



ESSENTIAL OIL EXTRACTION FROM “VASSOURINHA” (*Baccharis dracunculifolia* DC) IN DIFFERENT PERIODS

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INTRODUCTION

Essential oils are volatile compounds from plant species that can be affected, qualitatively and quantitatively, by environmental factors. The present work aimed to extract essential oil from “vassourinha, alecrim-do-campo” (*Baccharis dracunculifolia* DC), growing naturally in the Southwest region of Paraná.

MATERIAL AND METHODS

Plant material (leaves) was collected in three periods of the day, at 7:00, 12:00, and 17:00, from three different plants, with three replications (of each individual) during the spring of 2020. The essential oil extraction was carried out in the Laboratory of Plant Biochemistry and Physiology at UTFPR, Campus Pato Branco, using hydrodistillation in a Clevenger-type system. One hundred grams of fresh or dry mass (obtained by drying at room temperature, in the shade, until constant mass) were used in 500 mL of water, totaling 18 subsamples for each collection period. The essential oil yield of each sample was calculated by the ratio between the essential oil mass and the mass of fresh or dry plant material.

RESULTS

It was found that the highest average yield of essential oil was 1.18% in extraction performed with material collected at 17 h when extracted from dry mass. The lowest result was 0.52% in material collected at 7 h from the fresh mass.

CONCLUSIONS

Therefore, it was identified that for the extraction of essential oil from “vassourinha” in the environmental conditions of Southwest Paraná, during the spring season, the best time of day for collecting material was in the afternoon, in extraction by hydrodistillation from the dry mass.

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