

Supplementary Materials: Analysis of the Relationship between Alternative Respiration and Sterigmatocystin Formation in *Aspergillus nidulans*

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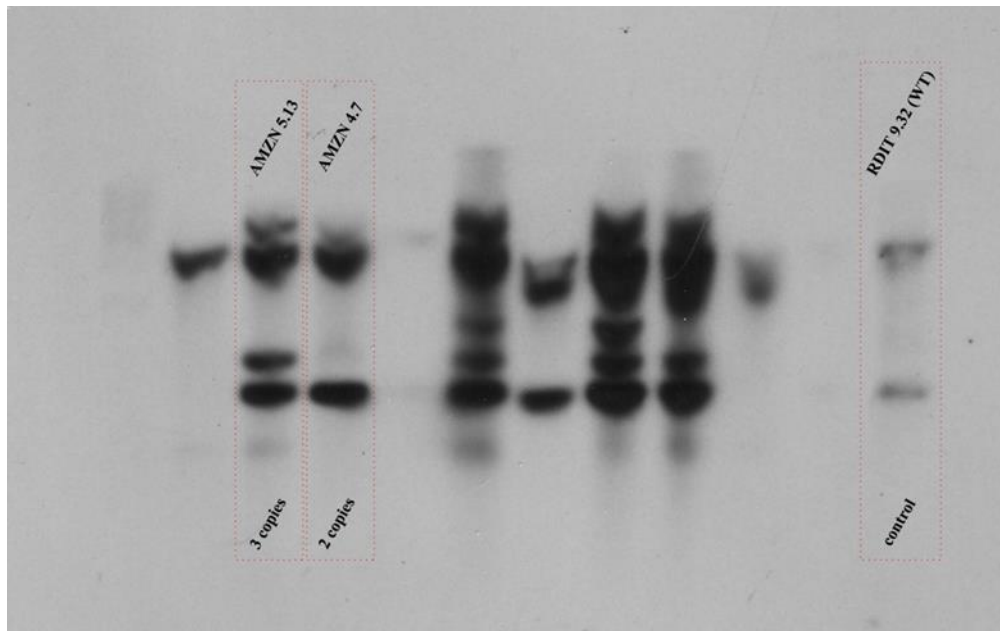


Figure S1: Southern blot analysis of the *A. nidulans aodA* multi-copy strains.

Table S1: *Aspergillus nidulans* strains used in this study.

Strain	Genotype	Reference
RDIT 9.32 (FGSC A1252)	<i>veA+</i> ; <i>aodA</i> ⁺	Tsitsigiannis et al. (2004)
TN02A3 (FGSC A1149)	<i>veA1</i> ; <i>pyroA4</i> ; <i>pyrG89</i> ; Δ <i>nkuA</i>	Nayak et al. (2006)
RJMP 155.55	<i>veA+</i> ; <i>riboB2</i> ; <i>wA3</i>	Németh et al. (2016)
AMEF 001	<i>veA1</i> ; <i>pyroA4</i> ; Δ <i>aodA</i> ; Δ <i>nkuA</i>	This study
AMZN 1.2 ¹	<i>veA+</i> ; <i>riboB2</i> ; <i>pyroA4</i> ; Δ <i>aodA</i> ; <i>wA3</i>	This study
AMZN 2.13	<i>veA+</i> ; <i>pyroA4</i> ; <i>aodA</i> ²⁺ ; <i>wA3</i>	This study
AMZN 2.39	<i>veA+</i> ; <i>pyroA4</i> ; <i>aodA</i> ³⁺ ; <i>wA3</i>	This study
AMZN 3.37 ²	<i>veA+</i> ; Δ <i>aodA</i>	This study
AMZN 4.7 ³	<i>veA+</i> ; <i>aodA</i> ²⁺	This study
AMZN 5.13 ⁴	<i>veA+</i> ; <i>aodA</i> ³⁺	This study

All strains descended from FGSC A4, a genome sequenced strain.

All experiments described in the Results section were performed with the last 3 strains and the wild-type reference, RDIT 9.32.

Δ *aodA*: alternative oxidase negative; decreased cyanide-resistant respiratory rate.

aodA⁺: alternative oxidase positive. ²⁺; ³⁺: number of *aodA* copies

¹ Offspring from a cross between AMEF 001 and RJMP 155.55.

² Offspring from a cross between AMZN 1.2 and RDIT 9.32.

³ Offspring from a cross between AMZN 2.13 and RDIT 9.32.

⁴ Offspring from a cross between AMZN 2.39 and RDIT 9.32.

Table S2: Primers and plasmid used in this study.

Primers		Sequence (5'-3')	Remark
<i>veA+</i>	Forward	TGTGTTATCCCATCAAGAGG	Han et al. (2010)
	Reverse	CTTGGCGCTGTAGACGATAA	
<i>aodA</i>	Forward	ATCCGCCCCTCGTCAAAAAAT	This study
	Reverse	TCAAACAACCTCCTCTCGT	
deletion cassette			This study
P1	Forward	AAAGTAGTCTCAGCGTAGCCT	<i>aodA_5_flanking</i> ; for functional gene fragment (<i>aodA</i>)
P2	Reverse	CGGTTGAGCCGTTACAGGTACAGTACATGCAGGTAATGTTTCGCAATAGC	<i>aodA_5_flanking</i>
P3	Forward	TATGGTCCTGACATATCTGGTGGATCTACGAGAGGAGGTTGTTTGAG	<i>aodA_3_flaking</i>
P4	Reverse	AAAGATGAAAGGACAGGTGG	
P5	Forward	ATGTACTGTACCTGAACCG	<i>pyr4</i>
P6	Reverse	AGATCCACCAGATATGTCAG	
P7	Forward	TTTATTCTCGGCGTTTGTC	<i>aodA</i> nested
P8	Reverse	TAGAATAACAGCGGAAATGG	
P9	Reverse	CTCAACTAATAATCAATGCGC	for functional gene fragment (<i>aodA</i>)
<i>aox_copyF</i>	Forward	TAGTCTCAGCGTAGCCTCTTC	<i>aodA</i> ; for Southern blot
<i>aox_copyR</i>	Reverse	GCGGATTGATTATTAGTTGAG	
Plasmid	Gene	Remark	
pTN2	<i>riboB2</i>	Nayak et. al (2006)	