

Table S1: Soil chemical properties of the experimental soil prior to experimentation.

Properties	Contents
Organic matter (g kg ⁻¹)	20.78
Total nitrogen (g kg ⁻¹)	1.16
Total phosphorus (g kg ⁻¹)	0.99
Total potassium (g kg ⁻¹)	18.85
pH	5.87
Available nitrogen (mg kg ⁻¹)	90.45
Available phosphorus (mg kg ⁻¹)	9.49
Available potassium (mg kg ⁻¹)	127.91
Available molybdenum (mg kg ⁻¹)	0.081
Cadmium (mg kg ⁻¹)	4.26

Table S2: Primer sequences used for qRT-PCR amplification

Genes	Strand	5' to 3' Primer Sequences	Annealing Temperature	Accession no.
OsSO _D	Forward	TGTCAACTGGACCACACTTC	58 °C	Os07g066520 0
	Reverse	ACTTAAAACGCATGCACTC A		
OsPO _D	Forward	CGACGATTTCTACGACTACA T	59 °C	Os10g010960 0
	Reverse	TGATTGAGGAGGTTCTGGT		
OsCA _T	Forward	GCACAGTTTGACAGGGAG	55 °C	Os06g51150
	Reverse	GTCTTTGGACTTGGCTTG		
OsAP _X	Forward	TACGCCGACTTCTACCAGC	57 °C	Os07g069470 0
	Reverse	TTTATTACAACCGCCACGA		
ACTI _N	Forward	TGCCAAGGCTGAGTACGAC GA	58 °C	Os03g50885
	Reverse	CAAGCAGGAGGACGGCGAT A		