

Identification of Ellagic Acid Derivatives in Methanolic Extracts from *Qualea* Species

Ana L. M. Nasser^{a,*}, Camila B. A. Carli^b, Clenilson M. Rodrigues^a,
Danielle C. G. Maia^b, Iracilda Z. Carlos^b, Marcos N. Eberlin^c,
Clélia A. Hiruma-Lima^d, and Wagner Vilegas^a

^a UNESP – São Paulo State University, Instituto de Química de Araraquara, C. Postal 355, 14801-970, Araraquara, SP, Brazil. Fax: 55-16-33 01-66 92. E-mail: nasser@iq.unesp.br

^b UNESP – São Paulo State University, Faculdade de Ciências Farmacêuticas, C. Postal 502, 14801-902, Araraquara, SP, Brazil

^c UNICAMP – Campinas State University, Instituto de Química, 13083-970, Campinas, SP, Brazil

^d UNESP – São Paulo State University, Departamento de Farmacologia, Instituto de Biociências, 18618-000, Botucatu, SP, Brazil

* Author for correspondence and reprint requests

Z. Naturforsch. **63c**, 794–800 (2008); received February 28/May 16, 2008

The methanolic extract from the barks of the medicinal plant *Qualea parviflora* (Vochysiaceae) was fractionated by column chromatography over silica gel followed by gel permeation over Sephadex LH-20 to give 3,3'-di-*O*-methylellagic acid-4-*O*- β -D-glucopyranoside (**1**), 3-*O*-methylellagic acid-4'-*O*- α -L-rhamnopyranoside (**2**), 3,3',4-tri-*O*-methylellagic acid-4'-*O*- β -D-glucopyranoside (**3**), and 3,3'-di-*O*-methylellagic acid (**4**), together with triterpenes and saponins. We also performed comparative analyses among this species and *Q. grandiflora* and *Q. multiflora* using high-pressure liquid chromatography. The biological assays showed that, when compared to the standard ellagic acid, compounds **1–4** are less cytotoxic but have a lower capacity of stimulating murine peritoneal macrophages to release nitric oxide and tumoural- α necrose factor.

Key words: *Qualea*, Ellagic Acid Derivatives, Liquid Chromatography