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D3838 Biodiversity and vertical stratification of Scolytinae and Platypodinae (Curculionidae) in an Amazonian forest fragment of Amapá, Brazil

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West Hall C (Convention Center)

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Bark and ambrosia beetles are an important group of beetle borers in the forest environment worldwide. In Brazil, they are better studied in implanted forests, mainly in the southern part of the country. Surprisingly, the few publications that deal with Amazonian representatives list mainly secondary species. The objectives of our research are two-fold: to survey the bark and ambrosia beetle biodiversity of an Amazon rainforest, and to understand how a vertical stratification impacts both their diversity and abundance.

The site is a 60-ha well preserved terra firme ombrophilous forest fragment, (central coordinates are 1°7'59.60"N 51°18'2.40"W), in Tartarugalzinho, state of Amapá, Brazil. The survey has been done biweekly with 95% ethanol baited flight intercept traps at 2-m height intervals, from ground level until the beginning of dominant tree canopy (24 m),

totaling 13 traps per sampling point. Partial results presented here are based on the first seven weeks of collecting, from April to July 2015.

An impressive number of over 90 species of Scolytinae and Platypodinae were trapped. The most abundant species showed a large flight height range, flying from ground until the lower canopy. *Xyleborus affinis* and *Xylosandrus compactus* were significantly more trapped at ground level, *Cryptocarenum seriatus* and *Euplatypus parallelus* at the highest traps (above 20 m), while *Hypothenemus obscurus* and *Cnemonix niger* at intermediate heights, 8-10 m and 4-6 m, respectively. Traps at ground level trapped the lowest number of species (5), while traps at 20 m trapped the highest number (26).

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