SPATIAL MODELING IN THE ANALYSIS OF A EXPERIMENTAL PLANTING CANDEIA

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- ABSTRACT: With the advancement of space technology, the presence of spatial effects becomes a source of information that can result in more accurate analysis. Thus, the present study aimed to analyze data from an experimental planting of candeia from a model that considered the effect of spatial information by geostatistical methods. The experiment was conducted under a randomized block design consisting of four blocks and thirteen types of fertilization. The variables diameter at breast height (DBH) and total height (H) of the trees were evaluated. By comparing the results obtained from a standard analysis, which is based on the assumption of independent errors, with those obtained by the spatial model, we observed that the second approach was more effective in detecting difference between treatment means. Thus, the aggregation of spatial component in the analysis of variance allowed the differentiation of the fertilization treatments for variable diameter. Therefore the application of formulated fertilizer NPK 8-28-16 provided the largest growth.
- KEYWORDS**:** Semivariogram; forest experiment; analysis of variance.

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