

## Supporting Information

The Multifaceted Gene 275 Embedded in the PKS-PTS Gene Cluster  
was Involved in the Regulation of Nematicidal Activity, Arthrobotrisin  
Biosynthesis, TCA Cycle, and Septa Formation of Nematode-Trapping  
Fungus *Arthrobotry oligospora*

Jiao Zhou<sup>1,2</sup>, Qun-Fu Wu,<sup>1,2</sup> Shu-Hong Li,<sup>1</sup> Jun-Xian Yan,<sup>1</sup> Li Wu,<sup>1</sup> Qian-Yi Cheng,<sup>1</sup>  
Zhi-Qiang He,<sup>1</sup> Xu-Tong Yue,<sup>1</sup> Ke-Qin Zhang,<sup>1</sup> Long-Long Zhang,<sup>1</sup> Xue-Mei Niu,<sup>1\*</sup>

State Key Laboratory for Conservation and Utilization of Bio-Resources & Key Laboratory  
for Microbial Resources of the Ministry of Education, School of life Sciences, Yunnan  
University, Kunming 650091, People's Republic of China

Jiao Zhou, Qun-Fu Wu, contributed equally to this work.

**Table S1. List of primers for 275**

Gene	Primer	Sequence (5'-3')
275	275up-F	GAGCTCGGTACCAAGGCCCGGGACTTATCAATTAGGGCTCAC
	275up-R	AGGCCTGATCATCGATGGGCCCAACAAATCGGAATAGGGT
	275down-F	TCTAGAGGATCCCCCGACTAGTCCCAGCATATTAGATAGAG
	275down-R	CACGAAGCTTGCATGCCTGCAGGTTCTCACATAATCCGTCA
	275yz-5f	CGTGAATTCAGCCTCATGAGC
	275yz-3r	AGGTACCACGTTGACGAAGG

**Table S2. List of primers for OE-275**

Gene	Primer	Sequence (5'-3')
275	275-5f	ATGTTCACTTCTCTTCGCTTTCTATG
	275-3r	TTATAGAATAACACAATCACTTCCAAGTTTGGATAGAG
	PUC-5f	GAAGAGAAGTGAACATATCGATGCTTGGGTAGAATAGGT
	PUC-3r	TGTGTTATTCTATAACCACTTAACGTTACTGAAATCATC
	275yz-5f	AAGCAAGGTAAGTGAACGACCC
	275yz-3r	AACTCCGGAGCTGACATCG
	275RT-5f	CTCTAAGTTCAAGCATCGGAC
	275RT-3r	ACGGATAGAGGAGGCAATG
	$\beta$ -tubulin-5f	CCACCTTCGTCGGTAACTC
	$\beta$ -tubulin-3r	TCGTCCATACCCTCACCAG