ATTRACTION OF TRIATOMINAE BY *EUTERPE OLERACEA* FRUIT AND SYNERGISM EVALUATION IN THE PRESENCE OF CO2

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It has been recently reported several cases of oral transmission of Chagas Disease (CD) through açaí (*Euterpe oleracea*) consume. Gradient of temperature, UV light, high relative humidity and volatile compounds such as CO2 and organic acids are known to attract triatominae, the vectors of CD. To determine the main variables of insect attraction by açaí fruits, tests were performed with *Rhodnius pictipes* using açaí fruits (10 Kg) or a mixture of organic acids produced during the spontaneous fermentation of the fruits, i.e. propionic, butyric, valeric and lactic acids (40mg:0.4mg:0.4mg:40mg/mL), in the absence or presence (1%, w:w) of CO2. The tests were performed with fourteen adults monitored by an infrared camera, during 30 minutes in a box divided into four lanes, one of them randomly chosen to receive the odor’s sample and the three other ones as negative control. Positive responses were found in the four tests regarding the attraction of the insects by volatile compounds, however, on a more expressive way in the presence of CO2, achieving five insects. The test with fruits without CO2 attracted four insects. Similar tests with CO2 did not show significant attraction of insects, probably because the added CO2 has summed with that one produced by the fruit respiration. These results clearly show that there is attraction of the insects by açaí fruits, which is correlated with the production of organic compounds and environmental factors such as the higher fruit temperature during the spontaneous fermentation and a high relative humidity.