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# Effects of *Tagetes coronopifolia* and *T. lemmonii* (Asteraceae) essential oils in nymphs of *Diaphorina citri* (Hemiptera: Psyllidae)

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Worldwide, the management of Asian citrus psyllid, *Diaphorina citri* Kuwayama (Hemiptera: Psyllidae) is performed mainly by the use of agrochemicals. Often, indiscriminate use of insecticides has resulted in the elimination of natural enemies and in the development of insecticide resistance in the target pest and in no target insects. This situation has motivated the generation and implementation of alternative strategies, such as the use of insecticidal plants. This study was carried out to evaluate the toxic effect of *Tagetes coronopifolia* Willd. and *T. lemmonii* A. Gray (Asteraceae) essential oils in *D. citri* third instar nymphs. Effect was evaluated by orange disc immersion method. Mortality was recorded 24 hours after applying the oils; the log dose response line Probit and the LC<sub>50</sub> values were determined. *T. coronopifolia* and *T. lemmonni* oils were toxic to *D. citri* nymphs and the effect was positively related to the concentration. Highest nymph mortality ( $\geq 98\%$ ) with both oils was registered in concentrations of 10 mg mL<sup>-1</sup>. The LC<sub>50</sub> estimated for *T. lemmonii* and *T. coronopifolia* oils was 0.034 and 0.094 mg mL<sup>-1</sup>, respectively.

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