PCR of *OsAMT1-3*, *OsNRT2* and *OsNAR2* genes.

Gene	Accession number	Primer sequence
<i>OsAMT1.1</i>	LOC_Os04g43070	5'-AGCGAAGGAAGAAATCACG-3'
		5'-CCAAACAGAAACTGGCAATC-3'
<i>OsAMT1.2</i>	LOC_Os02g40710	5'-TTCTACGTGCTGCACAGGTTC-3'
		5'-TTGCTCCGGCGACTTTTCT-3'
<i>OsAMT1.3</i>	LOC_Os02g40730	5'-GTCTAGTGGAAACCGGAGGAG-3'
		5'-CCTATTATAACAATCACGAAACCTG-3'
<i>OsAMT2.1</i>	LOC_Os05g39240	5'-CTGGCTCCTCCTCTCCTACA-3'
		5'-CAGGATGTTGTTCCGGTGAGA-3'
<i>OsAMT2.2</i>	LOC_Os01g61510	5'-GCCTCGACGTCATCTTCTTC-3'
		5'-TTGTGGAGGATCATCATGGA-3'
<i>OsAMT2.3</i>	LOC_Os01g61550	5'-GCCTCGACGTCATCTTCTTC-3'
		5'-GGAAGGTGGATTTCTTGTGC-3'
<i>OsAMT3.1</i>	LOC_Os01g65000	5'-CTCCCGCAGACGACGCAGTT-3'
		5'-GCCGACGGTGTAGGAGAAGGTG-3'
<i>OsAMT3.2</i>	LOC_Os03g62200	5'-CTCACCTTCTCCTACACCGTC-3'
		5'-ACCCCATCCATAGTAACCCTG-3'
<i>OsAMT3.3</i>	LOC_Os02g34580	5'-GCTGGCGCACTATTTGTCA-3'
		5'-CATTCTGTGTCACTCCTACA-3'
<i>OsNRT2.1</i>	LOC_Os02g02170	5'-CTTGTTGCAAACGGTGATGA-3'
		5'-GCCTCTCCCTTATTATACCTCCG-3'
<i>OsNRT2.2</i>	LOC_Os02g02190	5'-CGGAGCACGCCTAATTAAGAG-3'
		5'-CTCCATGACGACATACTCTAGATA-3'
<i>OsNRT2.3a</i>	LOC_Os01g50820	5'-CGCTGCTGCCGCTCATCCG-3'
		5'-CCGTGCCCATGGCCAGAC-3'
<i>OsNRT2.4</i>	LOC_Os01g36720	5'-AAAGGTCGCTGGGCGTGGTG-3'
		5'-CCTGGACCCGCTGAAGAAGAG-3'
<i>OsNAR2.1</i>	LOC_Os02g38230	5'-CAAGGACAAGGCGTGCCAG-3'
		5'-GCGATGGAGAAGGTGGAG-3'
<i>OsNAR2.2</i>	LOC_Os04g40410	5'-GACGACCTGAGCAAGGACAAG-3'
		5'-TGCCACCGTGTACTCGAACTT-3'