

Methodology of rearing citrus psyllid pest *Diaphorina citri* (Hemiptera: Liviidae) in laboratory-controlled conditions

Ana C. G. França¹; Ana C. Sato²; Luiz A. N. Sá³

The country is the main producer of oranges and the world's second largest producer of citrus, accounting for 30% of the world's production of sweet orange, 50% of the juice production and 85% of the world market of this commodity, moving US \$ 14.6 billion annually in this chain; which accounts for the generation of 350 thousand jobs in Brazil. The pest citrus psyllid, *Diaphorina citri* Kuwayama (Hemiptera: Psyllidae), sucks the sap of the plant and thus acquires the HLB (Huanglongbing/citrus disease) virus, but also, by the same way, inoculates it in other healthy plants when feeding. Considering the impacts related to the reduction of production due to HLB damage to the trees and their complete eradication, the costs increase significantly due to the reduction of productivity and longevity of the orchards to the point of hindering economic activity under endemic HLB levels. The objective of this work was to rear, establishment and maintenance of a population of citrus psyllid pest (*D. citri*) in the lab conditions, to help in rational programs for the biological control of citrus pests in Brazil. *D. citri* populations were developed from May 2017 to April 2018 with a production between 7,890 to 10,340 individuals. A good establishment and population of citrus psyllid was observed in laboratory-controlled conditions, which demonstrated that the methodology was adequate and essential for the success of the rearing.

Palavras-chave: pest insect; laboratory rearing; biological control of pests

Apoio institucional: CNPq, EMBRAPA, ESALq, FUNDECITRUS

Filiação institucional: 1Bolsista CNPq (PIBIC): Graduação em Ciências Biológicas, Pontifícia Universidade Católica de Campinas, 13.100-000, Campinas - SP; Brasil, E-mail aanacarolinagf22@hotmail.com; 2Graduação em Ciências Biológicas, Pontifícia Universidade Católica de Campinas, Campinas-SP; Brasil; 3Embrapa Meio Ambiente, 13918-110, Jaguariúna-SP, Brasil