

## **6. RESUMO**

O objetivo deste estudo foi testar a hipótese de que solos e unidades de paisagem são preditores de distribuição, abundância, riqueza e diversidade de plantas lenhosas na caatinga. O estudo foi realizado na região de Xingó, localizada entre os estados da Bahia, Sergipe e Alagoas ( $09^{\circ}30' - 10^{\circ}00'$  S e  $37^{\circ}30' - 38^{\circ}00'$  W) onde a vegetação predominante é a savana-estépica arborizada. Em um polígono de 60 km x 44,2 km (2652 km<sup>2</sup>) foram distribuídas 90 parcelas de 0,1 ha, onde todos os indivíduos com dap  $\geq 5$  cm foram amostrados. No total foram amostradas 101 espécies lenhosas, entre as quais 24 muito abundantes ( $> 50$  indivíduos) e 12 muito freqüentes (amostradas  $> 39$  parcelas). Entre este grupo de espécies, nenhuma teve distribuição associada a classes de solo ou a unidades de paisagem. Todavia, 16 e 15 espécies deste grupo tiveram suas abundâncias associadas a classes de solo e unidades de paisagem, respectivamente. Ao contrário do esperado, apenas unidades de paisagem esteve associado à mudanças significativas na riqueza e na diversidade de espécies lenhosas na área de estudo.

## **7. ABSTRACT**

This study aimed to test the hypothesis that soil and landscape units are predictors of distribution, richness and diversity of woody plant species in the caatinga vegetation of northeastern Brazil. The study was carried out in the Xingó region, located between the States of Bahia, Sergipe and Alagoas ( $09^{\circ}30' - 10^{\circ}00'$  S e  $37^{\circ}30' - 38^{\circ}00'$  W). Ninety 0.1-ha plots were set randomly in a region of  $60\text{ km} \times 44.2\text{ km}$  ( $2652\text{ km}^2$ ), in which all individuals  $> 5$  dbh were sampled. Within these 90 plots, 101 plant species were recorded. Among these 101 species, 24 were classified as very abundant ( $> 50$  individuals recorded) and 12 as very frequent (recorded  $> 39$  plots). No species had their distribution associated with both soil and landscape units. In contrast, 15 and 16 species have their abundance associated with different soil types and landscape units, respectively. In addition, only landscape unit was associated with differences on species richness and species diversity among the 90 plots. Our results support the idea that soil and landscape units are good predictor of woody plant species abundance and distribution as well as of species richness and diversity in the caatinga vegetation of Brazil.

Key-words: Brazil, Caatinga vegetation, soil, species richness, woody plants species.