

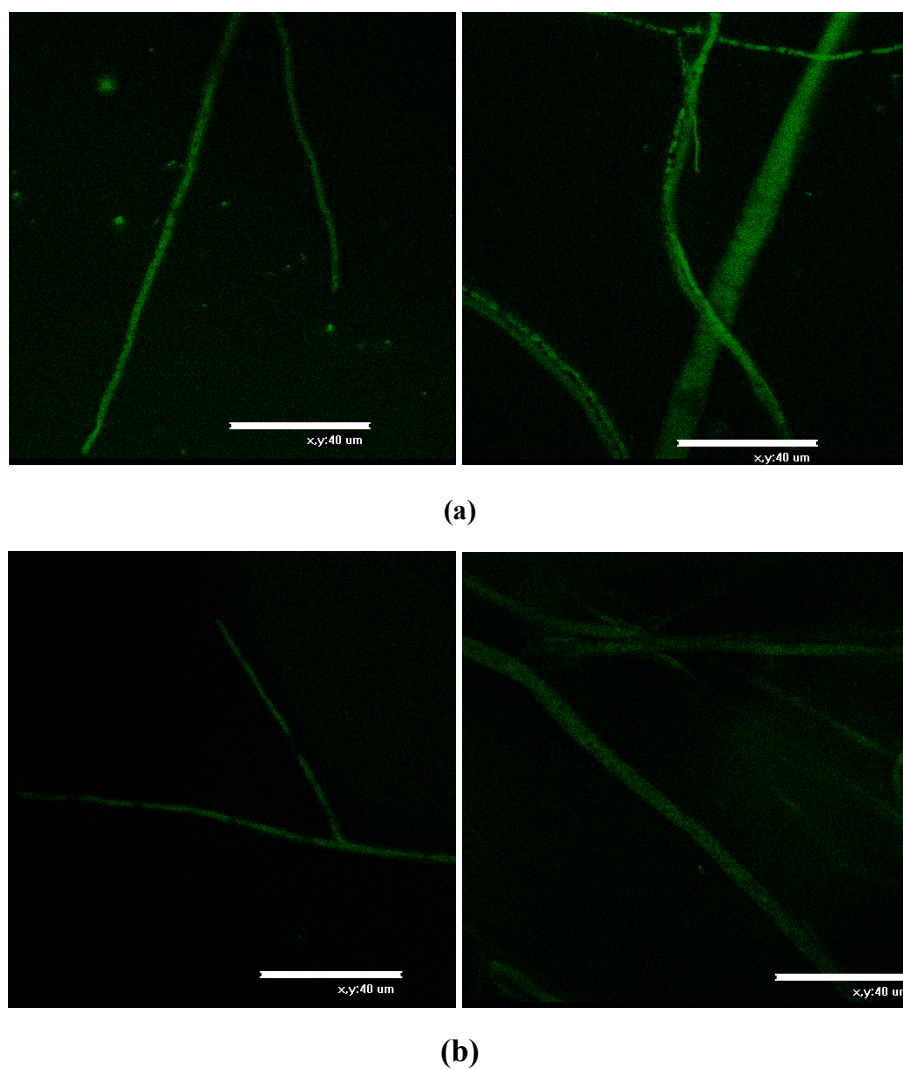
### Supporting Information

**Table S1** FPKM values of all of the genes of *A. oryzae* 3.042 and *A. oryzae* 100-8 at the three growth stages.

**Table S2** FPKM values of *A. oryzae* 3.042 and *A. oryzae* 100-8 for: reactive oxygen species, calcium ions, oxidative phosphorylation, spore formation, proteases, glycolysis and lipid metabolism.

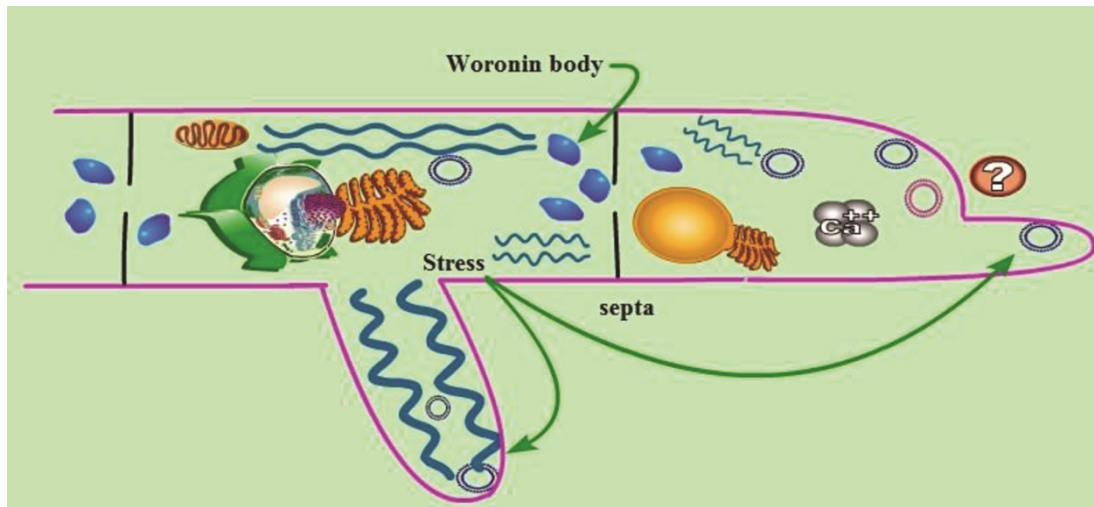
**[See attached tables]**

**Figure S1**



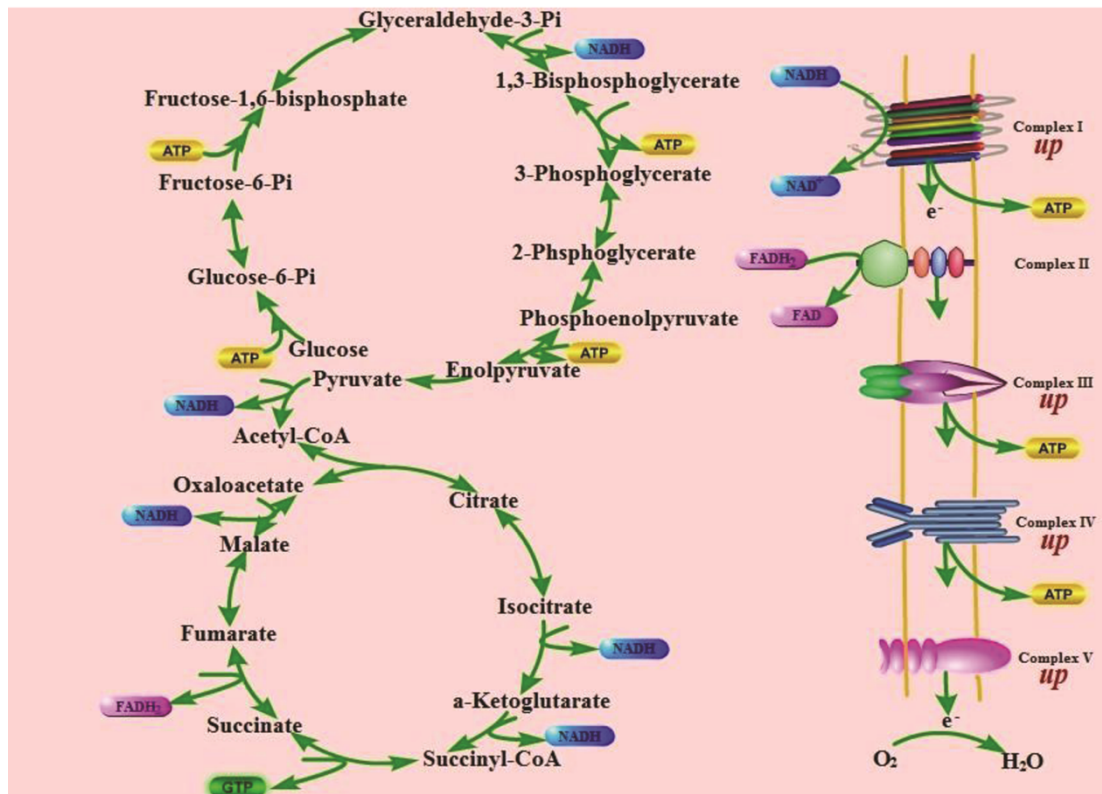
**Figure S1.** ROS generation in *A. oryzae* 3.042 (a) and *A. oryzae* 100-8 (b). Confocal microscopy analysis of the cells indicated the generation of ROS (green).

**Figure S2**



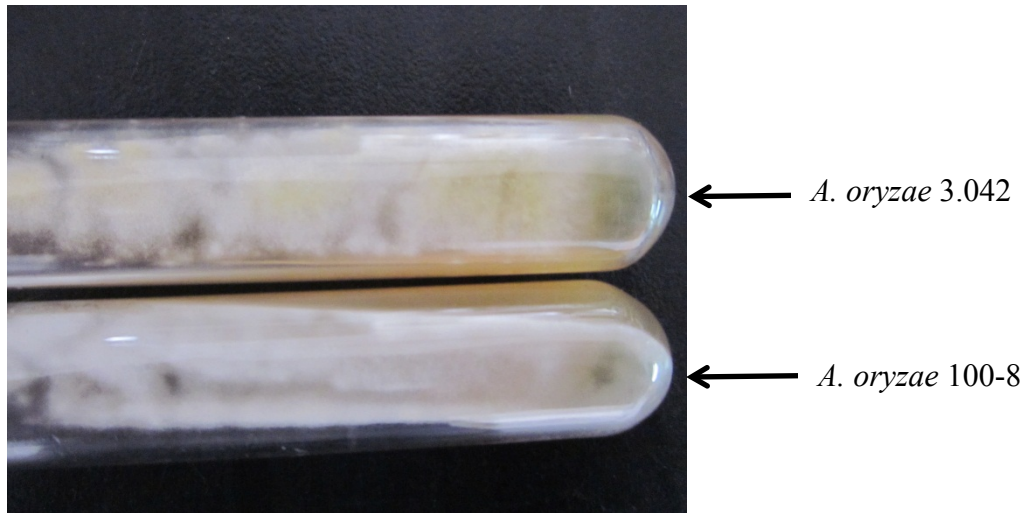
**Figure S2.** Relationship between reduced concentrations of  $\text{Ca}^{2+}$  and growth at the top of the hyphae.  $\text{Ca}^{2+}$  ions may cross-link with the carbohydrates and macromolecules of the cell wall to make it more rigid. A relatively low concentration of  $\text{Ca}^{2+}$  play a role in increasing plasticity and promoting hyphal growth.

**Figure S3**



**Figure S3.** Energy production through carbon metabolism (glycolysis, tricarboxylic acid cycle) and oxidative phosphorylation in *A. oryzae* 100-8.

**Figure S4**



**Figure S4.** *A. oryzae* 100-8 and 3.042 grow on the agar slant at the same period. The amount of spores of 3.042 was more than 100-8 obviously.