

ULTRAMORPHOLOGY AND HISTOLOGY OF OVARIES OF CITRUS PSYLLID, *DIAPHORINA CITRI* KUWAYAMA (HEMIPTERA: PSYLLIDAE)

Fábio C. A. Dossi¹ and Fernando L. Cônsoli²

^{1,2}Escola Superior de Agricultura “Luiz de Queiroz”, Universidade de São Paulo, São Paulo, Brazil.

The psyllid *Diaphorina citri* Kuwayama, is a important pest of citrus due to be a vector of the causative agent of *Huanglongbing*. Despite the importance of the interactions with endosymbionts that play a key role in their nutritional ecology, there is no data available on the morphology and ultrastructure of their reproductive system that act as a route for vertical transmission of symbionts. Thus, this study aimed to characterize the reproductive system during its development to support further studies on the symbiont migration from the bacteriome to the reproductive tissues. *D. citri* has telotrophic ovaries that are similar to that described for other Sternorrhyncha, mainly that of Aleyrodoidea. Ovarioles are organized in a bouquet, and have a rudimentar terminal filament. The trophocytes are devoided of cell membrane once pre-vitellogenesis starts, forming a trophic syncitium. A trophic cord maintains the developing oocyte in communication with the tropharium. Only one oocyte grows at a time in the vitellarium in each maturation cycle. During vitellogenesis, the follicle cells shows an increase in the number of their organelles, and an intensive activity of incoming pinocitic vesicles. The choriogenesis becomes evident at the end of oocyte growth as the chorion is secreted by the follicular cells.