I SIMPÓSIO INTERNACIONAL EM INVESTIGAÇÕES QUÍMICO-FARMACÊUTICAS

UNIVALI
Itajaí, Santa Catarina, Brasil
11 a 12 de dezembro de 2017

PHYTOCHEMICAL PROFILE OF *Psidium cattleianum* FRUITS

Schinkel, G. R.; Dias, B. S.; Campos, A.; Cechinel-Filho, V.; Nesello*, L. A. N.;

*Centro de Ciências da Saúde – CCS, Rua Uruguai, 458 (88302-202), Universidade do Vale do Itajaí – UNIVALI, Itajaí, Santa Catarina, Brasil. *nesello@univali.br.*

Introduction: Natural products have been used in the prevention and treatment of several diseases for many years, but today, it is necessary studies on the active compounds responsible for these biological effects. Plant species provide most of the active therapeutic principles currently used, for their diversity and bioavailability. Several botanical families are evaluated in phytochemical research, such Myrtaceae family. *Psidium* genus, belonging to this family, presents 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* fruits. **Methods:** Fresh fruits 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 rotary evaporator, yielding 105 g (4.6%) of ethanolic extract. Phytochemical analysis was carried out by chromatographic columns, and the resulting compounds were identified by specific standards and by the techniques of NMR ^{1}H and ^{13}C in comparison to the literature. **Results:** Part of the ethanolic fraction (5 g) was subjected to column chromatography over silica gel and eluted with dichloromethane and methanol in increasing order of polarity to afford 46 fractions that were combined based on the thin-layer chromatography (TLC) profiles. In subfrations 7 to 11, two compounds were identified as the phytosterol beta-sitosterol and the triterpenoi ursolic acid, according to specific standards analysed by TLC. The fractions 28 to 46 were rechromatographed as before, using a solvent system dichloromethane:methanol, yielding new 40 subfractions, which were combined according to their TLC profiles. Two flanonoids were isolated e identified by NMR ^{1}H and ^{13}C as catechin and isoquercetin. **Conclusion:** *Psidium cattleianum* has active compounds with several biological activities already proven, 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 fruits as well as from leaves, and to evaluate antioxidant and gastroprotective activity of this fruit plant.

Financial support/Acknowledgments: Programa de Bolsa de Pesquisa do ARTIGO 171 and Vice-Reitoria de Pós-Graduação, Pesquisa, Extensão e Cultura (ProPPEC) - Universidade do Vale do Itajaí (UNIVALI).