

# Biodiversity of Scolytinae and Platypodinae (Coleoptera, Curculionidae) in the Brazilian Northwestern Amazon Forest

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Bark and ambrosia beetles (Curculionidae, Scolytinae and Platypodinae) are important forest insects, and in many occasions they are of economic importance. The biodiversity of these beetles in Brazil is better known for the southern part of the state, while in the rich Amazon forest it is comparatively poorly studied. Our experimental sites were three vegetation covers belonging to the CEPLAC Cocoa Research Station, in Ouro Preto do Oeste, state of Rondônia, Brazil. Sites were a 100-ha well preserved Amazon forest fragment (10°43'12.60"S 62°13'45.40"W), a 16-year old 1-ha intercropping area cultivated with peach palm (*Bactris gasipaes* Kunth), cocoa (*Theobroma cacao* L.) and coffee (*Coffea arabica* L.) (10°43'31.82"S 62°14'0.68"W) and a 16-year old 1-ha 'capoeira' area (second-growth forest enriched with planting of native trees) (10°43'1.85"S 62°13'22.72"W). In each site, eleven 95% ethanol-baited flight intercept traps are being used to trap for the target beetles, in weekly collections, since January 2011. Scolytinae beetles predominated both in diversity and abundance over Platypodinae. The Scolytinae diversity was high, totaling 112 species, belonging to 22 different genera, *Ambrosiodmus*, *Camptocerus*, *Cnesinus*, *Corthylus*, *Coccotrypes*, *Cryptocarenum*, *Dendrosinus*, *Dryocoetoides*, *Hylocurus*, *Hypocryphalus*, *Hypothenemus*, *Metacorthylus*, *Microcorthylus*, *Phloeoborus*, *Pityophthorus*, *Premnobius*, *Sampsonius*, *Scolytus*, *Taurodemus*, *Xyleborus*, *Xyleborinus*, and *Xylosandrus*. In Platypodinae, 2 genera and 12 species were trapped. Both capoeira and forest fragments had similar numbers of Scolytinae species (86 and 85 species, respectively), and higher than in intercropping (61 species). Several species were present in all sites, but others were present in only one area. Scolytinae beetles corresponded to over 98% of trapped specimens. *Cryptocarenum* and *Hypothenemus* beetles, typical of disturbed areas, were significantly more abundant in the intercropping site.

**Keywords:** flight intercept trap; ambrosia beetle; ethanol.