

**6.26 P**

**Identification and entomopathogenicity of newly-isolated fungi infecting *Diaphorina citri* Kuwayama (Homoptera: Psyllidae) in Murraya orchards of Fujian, China**

Ruan, C.<sup>1</sup>, Xia, Y.<sup>2</sup>, Liu, B.<sup>1\*</sup>, Chen, J.<sup>3</sup>, Zhu, Y.<sup>1</sup>, Fan, G.<sup>4</sup>, and Sequeira, R.<sup>5</sup>

<sup>1</sup>Agricultural Bio-Resources Research Institute, Fujian Academy of Agricultural Sciences, Fuzhou, Fujian 350003, China

<sup>2</sup>The Center of Integrated Pest Management, North Carolina State University, NC 27695, USA

<sup>3</sup>Key Laboratory of Biopesticide and Chemical Biology, Ministry of Education, Fujian Agriculture and Forestry University, Fuzhou 350002, Fujian, China

<sup>4</sup>Research Institute of Fruit Sciences, Fujian Academy of Agricultural Sciences, Fuzhou, Fujian 350003, China

<sup>5</sup>The United States Department of Agriculture, Animal and Plant Health Inspection Service, Plant Protection and Quarantine, center for plant health science and technology, Raleigh, NC 27606, USA

Among fungal isolates obtained from *Murraya paniculata* L. groves in Fujian, China, seven were tested pathogenic against the Asian citrus psyllid (ACP), *Diaphorina citri* Kuwayama (Homoptera: Psyllidae). In the present paper, the isolates were identified for their taxonomic ranks and compared on their entomopathogenicity against ACP adults. Based on the analysis of conidia morphological data and ITS sequences of 18 S rDNA, the fungal isolates FJAT-9620, FJAT-9621, FJAT-9622, FJAT-9624 and FJAT-9719 were identified as *Beauveria bassiana*, FJAT-9623 as *B. asiatica* and FJAT-9720 as *Lecanicillium attenuatum*. Bioassays revealed that fungal isolates FJAT-9622, FJAT-9623, FJAT-9719 and FJAT-9720 infected adult psyllids with mortality of 95.00-98.33% at 27±1°C and 100% relative humidity (RH) in the laboratory. Meanwhile, isolates FJAT-9620, FJAT-9621 and FJAT-9624 induced significantly lower mortality (3.33-40.00%) on the psyllids.