Bioactive Phenolic Compounds from Aerial Parts of *Plinia glomerata*

Cláudia Serafína, Viviane Narta, Angela Malheirosa, Márcia Maria de Souzaa, Luiz Fischera, Giuliano Delle Monacheb, Franco Delle Monachea, and Valdir Cechinel Filhoa,*

a Programa de Mestrado em Ciências Farmacêuticas e Núcleo de Investigações Químico-Farmacêuticas (NIQFAR), Universidade do Vale do Itajaí (UNIVALI), Itajaí, 88302-202, Santa Catarina, Brazil. Fax: +4733417601. E-mail: cechinel@univali.br

b Dipartimento di Studi di Chimica e Tecnologia delle Sostanze Biologicamente Attive, Universita La Sapienza, 00185 Roma, Italy

* Author for correspondence and reprint requests

Z. Naturforsch. 62c, 196–200 (2007); received August 17/October 4, 2006

The present work describes the antinociceptive properties and chemical composition of the aerial parts of *Plinia glomerata* (Myrtaceae). Both of the extracts evaluated, acetonic and methanolic, showed potent antinociceptive action, when analyzed against acetic acid-induced abdominal constrictions in mice, with calculated ID<sub>50</sub> (mg/kg, i. p.) values of 24.8 and 3.3, respectively. Through usual chromatographic techniques with an acetonic extract, the following compounds were obtained: 3,4,3′-trimethoxy flavellagic acid (1), 3,4,3′-trimethoxy flavellagic acid 4′-O-glucoside (3) and quercitrin (4), which were identified based on spectroscopic data. Compounds 1 (ID<sub>50</sub> = 3.9 mg/kg, i. p., or 10.8 µmol/kg) and 3 (ID<sub>50</sub> = 1.3 mg/kg or 2.5 µmol/kg) were notably more active than some well-known analgesic drugs used here for comparison.

**Key words:** *Plinia glomerata*, Antinociception, Phenolic Compounds