

Chemical Composition and Biological Activity of *Laennecia schiedeana*

Amira Arciniegas^a, Luis Angel Polindara^a, Ana L. Pérez-Castorena^{a,*},
Ana María García^b, Guillermo Avila^b, José Luis Villaseñor^c,
and Alfonso Romo de Vivar^a

^a Instituto de Química, Universidad Nacional Autónoma de México (UNAM),
Circuito Exterior, Ciudad Universitaria, 04510 México, D. F., México.
Fax: +5255-56162217. E-mail: alperezc@unam.mx

^b Laboratorio de Fitoquímica, Unidad de Biología, Tecnología y Prototipos (UBIPRO),
Universidad Nacional Autónoma de México, FES Iztacala, Tlanepantla 54090, México

^c Instituto de Biología, Universidad Nacional Autónoma de México, Circuito Exterior,
Ciudad Universitaria, 04510 México, D. F., México

* Author for correspondence and reprint requests

Z. Naturforsch. **66c**, 115–122 (2011); received May 19, 2010/February 17, 2011

The chemical study of *Laennecia schiedeana* afforded three sterols, five diterpenes, five flavonoids, three caffeoyl derivatives of quinic acid, and two triterpenes. Evaluation of the cytotoxic activity of the extracts and isolated metabolites showed that 15-methoxy-16-oxo-15,16*H*-strictic acid was the most active compound [(15.05 $\pm$ 2.2) μ g/mL against U-251 cells]. In antibacterial assays the acetonic extract of leaves was the only active extract exhibiting its highest effect against the multiresistant *Staphylococcus epidermidis* (MIC 0.25 mg/mL). The anti-inflammatory activity observed was mild in the extracts and not relevant in the isolated compounds.

Key words: Diterpenes, Cytotoxic Activity, Anti-Inflammatory Activity, Antibacterial Activity