



PHYTOCHEMICAL PROFILE OF *Psidium cattleianum* LEAVES

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INTRODUCTION

Natural products have been used in the prevention and treatment of several diseases for many years, but nowadays, it is necessary studies on the active compounds responsible for these biological effects. Several botanical families are evaluated in phytochemical research, such Myrtaceae family. *Psidium* genus, belong to this family and present several species known as "araças" and some classes of compounds already identified: flavonoids, terpenoids, and tannins. The aim of this study was to evaluate the phytochemical profile of the ethanolic extract of *Psidium cattleianum* leaves.

MATERIAL AND METHODS

Fresh leaves of *P. cattleianum* were macerated with ethanol at room temperature for a period of 1 week. The macerate was filtered and concentrated under reduced pressure in a rotatory evaporator. The yield was 17.36% (140g) of ethanolic extract. Part of the extract was subjected to fractionation with organic solvents of different polarities. Phytochemical analysis was carried out by chromatographic columns, and the resulting compounds were identified by specific standards and by the techniques of NMR ¹H and ¹³C in comparison to the literature.

RESULTS

The Ethyl Acetate fraction (2g) was subjected to column chromatography (CC) with silica gel and was eluted with

chloroform and methanol, increasing the polarity with time. Subfractions 84 to 92 were combined due to the similar profile observed in thin layer chromatography (CCD) and were recromatographed with the same mobile phase as the first CC. Its subfractions 12 to 20 were also combined and recromatographed as well as its own subfractions 22 to 34, that were in this case, subjected to a flash column with 90%-10% dichloromethane and methanol. From this last flash column, subfraction 4 was isolated and identified by ¹H and ¹³C NMR as (+) - Catechin, in comparison with Lôbo et al., 2008, Quím Nova.

CONCLUSION

The genus *Psidium* has active compounds with several biological activities already proven (FRAZON et al. 2009, Embrapa, FONSECA 2010, Fac Odontol, SILVA et al., 2013, BBR), demonstrating the importance of the continuity of the study to verify the biological properties of the species. Studies are in progress to isolate and identify other compounds from leaves, and to evaluate antioxidant, antinociceptive and gastroprotective activity of this plant.

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