

ETHANOL AND METHANOL AS ATTRACTANTS TO SCOLYTINAE (COLEOPTERA, CURCULIONIDAE) IN A CERRADÃO FRAGMENT IN SOUTHERN BRAZIL.

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Scolytinae are important beetles in most forestry environments, and under several conditions they may play an economic role, becoming pests. Monitoring of these beetles is a key element in any program of pest management, and the usage of traps is usually one of the best options in such operations. In Brazil, ethanol is a bait widely used in monitoring programs, but methanol has been reported as an important lure to monitor the coffee berry borer, Hypothenemus hampei, in coffee plantations. The main objective of this experiment was to compare the efficacy of methanol with the one of ethanol in a forestry environment, in an attempt to improve monitoring efficiency. Flight intercept traps baited with ethanol alone and ethanol + methanol (ETME) were set in a well preserved cerradão fragment in Selvíria, state of Mato Grosso do Sul, Brazil, in January 2010. Trapping frequency was weekly, and results from 21 weeks of trappings are presented here. In all, 535 Scolytinae specimens were trapped, in 10 genera and 28 species. Most abundant genera were Ambrosiodmus, Cryptocarenus, Hypothenemus, Premnobius, Sampsonius and Xyleborus. Statistical analyses were performed with the 12 most abundant species. Hypothenemus obscurus, P. cavipennis, S. dampfi and X. affinis were significantly more trapped in ethanol-baited traps, while A. obliquus, C. diadematus, C. heveae, H. dolosus and Hypothenemus sp. were most trapped in ETME traps. There were no statistically significant differences in catches for C. seriatus, H. eruditus and Microcorthylus quadridens. Overall, Hypothenemus specimens were significantly more trapped in ETME-baited traps, while Scolytinae as a whole, with Hypothenemus specimens included or not in the analyses, were more caught in ethanol-baited traps. Most of the species significantly more trapped with ETME as a bait are usually considered as secondary and not harmful to forest trees. Hence these results indicate that ETME is not a good alternative to ethanol in monitoring Scolytinae in forests, at least under the conditions prevalent in this experiment.