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Scolytidae (Coleoptera) in forest fragment of semideciduous tropical forest and reforestation of riparian vegetation in southern of Brazil

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Scolytidae beetles are important as biological agents, because participate in nutrient cycling and aid in the decomposition of dead plants, contributing to the maintenance of forest dynamics. This study compared abundance and diversity of Scolytidae in forest fragment of semideciduous tropical forest and reforestation of riparian vegetation, and verified if the reforestation has conditions to host these beetles. The individuals were collected with baited pitfalls from May 2007 to April 2008 in adjacent reforestation and forest fragment, in Alvorada do Sul (Paraná, Brazil). 1133 individuals of Scolytidae of 10 different species were collected, which 85,8% were from forest fragment and 14,2% from reforestation. *Coccotrypes* sp.1 was the most abundant specie in both areas. There were more individuals in the fragment in January and February, while for the reforestation in March. These results are correlated with values obtained for *Coccotrypes* sp.1 for these months, coinciding with the hot and rainy season. However, no significant correlation between the number of individuals with temperature and rainfall was found. Shannon-Wiener index is similar for both areas ($H'_{fragment}$=0,68; $H'_{reforestation}$=0,87; t=-1,91; p=0,06). The equitability between two areas indicates that the distribution of the species not is regular ($E_{fragment}$=0,33; $E_{reforestation}$=0,43), probably because of the high number of *Coccotrypes* sp.1. This high number of *Coccotrypes* sp.1 also reflects in the dominance of the species ($D_{fragment}$=0,63; $D_{reforestation}$=0,57). However, the Sorensen similarity between two areas is high (75%), possibly because there is an interaction between forest fragment and reforestation. The resemblance between forest fragment and reforestation in relation to diversity and high similarity may indicates that the reforestation provides environmental conditions to host some species of Scolytidae, and that forest fragment may be acting as a source of these beetles for the adjacent reforestation. (Acknowledgments: Universidade Estadual de Londrina, Fundação Araucária, CNPq).