

Phytochemistry Vol. 66, No. 6, 2005

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Reports on Structure Elucidation

FULL PAPERS

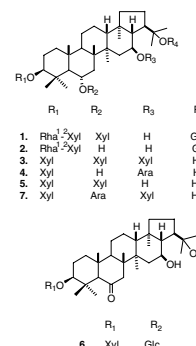
TERPENOIDS

Hopane-type saponins from *Glinus lotoides* Linn

pp 621–626

Tanusree Biswas, Moumita Gupta, Basudeb Achari, Bikas C. Pal\*

Six hopane-type saponins, lotoidesides A–F, along with a known compound were isolated. Their structures were elucidated by 2D NMR analysis, mass spectrometry and chemical evidences.

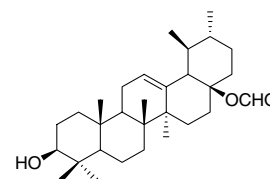


Cladocalol, a pentacyclic 28-nor-triterpene from *Eucalyptus cladocalyx* with cytotoxic activity

pp 627–632

Samira Benyahia, Samir Benayache, Fadila Benayache, Francisco León, José Quintana, Matías López, Juan C. Hernández, Francisco Estévez, Jaime Bermejo\*

From the leaves of *Eucalyptus cladocalyx* a triterpene, cladocalol (1), was isolated, along with five known compounds, and their cytotoxic activities were evaluated on the human leukemia cell line HL-60.

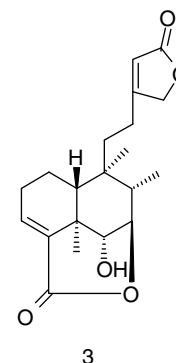


Clerodane diterpenoids from *Pulicaria wightiana*

pp 633–638

Biswanath Das\*, M. Ravinder Reddy, R. Ramu, N. Ravindranath, H. Harish, K.V.S. Ramakrishna, Y. Koteswar Rao, K. Harakishore, U.S.N. Murthy

Five clerodane diterpenoids were isolated from *Pulicaria wightiana*. The antibacterial activities of the compounds were studied.

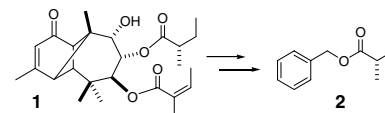


### Absolute configuration of the $\alpha$ -methylbutyryl residue in longipinene derivatives from *Stevia pilosa*

pp 639–642

Rocío Álvarez-García, J. Martín Torres-Valencia\*, Luisa U. Román, Juan D. Hernández, Carlos M. Cerda-García-Rojas, Pedro Joseph-Nathan\*

The absolute configuration of the  $\alpha$ -methylbutyryl residue in longipinene derivatives from *Stevia* (e.g., **1**) was determined by chemical correlation with (*S*)-(+)-benzyl  $\alpha$ -methylbutyrate (**2**).

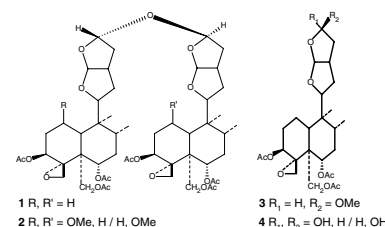


### Neo-clerodane diterpenoids from *Clerodendrum inerme*

pp 643–648

Richa Pandey, Ram K. Verma, Madan M. Gupta\*

Three neo-clerodane diterpenoids, inermes A, B, 14,15-dihydro-15 $\beta$ -methoxy-3-epicaroyptin, in addition to 14,15-dihydro-15-hydroxy-3-epicaroyptin, have been isolated from the hexane extract of the leaves of *Clerodendrum inerme*. Structures of these compounds have been elucidated on the basis of spectral studies.



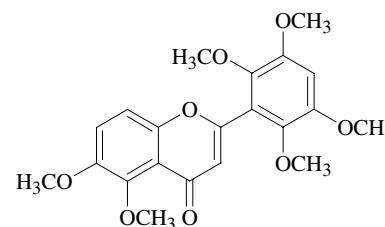
## PHENOLICS

### A furanocoumarin and polymethoxylated flavonoids from the Yucatec Mayan plant *Casimiroa tetrameria*

pp 649–652

Bilkis Heneka, Horst Rimpler, Anita Ankli, Otto Sticher, Simon Gibbons, Michael Heinrich\*

Eight polymethoxylated flavonoids and a furanocoumarin were isolated from the Yucatec Mayan medicinal plant *Casimiroa tetrameria*. Structures were assigned on the basis of 1 and 2D NMR spectral studies.

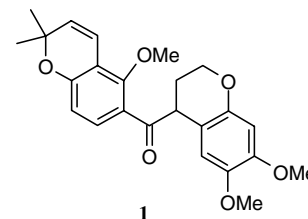


### 7a-O-methyldeguelol, a modified rotenoid with an open ring-C, from the roots of *Derris trifoliata*

pp 653–657

Abiy Yenesew\*, Eluid K. Mushibe, Martha Induli, Solomon Derese, J.O. Midiwo, Jacques M. Kabaru, Matthias Heydenreich, Andreas Koch, Martin G. Peter

From the roots of *Derris trifoliata* an isoflavonoid derivative (**1**), a modified rotenoid with an open ring-C, representing a new sub-class of isoflavonoids (the sub-class named rotenoloid) was isolated and characterised. The structure was determined on the basis of spectroscopic evidence.

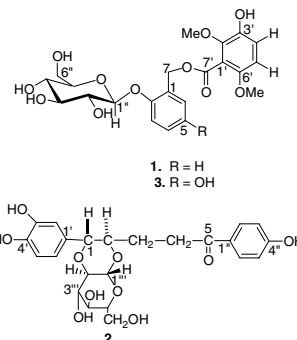


### Glucosides from *Curculigo orchoides*

pp 659–663

Moumita Gupta, Basudeb Achari, Bikas C. Pal\*

Two phenolic glucosides, orchioside A and B, along with four known compounds were isolated from the rhizomes of *Curculigo orchoides* Garten (Amaryllidaceae). Their structures were elucidated by 2D-NMR analysis, mass spectrometry and chemical evidences.

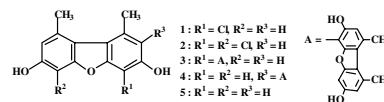


### Monomeric and dimeric dibenzofurans from cultured mycobionts of *Lecanora iseana*

pp 665–668

Yukiko Takenaka, Nobuo Hamada, Takao Tanahashi\*

The spore-derived mycobionts of the lichen *Lecanora iseana* were cultivated on a malt-yeast extract medium supplemented with 10% sucrose. The investigation of the metabolites resulted in isolation of four dibenzofurans **1–4**, as well as six known compounds, 3,7-dihydro-1,9-dimethyldibenzofuran (**5**) and five norlichexanthone derivatives.

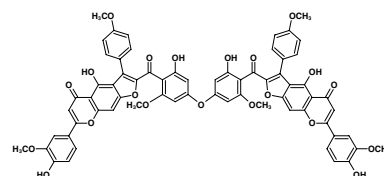


### Chalcone–flavone tetramer and biflavones from *Aristolochia ridicula*

pp 669–674

Marcos B. Machado, Lucia M.X. Lopes\*

Biflavones and a chalcone–flavone tetramer were isolated from the leaves of *Aristolochia ridicula*, together with *proto*-quercitol. Their structures were determined by spectroscopic methods.

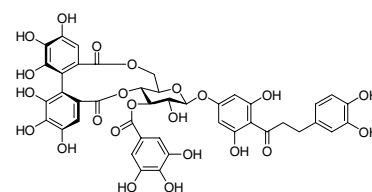


### Galloyl, caffeoyl and hexahydroxydiphenoyl esters of dihydrochalcone glucosides from *Balanophora tobiracola*

pp 675–681

Takashi Tanaka, Rami Uehara, Kaori Nishida, Isao Kouno\*

Seven galloyl, caffeoyl and (*S*)-hexahydroxydiphenoyl esters of dihydrochalcone glucosides were isolated from *Balanophora tobiracola*. The 3-galloyl-4,6-HHDP esters strongly inhibited  $\alpha$ -glucosidase.

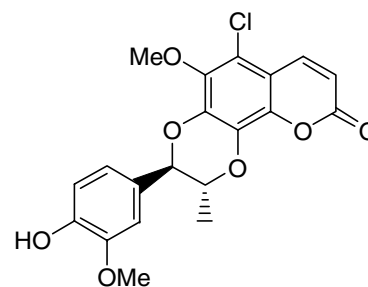


### A chlorinated coumarinolignan from the African medicinal plant, *Mondia whitei*

pp 683–686

Ramesh Patnam, Satya Sagar Kadali, Kossi H. Koumaglo, René Roy\*

The unusual chlorinated coumarinolignan, 5-chloropropacin, along with other known compounds have been isolated from the roots of *Mondia whitei*. The structure of the chlorinated coumarinolignan was determined by NMR and mass spectral analysis.

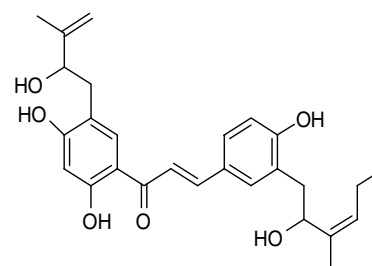


### Prenylated chalcones, flavone and other constituents of the twigs of *Dorstenia angusticornis* and *Dorstenia barteri* var. *subtriangularis*

pp 687–692

Bonaventure T. Ngadjui, Jean Watchueng, Felix Keumedjio, Bathélémy Ngameni, Ingrid K. Simo, Berhanu M. Abegaz\*

Three prenylated chalcones, bartericin D, angusticonins A and B, were isolated from the twigs of *Dorstenia angusticornis* and *Dorstenia barteri* var. *subtriangularis*.



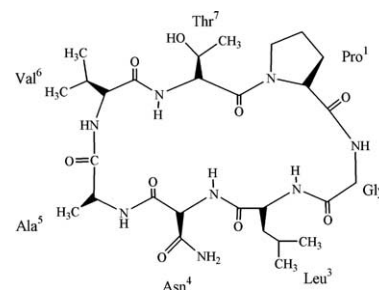
## ALKALOIDS

### Cherimolacyclopeptide D, a novel cycloheptapeptide from the seeds of *Annona cherimola*

pp 693–696

Alassane Wélé\*, Idrissa Ndoeye, Yanjun Zhang, Jean-Paul Brouard, Bernard Bodo

The structure of cherimolacyclopeptide D was elucidated on the basis of its MS/MS fragmentation, chemical degradation and extensive 2D-NMR.

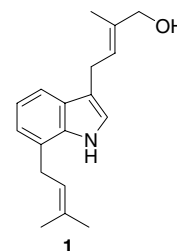


### Indole and carbazole alkaloids from *Glycosmis montana* with weak anti-HIV, cytotoxic activities

pp 697–701

Junsong Wang, Yongtang Zheng, Thomas Efferth, Ruirui Wang, Yuemao Shen, Xiaojiang Hao\*

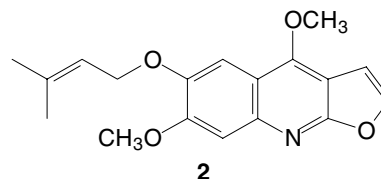
A diprenylated indole alkaloid and six carbazole alkaloids were isolated from *Glycosmis montana*. Their structures were based on spectroscopic studies. Anti-HIV and cytotoxic activities of some of the compounds were investigated.



**Furoquinoline alkaloids from the southern African Rutaceae *Teclea natalensis*****pp 703–706**

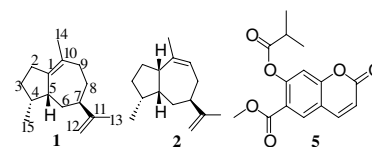
Paul K. Tarus, Philip H. Coombes\*, Neil R. Crouch, Dulcie A. Mulholland, B. Moodley

The leaves of *Teclea natalensis* have yielded two furoquinoline alkaloids, 6-[(2,3-epoxy-3-methylbutyl)oxy]-4,7-dimethoxyfuro[2,3-*b*]quinoline **1** and 4,7-dimethoxy-6-[(3-methyl-2-butenyl)oxy]furo[2,3-*b*]quinoline **2**, and the known alkaloids 4,7-dimethoxy-8-[(3-methyl-2-butenyl)oxy]furo[2,3-*b*]quinoline, flindersiamine and dictamnine.

**GENERAL CHEMISTRY****Secondary metabolites of *Peucedanum tauricum* fruits****pp 707–713**

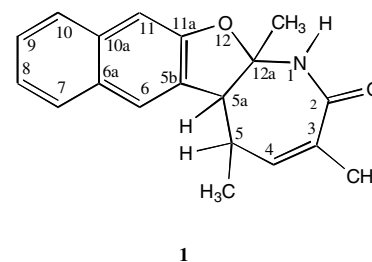
Hailemichael Tesse\*, Wilfried A. König, Karl-Heinz Kubeczka, Magdalena Bartnik, Kazimierz Glowinski

Fruits of *Peucedanum tauricum* contain, among other constituents, two guaiane type sesquiterpene hydrocarbons, guaia-1(10),11-diene (**1**) and guaia-9,11-diene (**2**), as well as officinalin isobutyrate (**5**).

**Drazeponone, a trisubstituted tetrahydronaphthofuroazepinone with herbicidal activity produced by *Drechslera siccans*****pp 715–721**

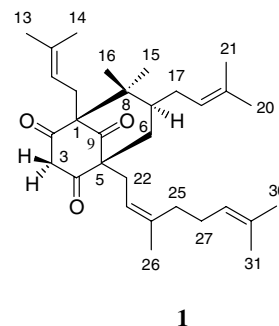
Antonio Evidente\*, Anna Andolfi, Maurizio Vurro, Mariano Fracchiolla, Maria Chiara Zonno, Andrea Motta

We report on the isolation and the chemical and biological characterization of drazeponone (**1**), a 3,5,12a-trimethyl-2,5,5a,12a-tetrahydro-1*H*-naphtho[2',3':4,5]furo[2,3-*b*]azepin-2-one produced by *Drechslera siccans*, showing interesting selective herbicidal properties, not associated to antibacterial and antifungal activities.

**A polyisoprenylated ketone from *Calophyllum nervosum*****pp 723–726**

Muhammad Taher\*, Muhammad Sum Idris, Farediah Ahmad, Dayar Arbain

A bicyclo[3.3.1]nonane derivative, identified as 8,8-dimethyl-5-geranyl-1,7-bis(3-methylbut-2-enyl)bicyclo[3.3.1]nona-2,4,9-trione, was isolated from *Calophyllum nervosum*. The compound exhibited a moderate antimicrobial property.

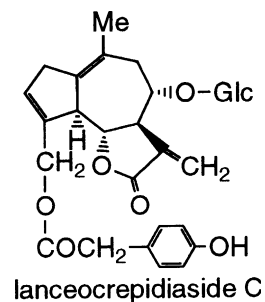


**Lanceocrepdiasides A–F, glucosides of guaiane-type sesquiterpene from *Crepidiastrum lanceolatum***

pp 727–732

Yoshio Takeda\*, Toshiya Masuda, Hiroyuki Morikawa, Hisako Ayabe, Eiji Hirata, Takakazu Shinzato, Mitsunori Aramoto, Hideaki Otsuka

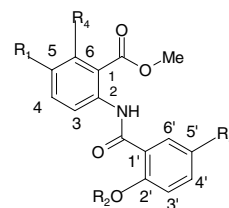
Six sesquiterpene glucosides, lanceocrepdiaside A–F, were isolated from the aerial parts of *Crepidiastrum lanceolatum* and the structures were elucidated.


**Dianthramide glucosides from tissue cell cultures of *Delphinium staphysagria* L.**

pp 733–739

Jesús G. Díaz, Jorge L. Marapara, F. Valdés, José Gavin Sazatornil, Werner Herz\*

Tissue cell cultures of *Delphinium staphysagria* produced dianthramide **1** and dianthramide glucosides **2–5**.



- 1  $R_1, R_2, R_3, R_4 = H$
- 2  $R_1 = OH, R_2 = Glc, R_3, R_4 = H$
- 3  $R_1, R_3 = OH, R_2 = Glc, R_4 = H$
- 4  $R_1 = OH, R_2 = Glc, R_3 = OMe, R_4 = H$
- 5  $R_1, R_3 = OH, R_2 = Glc, R_4 = OMe$

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**Guide for Authors**

\* Corresponding author

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ISSN 0031-9422

INDEXED/ABSTRACTED IN: *Current Awareness in Biological Sciences (CABS)*, *Curr Cont ASCA*, *Chem. Abstr.*, *BIOSIS Data*, *PASCAL-CNRS Data*, *CAB Inter*, *Cam Sci Abstr*, *Curr Cont/Agri Bio Env Sci*, *Curr Cont/Life Sci*, *Curr Cont Sci Cit Ind*, *Curr Cont SCISEARCH Data*, *Bio Agri Ind*

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