

EVALUATION OF THE QUALITY OF HONEY MARKETED IN TWO MUNICIPALITIES OF MINAS GERAIS

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ABSTRACT

This study evaluated the physicochemical characteristics and quality of honey marketed in two municipalities of Minas Gerais, according to the parameters established by Brazilian legislation. Honey samples from the municipalities of Antônio Carlos and Juiz de Fora were analyzed, focusing on reducing sugars, non-reducing sugars, moisture, water-insoluble solids, minerals, diastase activity, hydroxymethylfurfural (HMF), and total acidity. The methodology followed the standards of Normative Instruction N°. 11/2000, using standardized analytical techniques. The results showed that the samples met the legal standards for most of the analyzed parameters: reducing sugars (65.7 g/100g and 66.2 g/100g), non-reducing sugars (4.7 g/100g and 3.7 g/100g), moisture (19.0 g/100g and 20.0 g/100g), water-insoluble solids (0.08 g/100g and 0.1 g/100g), and minerals (0.4 g/100g and 0.5 g/100g). Diastase activity (9.0 Göthe and 8.0 Göthe) and hydroxymethylfurfural (50.0 mg/kg and 58.0 mg/kg) were also within the established limits. However, the sample from Juiz de Fora presented total acidity at the maximum allowable limit (50.0 mEq/kg), while the sample from Antônio Carlos had a value close to this threshold (48.0 mEq/kg), suggesting potential fermentation issues during storage. The findings indicate that the analyzed honey is of satisfactory quality, although storage conditions require improvements to prevent deterioration. Further studies are recommended to assess the impact of storage conditions on honey quality.

Keywords: Honey quality. Legislation. Storage.

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