



DETERMINATION OF TOTAL PHENOLICS IN COFFEE PARAÍSO OBTAINED BY PROCESSING RED HONEY

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INTRODUCTION

Brazil is the world's largest producer of coffee, with Paraíso being a special type of coffee obtained by Red Honey processing, which requires 500 g of coffee to make a cup of the drink. As a major producer, the country also generates a large amount of waste related to coffee consumption. Due to its composition, coffee grounds have great antioxidant potential and can be used as an alternative material in several industrial areas (Mussatto et al. 2011, Carb Polym; Peshev et al. 2018, Sep and Purif Tech).

MATERIAL AND METHODS

The coffee grounds were collected in the Café com Queijo cafeteria in Balneário Camboriú and were then dried at 60 °C in a greenhouse with air recirculation. The extracts were obtained in a microwave reactor (Cem-Discover System), according to the methodology described in the literature (Cruz, 2014), using a ratio 1:30 (m / v) of sludge and ethanol solution (49, 5%). The extracts obtained were centrifuged (Eppendorf - Centrifuge 5810) and vacuum filtrated. The total phenolic content was determined by adaptations of the literature (Anagnostopoulou et al., 2006, Food Chem), using a calibration curve of gallic acid (Azevedo, 2018).

RESULTS

The ideal time for drying the sludge was 9 hours with a moisture content of 65.53%. The total phenolic content determined was 30.24 mg GA / g. A recent study (Azevedo, 2018) on 100% arabic grains extract, under the same experimental conditions of the present study, showed values of 15.5 and 7.75 mgAG / g for the expressed and filtered preparation methods, respectively. The high phenolic content observed in Paraíso coffee may be related to its different processing (Red Honey), which leads to fermentation of the grain for 72 hours and to its method of preparation, since this coffee is part of what is called "Cold Brew" being obtained after 12 hours of infusion in cold water, differing from conventional methods.

CONCLUSIONS

The content of phenolic compounds found shows the antioxidant potential of the Paraíso coffee grounds, which presents a higher amount of waste generation due to the preparation method.

ACKNOWLEDGEMENTS

We thank UNIVALI for the technical and financial support.