

**Supplementary Table IV** Parameters measured on a different set of plants incorporating a second strongly reduced line (RL34). For enzymatic activities refer to legend to Table 1. For  $^{14}\text{CO}_2$  assimilation refer to legend to Figure 3. For flux estimation refer to legend to Figure 6B. Metabolites were determined as described in the Materials and Methods. Values are presented as mean  $\pm$  SE of determinations on six individual plants per line. Values set in bold type were assessed by *t*-tests ( $P < 0.05$ ) to be significantly different from wild type.

	WT	RL34	RL25	AL40	AL18	AL10
Enzymatic activities	<i>nmol min<sup>-1</sup> gFW<sup>-1</sup></i>					
ScoAL	264.12 $\pm$ 28.48	<b>11.50</b> $\pm$ <b>1.62</b>	<b>79.11</b> $\pm$ <b>14.72</b>	228.98 $\pm$ 21.03	192.98 $\pm$ 22.64	211.44 $\pm$ 6.99
GAD	1.52 $\pm$ 0.24	<b>2.69</b> $\pm$ <b>0.41</b>	<b>3.36</b> $\pm$ <b>0.23</b>	2.23 $\pm$ 0.24	2.16 $\pm$ 0.41	1.99 $\pm$ 0.25
Flux [1- $^{14}\text{C}$ ]-glutamate	<i>(% of total <math>^{14}\text{C}</math> applied) min<sup>-1</sup> mgFW<sup>-1</sup></i>					
$^{14}\text{CO}_2$ assimilation	<i><math>^{14}\text{CO}_2</math> released (Proportion of <math>^{14}\text{C}</math> applied g FW<sup>-1</sup> h<sup>-1</sup>)</i>					
	2.65 $\pm$ 0.21	<b>4.22</b> $\pm$ 0.28	<b>3.71</b> $\pm$ 0.17	3.03 $\pm$ 0.27	2.53 $\pm$ 0.33	2.41 $\pm$ 0.22
	<i>Label incorporated (DPM g FW<sup>-1</sup>)</i>					
	2212.66 $\pm$ 91.27	3356.36 $\pm$ 517.15	2375.50 $\pm$ 317.67	2328.43 $\pm$ 205.82		2444.08 $\pm$ 92.60
Metabolites	<i>Normalized peak area g FW<sup>-1</sup></i>					
Citrate	1.00 $\pm$ 0.14	1.03 $\pm$ 0.10				
2-OG	1.00 $\pm$ 0.16	<b>3.63</b> $\pm$ <b>0.61</b>				
Succinate	1.00 $\pm$ 0.26	<b>0.51</b> $\pm$ <b>0.08</b>				
Fumarate	1.00 $\pm$ 0.09	<b>0.75</b> $\pm$ <b>0.05</b>				
Malate	1.00 $\pm$ 0.18	<b>0.77</b> $\pm$ <b>0.12</b>				
Ala	1.00 $\pm$ 0.15	1.13 $\pm$ 0.05				
GABA	1.00 $\pm$ 0.21	<b>1.40</b> $\pm$ <b>0.07</b>				
Glu	1.00 $\pm$ 0.02	<b>1.49</b> $\pm$ <b>0.05</b>				
Phe	1.00 $\pm$ 0.22	1.29 $\pm$ 0.08				
Pro	1.00 $\pm$ 0.31	0.79 $\pm$ 0.30				