



## FRIENDLY Regulates Mitochondrial Distribution, Fusion, and Quality Control in Arabidopsis

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Résumé en anglais	<p>Mitochondria are defining components of most eukaryotes. However, higher plant mitochondria differ biochemically, morphologically, and dynamically from those in other eukaryotes. FRIENDLY, a member of the CLUSTERED MITOCHONDRIA superfamily, is conserved among eukaryotes and is required for correct distribution of mitochondria within the cell. We sought to understand how disruption of FRIENDLY function in Arabidopsis (<i>Arabidopsis thaliana</i>) leads to mitochondrial clustering and the effects of this aberrant chondriome on cell and whole-plant physiology. We present evidence for a role of FRIENDLY in mediating intermitochondrial association, which is a necessary prelude to mitochondrial fusion. We demonstrate that disruption of mitochondrial association, motility, and chondriome structure in friendly affects mitochondrial quality control and leads to mitochondrial stress, cell death, and strong growth phenotypes.</p>
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