

## **STUDY OF THE INFLUENCE OF PHYSICAL- CHEMICAL COMPOSITION OF *Araucaria angustifolia* SEEDS FROM DIFFERENTS ORIGINS IN THE GELATINIZATION ENTHALPY OF STARCH**

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The present study investigated the seed of the in extinction conifer *Araucaria angustifolia* (pinhão) native in the southern states of Brazil, Argentina, Chile e Paraguai, and aimed to correlate the power of gelatinization with the physical- chemical composition, starch content, ratio amylose / amylopectin from two origins of pinhão of the State of Paraná (Ipiúna de Caldas e Irati). In physico-chemical characterization of raw pine nuts was possible to verify the presence of 56,81 and 51,99 (g/100g) of moisture, 0,95 and 1,2 (g/100 g) of ash, 3,53 and 3,70 (g/100 g) protein, 0,74 and 0,58 (g/100g) of lipids, 14,40 and 17,77 (g/100g) of fiber and 45,12 and 40,33% of starch, respectively for samples from Ipiúna de Caldas and Irati. the determination of the enthalpy of gelatinization was carried by DSC (Differential Scanning Calorimetry) which the sample Ipiúna de Caldas shoed the highest gelatinization enthalpy (50 J / g) had fewer content of fibers (14,40 g/100 g) and a high starch (45,12%) and amylose (26%), however, a smaller amount of fibers indicates the greater availability of the starch to gelatinize. In these conditions the materials studied had characteristics that allow them to be used in breads, cookies and encapsulating agents. Therefore, the composition of the pinion directly influences the characteristics of gelatinization and therefore its subsequent use in food.