

Supplementary Materials: Impact of the Disruption of ASN3-Encoding Asparagine Synthetase on Arabidopsis Development

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Amino Acids	Col-0	<i>asn3-1</i>
Total glutamine	1.398 (100) ^(a)	1.009 (72) ^(a)
¹⁵ N labelled glutamine	1.106 (79) ^(b)	0.664 (66) ^(b)
Total glutamate	0.806 (100) ^(a)	0.900 (112) ^(a)
¹⁵ N labelled glutamate	0.209 (26) ^(b)	0.249 (28) ^(b)
Total asparagine	1.030 (100) ^(a)	0.814 (79) ^(a)
¹⁵ N labelled asparagine	0.307 (30) ^(b)	0.340 (42) ^(b)
Total aspartate	0.511 (100) ^(a)	0.414 (81) ^(a)
¹⁵ N labelled aspartate	0.165 (32) ^(b)	0.134 (32) ^(b)

Table S1. The ¹⁵N labeling analysis of amino acids in the seeds of wild-type (Col-0) and *asn3-1* lines. The ¹⁵N labeling analysis was carried out on three sets, each comprising more than 150 seeds using the same initial weight per genotype. Dry seeds were incubated with ¹⁵N-labeled ammonium (99% enrichment) for 24 h at 20 °C in the dark. Amino acids were analyzed by a capillary electrophoresis system coupled to a mass spectrophotometer. Amino acid contents are expressed as nmol·mg⁻¹ seed. The value in parentheses for glutamine, glutamate, asparagine and aspartate shows the percentage of (a) total content relative to that of the Col-0 line and (b) ¹⁵N-labeled content relative to the total content.