

Contribution of the Tyrosinase (MoTyr) to melanin synthesis, conidiogenesis, appressorium development, and pathogenicity in *Magnaporthe oryzae*

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Supplement Figure S1: Melanin synthesis pathway. A: DHN-melanin synthesis pathway; PKS, polyketide synthase; B: L-DOPA-melanin synthesis pathway. L-DOPA, 3,4-dihydroxyphenylalanine; DQ, Dopakinone; DHI, 5, 6-dihydroxyindole DHICA; 5,6-dihydroxyindole-2-carboxylic acid; TRP1, tyrosinase-related protein 1; TRP2, tyrosinase-related protein 2.

Supplement Figure S2: Construction of vectors and verification of mutants. (A) Construction of *MoTyr* gene knockout vector. (B) Verification of *MoTyr* knockout mutant strains. M stands for DNA marker (2000 bp; 1000 bp; 750 bp; 500 bp; 250 bp; 100 bp).

Supplement Figure S3: Growth characteristics of wild-type and $\Delta MoTyr$ mutant stains. (A) Observation of vegetative growth. (B) Colony diameter statistics. (C) Conidia morphology of wild-type and mutants; Scale bar =20 μ m. ns represent not significant; $p < 0.05$.

Supplement Figure S4 : Conidia germination and appressoria formation. (A) Development of conidia in different time periods. (B) Statistical analysis of conidia germination rate of different strains. (C) The formation of appressoria of different mutant strains at different times. Scale bar =20 μ m; ns represent not significant; $p < 0.05$.