## **Supplementary material**

Table S1. Primer sequences used for qRT-PCR analysis

#	Primer name	Sequence (5'-3')	Description
1	Btub_carF	GGACGAGATGGAGTTCACTGA	$\beta$ -tubulin control gene
2	Btub_carR	CCTCTTGCTCAAGGACCTCCT	
3	AcLaeA LI	CACCTATACAACCTCCGAACCAC	Velvet complex laeA gene
4	AcLaeA LJ	GGTTCGGCCAACCGACGACGCTG	
5	AcGox f2	TCGAACACTCTGGCATTGGA	Glucose oxidase (gox) gene
6	AcGox r2	GTGGTTTGGTCCTGCAGGTT	
7	PKS_carF	GGGATCGTACGATCTGGTGAT	OTA cluster polyketide synthase
8	PKS_carR	GGGAACACATGAGGTCAGGCT	
9	NRPS_carF	CGGTAGAAAGACTGCAGTCCAT	OTA cluster non-ribosomal peptide synthetase
10	NRPS_carR	CGTCGGAATCCATTGCGCTGA	
11	bZip_carF	CTCGACGGTTCGAGCCTTCT	OTA cluster bZip transcription factor
12	bZip_carR	GCATTCGCTCTAGCTGCTCGA	
13	P450_carF	CCATCGTCTCCAGAGAATCAGT	OTA cluster cytochrome P450 monooxygenase
14	P450_carR2	GGTCTCGTCGTGATGAATCAAG	
15	HAL_carF	GCCAGTAGAGGGACAGCCAT	OTA cluster halogenase
16	HAL_carR	GCTGGAGGTGGTTGAGA	
17	AcCreA f1	CCCTCAGGTGCCGAAAGTC	- Carbon catabolite repressor <i>creA</i> gene
18	AcCreA r1	CGAAGTCACCGAGGAAAACC	

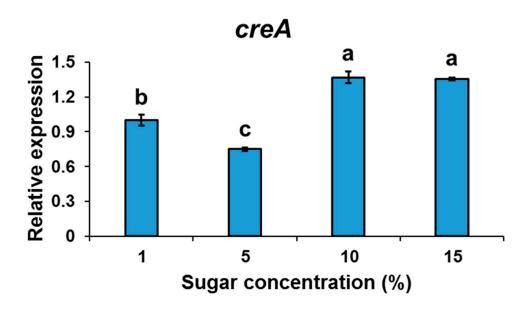


Figure S1. Effect of sugar concentrations and pH changes on the relative expression *creA* gene. Solid SGM media was supplemented with different sugar concentrations (glucose/fructose at a ratio of 2.33). The media was inoculated with 100  $\mu$ l of a 10<sup>6</sup> spores/ml *A. carbonarius* suspension and the relative expression of *creA* was compared at different conditions. RNA was extracted from mycelia at day 6 post-inoculation. Relative expression was normalized using β-tubulin as an internal control. The gene expression under sugar concentration of 1% was normalized as 1.0. Error bars represent standard error of three independent biological replicates. Different letters above the columns indicate statistically significant differences at p<0.05, as determined using the Tukey's honest significant difference test.

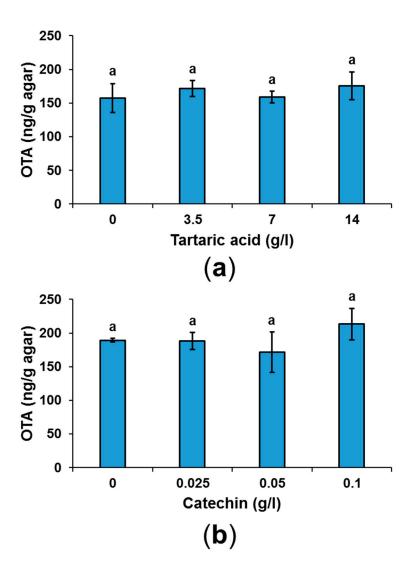


Figure S2. Effect of tartaric acid and catechin on OTA accumulation in vitro. Solid SGM media was amended with various concentrations of tartaric acid and catechin. Then, the media was inoculated with 100  $\mu$ l of a 10<sup>6</sup> spore/ml suspension of *A. carbonarius*, and OTA accumulation was evaluated at day 6 post-inoculation under different concentrations of tartaric acid (a) and catechin (b). Error bars represent standard error of three independent biological replicates. The letters above the columns indicate no statistical difference, as determined using the Tukey's honest significant difference test.