

## A Triterpene and a Flavonoid C-Glycoside from *Aleurites moluccana* L. Willd. (Euphorbiaceae)

Christiane MEYRE-SILVA<sup>1</sup>, Ticiana C. MORA<sup>1</sup>, Adair R. SOARES SANTOS<sup>1</sup>,  
Jacir DAL MAGRO<sup>2</sup>, Rosendo Augusto YUNES<sup>3</sup>,  
Franco DELLE MONACHE<sup>4</sup> & Valdir CECHINEL-FILHO<sup>1\*</sup>

<sup>1</sup> Núcleo de Investigações Químico-Farmacêuticas (NIQFAR)/FAQFAR, Universidade do Vale do Itajaí-UNIVALI, 88302-202, Itajaí-SC, Brazil. <sup>2</sup> Departamento de Ciências Biológicas e da Saúde, Universidade do Oeste de Santa Catarina-UNOESC, Chapecó-SC, Brazil. <sup>3</sup> Departamento de Química, Universidade Federal de Santa Catarina UFSC, 88040-900, Florianópolis-SC, Brazil.

<sup>4</sup> Centro de Chimica dei Recettori, CNR, Universita Cattolica S. Cuore, Largo F. Vito 1, 00168, Rome, Italy.

**SUMMARY.** This paper describes the isolation of two phytoconstituents from the leaves and barks of *Aleurites moluccana*, a medicinal plant widely employed in folk medicine for the treatment of several ailments. On the basis of spectroscopic evidence, these compounds were identified as swertisin (leaves), a flavonoid C-glycoside yet not described for the family Euphorbiaceae and acetyl aleuritolic acid (bark), a triterpene which was recently reported as an antimicrobial agent.

**RESUMEN.** "Un triterpeno y un flavonoide glicosídico de *Aleurites moluccana* L. Willd. (Euphorbiaceae)". El presente trabajo describe el aislamiento de dos componentes de hojas y corteza de *Aleurites moluccana*, una planta medicinal ampliamente empleada en medicina popular para el tratamiento de varias dolencias. Sobre la bases de la evidencia espectroscópica existente, estos compuestos fueron identificados como swertisina (hojas), un flavonoide glicosídico aún no descrito para la familia Euphorbiaceae y el ácido acetil-aleuritico (corteza), un triterpeno que ha sido recientemente citado como agente antimicrobiano.

### INTRODUCTION

*Aleurites moluccana* L. Willd. (Euphorbiaceae), known as "Nogueira-da-India" or "Nogueira-de-Iguape" is a medicinal plant frequently employed in folk medicine for the treatment of tumours, ulcers, headache, fevers, diarrhea and gonorrhoea<sup>1</sup>, and also have been used as antiinflammatory<sup>2</sup>.

Previous phytochemical studies with this plant have revealed the presence of triterpenes<sup>3</sup> and a new coumarinolignoid, denominated moluccanin<sup>4</sup>, whereas biological investigations have shown antimicrobial<sup>5</sup> and antiviral<sup>6</sup> activities.

Preliminary pharmacological studies conducted by our laboratories have demonstrated that hydroalcoholic extract obtained from *A. moluccana* leaves exhibited potent analgesic effect in mice, which could be related with the presence of hydrocarbons, sterols and triterpenes<sup>7</sup>.

In the present report, we have extended our previous chemical findings and analysed other constituents present in the leaves and barks of *A. moluccana*.

**KEY WORDS:** Acetyl aleuritolic acid, *Aleurites moluccana*, Chromatography, Swertisin

**PALABRAS CLAVE:** Acido acetil-aleuritólico, *Aleurites moluccana*, Cromatografía, swertisina

\* Author to whom correspondence should be addressed.