Carbohydrates Content in Seeds of Jacaranda cuspidifolia (Mart).

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The improvement of biochemical knowledge about seed composition is of practical interest in plant technology, because both the vigour and the potential for storage of seed are influenced by the content of their compounds. Then, the aim of this work was to study the variation of the carbohydrates contents in seeds of a natural population of Jacaranda cuspidilifolia - Bignoniaceae, from Ilha Solteira-SP city. It was utilized the completely random design with 32 treatments (trees matrices) and 4 replications. The determination of carbohydrates content represented by starch was done using fungal amylases (glucoamylase and a-amylase) and glucose as standard. Estimates of the variation of these contents were obtained from an analysis of variance, using the software SISVAR. The average of carbohydrate contents (mg.g⁻¹ seeds) was 55.36. The experimental coefficient of variation was 37.35%. The test-F was significative (a = 1%), indicating the variation between trees matrices to the content of reserves of the seed. However , the Scott and Knott test had two groups of average between treatments, the first group (8), ranged from 29.50 mg.g⁻¹ to 31.75 mg.g⁻¹, the second group (24) ranged from 45.75 mg.g⁻¹ to 70.50 mg.g⁻¹, containing the highest content (gain) of reserves in the seeds of the first group, providing seed physiological quality. The study of J. cuspidifolia seeds showed variations in content of carbohydrates, which is very important to understand the mechanisms of adaptation and survival in an urbanized environment, as what it meets this natural population.

Keywords: biochemical composition, Scott and Knott test, physiological quality.

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