

# Supplementary Materials: Functional characterization of the *alb1* orthologue gene in the ochratoxigenic fungus *Aspergillus carbonarius* (AC49 strain)

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**Table S1.** Determination of the number of T-DNA copies integrated in the genome of *A. carbonarius* transformants.

Strain	C <sub>q</sub> <sub>alb1</sub>	C <sub>q</sub> <sub>NRPS</sub>	ΔC <sub>q</sub> <sub>target</sub>	ΔC <sub>q</sub> <sub>ref</sub>	GC*
AC49	23.38±0.17	23.29±0.01	-	-	-
Δ <i>alb1</i> -1	23.21±0.11	23.20±0.06	0.38	0.35	1.08
Δ <i>alb1</i> -2	23.44±0.02	23.41±0.05	0.33	0.31	1.07
Δ <i>alb1</i> -3	23.29±0.02	23.29±0.01	0.36	0.33	1.09
Δ <i>alb1</i> -4	23.25±0.02	23.40±0.07	0.37	0.31	1.20
Δ <i>alb1</i> -5	23.80±0.25	23.84±0.02	0.26	0.23	1.11
Δ <i>alb1</i> -6	22.56±0.02	22.52±0.14	0.58	0.54	1.07

\*Gene copy number (GC) quantification was conducted by wPCR according to the formula  $GC = E_{target}^{(Cq_{control}-Cq_{sample})}/E_{ref}^{(Cq_{control}-Cq_{sample})}$ . Gene *alb1* was used as target gene for *alb1* transformants, and the *neps* gene was used as a reference. Wild-type *A. carbonarius* AC49 strain was used as control. All reactions were conducted in duplicate.

**Table S2.** Three-way ANOVA on data of conidia and OTA production of *A. carbonarius* Δ*alb1* and WT strains.

Source	df*	Conidiogenesis		OTA production	
		F	<i>p</i>	F	<i>p</i>
<b>Main effects</b>					
Strain (A)	3	122.02	0.00	49.75	0.00
Temperature (B)	1	4.50	0.03	840.68	0.00
Medium (C)	2	3.74	0.03	724.66	0.00
<b>Interactions</b>					
A x B	3	2.86	0.04	12.4	0.00
A x C	6	5.26	0.00	11.83	0.00
B x C	2	5.26	0.01	365.6	0.00
A x B x C	6	4.78	0.00	4.11	0.00

df: degree freedom; F: Fisher ratio; bold *p* ≤ 0.01

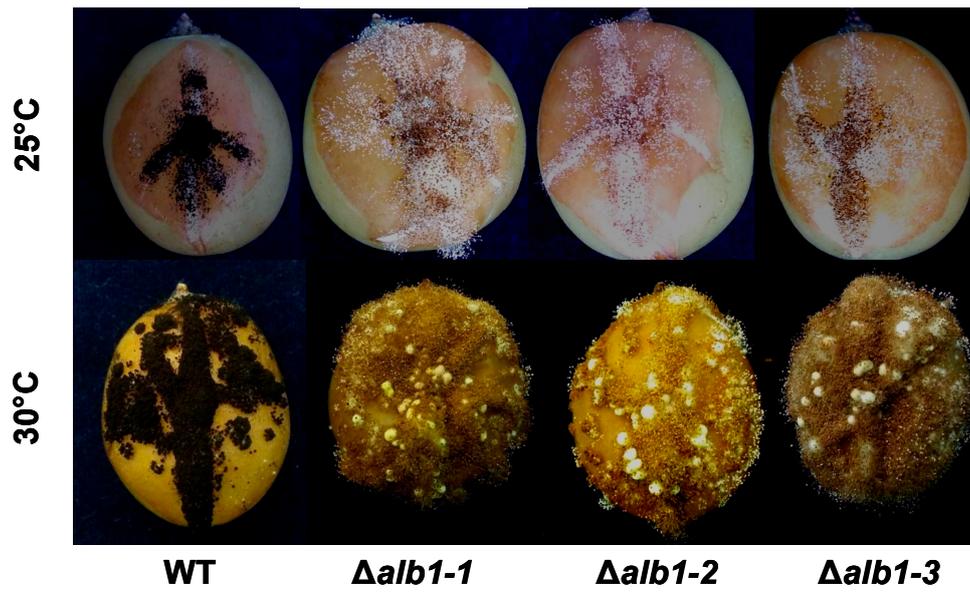


Figure S1. Grape berries at 7 days after inoculation with  $\Delta alb1$  mutants and WT.