

Supplemental Movie 1. Formation of PEN2-GFP-TA_{PEN2} aggregates at attempted fungal penetration site 20 hours post infection (hpi) with *Bgh*.

Confocal laser scanning microscopy (CLSM) time-lapse (02:31 min, 30 frames) showing the accumulation of PEN2-GFP-TA_{PEN2} positive organelles below an attempted penetration site (arrow head) and the subsequent formation of immobile PEN2-GFP-TA_{PEN2} aggregates exhibiting a higher fluorescence intensity.

Supplemental Movie 2. Mitochondrial mobility and PEN2-GFP-TA_{PEN2} distribution underneath an attempted *Bgh* penetration site.

(A) Representative five-minute CLSM time lapse of PEN2-GFP-TA_{PEN2} (green) and ScCOX4-RFP (magenta) of the epidermal layer underneath an attempted *Bgh* penetration site. The time lapse corresponds to *series a* in Supplemental Figure 3 A and C.

(B) and (C) Corresponding PEN2-GFP and ScCOX4-RFP fluorescence intensities as a function of the distance from the attempted penetration site over time. Each data point represents a single mitochondrion at the time point shown in (A). a.u., arbitrary units.

Supplemental Movie 3. Mitochondria expressing roGFP2 accumulate and form immobile aggregates at the attempted fungal penetration site at 1 dpi with *Bgh*.

CLSM time-lapse (01:26 min, 34 frames) showing one representative experiment performed to analyze the oxidative state in mitochondria upon *Bgh* infection. The periphery of the penetrated cell is indicated (green line) and mitochondria are segmented, and their outline color-coded to distinguish mitochondria in the penetrated cell (green outlines) from those in uninfected neighboring cells (red outlines). The attempted penetration site is labeled (pink asterisk) and used to measure the distance of mitochondria from the fungal entry site. Stomata are also indicated (blue) and stomata localized mitochondria (blue outlines) were excluded from the redox analysis. The movie shows merged images of the roGFP2 fluorescence at 405nm (red channel) and 488 nm (green channel) excitation as well as the autofluorescence at 405 nm (blue channel). Bar = 25 μ m.