

DIAMETRIC AND HYPSOMETRIC STRUCTURE IN A REMAINING OF CAATINGA IN BARRA DE SANTANA CITY, PARAÍBA

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The Caatinga is a complex and diverse ecosystem, showing the plurality of phytophysiognomy that reflects the conditions of weather, relief and geological basement, resulting in an ecologically diverse environment. The different uses in these vegetation, influence in your floristic composition and structural. From the study of diametric and vertical structure of vegetation it is possible to analyze the stage of development and sustainability. It was aimed at analyzing the diametric and hypsometric structure of shrub-arboreal species in a fragment of Caatinga located in Barra de Santana (PB) city. Were established 35 plots (4 m x 50 m) totality to sample area of 0.7 hectare, with all individuals with ground-level stem diameters of ≥ 3 cm and heights ≥ 1 m measured. The graphs of frequency and diameter, and height distribution showed ranges of 3 cm and 1 m, respectively. Were sampled 2184 individuals and the total floristic richness were 25 species. The curve of diameter distribution of individuals follows the characteristic patterns of Naturals Forest, with a greater disposition of individuals in the first three classes (91.61%) assuming the conformation of a negative exponential curve. This pattern of distribution indicates there is a positive balance between recruitment and mortality rates of individuals in community, otherwise aimed at constant decrease in individual's number of the class to the next, what can indicate the occurrence of recently disturbances framing the remnant as self-regenerating. The distribution hypsometric configuration remained with the same pattern of diametric, with greater concentration of individuals in the three lower height classes (95.14%), with most of individuals showing height lower 3 m. The lowers values of height and diameter reflect the influence of anthropic disturbances, indicating the studied fragment is in the initial stage of succession.

Key words: Semi arid, Caatinga, Human action

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