



#### **PHYTOCHEMISTRY**

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### Phytochemistry Vol. 67, No. 8, 2006

## **Reports on Structure Elucidation**

#### **Contents**

#### **TERPENOIDS**

Lilac alcohol epoxide: A linalool derivative in Actinidia arguta flowers

pp 759-763

Adam J. Matich\*, Barry J. Bunn, Martin B. Hunt, Daryl D. Rowan

Lilac alcohol epoxide (2-(5-methyl-5-(oxiran-2-yl)-tetrahydrofuran-2-yl)propan-1-ol), a previously unreported monoterpene, was identified in the solvent extract of the flowers of seven *Actinidia arguta* genotypes.

#### Sesquiterpene lactones from Achillea collina J. Becker ex Reichenb.

pp 764-770

Antoaneta Trendafilova\*, Milka Todorova, Bozhanka Mikhova, Antonina Vitkova, Helmut Duddeck

Nine guaianolides, a germacranolide and a dimeric guaianolide, along with 20 known sesquiterpene lactones were isolated from flower heads of *Achillea collina*.

# HPLC analysis of geometrical isomers of lutein epoxide isolated from dandelion (*Taraxacum officinale* F. Weber ex Wiggers)

pp 771–777

Antonio J. Meléndez-Martínez, George Britton, Isabel M. Vicario, Francisco J. Heredia\*

Lutein epoxide was isolated from petals of dandelion and identified by its chromatographic behavior and UV/vis and mass spectra. Six geometrical isomers were separated by HPLC and identified.

#### Three ent-eudesmenones from the liverwort Plagiochila bifaria

pp 778-783

Thomas Hackl\*, Wilfried A. König, Hermann Muhle

The liverwort *Plagiochila bifaria* (Plagiochilaceae) was reinvestigated by GC and GC–MS. Three *ent*-eudesmenones (2–4) were isolated and identified as natural products. Structure elucidation and the determination of absolute configurations is described.

#### Triterpenoid saponins from the fruits of Aesculus pavia

pp 784-794

Zhizhen Zhang, Shiyou Li\*, Shanmin Zhang, David Gorenstein

The isolation and structure elucidation of 12 polyhydroxyoleanene pentacyclic triterpenoid saponins, named aesculioside Ia–Ie, IIa–IId, and IVa–IVc, from the fruits of North American *Aesculus pavia* are reported.

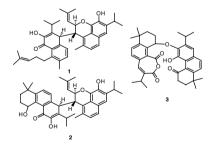
$$\begin{array}{c} \text{OR}_3 \\ \text{OH} \\ \text{OH}$$

### Abietane diterpenoid dimers from the roots of Salvia prionitis

pp 795-799

Jun Xu, Jun Chang, Ming Zhao, Jin-Sheng Zhang\*

Three abietane diterpenoid dimers, bisprioterones A–C (1–3), were isolated from the roots of *Salvia prionitis* Hance (Labiatae). Compounds 1–3 possessed two different abietane diterpenoid skeleta, which were linked via either a C–C single bond (1 and 2) or an ether bridge (3).



#### **PHENOLICS**

## Phenylpropanoids from Thapsia transtagana

pp 800-804

Abderrahmane Saouf, Francisco M. Guerra, Juan J. Rubal, Zacarías D. Jorge, Mohamed Akssira, Fouad Mellouki, F. Javier Moreno-Dorado, Guillermo M. Massanet\*

Five phenylpropanoids have been isolated from the roots of *Thapsia transtagana*. Their structures have been elucidated by spectroscopic means.

 $R_1$ ,  $R_2$  = several ester groups

## Newbouldiosides A-C, phenylethanoid glycosides from the stem bark of *Newbouldia laevis*

pp 805-811

Rainer Gormann, Maki Kaloga, Daneel Ferreira, Jannie P.J. Marais, Herbert Kolodziej\*

Three phenylethanoid glycosides, newbouldioside A–C, were isolated from the stem bark of *Newbouldia laevis*. In addition, a sodium salt of analogue B representing the first phenolate within this group was encountered. Newbouldioside C represents the first member possessing a linear glc-rha-api chain and a sinapoyl moiety.

## Flavonoids from the pods of Millettia erythrocalyx

pp 812-817

Boonchoo Sritularak, Kittisak Likhitwitayawuid\*

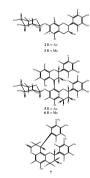
2'-Hydroxy-3,4-dimethoxy-[2'',3'':4',3']-furanochalcone, 2',3-dihydroxy-4-methoxy-4'- $\gamma,\gamma$ -dimethylallyloxychalcone, (-)-(2S)-6,3',4'-trimethoxy-[2'',3'':7,8]-furanoflavanone, 3',4'-methylenedioxy-[2'',3'':7,8]-furanoflavonol and 6,3'-dimethoxy-[2'',3'':7,8]-furanoflavone were isolated from the pods of *Millettia erythrocalyx*, along with six other known flavonoids.

## Two flavonoid glycosides and a miscellaneous flavan from the bark of *Guibourtia coleosperma*

pp 818-823

Madelyn Bekker\*, Riaan Bekker, Vincent E. Brandt

Three metabolites 7-O- $\beta$ -D-xylopyranosyl-epicatechin, epicatechin-(4 $\beta \rightarrow 8$ )-7-O- $\beta$ -D-xylopyranosyl-epicatechin and epicatechin-(7,8-bc)-9 $\beta$ -(3-methoxy-4-hydroxyphenyl)-dihydro-2(3H)-pyranone were isolated as their acetate and methyl ether acetate derivatives from the bark of *Guibourtia coleosperma*. Their structures have been established by spectroscopic methods.



## Antiplatelet prenylflavonoids from Artocarpus communis

pp 824-829

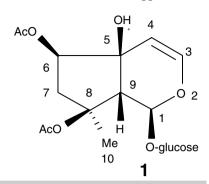
Jing-Ru Weng, Sheng-Ching Chan, Yi-Huang Lu, Hsien-Cheng Lin, Horng-Huey Ko, Chun-Nan Lin\*

Four flavonoids, dihydroartomunoxanthone (1), artomunoisoxanthone (2), cyclocomunomethonol (3) and artomunoflavanone (4), together with three known compounds, artochamins B (5), D and artocommunol CC (6) were isolated from the cortex of the roots of *Artocarpus communis*. Compounds 1, 5 and 6 showed significant inhibitory effect on platelet aggregation induced by adrenaline in human platelet-rich plasma (PRP).

#### Flavonol and iridoid glycosides of Ajuga remota aerial parts

Lawrence O. Arot Manguro\*, Samuel Otieno Wagai, Peter Lemmen

Two iridoid glycosides including 1, along with six flavonol glycosides were isolated from the aerial parts of *Ajuga remota*. Their structures were determined on the basis of spectroscopic evidence and also by comparison with known compounds.



pp 830-837

#### **GENERAL CHEMISTRY**

#### Secondary metabolites from Senecio burtonii (Compositae)

J.C. Ndom\*, J.T. Mbafor, A.G.B. Azebaze, J.C. Vardamides, Z. Kakam, A.F.W. Kamdem, A. Deville, T.M. Ngando, Z.T. Fomum

A cacalolide derivative named  $4\alpha$ -[2'-hydroxymethylacryloxy]-1 $\beta$ -hydroxy-14-(5-6)abeo eremophilan-12,8-olide and a shikimic acid derivative named (3'E)-(1 $\alpha$ )-3-hydroxymethyl-4 $\beta$ , 5 $\alpha$ -dimethoxycyclohex-2-enyloctadec-3'-enoate together with three known compounds were isolated from *Senecio burtonii*.

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\* Corresponding author

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