

Diversity of Scolytinae (Coleoptera: Curculionidae) in Forest Formations

Elisângela N. Lopes¹; Wesley A.C Godoy², Carlos A. H. Flechtmann³

¹Department of Entomology and Acarology, ESALQ/USP, C.P. 11, 13418-900 - Piracicaba/SP, Brazil, elisangela.lopes@usp.br

²Department of Entomology and Acarology, ESALQ/USP, C.P. 11, 13418-900 - Piracicaba/SP, Brazil, wacgodoy@usp.br

³Department of Plant Protection, FEIS/UNESP, Av. Brasil 56, 15385-000 - Ilha Solteira/SP, Brazil, flechtma@bio.feis.unesp.br

Over 95% of implanted forests in Brazil consist of *Eucalyptus* and *Pinus* species, which are exotic to the country. With the increase in forested land through reforestation with these species, there is a rise in the interest of studying Scolytinae beetles, which are considered to have important pest species in these environments. The cumulative gathering of biological and ecological information on these beetle borers are adamant in the implementation of effective control strategy techniques. The objective of this experiment was to compare the fauna of Scolytinae in five different forested areas. Sites were stands of 6.0 ha 32-year old *Eucalyptus urophylla*, a 3.6 ha 10-year old *Eucalyptus grandis*, a 7.2 ha 32-year old *Pinus oocarpa* + *Pinus caribaea* var. *hondurensis*, a 8.0 ha 25-year old secondary natural growth forest and a 5.4 ha 8-year old area reforested with native trees. The sites were located in the "Estação Experimental de Ciências Florestais de Anhembi" (22°40'S 48°10'W, 455 m a.s.l.), in Anhembi, state of São Paulo, Brazil, belonging to the ESALQ/USP university. We used five 95% ethanol-baited flight intercept traps in each of the sites, to collect for Scolytinae beetles. Baiting frequency was biweekly, from April 2011 until 2012. *Eucalyptus urophylla* and *E. grandis* stands showed the highest Scolytinae diversity and beetle abundance, respectively. The species *Hypothenemus eruditus* and *Xyleborus affinis* were the most frequent species in all five collecting sites. The most abundant species were *Premnobius cavipennis*, followed by *H. eruditus* and *X. affinis*. Results show that *Eucalyptus* stands provide good conditions for the growth and maintenance of Scolytinae beetles, where they thrive in higher numbers than in stands composed of native trees.

Keywords: ambrosia beetles; *Eucalyptus*; monitoring.

Support: Conselho Nacional de Desenvolvimento Científico e Tecnológico (CNPq).