

#### **PHYTOCHEMISTRY**

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## Phytochemistry Vol. 66, No. 19, 2005

## **Reports on Structure Elucidation**

## **Contents**

### **FULL PAPERS**

## **TERPENOIDS**

Isolation and structure elucidation of three *neo*-clerodane diterpenes from *Teucrium fruticans* L. (LABIATAE)

Josep Coll\*, Yudelsy Tandrón

Three *neo*-clerodane diterpenes were isolated from aerial parts of *T. fruticans*. Antifeedant activity against *Spodoptera littoralis* and antifungal activity against *Rhizoctonia solani* were determined.

## pp 2298-2303

#### Cycloartane type triterpenoids from the rhizomes of *Polygonum bistorta*

Karuppiah Pillai Manoharan, Tan Kwong Huat Benny, Daiwen Yang\*

The isolation and structure elucidation of two compounds, 24(E)-ethylidenecycloartanone (1) and 24(E)-ethylidenecycloartan- $3\alpha$ -ol (2), together with some known compounds from the rhizomes of *Polygonum bistorta* are reported.

## Sesquiterpenes from Warburgia ugandensis and their antimycobacterial activity

Abraham Abebe Wube, Franz Bucar\*, Simon Gibbons, Kaleab Asres

By a combination of CC, prep. TLC and semi-prep. HPLC, 12 sesquiterpenes along with linoleic acid were isolated from the stem bark of *Warburgia ugandensis* and subjected to antimycobacterial tests. The active compounds displayed MIC values ranged from 4 to  $128 \mu g/ml$ .

## Polar acyclic diterpenoids from Bifurcaria bifurcata (Fucales, Phaeophyta)

pp 2316-2323

Annick Ortalo-Magné, Gérald Culioli\*, Robert Valls, Bernard Pucci, Louis Piovetti

Five polar linear diterpenoids, together with three known related compounds, have been isolated from the brown alga *Bifurcaria bifurcata* collected off the French Atlantic coast. These metabolites have been identified as hydroxylated derivatives of 13-oxo-and 13-hydroxygeranylgeraniol. The absolute configuration of the 13-position has been determined, for the 13-hydroxygeranylgeraniol derivatives, to be *R* by means of a modified Mosher's method. These data were used for chemotaxonomical purposes.

#### Tirucallane triterpenes from the leaf extract of Entandrophragma angolense

Abayomi T. Orisadipe, Akinbobola A. Adesomoju, Michele D'Ambrosio\*, Antonio Guerriero, Joseph I. Okogun

Three protolimonoids are described, two of them possessing the rare ring-A-seco feature.

## Illudalane sesquiterpenoids, echinolactones A and B, from a mycelial culture of *Echinodontium japonicum*

Shinsuke Suzuki, Tetsuya Murayama, Yoshihito Shiono\*

Illudalane sesquiterpenoids, echinolactones A and B, were been isolated from the culture broth of the fungus *Echinodontium japonicum*. Their structures were established on the basis of spectroscopic analysis.

pp 2329-2333

pp 2324-2328

## Phragmalin-type limonoids from the mangrove plant Xylocarpus granatum

pp 2334-2339

Jianxin Cui, Zhiwei Deng, Jun Li, Hongzheng Fu, Peter Proksch, Wenhan Lin\*

Five phragmalin-type limonoids, xyloccensins Q–U (1–5), along with xyloccensin P, were isolated from the stem and bark of the mangrove plant *Xylocarpus granatum*. Their structures were elucidated on the basis of extensive 1D and 2D NMR, as well as IR and MS, spectroscopic data analyses.

## Two triterpenoids and other constituents from Petasites tricholobus

pp 2340-2345

Wei-Dong Xie, Qi Zhang, Ping-Lin Li, Zhong-Jian Jia\*

Two pentacyclic triterpenoids, petatrichol A (1) and petatrichol B (2), along with 10 known compounds, were isolated from the rhizome of *Petasites tricholobus*. Their structures were elucidated by spectroscopic methods.

#### **PHENOLICS**

## Bioactive phenolic compounds from a medicinal lichen, Usnea longissima

pp 2346-2350

Muhammad I. Choudhary\*, Azizuddin, Saima Jalil, Atta-ur-Rahman

Two phenolic compounds 1 and 2 along with a known compound, glutinol (3), were isolated from the lichen, *Usnea longissima*. Their structures were determined by spectroscopic techniques. Anti-inflammatory and cytotoxic activities of the compounds were also studied.

HO HO OH

$$H_3$$
CO  $R$ 
 $COCH_3$ 

1 R = H

2 R = Cl

# Bangangxanthone A and B, two xanthones from the stem bark of *Garcinia* polyantha Oliv.

pp 2351-2355

A. Meli Lannang\*, J. Komguem, F. Ngounou Ngninzeko, J. Gustave Tangmouo, D. Lontsi, Asma Ajaz, M. Iqbal Choudhary, Rosa Ranjit, Krishna P. Devkota, B. Luc Sondengam

$$\bigcap_{\mathsf{OH}} \bigcap_{\mathsf{1}} \bigcap_{\mathsf{OH}} \bigcap_{\mathsf{2}} \bigcap_{\mathsf{OH}} \bigcap_{\mathsf{2}} \bigcap_{\mathsf{OH}} \bigcap_{\mathsf{3}} \bigcap_{\mathsf{4}} \bigcap_{\mathsf{5}} \bigcap_{\mathsf{5$$

Two xanthones, bangangxanthone A (1) and B (2), along with two known xanthones and pentacyclic triterpenoids were isolated from *Garcinia polyantha*.

## Acylated quercetagetin glycosides with antioxidant activity from *Tagetes maxima*

pp 2356-2362

Irene Parejo, Jaume Bastida, Francesc Viladomat, Carles Codina\*

A methanolic extract of *Tagetes maxima* for antioxidant activity resulted in the isolation of three antioxidative acylated quercetagetin glycosides, quercetagetin-7-O-(6-O-caffeoyl- $\beta$ -D-glucopyranoside) (1), quercetagetin-7-O-(6-O-galloyl- $\beta$ -D-glucopyranoside), and quercetagetin-7-O-(6-O-galloyl- $\beta$ -D-glucopyranoside), and four known flavonoids.

# Benzopyrans from *Curvularia* sp., an endophytic fungus associated with *Ocotea corymbosa* (Lauraceae)

pp 2363-2367

Helder Lopes Teles, Geraldo Humberto Silva, Ian Castro-Gamboa, Vanderlan da Silva Bolzani, José Odair Pereira, Claudio Miguel Costa-Neto, Renato Haddad, Marcos Nogueira Eberlin, Maria Claudia Marx Young, Ângela Regina Araújo\*

Benzopyrans (2) and (4) were produced by an endophytic fungus *Curvularia* sp. associated to *Ocotea corymbosa*, a native plant of Brazilian Cerrado. The structures of the derivatives were established on the basis of comprehensive spectroscopic analysis, mainly using 1D and 2D NMR experiments. Analyses of biological activities were carried out on a human cervix tumor cell line aimed at evaluation of potential effects on a mammalian cell line proliferation. Only 2 showed a significant activity.

#### Phenolic compounds from the fruit of Garcinia dulcis

S. Deachathai, W. Mahabusarakam\*, S. Phongpaichit, W.C. Taylor

Dulcisxanthones A and B, dulcinoside, dulcisisoflavone and dulcisflavan together with 37 known compounds were isolated from the fruit of *Garcinia dulcis*. The radical scavenging and antibacterial activities were investigated.

pp 2368–2375

Dulcisisoflavone

#### **ALKALOIDS**

#### Two cyclopeptides from the seeds of Annona cherimola

pp 2376-2380

Alassane Wélé\*, Yanjun Zhang, Jean-Paul Brouard, Jean-Louis Pousset, Bernard Bodo

The structures of cherimolacyclopeptides E and F were elucidated on the basis of their MS/MS spectra, chemical degradation and extensive 2D NMR experiments.

#### **GENERAL CHEMISTRY**

## Phenolic and terpenoid compounds from *Chione venosa* (Sw.) URBAN var. venosa (Bois Bandé)

pp 2381-2387

Angelika Lendl, Ingrid Werner, Sabine Glasl\*, Christa Kletter, Pavel Mucaji, Armin Presser, Gottfried Reznicek, Johann Jurenitsch, David W. Taylor

The phytochemical investigation of the popular aphrodisiac drug Bois Bandé, the stem bark and root of *Chione venosa* (Sw.) URBAN var. *venosa* (Rubiaceae), yielded *ortho*-hydroxy-acetophenone-azine (1), acetophenone-2-O-[ $\beta$ -D-apiofuranosyl-( $1 \rightarrow 6'$ )-O- $\beta$ -D-glucopyranoside] (2), acetophenone-2-O- $\beta$ -D-glucopyranoside (3),  $\alpha$ -morroniside (4), sweroside (5), diderroside (6), daucosterol (7) and  $\beta$ -sitosterol (8).

## Unusual naphthoquinones, catechin and triterpene from Byrsonima microphylla

pp 2388-2392

Rosane M. Aguiar, Juceni P. David, Jorge M. David\*

The compounds  $\Delta^1$ -lupenone (1), 3-hydroxy-2-methoxy-8,8,10-trimethyl-8H-antracen-1,4,5-trione (2), 3,7-dihydroxy-2-methoxy-8,8,10-trimethyl-7,8-dihydro-6H-antracen-1,4,5-trione (3), (2S,10aR)-2,8-dihydroxy-6-methoxy-1,1,7-trimethyl-2,3,10,10a-tetrahydro-1H-fenantren-9-one (4) and (2S,3S)-3'-hydroxy-4',5,7-trimethoxy-flavan-3-ol (5) were isolated from the wood of *Byrsonima microphylla* (Malpighiaceae). The structures of these compounds were elucidated by chemical and spectroscopic analysis.

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\* Corresponding author

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