

Seasonality of ambrosia and false powderpost beetles (Coleoptera) in the Paraiban semiarid (Paraíba, Brazil)

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Borers of the sub-family Scolytinae (Curculionidae) develop usually in woody and moist plant material such as trees and shrubs, and constitute an important group of beetles in forest environments worldwide. Knowledge on its diversity in Brazil concentrates mostly on the southern part of the country. The caatinga biome corresponds to the largest dry forest in South America, and covers the northeastern part of Brazil. Despite its importance, not much is known about its insect biodiversity, particularly for Scolytinae beetles. Our objective was to understand the seasonal variation and biodiversity of Scolytinae and Bostrichidae beetles in a well preserved 20-ha caatinga fragment, located at Farm Tamanduá (7°1'30.3"S 37°24'22.5"W), in Santa Terezinha, state of Paraíba, Brazil. One week a month from September 2013 until May 2014, encompassing the dry (September-December) and rainy (February-May) seasons we surveyed these beetles with ethanol-baited flight intercept traps. Surprisingly only 72 specimens were trapped, with roughly equal numbers of specimens of Scolytinae (32) and Bostrichidae (40). While in Bostrichidae four species were trapped, within *Bostrichopsis*, *Dolichobostrichus*, and *Xylionulus*, only *Hypothenemus* species were found in Scolytinae. The small numbers of beetles trapped allow only for inferences, but results indicate there was a trend, with Bostrichidae being more trapped in the dry season (over 90% specimens), while Scolytinae during the rainy season (also over 90% specimens). Bostrichidae typically develop in dry plant material, while Scolytinae usually need a certain degree of moisture to breed inside their hosts. This suggests the observed seasonality matches with the degree of moisture needed for beetle development. The number of Bostrichidae species was similar to, but far smaller than the number of Scolytinae species observed by us in an anthropized and small caatinga fragment distant less than 20 km of this current locality.

Keywords: Scolytinae, Bostrichidae, flight intercept trap.