

Journal of Engineering Research

BUILDING REGIONAL NETWORKS FROM HEALTHY FOOD: PHYSICAL-CHEMICAL ANALYSIS OF HONEY SELLED IN THE MISSIONARY REGION – RS¹

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1. Completion of Undergraduate Course Work – TCC

Abstract: In this article, honeys are dialogues of diversity that need no words (DEMARI, 2017). Through popular and regional consumption, knowledge regarding the ways and times of producing honey is passed from one generation to the next, as well as knowledge about natural, traditional and regional compositions in social networks between the environment and consumption (DEMARI, 2017). The main objective of the work is the analysis of ten samples of honey sold by ten rural producers from ten municipalities in the missionary region of Rio Grande do Sul (DEMARI, 2017). In addition to promoting knowledge of the physicochemical properties of the products, it also allows the comparison of results obtained in relation to current standards in a proof of the naturalness of honeys in the consumer market (DEMARI, 2017). The specific objectives of the work involve carrying out the following physicochemical analyses: micro and macroscopic analyses; pH (Hydrogenionic Potential); free acidity (acid-base titration); water content, and ash; determination of reducing sugar content, and density; research of diastatic enzymes and dyes; chromatic reaction, and of Lund (DEMARI, 2017). The development of the physicochemical analysis methodology took place at "Universidade Regional Integrada do Alto Uruguai" e das Missões (URI) – Campus: Santo Ângelo (DEMARI, 2017). The research of the ten honey samples proceeded in triplicate. Next, the range of physicochemical analyzes carried out: micro and macroscopic analyses; the first involved the microscope, and the second involved observation; free acidity by simple titration; Lund reaction with tannic

acid solution; pH meter analysis of the pH (Hydrogenionic Potential); density analysis with pycnometers; analyzes by weighing the water and ash contents; chromatic reaction such as the Jagerschmidt Reaction by decantation; determination by the Lane Eynon Method of the reducing sugar content; dye research with sulfuric acid; and research by water bath of diastase enzymes (DEMARI, 2017). In view of the physical-chemical analyzes of the analyzed honey samples, the following results were obtained: in addition to the natural acidity of honeys from the variation of the limits between 3.66 and 4.28 of the pH (Potential Hydrogenionic), and from 1.10 to 4.75 meq./kg of acidity; also the purity and/or legitimacy of honeys in relation to current norms according to the variance of the four ranges of values; the first, between 1.0998 and 1.1175 g/cm³ of density; the second, from 1.5 to 2.9 mL of precipitate in the Lund Reaction; the third, between ≈0.14 and ≈0.50% of the ash content; and the fourth, from 14.14 to ≈44.00% of the moisture concentration (DEMARI, 2017). To complete, it is possible to prove the legitimacy of honeys in relation to the legislation according to the presence of the two colors, violet and amber; the first, existing in the Research of Diastatic Enzymes; and the second, present in two analyzes, the Jagerschmidt Reaction and the Dye Research (DEMARI, 2017). In this context, honey is a dialogue of diversity in a range of physical-chemical analyzes; and food to produce, know, relate, humanize and socialize, building regional networks (DEMARI, 2017).

Keywords: Honey. Dialogues. Legislation. Physicochemical analysis.

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