FIRST RECORD AND PREDATORY ACTIVITY OF *EXOCHOMUS MARGINIPENNIS* (LECONTE) (COLEOPTERA: COCCINELLIDAE) ON *DIAPHORINA CITRI* KUWAYAMA (HEMIPTERA: LIVIIDAE)[1]

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ABSTRACT: The Asian citrus psyllid (ACP) *Diaphorina citri* Kuwayama (Hemiptera: Liviidae) was detected in Mexico in 2002, and since then national researchers have been sampling in different production areas of citrus in order to find natural enemies with potential as biological control agents to be included in integrated pest management programs. In September 2013, an unidentified coccinellid species was observed apparently feeding on *D. citri* in the state of Colima, Mexico. The aim of this work is to identify this coccinellid and verify if *D. citri* is part of its diet. The coccinellid was identified as *Exochomus marginipennis* (LeConte). Under laboratory conditions feeding habits were studied, and it was verified that adults of *E. marginipennis* can feed on both eggs and larvae of *D. citri*.

KEY WORDS: *Murraya paniculata*, citrus, biological control, natural enemy, Mexico

Once the Asian citrus psyllid (ACP) *Diaphorina citri* Kuwayama (Hemiptera: Liviidae) was detected in Mexico in 2002, national researchers began sampling in different production areas of citrus in order to find natural enemies with potential as biological control agents to be included in integrated pest management programs. Today *D. citri* is considered the most important pest of citrus since it transmits *Candidatus Liberibacter* spp., the bacterium that is associated with Huanglongbing or HLB, which is responsible for the death of millions of citrus trees worldwide (Halbert and Manjunath, 2004; Bové, 2006). In Mexico there are about 549,000 hectares of established citrus, with a production amount of approximately 7 million tons annually; this yield is being affected by HLB (Salcedo et al., 2012).

In Mexico, as in other parts of the world, several species of the family Coccinellidae are frequently mentioned within the complex of natural enemies of *D. citri*. In Florida, Puerto Rico and Cuba, this family of insects is important as a regulator of *D. citri* populations (Michaud, 2001, 2004; González et al., 2003; Pluke et al., 2005). Michaud and Olsen (2004) found that in Florida at least five species of ladybirds are often present in citrus crops (*Exochomus childreni* Mulsant, *Olla v-nigrum* (Mulsant), *Curinus coeruleus* Mulsant, *Harmonia axyridis* (Pallas) and *Cycloneda sanguinea* (L)). Those species develop their full life

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