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A	no. cells	no. mitochondria	(i) normal normal	(ii) normal spheroid	(iii) \geq double spheroid
Col-0	279	512	502 (98.0 %)	10 (2.0 %)	0
<i>tric1tric2</i>	161	442	224 (50.7 %)	11 (2.5 %)	207 (46.7 %)

B	no. mitochondria	(i) well	(ii) not well	(iii) periphery	(iv) no cristae
Col-0	224	224 (100 %)	0	0	0
<i>tric1tric2</i>	64	6 (9,4 %)	6 (9,4 %)	45 (70,3 %)	7 (10,9 %)

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4 **Table S1.** Analysis of mitochondria morphology in *tric1tric2* mutant and Col-0 wild
5 type. Morphology of mitochondria was analyzed in multiple, independent
6 transmission electron micrograph (TEM) pictures on mature rosette leaves of
7 *tric1tric2* and Col-0 wild-type plants as described in Figure 6. **A**, General analysis of
8 size and shape. The total number (no.) of all mitochondria analyzed was subdivided
9 into those with (i) normal wild-type size and shape, (ii) normal size but spheroidal
10 shape, (iii) at least doubled in size with a spheroidal shape. **B**, Cristae analysis, the
11 cristae structure of mitochondria was subdivided into categories (i) well-developed,
12 (ii) not well-developed, but present across the entire organelle, (iii) visible cristae only
13 at periphery of mitochondria, (iv) no cristae detectable. Please note that not all
14 mitochondria pictures displayed suitable resolution for cristae analysis. Therefore, the
15 total amount of mitochondria analysed in **B** is less than **A**.