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Diatraea saccharalis (FABRICIUS, 1794) (LEPIDOPTERA: CRAMBIDAE) MALE RESPONSES IN WIND TUNNEL.

Nancy Barreto-Triana[1]; Yuly Sandoval-Caceres[2]; Liliana Cely –Pardo[3]; Yajaira Romero-Barrera[4]; Ginna Natalia Cruz-Castiblanco[5].

Corporación Colombiana de Investigación Agropecuaria; [1]nbarreto@agrosavia.co; [2]ysandoval@agrosavia.co; [3]ncely@agrosavia.co; [4]yromero@agrosavia.co; [5]gcruz@agrosavia.co.

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ABSTRACT: In order to determine the attraction of *D. saccharalis* males in wind tunnel, two bioassays were conducted on one- and two-days old (1 d.o. and 2 d.o.) virgin adults. The tests were carried out under controlled conditions 25°C, 50% HR, wind speed 0.30 m/s and inverted photoperiod 12h L:12h D, between the fifth and twelfth hour from the beginning of the scotophase. In the first trial (E1), male response to virgin females was evaluated, 15 males were tested by placing five females per age in a plastic cage. Each male was observed for 10 minutes, recording the response to the stimulus released by the females, Female free control was used (n = 10 for each male age). For the second trial (E2) male response to concentrated sex glands in n-hexane (16 female glands in average per ml) was evaluated. Thirty males were evaluated per treatment, applying 10µl of extract on a filter paper for each evaluation, and the response time to the stimulus and their behavior inside the tunnel was recorded during five minutes. Treatments for both trials corresponded to T1 (♂ 2 d.o. ♀ 1 d.o.), T2 (♂ 2 d.o. ♀ 2 d.o.), T3 (♂ 1 d.o. ♀ 2 d.o.) and T4 (♂ 1 d.o. ♀ 1 d.o.). Data analysis was carried out under generalized linear models, using the binomial distribution; the LSD-Fisher with Bonferroni correction was performed; the association between treatments and displacement inside the tunnel was evaluated using the chi-square test. The results obtained indicate that, for Trial one (E1), T4 showed the highest number of males that responded to the stimulus (80%), followed by T3 (40%). For Trial two (E2), the highest male response corresponded to T4 and T3 (63,33 % and 56,67%, respectively). The chi-square test showed no association between treatments and displacement in the tunnel. Extracts that presented the greatest response stimulus in males are being identified to determine the sex pheromone composition for *D. saccharalis* colombian populations.