9.12 Identification of Parasitoids and Haplotypes of *Tamarixia radiata* (Waterston) (Hymenoptera: Eulophidae) from *Diaphorina citri* in Yucatán, México

González-Hernández, A.¹, Jasso-Argumedo, J.², Cruz-García, R.¹, Lozano-Contreras, M.², López-Arroyo, J.I.³, Villanueva-Segura, O.K.¹

¹UANL, Facultad de Ciencias Biológicas, San Nicolás de los Garza, N.L., México  
²INIFAP, Centro de Investigación Regional del Sureste, Mérida, Yuc., México  
³INIFAP, Centro de Investigación Regional del Noreste, Río Bravo, Tam., México  
agonzale@fcb.uanl.mx.

Recent studies from 2007 to 2010 have shown morphological and genetic variation in *Tamarixia radiata* (Waterston), as well as possible cryptic species. The main objective of this work is to identify the parasitoids associated with *Diaphorina citri* and to characterize the haplotypes of *T. radiata* present in Yucatán, México. During January to July of 2010, 76 samples of immature *D. citri* were collected from citrus plants and *Murraya* sp. from 161 different, sampled localities. Species identification was done through comparison of amplified sequences and those available at GeneBank. Phylogeny was rebuilt using the program Mega 4.1. The results showed the following parasitoids: *Tamarixia radiata*, *Aprostocetus* sp., *Horismenus* sp., *Pachyneuron* sp., and *Synopeas* sp. Most of the genetic diversity was found in gen COI from the identified specimens of *T. radiata*; four different haplotypes were obtained: H1, H2, H3, and H4. Comparing Haplotypes (H) from the current study and previous works, it was found that H1 is similar to H2 from Barr et al. (2010) and also similar to H7 from de León and Sétamou (2010). The H2 is similar to H1 from Barr et al. (2010) and also similar to H2 from de León and Sétamou (2010). The Haplotypes H3 and H4 are unique from México. The H1 is the most common; this is similar to the records found in de León and Sétamou (2010) and Barr et al. (2010). There is only one record of the Haplotype H4. We found one cryptic species that has not been reported in previous work.