

Phytochemistry Vol. 67, No. 24, 2006

Reports on Structure Elucidation

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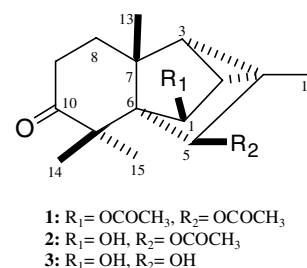
TERPENOIDS

Chemical constituents of Malagasy liverworts: Cyclomyltaylanoids from *Bazzania madagassa*

pp 2616–2622

Liva Harinantenaina, Ritsu Kurata, Shigeru Takaoka, Yoshinori Asakawa\*

Five cyclomyltaylanoids (**2–6**), together with 1*R*,5*R*-diacetoxycyclomyltaylan-10-one (**1**), (+)-globulol, and *ent*-4,10-dihydroxyaromadendrane were isolated from *Bazzania madagassa*. The structure of **1** was confirmed by X-ray analysis, while those of the compounds were established on the basis of one- and two-dimensional NMR spectroscopic evidence, and comparison with data reported in the literature. The chemosystematics of *B. madagassa* are discussed.

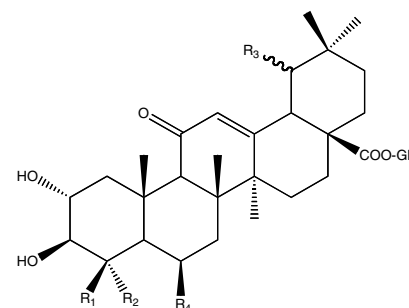


Triterpenoid saponins from *Pteleopsis suberosa* stem bark

pp 2623–2629

Marinella De Leo, Nunziatina De Tommasi, Rokia Sanogo, Valeria D'Angelo, Maria Paola Germanò, Giuseppe Bisignano, Alessandra Braca\*

Thirteen oleanane saponins were isolated from *Pteleopsis suberosa* Engl. et Diels stem bark (Combretaceae). Their structures were determined by 1D and 2D NMR spectroscopy and ESI-MS spectrometry. Moreover, the isolated compounds were tested against *Helicobacter pylori* standard and *vacA*, and *cagA* clinical virulence genotypes. Results showed that compound **6** has an anti-*H. pylori* activity against three metronidazole-resistant strains (Ci 1 *cagA*, Ci 2 *vacA*, and Ci 3).

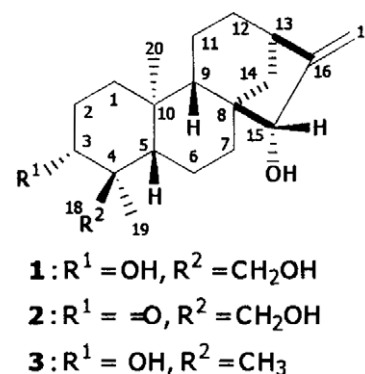


Potential anti-allergic *ent*-kaurene diterpenes from the bark of *Suregada multiflora*

pp 2630–2634

Sarot Cheenpracha, Orapun Yodsauae, Chatchanok Karalai\*, Chanita Ponglimanont, Sanan Subhadhirasakul, Supinya Tewtrakul, Akkharawit Kanjana-opas

*ent*-16-Kaurene-3β,15β,*ent*-3-Oxo-16-kaurene-15β,18-diol (**2**) along with five known diterpenes were isolated from the bark of *Suregada multiflora*. All compounds possessed appreciable anti-allergic activities in RBL-2H3 cells model with IC<sub>50</sub> values ranging from 22.5 to 42.2 μM

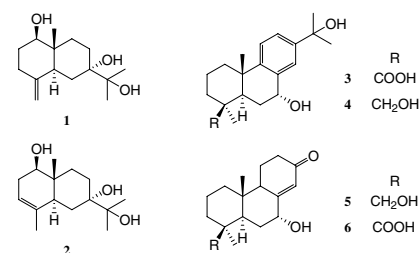


### Terpenoids from *Juniperus polycarpus* var. *seravschanica*

pp 2635–2640

Mamoru Okasaka, Yoshihisa Takaishi\*, Yoshiki Kashiwada,  
Olimjon K. Kodzhimatov, Ozodbek Ashurmetov, Ai J. Lin,  
L. Mark Consentino, Kuo-Hsiung Lee

The sesquiterpenoids and diterpenoids shown were isolated from fruits of *Juniperus polycarpus* var. *seravschanica*, together with nine known compounds. Their structures were established based on spectroscopic studies.

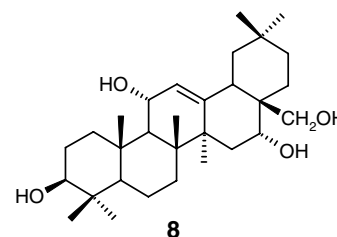


### Oleanane-type triterpenes of *Embelia schimperi* leaves

pp 2641–2650

Lawrence Onyango Arot Manguro\*, Steve Onyango Okwiri, Peter Lemmen

Ten oleanane type triterpenes, including **8** were isolated from the leaves of *Embelia schimperi*. Their structures were established by spectroscopic and chemical methods and by comparison with spectral data of related known compounds.



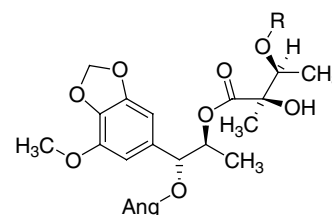
## PHENOLICS

### Cytotoxic phenylpropanoids and an additional thapsigargin analogue isolated from *Thapsia garganica*

pp 2651–2658

Huizhen Liu, Kent Gunnertoft Jensen, Linh My Tran, Ming Chen, Lin Zhai,  
Carl Erik Olsen, Helmer Søhoel, Samuel R. Denmeade, John T. Isaacs,  
S. Brøgger Christensen\*

Some phenylpropanoids (R = angeloyl, butanoyl, hexanoyl, or octanoyl), and a thapsigargin analogue have been shown to be cytotoxic.

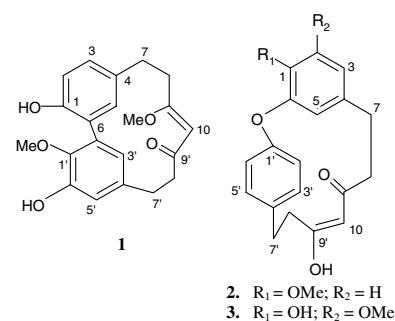


### Macrocyclic diarylheptanoids from *Garuga pinnata*

pp 2659–2662

Kulsum Ara, A.H.M.M. Rahman, Choudhury M. Hasan, Magdy N. Iskander,  
Yoshinori Asakawa, Dang N. Quang, Mohammad A. Rashid\*

Three macrocyclic diarylheptanoids, 6'-hydroxygaruganin V (**1**), 9'-desmethylgarugamblin I (**2**) and 1,9'-didesmethylgaruganin III (**3**) were isolated from the petroleum ether and dichloromethane extracts of the stem bark of *Garuga pinnata*. The structures of these compounds were established by extensive spectroscopic studies, including high field NMR and MS measurements.

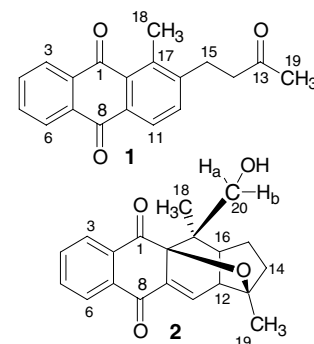


**Stereochenols A and B, two quinones from *Stereospermum chelonoides***

pp 2663–2665

Mohammad R. Haque, Khondaker M. Rahman, Magdy N. Iskander, Choudhury M. Hasan, Mohammad A. Rashid\*

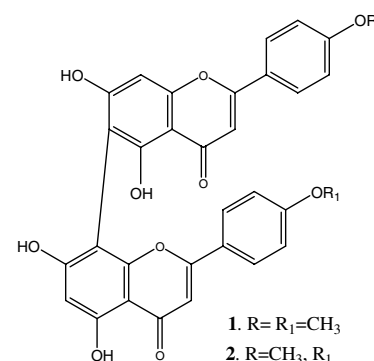
Two quinones, stereochenols A (**1**) and B (**2**) were isolated from a methanol extract of the stem bark of *Stereospermum chelonoides*, in addition to the known naphthoquinones, sterekunthal B (**3**) and sterequinone C (**4**). The structures of these compounds were established by extensive spectroscopic analyses and by comparison of their spectral data with those of related compounds.

**Two biflavonoids from *Ouratea nigroviolacea***

pp 2666–2670

Josephine Ngo Mbing, Cécile Enguehard-Gueiffier, Alex de Théodore Atchadé, Hassan Allouchi, Joseph Gangoué-Piéboji, Joseph Tanyi Mbafor, Raphael Ghogomu Tih, Jacques Pothier, Dieudonné Emmanuel Pegnyemb\*, Alain Gueiffier

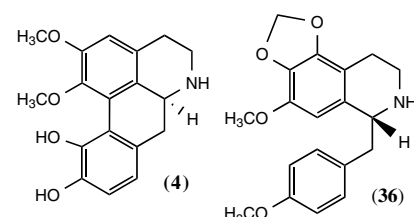
Two biflavonoids, ouratine A and B (**1–2**) were isolated from the leaves of *Ouratea nigroviolacea* together with two known compounds. The structure of **1** was ascertained by single crystal X-ray analysis.

**ALKALOIDS****Secondary and tertiary isoquinoline alkaloids from *Xylopia parviflora***

pp 2671–2675

Yumi Nishiyama\*, Masataka Moriyasu, Momoyo Ichimaru, Kinuko Iwasa, Atsushi Kato, Simon G. Mathenge, Patrick B. Chalo Mutiso, Francis D. Juma

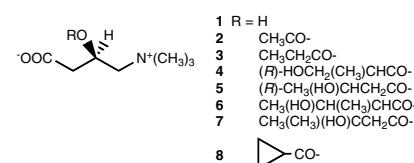
Isoquinoline alkaloids, 10,11-dihydroxy-1,2-dimethoxynoraporphine (**4**) and parvinine (**36**) were isolated from the secondary and tertiary alkaloidal fraction of *Xylopia parviflora* (Annonaceae).

**GENERAL CHEMISTRY****Carnitine-esters from the mushroom *Suillus laricinus***

pp 2676–2680

Hirokazu Kawagishi\*, Hiroaki Murakami, Shingo Sakai, Shintaro Inoue

Carnitine-esters (**1–8**) including a compound, (*R*)-3-hydroxybutanoyl-(*R*)-carnitine (**5**), were isolated from the mushroom *Suillus laricinus*. One of them, (*R*)-3-hydroxy-2-methylpropanoyl-(*R*)-carnitine (**4**), promoted hyaluronan-degradation by human skin fibroblasts.

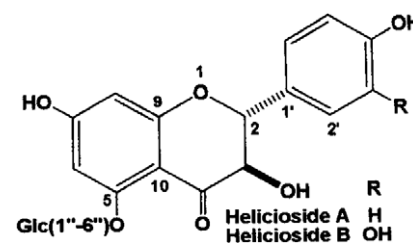


**5-*O*-glucosyldihydroflavones from the leaves of *Helicia cochinchinensis***

pp 2681–2685

Ken-Ichi Morimura, Asuka Gatayama, Reiki Tsukimata, Katsuyoshi Matsunami, Hideaki Otsuka\*, Eiji Hirata, Takakazu Shinzato, Mitsunori Aramoto, Yoshio Takeda

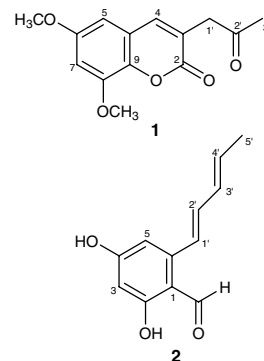
From the leaves of *Helicia cochinchinensis*, two 5-*O*-glucosyldihydroflavones, heliciosides A and B, were isolated. Their structures were elucidated by spectroscopic analyses.

**Aromatic compounds produced by *Periconia atropurpurea*, an endophytic fungus associated with *Xylopia aromatica***

pp 2686–2690

Helder Lopes Teles, Renata Sordi, Geraldo Humberto Silva, Ian Castro-Gamboa, Vanderlan da Silva Bolzani, Ludwig Heinrich Pfenning, Lucas Magalhães de Abreu, Claudio Miguel Costa-Neto, Maria Claudia Marx Young, Ângela Regina Araújo\*

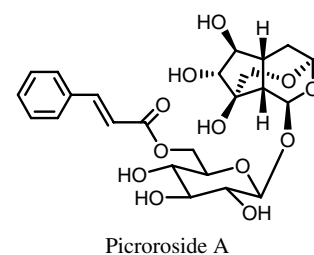
Compounds **1** and **2** were produced by the endophytic fungus *Periconia atropurpurea* which is associated with *Xylopia aromatica*, a native plant of the Brazilian Cerrado. Their structures were established on the basis of comprehensive spectroscopic analyses, mainly by 1D and 2D NMR spectroscopic experiments. Compound **2** showed significant activity when evaluated against human cervix tumor cell lines.

**Iridoid glycosides and cucurbitacin glycoside from *Neopicrorhiza scrophulariiflora***

pp 2691–2696

Ik Hwi Kim, Nahoko Uchiyama, Nobuo Kawahara, Yukihiro Goda\*

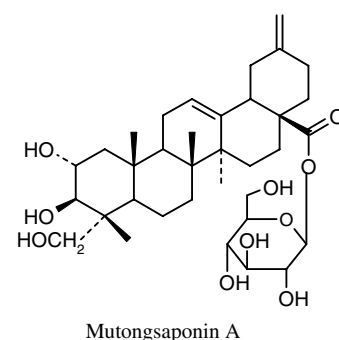
Three iridoid glycosides, picrorosides A, B and C, and a cucurbitacin glycoside, scrophoside A, were isolated from the rhizomes of *Neopicrorhiza scrophulariiflora*. Picrorosides A, B and C have a rigid three ring skeleton.

**Triterpenoid saponins and phenylethanoid glycosides from stem of *Akebia trifoliata* var. *australis***

pp 2697–2705

Huimin Gao, Zhimin Wang\*

Triterpenoid saponins, named mutongsaponin A, B, C, D and E, were isolated along with 12 known triterpenoid saponins and three phenylethanoid glycosides from the stem of *Akebia trifoliata* var. *australis*.



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\* Corresponding author

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