

RESUMEN DEL SEGUNDO SEMINARIO INTERNACIONAL DE SANIDAD AGROPECUARIA (SISA)

**Activity of *Eugenia winzerlingii* Standl extracts on *Bemisia tabaci* Gennadius  
(Hemiptera: Aleyrodidae)**

**Efecto de extractos de *Eugenia winzerlingii* Standl contra *Bemisia tabaci* Gennadius  
(Hemiptera: Aleyrodidae)**

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The whitefly (*Bemisia tabaci* Genn.) is a widely distributed and highly harmful plant pest. Selection of resistant populations to chemical pesticides exacerbated the whitefly problem in many crop productions. Currently, there is enormous impetus for the development of natural alternatives to manage *B. tabaci*. *Eugenia winzerlingii* (Myrtaceae) is an endemic plant located in southern México. Previous studies have shown that ethanol extracts of leaves have nematicidal and repellent properties against *Meloidogyne incognita* and *Myzus persicae*. Therefore, the objective of this study was to determine the repellent and insecticidal effect of aqueous and organic extracts of *E. winzerlingii* leaves against eggs, nymphs and adult whiteflies, under laboratory conditions. On *B. tabaci* eggs, the aqueous extract was the most active. This extract showed values of 0.21 and 1.29 % w/v for LC<sub>50</sub> and LC<sub>90</sub>, respectively. In contrast, *B. tabaci* nymphs were affected only by organic extracts. In this regard, the ethyl acetate extract showed the lowest values for LC<sub>50</sub> and LC<sub>90</sub> (0.25 and 3.10 mg mL<sup>-1</sup>, respectively). This extract was also the most active against adult settling, where more than 80% inhibition was observed. To the best of our knowledge no reports on insecticidal activity or chemical constituents of *E. winzerlingii* have been reported. This plant species might be considered a good candidate for natural sources of insecticides to manage whitefly.