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ABSTRACTS

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BOOK I

[0956] **BIOLOGICAL ASPECTS, POPULATION DENSITY, DAMAGE RATE AND BEHAVIOR OF THE FRUIT-BORER, *CONOTRACHELUS* SP. (COLEOPTERA: CURCULIONIDAE) ON CUPUAÇU TREE (*THEOBROMA GRANDIFLORUM* SCHUM.) IN AMAZONIAN REGION, BRAZIL**

J.A.Duarte-Aguilar¹ & A.M.Tavares², ¹ Embrapa Amazônia Ocidental – CNPq/DCR, Lab. de Entomologia, Rodovia AM-010, Km 29, C.P. 319, CEP 69011-970, Manaus, AM, E-mail sac@cpaa.embrapa.br, ²Embrapa Amazônia Ocidental, Lab. de Entomologia, Rodovia AM 010, Km 29, C.P. 319, CEP 69011-970, Manaus, AM, E-mail adauto@cpaa.embrapa.br.

The fruit-borer (*Conotrachelus* sp.) has been causing severe economic damage in the cupuaçu tree plantations (*Theobroma grandiflorum* Schum.) in the Amazon region. In order to estimate the damage of this pest on fruits production, surveys were carried out in areas nearby Manaus, in plants age six years and over, collecting twenty fruits once a week. In each sample of fruit, the number of holes, where the larvae are going out, were counted, and then opened to quantify the larvae in fruits. Biological and behavioral parameters were studied in laboratory, putting the larvae recently emerged from fruits (last instar) into plastic boxes, using as substrate a mixture made of soil and vermiculite in the proportion of 2:1, sterilized at 160 °C and moistened with distilled water. The cultures were kept at room temperature (27 ± 2 °C), relative humidity ($80 \pm 10\%$) and photoperiod of 12:00. The intensity of insects on fruits during February to May 1998 and 1999 were 93% and 66%, respectively. Were also observed that 63%; 24% and 13% of the larvae built up their pupal chambers in the soil at depths of 10, 12 and 15 cm, respectively. The emergence time of adults from the soil was 49 to 80 days, with 81,6% of viability. In areas where the fallen fruits were regularly collected from the ground, the extraction process of the fruit pulp were made in an adequate local, including the destruction of the peels, were observed a notable reduction of the insect density to 27 %. The results show that the cultural control was efficient in the reduction of the population of *Conotrachelus*.

Index terms: Tropical pests, cultural control, injury level