

Phytochemistry Vol. 66, No. 10, 2005

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Reports on Structure Elucidation

FULL PAPERS

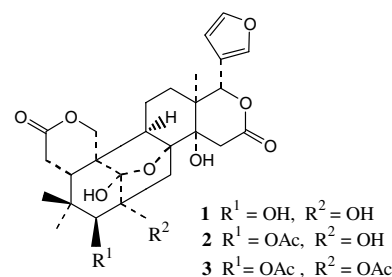
TERPENOIDS

Four tetranortriterpenoids from the stem bark of *Khaya anthotheca*

pp 1088–1093

Michel K. Tchimine, Pierre Tane, Dieudonne Ngamga, Joseph D. Connolly*, Louis J. Farrugia

Four tetranortriterpenoids, **1–3** and 6*R*,8*α*-dihydroxycarapin, have been isolated from the stem bark of *Khaya anthotheca*.

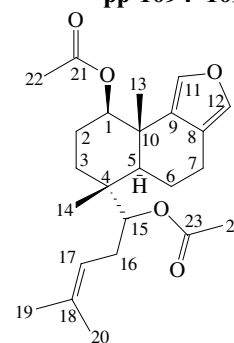


Sacculatane diterpenoids from axenic cultures of the liverwort *Fossombronia wondraczekii*

pp 1094–1099

Hildegard Feld, Ursula Maria Hertewich, Josef Zapp, Hans Becker*

Five sacculatane diterpenoids along with sacculatal and sacculatanolide have been isolated from axenic cultures of the liverwort *Fossombronia wondraczekii* and their structures assigned on the basis of their spectroscopical properties.

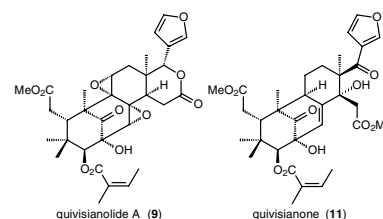


Mexicanolide limonoids from the Madagascan Meliaceae *Quivisia papinae*

pp 1100–1107

Philip H. Coombes*, Dulcie A. Mulholland, Milijaona Randrianarivelosia

The seeds of *Quivisia papinae* have yielded five mexicanolide group limonoids, together with two known mexicanolide limonoids and two known triterpenoids. Quivisianolide A **9** possesses a hitherto unreported 9*α*,11*α*-epoxide ring, quivisianolide B **10** the corresponding Δ⁹⁽¹¹⁾ double bond, and quivisianone **11** is a 17-keto *seco*-ring D compound.

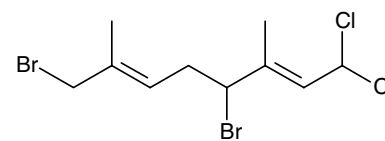


Plocoralides A–C, polyhalogenated monoterpenes from the marine alga
Plocamium corallorhiza

pp 1108–1112

 Michael G. Knott, Henry Mkwanzani, Catherine E. Arendse,
 Denver T. Hendricks, John J. Bolton, Denzil R. Beukes*

Organic extracts of *Plocamium corallorhiza* contain three polyhalogenated monoterpenes, plocoralides A–C (1–3). Compounds 1–3 show moderate activity towards esophageal cancer cells.



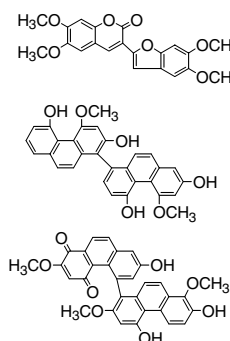
Plocoralide A (1)

PHENOLICS
Bi-bicyclic and bi-tricyclic compounds from *Dendrobium thyrsiflorum*

pp 1113–1120

 Guang-Nong Zhang, Ling-Yan Zhong, S.W. Annie Bligh, Ying-Li Guo,
 Chao-Feng Zhang, Mian Zhang, Zheng-Tao Wang*, Luo-Shan Xu

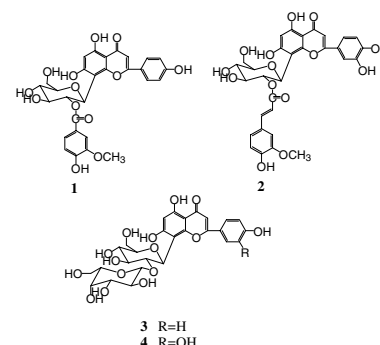
Coumarin–benzofuran, dimeric phenanthrene and phenanthrene–phenanthraquinone derivatives, along with seven known ones, were isolated from *Dendrobium thyrsiflorum* (Orchidaceae). Four of the compounds showed significant cytotoxic activities against Hela, K-562 and MCF-7 cell lines.


Flavone C-glycosides from flowers of *Trollius ledebouri*

pp 1121–1125

Jian-Hua Zou, Jun-Shan Yang*, Yue-Sheng Dong, Liang Zhou, Geng Lin

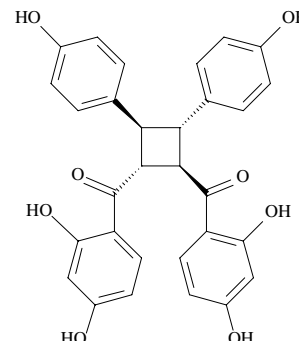
Four flavone C-glycosides, 2''-O-vanilloylvitexin (1), 2''-O-feruloylorientin (2), 2''-O-β-L-galactopyranosylvitexin (3), and 2''-O-β-L-galactopyranosylorientin (4), were isolated from the flowers of *Trollius ledebouri*, respectively.


Isolation and synthesis of a dimeric dihydrochalcone from *Agapanthus africanus*

pp 1126–1132

Bukirwa I. Kamara*, Dale T.L. Manong, Edward V. Brandt

A dimeric dihydrochalcone was isolated from the roots of *Agapanthus africanus*, and synthesized via a pericyclic [$\pi 2_s + \pi 2_s$] photocyclo-addition of the corresponding chalcone.

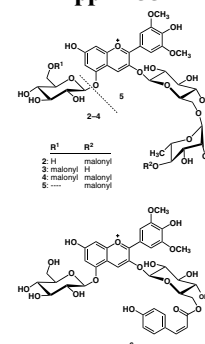


Acylated anthocyanins from leaves of *Oxalis triangularis*

pp 1133–1140

Torgils Fossen*, Saleh Rayyan, Maya H. Holmberg, Håvard S. Nateland, Øyvind M. Andersen

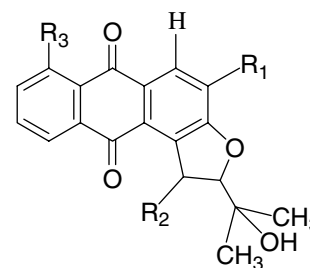
Five anthocyanins, the 3-(6-(4-malonylrhamnosyl)glucoside)-5-glucoside (**2**), the 3-(6-rhamnosylglucoside)-5-(6-malonylglucoside) (**3**), the 3-(6-(4-malonylrhamnosyl)glucoside)-5-(6-malonylglucoside) (**4**), the 3-(6-(4-malonylrhamnosyl)glucoside) (**5**) and the 3-(6-(*Z*)-pcoumaroylglucoside)-5-glucoside (**6**) of malvidin, have been isolated from methanolic extracts of leaves of *Oxalis triangularis*.

**Anthraquinones from *Hedyotis capitellata***

pp 1141–1147

Rohaya Ahmad, Khozirah Shaari, Nordin Hj. Lajis*, Ahmad Sazali Hamzah, Nor Hadiani Ismail, Mariko Kitajima

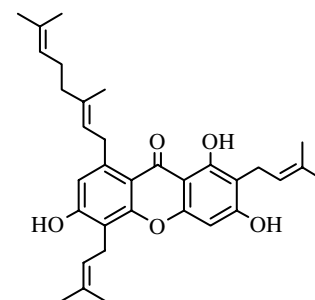
Four furanoanthraquinones together with four known anthraquinones and scopoletin were isolated from the stems of *Hedyotis capitellata*. Lucidin-3-*O*- β -glucoside was isolated from the roots of the plant.

**Xanthonones from *Garcinia cowa* Roxb. latex**

pp 1148–1153

W. Mahabusarakam*, P. Chairerk, W.C. Taylor

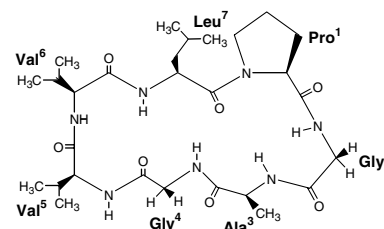
Five xanthonones named cowagarcinone A–E together with six known compounds were isolated from the latex of *Garcinia cowa*. The crude latex and isolated compounds were investigated for their radical scavenging activities.

**ALKALOIDS****Glaucacyclopeptide A from the seeds of *Annona glauca***

pp 1154–1157

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

The structure of glaucacyclopeptide A was determined on the basis of its MS/MS fragmentation, chemical degradation and extensive 2D NMR.

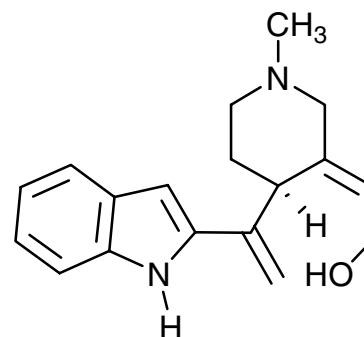


Indole alkaloids from the leaves of Philippine *Alstonia scholaris*

pp 1158–1162

Allan Patrick G. Macabeo, Karsten Krohn*, Dietmar Gehle, Roger W. Read, Joseph J. Brophy, Geoffrey A. Cordell, Scott G. Franzblau, Alicia M. Aguinaldo

Manilamine, a *seco*-uleine alkaloid identified for the first time from the genus *Alstonia*, and *N*⁴-methyl angustilobine B were isolated from the leaves of the Philippine medicinal plant, *Alstonia scholaris*.

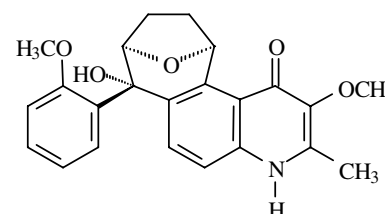


An unusual quinolinone alkaloid from *Waltheria douradinha*

pp 1163–1167

Solange C.S.M. Hoelzel, Eleno R. Vieira, Sandro R. Giacomelli, Ionara I. Dalcol, Nilo Zanatta, Ademir F. Morel*

The chemical investigation of the methanolic extract of the root bark of *Waltheria douradinha* (Sterculiaceae) afforded waltherione-A, an unusual quinolinone alkaloid.



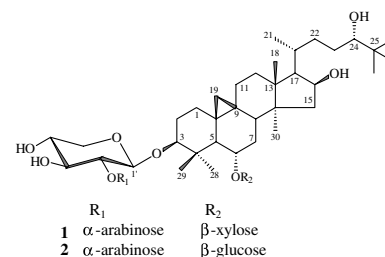
GENERAL CHEMISTRY

Leishmanicidal cycloartane-type triterpene glycosides from *Astragalus oleifolius*

pp 1168–1173

Meltem Özipek*, Ali A. Dönmez, İhsan Çalış, Reto Brun, Peter Rüedi, Deniz Tasdemir

Two cycloartane-type glycosides oleifoliosides A (**1**) and B (**2**) were isolated from the lower stem parts of *Astragalus oleifolius* and evaluated for in vitro trypanocidal, leishmanicidal and antiparasmodial activities as well as their cytotoxic potential on primary mammalian (L6) cells. Their structures were identified as 3-*O*-[β -xylopyranosyl-(1 \rightarrow 2)- α -arabinopyranosyl]-6-*O*- β -xylopyranosyl-3 β ,6 α ,16 β ,24(*S*),25-pentahydroxycycloartane and 3-*O*-[β -xylopyranosyl-(1 \rightarrow 2)- α -arabinopyranosyl]-6-*O*- β -glucopyranosyl-3 β ,6 α ,16 β ,24(*S*),25-pentahydroxycycloartane, respectively, by means of spectroscopic methods (IR, 1D and 2D NMR, ESI-MS).

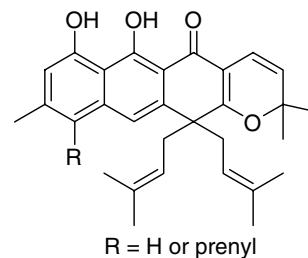


Prenylated anthronoid antioxidants from the stem bark of *Harungana madagascariensis*

pp 1174–1179

Simeon F. Kouam, Bonaventure T. Ngadjui, Karsten Krohn*, Pascal Wafo, Asma Ajaz, M. Iqbal Choudhary

Two prenylated anthronoids, harunmadagascarins A and B, were isolated from the stem bark of *Harungana madagascariensis*.

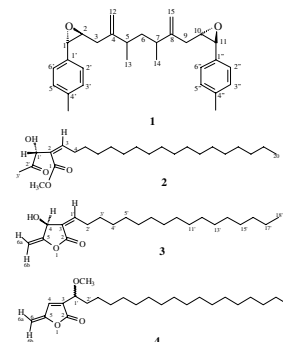


Steryl epoxide, secobutanolide and butanolides from the stem wood of *Machilus zuihoensis*

pp 1180–1185

Ming-Jen Cheng, Ian-Lih Tsai, Shoiw-Ju Lee, Bolleddula Jayaprakasam, Ih-Sheng Chen*

The dimeric steryl epoxide, machillene (1), the secobutanolide, secomahubanolide (2), and two butanolides, zuihoenalide (3), and 3-(1-methoxyoctadecyl)-5-methylene-5H-furan-2-one (4), together with 12 known compounds, have been isolated from the stem wood of *Machilus zuihoensis*. Their structures were determined by means of spectroscopic analyses. Machillene (1) showed cytotoxic activity against NUGC-3 and HONE-1 cancer cell lines in vitro.

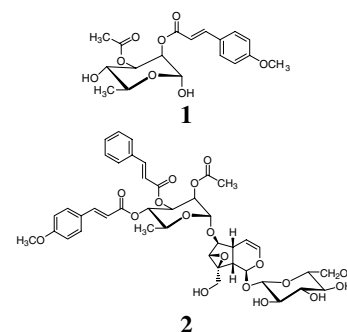


A sugar ester and an iridoid glycoside from *Scrophularia ningpoensis*

pp 1186–1191

Anh-Tho Nguyen*, Jeanine Fontaine, Hugues Malonne, Magda Claeys, Michel Luhmer, Pierre Duez

A sugar ester, ningposide D (1) and a iridoid glycoside, scrophuloside B₄ (2) together with six known compounds were isolated from cytotoxic extracts of the roots of *Scrophularia ningpoensis*. Their structures were established on the basis of spectral evidence. The isolated compounds: oleanonic acid, ursolonic acid, β -sitosterol and scrophuloside B₄ (2) inhibit the proliferation of several cancer human cell lines, i.e., MCF7, K562, Bowes, T24S and A549.



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* Corresponding author

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