Identification of Benzyloxy Carbonimidoyl Dicyanide Derivatives as Novel Type III Secretion System Inhibitors via High-Throughput Screening

Yi-Nan Ma^{1†}, Liang Chen^{1,2†}, Nai-Guo Si², Wen-Jun Jiang¹, Zhi-Gang Zhou³, Jun-Li Liu², Li-Qun Zhang^{1*}

¹Department of Plant Pathology and MOA Key Laboratory of Pest Monitoring and Green Management, China Agricultural University, Beijing, China;

²State Key Laboratory of the Discovery and Development of Novel Pesticide, Shenyang Sinochem Agrochemicals R&D Co., Ltd, Shenyang, China.

³China-Norway Joint Lab on Fish Gut Microbiota, Feed Research Institute, Chinese Academy of Agricultural Sciences, Beijing 100081, PR China.

*Corresponding author:

Li-Qun Zhang, zhanglq@cau.edu.cn

†These authors have contributed equally to this work

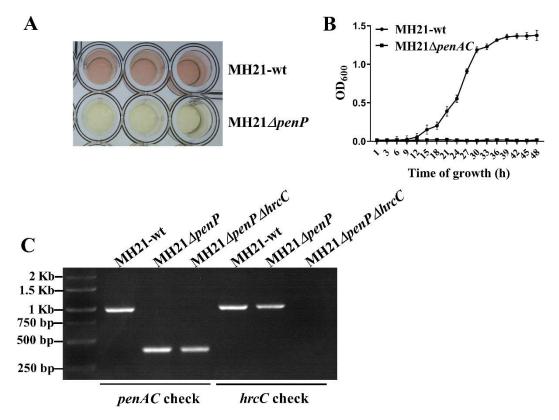


Figure S1. Mutant construction and functional analysis of the *penAC* gene in *Acidovorax citrulli* MH21. (A) Bacterial suspension of MH21 wild-type and mutant $\Delta penAC$. Photographs were taken 15 min after supplementation of nitrocefin (20 µg/mL). (B) Growth curves of MH21 wild-type and mutant $\Delta penAC$ in LB medium supplemented with 50 µg/mL ampicillin (Ap). (C) MH21 wild-type, mutant $\Delta penAC$ and double mutant $\Delta penAC\Delta hrcC$ were confirmed by PCR amplification using penAC-dF/-dR or hrcC-dF/-dR primers, respectively.