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***Brachygastra mellifica* (Hymenoptera: Vespidae): Predation preference and feeding behavior on *Diaphorina citri* (Hemiptera: Psyllidae) in Mexico**

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In previous field studies in Northern Mexico, we found the wasp *Brachygastra mellifica* (Say 1837) (Hymenoptera: Vespidae) preying voraciously the Asian citrus psyllid (ACP), *Diaphorina citri* Kuwayama (Hemiptera: Psyllidae), the vector of the bacteria *Ca. Liberibacter* spp., the putative agent of Huanglongbing, one of the most devastating citrus disease in the world. As in Mexico, the ACP management considers the use of pest biological control, the availability of potential agents for the control of the vector remains as a priority. The objective of this study was to determine the predation preference of the wasp for the different developmental stages of *D. citri*. During 2011-2012, we performed experiments in field where we exposed manually to the predator new citrus flushes infested by eggs and diverse ACP nymphal instars. The predation behavior was recorded in videos and posteriorly analyzed in the lab. Other observations on its feeding attack were made directly on infested flushes in the trees, during the foraging activity of the wasp. Results indicated that *B. mellifica* preferred for predation 4<sup>th</sup> and 5<sup>th</sup> instar nymphs, and posteriorly 2<sup>nd</sup> and 3<sup>rd</sup> instars. Due to their size and position in the flush, eggs and first instar nymphs were practically discriminated by the wasp. Occasionally, *B. mellifica* consumed *D. citri* adults. This predator represents a potential agent for natural control of *D. citri* in the North of Mexico, and South of the USA, mainly through conservation strategies of beneficial insects.