

Table SI. *The relative change in metabolites between WT and *pmdh1pmdh2* mutants.*

The ratio of various metabolites in the double *pmdh1pmdh2* mutants to wild-type (WT) plants. Leaf disks were sampled from the leaf chamber attached to the mass spectrometer after the 10 min at the CO₂ compensation point. Tissue was removed directly from the chamber into liquid nitrogen and stored at -80°C. Shown are the means ± the SE ratios from five leaves from taken from separate plants. Statistical analysis was conducted using a student-t test.

	Ratio of <i>pmdh1pmdh2</i> /WT	<i>p</i> values
Aspartic acid	0.3	0.00
Glutamine	0.6	0.03
Asparagine	0.8	0.31
Lysine	0.9	0.84
Beta-Alanine	0.9	0.58
Proline	0.9	0.91
L-Tyrosine	1.0	0.99
Threonine	1.0	0.96
Iso-Leucine	1.0	0.75
Phenylalanine	1.0	0.80
Valine	1.1	0.36
L-Glutamic acid	1.1	0.60
Glycolic acid	1.1	0.23
Glyoxylic acid	1.1	0.27
Glyceric acid	1.2	0.36
Leucine	1.2	0.28
Succinic acid	1.2	0.21
Fumaric acid	1.3	0.23
Alanine	1.3	0.19
2-Aminobutyric acid	1.3	0.29
Malic acid	1.5	0.05
Citramalic acid	1.5	0.39
Glycine	1.5	0.00
L-Methionine	1.5	0.02
Serine	1.6	0.01
Citric acid	1.7	0.05
2-Ketoglutaric acid	3.6	0.00
Iso-citrate	7.5	0.01