

CHALLENGES FOR PLANT PHYSIOLOGY

**FOOD PRODUCTION AND SUSTAINABILITY** 

## Biometry of seedlings of Bertholletia excelsa in different growth conditions

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Biometry of seedlings of Bertholletia excelsa in different growth conditions Boeno LC1, Silva AC1, Silva KNC1, Bouvié L2, Borella DR2, Baldoni AB3. 1Institute of Agrarian and Environmental Sciences, Federal University of Mato Grosso (UFMT), Sinop, MT, Brazil; Email: lauraboeno@hotmail.com; 2Program of Post-Graduation in Environmental Physics, Institute of Physics, UFMT, Cuiabá, Brazil; 3Embrapa Agrossilvipastoril, Sinop, MT, Brazil. Brazil nut presents fundamental importance among the non-timber products of the Amazon region, demanding more information about the management of this species and its cultural treatment when domesticated. The objective of this study was to determine the morphometry of growth variables in Brazil nut tree seedlings in different root growth containers and different dates of seed collection. As the seedlings were found in suspended table, in a vivarium with 50% solar interception, at Embrapa Agrossilvipastoril, Sinop-MT. Between January and February 2019, a total height (cm), diameter (mm), number of leaves, and determined leaf area (AF) were measured by means of length and width (cm) measurements. All the leaves of the seedlings, being the seedlings of different ages (harvest 2016 and 2017), and in the containers of 11 and 21 liters of volume, organized in a completely randomized design, with 15 plants per repetition in each treatment, totaling 60 plants. Was used an equation AF =  $\{0.8743 * [(C + C)^2]\}$ \* L) 0.9790)]} - 1.84 in the limbo area . Through the analysis of variance and Tukey test (5%), can be seen that the comparison was not significant on the leaf area, age and on the number of leaves. However, the interaction between the age and vessel series was significant for the variables of FA, total height and diameter of the seedlings. For the brasil nuts seedlings the container it is a limiting parameter of the initial growth variables. Key words: brasil nuts, leaf area, height, equation, growth. Acknowledgments: CAPES (Financing Code nº 001), CNPq (scientific initiation grants) and Embrapa Agrossilvipastoril.

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