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EVALUATION OF PHEROMONE AND LIGHT TRAPS FOR THE CITRUS BORER *Diploschema rotundicolle* (COLEOPTERA: CERAMBYCIDAE).

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KEYWORDS: Citrus borer; *Cerambycidae*; 3-hydroxyhexan-2-one.

ABSTRACT: The citrus borer, *Diploschema rotundicolle* (Coleoptera: Cerambycidae), is a longhorn beetle native to South America and regarded as a serious citrus pest in Uruguay. High infestation levels cause an overall deterioration of the tree structure, resulting in important yield reduction. Currently, the only available management strategy is cultural control by trimming off infested branches, which is expensive in labor costs and mostly inefficient. Our work aims at the development of an effective trapping system that could eventually be used for management strategies of this pest. Our work on the chemical communication system of *D. rotundicolle* has shown that males produce large amounts of (3R)-3-hydroxy-2-hexanone and some minor compounds, including 2,3-hexanediol and 2,3-hexanedione. This a nocturnal beetle, and preliminary work has shown attraction to light traps. In this study, a field trial was carried on to test the pheromone and light stimulus in combination, using cross-vane traps in a citrus grove, during the summer of 2018/19. Tested attractants included the racemic hydroxyketone, racemic hydroxyketone plus hexanediol, led light, led light plus the two pheromone compounds, and isopropanol as control. The results show a clear effect of light and only a tendency for higher catches in light traps with pheromone than in light traps alone, suggesting that light and chemical stimuli might be used in combination but a better chemical stimulus is needed to enhance field trapping for management purposes.