



Honey Quality from the Caatinga of Pernambuco: Physicochemical Analysis and the Importance of Good Beekeeping Practices

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INTRODUCTION

The Caatinga biome covers approximately 80% of the territory of the state of Pernambuco and stands out as one of the few regions in the world suitable for the production of organic honey, due to the presence of extensive areas free of the use of pesticides.

Beekeeping activity has significant socioeconomic relevance in the region, with about 2,000 beekeepers involved in production, positioning Pernambuco as the fifth largest honey producer in the Brazilian Northeast, contributing with 5.5% of national production.

However, challenges related to hive management, harvesting and honey processing directly impact the quality of the final product.

OBJECTIV

Evaluate the quality of the honey produced in the Caatinga, in order to ensure the sustainability of organic beekeeping in the region

MATERIALS

Honey samples were collected from 62 from 27 municipalities in Pernambuco were analyzed. The physicochemical analyses followed internationally recognized methodologies, including the protocols of the Adolfo Lutz Institute, the National Animal Reference Laboratory and the Association of Official Analytical Chemists (AOAC). Parameters such as color, moisture, reducing sugars, apparent sucrose, acidity, hydroxymethylfurfural (HMF), insoluble solids and ash were evaluated. The tests were carried out at the Laboratory of Analysis of Bees and Honey Products of the Federal Rural University of Pernambuco (LAMEL/CENAPESQ/UFRPE). (Figure 1, 2, 3 and 4)



Figure 1 and 2. Students doing the HMF and reducing sugars analyses

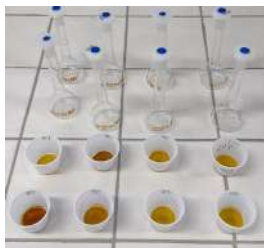


Figure 4 and 5. HMF analysis

RESULTS AND DISCUSSION

The results showed variation in the Pfund scale between the shades of white, extra clear amber, amber and dark amber. (figure 6 and 7).

Of the samples analyzed, 44 were in compliance with the standards required by Normative Instruction N°. 11/2000 (Brasil, 2000) and Codex Alimentarius (2001), while 18 presented values outside the limits established by current legislation.



Figure 6 and 7. Amber honey and dark amber

CONCLUSION

It is concluded that the findings reinforce the need to implement and strengthen good beekeeping practices, aiming to ensure the quality and appreciation of Caatinga honey, a product of high added value and potential for certification as organic honey.

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