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Chemical compounds from *Erythroxylum deciduum* St. Hil. (Erythroxylaceae) native of Brazilian savannah.

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The *Erythroxylum* (Erythroxylaceae) genus has about 130 species, which can be found in forest environments and cerrado. Studies with *Erythroxylum* species led to the isolation of secondary metabolites such as flavonoids, alkaloids, tannins, terpenes and phenylpropanoids that exhibit anti-oxidant activity, anti-carcinogenic, anti-inflammatory activity among others to be operated with pharmaceutical purposes. Several species have medicinal properties and the importance of socio-economic point of view as the popular “cocas” *E. novogranatense* (Morris) Hieron. var. *truxillense* and *E. coca* (Lamk.). The *Erythroxylum coca* is a species native from Peru, which records the use of its leaves are found in archaeological studies of about 3,000 years B.C. In order to contribute to the chemical elucidation of *Erythroxylum* genus, this research aimed to evaluate the composition of the essential oil from the leaves of *E. deciduum* A. St.-Hil., known for its toxic potential cause motor and neurological disorders in sheep, it grows spontaneously in Brazilian savannah and its fruits are attractive to the local herd. The botanical material was collected in the peri-urban area of the city of Goiânia, Goiás, Brazil, it was identified and had a voucher specimen deposited in the Herbarium of the State University of Goiás. The essential oil extraction was performed by hydrodistillation adapted by Clevenger. The essential oil chemical composition was determined by gas chromatography-mass spectrometry (GC/MS). The species studied showed as major components: himachalol (3.49%), sandaracopimarinal (4.87%), ethyl 8-cedren-13-ol (5.65%) and α -terpine (6.37%) whose description on the literature, points to the antimicrobial and allelopathic activity. Thus, these volatile components may be viable in obtaining bioproducts or as prototypes in the synthesis of compounds of pharmacotherapeutic, food and agricultural interest.

Biography

Giuliana Vila Verde has completed her PhD in 2011 and postdoctoral studies in 2014 from Universidade Federal de Goiás. She is currently Professor of Pharmacognosy holder at the Universidade Estadual de Goiás has experience in Pharmacy, with emphasis on Pharmacognosy, acting on Ethnobotanical, phytochemical, quality control and extraction of compounds by irradiation of microwave and biological assays Cerrado plants.

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