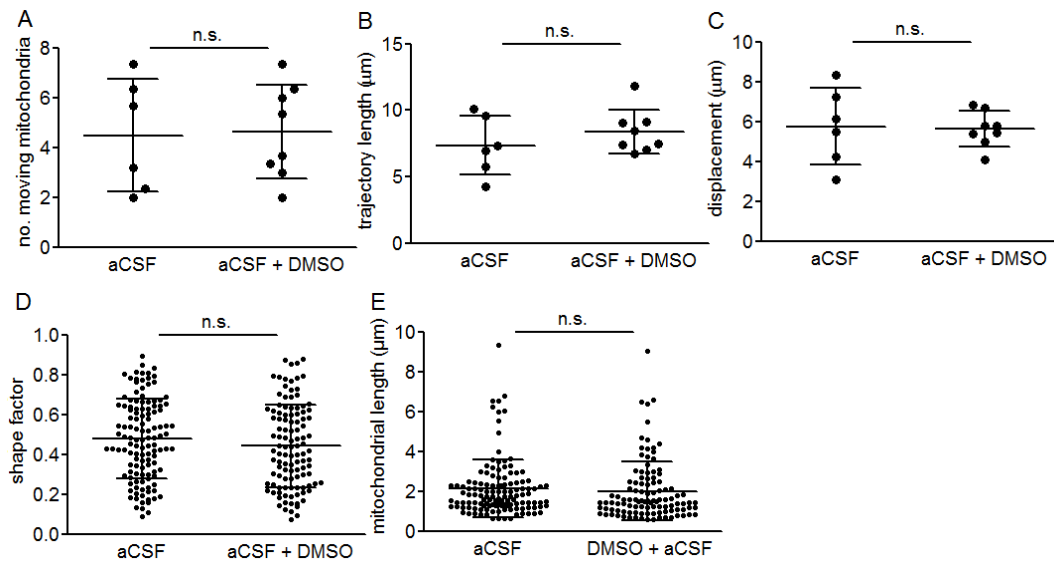
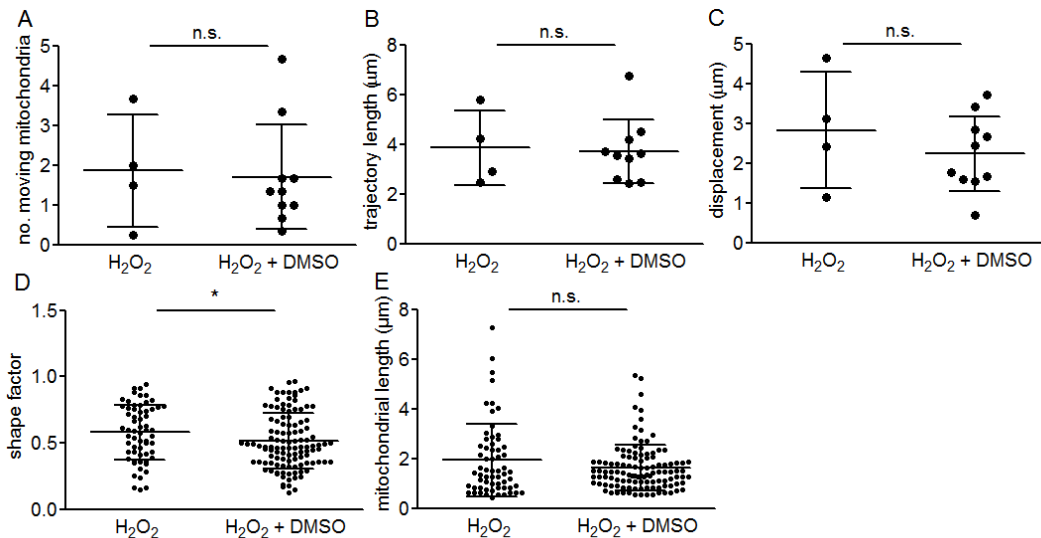


## Supplementary



**Supplementary Fig. 1.** The vehicle DMSO did not influence mitochondrial behavior in explanted roots. A. Number of moving mitochondria per root. Each dot represents the number of mitochondria that moved at least 1 μm during 1 minute. B. Length of the mitochondrial trajectories. Each dot represents the average length of the trajectories of all moving mitochondria. C. Displacement (final position minus initial position) of the mitochondria. Each dot represents the average displacement values of all moving mitochondria. D. Shape factor (circularity) and E. length of the mitochondria. Each dot represents the shape factor or the length (major axis) of one single mitochondrion. A-C: all the visible mitochondria in the axonal segment were analyzed, independently of their location relative to the nodes of Ranvier. D and E: only mitochondria located 30 to 40 μm away from the node of Ranvier were considered for the analysis. n.s.: not statistically significant. Error bars show the standard deviation (SD).



**Supplementary Fig. 2.** The vehicle DMSO did not alter mitochondrial transport and exerted a minimal influence on mitochondrial morphology in explanted roots. A. Number of moving mitochondria per root during 1 minute. B. Length of the mitochondrial trajectories. C. Displacement (final position minus initial position) of the mitochondria. D. Shape factor (circularity) and E. length of the mitochondria. A-C: all the visible mitochondria in the axonal segment were analyzed, independently of their location relative to the nodes of Ranvier. D and E: only mitochondria located 30 to 40 μm away from the node of Ranvier were considered for the analysis. n.s.: not statistically significant. \* p < 0.05. Error bars show the SD.