

## EVALUATION OF QUARANTINE RISK OF INTRODUCTION OF *Ceratitis capitata* IN HASS AVOCADOS FROM ARGENTINA

E. Willink<sup>1</sup> and M.E. Villagrán<sup>1</sup>

<sup>1</sup> Estación Experimental Agroindustrial "Obispo Colombres", William Cross 3150, Las Talitas (4101), Tucumán, Argentina. E-mail: ewillink@eeaoc.org.ar

Avocado is generically considered a fruit fly host, for that reason it is included as such in the lists developed by all National Plant Protection Organizations, but Hass has shown resistance to certain fruit fly species in Mexico and Guatemala. The most important economic fruit fly in some regions of Argentina is the medfly, *Ceratitis capitata*. For this reason, a quarantine treatment is mandatory to export to medfly-free countries. The objective of this study was to establish if there is a quarantine risk to export Hass avocados from Argentina without a quarantine treatment. The research included studies of resistance, monitoring adult populations in the field, and postharvest fruit sampling. To determine the host status of avocados, 15 resistance tests were made in different localities, including forced infestations of 750 fruits on plants and 1500 postharvest fruits with 23 to 33% dry matter content. Fruits were caged for 48 hours with 5 mature females per fruit. Seventy six McPhail and 76 Jackson traps for 36 ha were used to monitor adult population of medflies during the export season. Two percent of the fruits exported to Chile were checked in the packinghouse. Resistance trials showed no infestation. The flies/trap/day index during the export season hardly ever exceeded 0.14. Postharvest inspection of 85,520 fruits showed no infestation. All these factors allow to conclude that Hass avocados exported from Argentina without a quarantine treatment do not constitute a quarantine risk for medfly-free countries.