

# Gas Chromatography-Mass Spectrometry Study of the Essential Oils of *Schinus longifolia* (Lindl.) Speg., *Schinus fasciculata* (Griseb.) I. M. Johnst., and *Schinus areira* L.

Ana P. Murray<sup>\*,a,b</sup>, María A. Frontera<sup>a</sup>, María A. Tomas<sup>a</sup>, and María C. Mulet<sup>a</sup>

<sup>a</sup> Instituto de Investigaciones en Química Orgánica, Departamento de Química, Universidad Nacional del Sur, Avenida Alem 1253, (8000) Bahía Blanca, Argentina.  
Fax: 542914595187. E-mail: apmurray@criba.edu.ar

<sup>b</sup> Consejo Nacional de Investigaciones Científicas y Tecnológicas, Argentina

\* Author for correspondence and reprint requests

Z. Naturforsch. **60c**, 25–29 (2005); received August 6/September 10, 2004

The essential oil composition from the aerial parts of three Anacardiaceae growing in Bahía Blanca, Argentina was studied by gas chromatography and gas chromatography-mass spectrometry. The essential oils of *S. longifolia* and *S. fasciculata* have been studied for the first time. The major constituents were  $\alpha$ -pinene (46.5%),  $\beta$ -pinene (15.1%) and  $\alpha$ -phellandrene (10.1%) for *S. longifolia* and limonene (10.9%),  $\beta$ -phellandrene (6.16%) and  $\alpha$ -phellandrene (5.6%) for *S. fasciculata*. The major components of the essential oil of *S. areira* were limonene (28.6%),  $\alpha$ -phellandrene (10.1%), sabinene (9.2%) and camphene (9.2%) differing from the literature data. The essential oils from *S. areira* and *S. longifolia* exhibited a high biotoxicity in a brine shrimp assay with *Artemia persimilis*.

*Key words:* *Schinus*, Essential Oil, Biotoxicity