Supplemental Movie 1. Live cell imaging of closed mitosis during appressorium development in *M. oryzae*.

Movie of nuclear division occurring during appressorium development. A conidial suspension was prepared from the *M. oryzae* H1:RFP strain and incubated in conditions to allow appressorium development. A 10 μ M aliquot of 3,3'-dihexyloxacarbocyanine iodide (DiOC₆) was added 4-6 hours post-inoculation and images acquired at 10 second intervals with sequential excitation at the two wavelengths.

Supplemental Movie 2. Live cell imaging of actomyosin ring formation during the asymmetric cellular division associated with appressorium development in *M. oryzae*.

Movie to show position and formation of the actomyosin contractile ring and septum during appressorium development. A conidial suspension was prepared from the *M. oryzae* tpmA:GFP strain and the suspension was incubated to allow appressorium development. Actomyosin ring formation was observed 4-6 hours post-inoculation and images were acquired at 15 second intervals.