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**P-78 Attacked Citrus Plants Release Synomones that Attract an Egg Parasitoid,
Cosmocomoidea annulicornis (Hymenoptera: Mymaridae)**

Carolina Manzano^{1*}, **María Victoria Coll Aráoz**¹, Erica Luft Albarracín¹, Patricia C. Fernández^{2,3}

¹División Control Biológico, PROIMI-Biotecnología (CONICET).

Av. Manuel Belgrano 2960 (T4001MVB) Tucumán, Argentina.

²CONICET-INTA EEA Delta del Paraná, Buenos Aires, Argentina.

³Universidad de Buenos Aires, Facultad de Agronomía, Cátedra de Química de Biomoléculas.

*Correspondence: caromanzano@proimi.org.ar

It is known that hymenopteran parasitoids generally use a combination of host kairomones and plant induced synomones to locate their hosts. *Cosmocomoidea annulicornis* (Hymenoptera: Mymaridae) is an egg parasitoid frequently found attacking eggs masses of *Tapajosa rubromarginata* (Hemiptera: Cicadellidae), a xylem-feeding sharpshooter vector of *Xylella fastidiosa*, the bacteria that causes Variegated Citrus Chlorosis. In the present study, we evaluated the volatile attraction capacity of citrus plants induced solely by feeding damage of *T. rubromarginata*, without egg masses, to investigate whether plant volatiles alone could act as cues for host finding. Newly emerged *G. annulicornis* (< 12 h), naïve females were used for behavioral assays with Y tube olfactometer dual choice tests (n=40). For the induced treatment, Citrus plants (2 years plants, *Citrus aurantium* var. 75AB, a variety used for grafting lemon trees) were kept in voile fabric bags along with 15 males of *T. rubromarginata* (to avoid oviposition of females) for 24 h before measurements. Non-induced treatment consisted of healthy citrus plants. Females were offered: (a) Air (control) versus Non-induced plants and (b) Non-induced plants versus Induced plants. Wasps had no preferences between the choices offered in the first experiment (a) (p>0.05), however, when wasps were offered Non-induced plants versus Induced plants, 67.5% parasitoids chose plants attacked by *T. rubromarginata*. Plant volatiles were isolated and analyzed according to the procedure described by Braccini et al (2015). Non-induced plants produced almost exclusively limonene, whereas induced plants produced a more complex monoterpene mixture. Based on these results, *T. rubromarginata* feeding damage induces plant synomones, that would be important in *C. annulicornis* host searching behavior.

Braccini, C. L., Vega, A. S., Coll Aráoz, M.V., Teal P. E., Cerrillo, T., Zavala, J. A. & Fernández, P.C. (2015). *J chemecol*, 41(11), 985-996.