

### Supplemental data Captions

**Supplemental data 1:** The yield of CHA in shake flask with non-treatment and ammonium acetate feeding strategy. *Aspergillus fumigatus* CY018 was cultured 360 h at 180 rpm and 28 °C.

Time (h)	Yield in non-treatment (mg/g)	Yield in feeding strategy (mg/g)
0	0	0
24	0	0
48	0	0
72	0.17 ± 0.13	0.18 ± 0.09
96	0.61 ± 0.29	0.57 ± 0.25
120	0.66 ± 0.23	0.88 ± 0.33
144	1.04 ± 0.26	1.56 ± 0.39
168	1.08 ± 0.31	1.86 ± 0.42
192	1.50 ± 0.33	2.16 ± 0.49
216	1.46 ± 0.42	2.16 ± 0.54
240	1.83 ± 0.44	2.35 ± 0.55
264	1.84 ± 0.48	2.62 ± 0.61
288	2.02 ± 0.54	3.29 ± 0.83
312	1.60 ± 0.41	2.65 ± 0.72
336	1.33 ± 0.38	2.24 ± 0.63
360	1.06 ± 0.25	2.22 ± 0.56

**Supplemental data 2:** Time courses of DO (A), residual sugar (B), chaetominine production (C), DCW (D), and pH (E) in *Aspergillus fumigatus* cultured in 5-L bioreactor with feeding rate of 0.03 g/L/h, 0.01 g/L/h and non-treatment. The culture condition of *A. fumigatus* CY018 was 300 rpm and 28 °C. The 11.55 g of ammonium acetate (50 mM, 3 L broth) was supplied at 120 h.

