

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

Laure Gaufichon <sup>1</sup>, Anne Marmagne <sup>1</sup>, Tadakatsu Yoneyama <sup>2</sup>, Toshiharu Hase <sup>3</sup>, Gilles Clément <sup>1</sup>, Marion Trassaert <sup>1</sup>, Xiaole Xu <sup>1</sup>, Maryam Shakibaei <sup>1</sup>, Amina Najihi <sup>1</sup> and Akira Suzuki <sup>4,\*</sup>

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

**Table S1.** The <sup>15</sup>N labeling analysis of amino acids in the seeds of wild-type (Col-0) and *asn3-1* lines. The <sup>15</sup>N 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 <sup>15</sup>N-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<sup>-1</sup> 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) <sup>15</sup>N-labeled content relative to the total content.