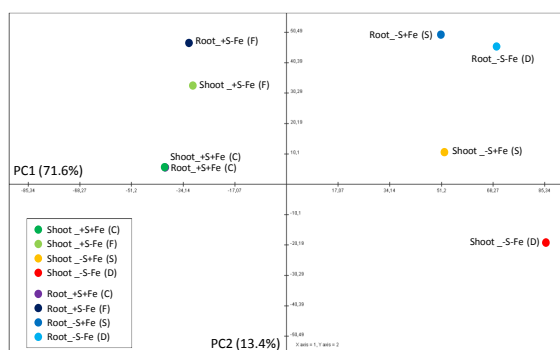


(A) PCA score plot



(B) PCA loading

PC1 order	PC1	PC2	PC2 order	PC1	PC2
Lysine	1.48	-0.91	Fructose	0.21	0.67
O-acetyl-serine	1.47	-2.94	Aspartic acid	-0.16	0.47
Arginine	1.43	-2.39	Glucose	0.10	0.45
Asparagine	1.40	-1.91	Fumaric acid	-0.59	0.40
Ornithine	1.25	-1.24	Malic acid	-0.44	0.36
Glutamine	1.12	-1.79	Citric acid	-0.42	0.34
Tyrosine	1.07	-1.26	Succinic acid	-0.77	0.30
Tryptophan	0.93	-1.19	Glutaric acid, 2-oxo-	-0.76	0.23
Isoleucine	0.93	-0.95	Inositol, myo-	0.23	0.23
Valine	0.86	-0.84	Methionine	-0.21	0.21
Phenylalanine	0.76	-1.12	Total Fe	-0.89	0.19
Threonine	0.66	-0.52	Nitrate	-0.19	0.15
Serine	0.56	-0.42	Protein	-0.46	0.15
Alanine	0.38	-0.55	Sucrose	-0.08	0.15
Inositol, myo-	0.23	0.23	SAM	-0.31	0.07
Fructose	0.21	0.67	Proline	0.03	0.00
Alanine, beta-	0.19	-0.18	H ₂ S	-1.99	0.00
Phosphoric acid	0.12	-0.70	GABA	-0.12	-0.03
Glucose	0.10	0.45	Glutamic acid	-0.14	-0.04
Phosphate	0.08	-0.30	Tyramine	-0.22	-0.11
Quinic acid	0.05	-0.42	Alanine, beta-	0.19	-0.18
Proline	0.03	0.00	Phosphate	0.08	-0.30
Sucrose	-0.08	0.15	Serine	0.56	-0.42
GABA	-0.12	-0.03	Quinic acid	0.05	-0.42
Glutamic acid	-0.14	-0.04	Glucose-6-phosphate	-0.62	-0.44
Putrescine	-0.15	-1.17	Threonine	0.66	-0.52
Aspartic acid	-0.16	0.47	Alanine	0.38	-0.55
Nitrate	-0.19	0.15	Cys	-0.99	-0.59
Methionine	-0.21	0.21	Sulfate	-0.88	-0.62
Tyramine	-0.22	-0.11	Phosphoric acid	0.12	-0.70
SAM	-0.31	0.07	Pyruvic acid	-1.12	-0.78
Citric acid	-0.42	0.34	Valine	0.86	-0.84
Malic acid	-0.44	0.36	Lysine	1.48	-0.91
Protein	-0.46	0.15	Isoleucine	0.93	-0.95
Saccharic acid	-0.49	-1.40	Phenylalanine	0.76	-1.12
Fumaric acid	-0.59	0.40	Putrescine	-0.15	-1.17
Glucose-6-phosphate	-0.62	-0.44	Tryptophan	0.93	-1.19
Glutaric acid, 2-oxo-	-0.76	0.23	Ornithine	1.25	-1.24
Succinic acid	-0.77	0.30	Tyrosine	1.07	-1.26
Sulfate	-0.88	-0.52	Saccharic acid	-0.49	-1.40
Total Fe	-0.89	0.19	Glc	-2.22	-1.65
Cys	-0.99	-0.59	Total S	-1.74	-1.75
Pyruvic acid	-1.12	-0.78	Glutamine	1.12	-1.79
Total S	-1.74	-1.75	Asparagine	1.40	-1.91
H ₂ S	-1.99	0.00	Arginine	1.43	-2.39
Glc	-2.22	-1.65	O-acetyl-serine	1.47	-2.94
GSH	-3.33	-4.45	GSH	-3.33	-4.45

Supplemental Figure 1. PCA (principal component analysis) of metabolite data.

(A) The plot was applied for the 47 annotated metabolites, which were detected in both shoots and roots. PCA was conducted with log₂ fold change between nutritional stress (F, S and D) and control (C) in each tissue by the MultiExperiment Viewer (Saeed et al., 2003). PC, Principal component. (B) PCA loadings are sorted by the PC1 or PC2 values.

Ref: Saeed AI, Sharov V, White J, Li J, Liang W, Bhagabati N, Braisted J, Klapa M, Currier T, Thiagarajan M, et al (2003) TM4: a free, open-source system for microarray data management and analysis. *Biotechniques* 34: 374–378.