

NEIGHBOR BALANCED LATIN SQUARES - PLANNING AND ANALYSIS OF SENSORY DATA

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- **ABSTRACT:** *The sensory evaluations are increasingly taking its position of importance within the centers producers and sellers of food and other products. In these evaluations, a series of treatments is given to each panelist, and a major problem is that the response depends not only on the treatment currently applied, but on the former followed by him. Therefore, a method often used is descriptive analysis, performed by trained people, receiving the name of quantitative descriptive analysis (QDA). In order to solve the problem presented, Williams (1949) presented the Latin square design balanced for neighborhood that, in general, ensuring that the residual effects of the treatments do not influence the comparison of treatment effects. Appropriate methods of construction, randomization and analysis, using the method of QDA such designs are described and adapted to the problem. Are presented, analyzed and discussed, yet, the results of an experiment of sensory analysis of different brandy, planned and conducted by the author. Concluded that, for the planning of tests to quantitative descriptive analysis (QDA), the Latin squares balanced for neighborhoods, and repeated the last column, are an important alternative.*
- **KEYWORDS:** *Latin square design; balanced neighborhood; sensory analysis.*

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