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Publisher's Note

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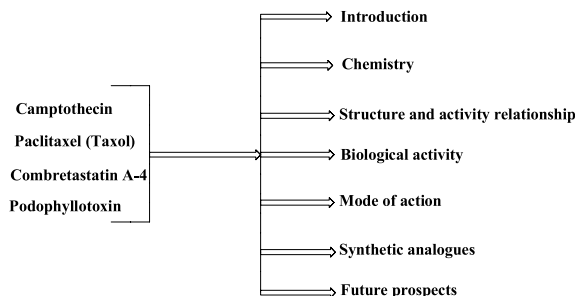
### REVIEW

#### Plant-based anticancer molecules: A chemical and biological profile of some important leads

pp 5892–5908

Vandana Srivastava, Arvind Singh Negi,\* J. K. Kumar, M. M. Gupta and Suman P. S. Khanuja

The review highlights the four important anticancer leads namely camptothecin, paclitaxel, combretastatin A-4 and podophyllotoxin. Their chemistry, structure and activity relationships, biological activities, modes of action, analogue synthesis and future prospects have been discussed.

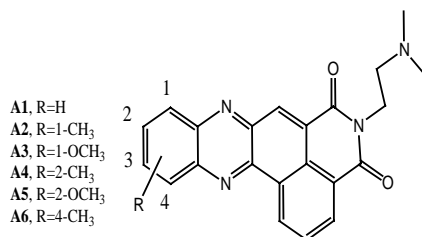


### ARTICLES

#### Novel synthetic isoquinolino[5,4-*ab*]phenazines: Inhibition toward topoisomerase I, antitumor and DNA photo-cleaving activities

pp 5909–5914

Peng Yang, Qing Yang, Xuhong Qian\* and Jingnan Cui

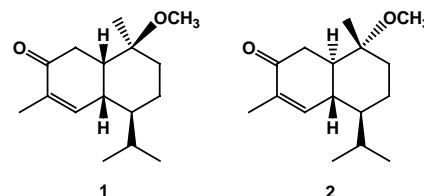


#### Two new sesquiterpenoids and anti-HIV principles from the root bark of *Zanthoxylum ailanthoides*

pp 5915–5920

Ming-Jen Cheng, Kuo-Hsiung Lee, Ian-Lih Tsai and Ih-Sheng Chen\*

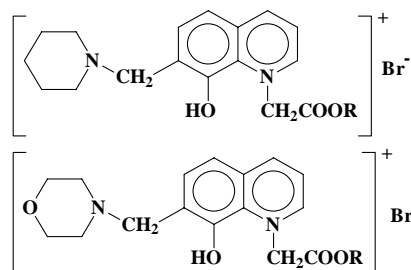
Two new sesquiterpenes, 10 $\beta$ -methoxymurolan-4-en-3-one (**1**) and 10 $\alpha$ -methoxycadinan-4-en-3-one (**2**), were isolated from the root bark of *Zanthoxylum ailanthoides*. Sixty-seven compounds obtained from the same plant were evaluated for inhibition of HIV replication in H9 lymphocyte cells, and 14 compounds demonstrated significant activity. Among them, decarine,  $\gamma$ -fagarine, and (+)-tembamide had EC<sub>50</sub> values of <0.1 $\mu$ g/mL and TI values of >226, >231, and >215, respectively.



**Biocidal activity of some Mannich base cationic derivatives**

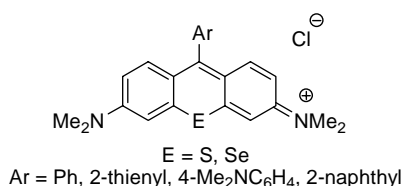
pp 5921–5926

Nabel A. Negm,\* Salwa M. I. Morsy and Medhat M. Said

**Chalcogenoxanthylum photosensitizers for the photodynamic purging of blood-borne viral and bacterial pathogens**

pp 5927–5935

Stephen J. Wagner, Andrey Skripchenko, David J. Donnelly, Krishna Ramaswamy and Michael R. Detty\*

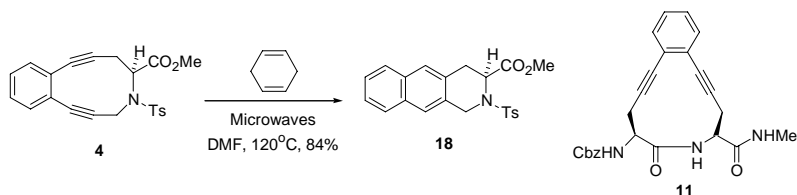


A series of substituted thio- and seleno-analogues of tetramethylrosamine was prepared and evaluated as photosensitizers for the photodynamic purging of blood-borne viral and bacterial pathogens.

**The synthesis and evaluation of 10- and 12-membered ring benzofused enediyne amino acids**

pp 5936–5948

Yanming Du, Christopher J. Creighton, Zhengyin Yan, Diane A. Gauthier, John P. Dahl, Boyu Zhao, Stanley M. Belkowski and Allen B. Reitz\*

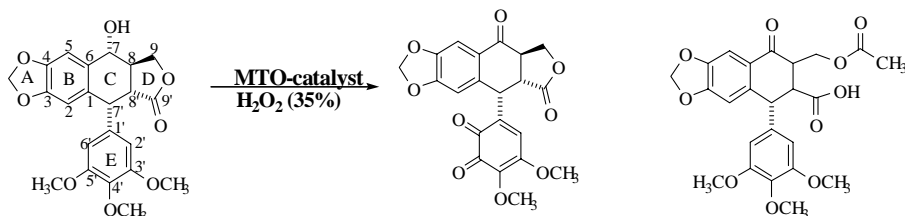


Benzofused enediynes such as **4** and **11** have been prepared and investigated.

**Methyltrioxorhenium catalysed synthesis of highly oxidised aryltetralin lignans with anti-topoisomerase II and apoptogenic activities**

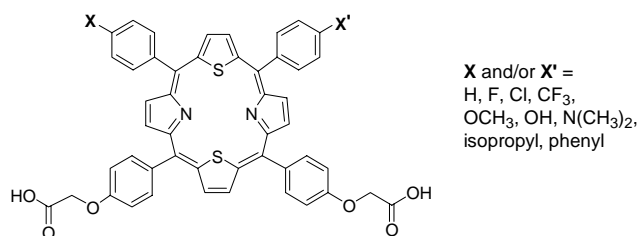
pp 5949–5960

Raffaele Saladino,\* Cinzia Fiani, Maria Cristina Belfiore, Giampiero Gualandi, Sabrina Penna and Pasquale Mosesso

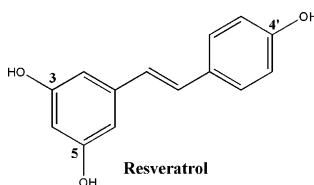


## pp 5961–5967

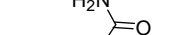
## Youngjae You,\* Scott L. Gibson and Michael R. Detty



Arthur E. Kümmerle, Gilberto M. Sperandio da Silva, Carlos M. R. Sant'Anna, Eliezer J. Barreiro  
and Carlos A. M. Fraga\*



**pp 5986–5995**

  
2 R = Bn, n-Bu

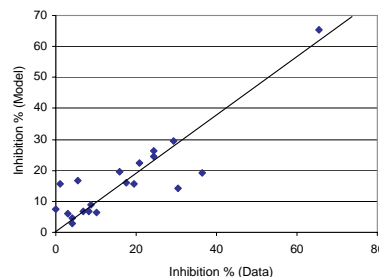
Preparation and testing of the highly substituted  $\gamma$ -lactam analogues **2** is reported.

**QSAR studies of paeonol analogues for inhibition of platelet aggregation**

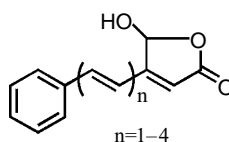
pp 5996–6001

Mukesh Doble,\* S. Karthikeyan, P. A. Padmawar and K. G. Akamanchi

Comparison of back-propagation neural network model prediction with data.

**Biological activities of retinoidal  $\gamma$ -hydroxybutenolides in cancer cell apoptosis and differentiation**

pp 6002–6008

Yumiko Yamano,\* Yukari Mizuguchi, Yumi Fujita, Maki Yoshida, Masayoshi Ito,\*  
Kimie Nakagawa and Toshio Okano\*

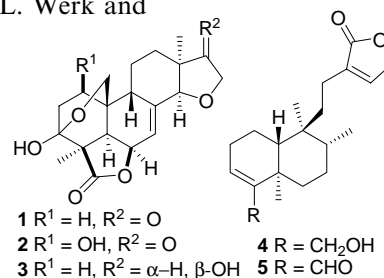
Retinoidal  $\gamma$ -hydroxybutenolides having various lengths of conjugated double bond were prepared, and their apoptosis-inducing and differentiation-inducing activities were tested in HL-60 cells.

**Cytotoxic diterpenoids from two lianas from the Suriname rainforest**

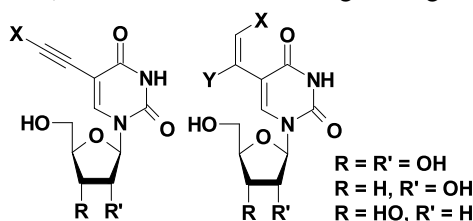
pp 6009–6014

Eba Adou, Russell B. Williams, Jennifer K. Schilling, Stan Malone, Jan Meyer, Jan H. Wisse,  
Djon Frederik, Delon Koese, Marga C. M. Werkhoven, Carl E. Snipes, Todd L. Werk and  
David G. I. Kingston\*

Bioassay-guided fractionation of methanol and ethyl acetate extracts of two lianas has led to the isolation of five new diterpenoids, humirianthone **1**, 1-hydroxy-humirianthone **2**, 15*R*-humirianthol **3**, patagonol **4**, and patagonal **5**, and the five known diterpenoids, humirianthol **7**, annonalide **8**, acrenol **9**, icacinol **10**, and the oxidized annonalide **11**. All 10 diterpenoids showed cytotoxic activity against the A2780 human ovarian cancer cell line.

**Synthesis of 5-haloethynyl- and 5-(1,2-dihalo)vinyluracil nucleosides: Antiviral activity and cellular toxicity**

pp 6015–6024

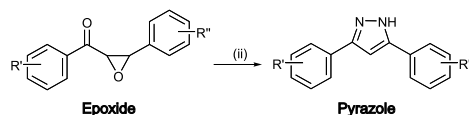
Vanessa Escuret, Vincent Aucagne, Nicolas Joubert, David Durantel,  
Kimberly L. Rapp, Raymond F. Schinazi, Fabien Zoulim and Luigi A. Agrofoglio\*

The synthesis and evaluation of eighteen, hitherto unknown, 5-haloethynyl- and 5-(1,2-dihalo)vinyluracil-(2'-deoxy-, ribo-, and 3'-deoxy)-nucleosides and their in vitro antiviral activity (HCV, HIV, BVDV) and toxicity are described.

**Synthesis and cytotoxicity of epoxide and pyrazole analogs of the combretastatins**

pp 6025–6034

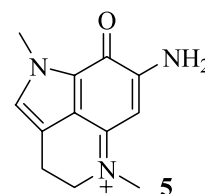
Regan LeBlanc, John Dickson, Toni Brown, Michelle Stewart, Hari N. Pati,  
Don VanDerveer, Hadi Arman, Jeff Harris, William Pennington,  
Herman L. Holt, Jr. and Moses Lee\*

**Antitumor activity and distribution of pyrroloiminoquinones in the sponge genus *Zyzzya***

pp 6035–6044

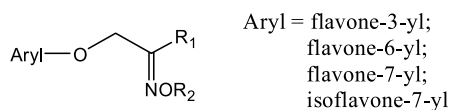
Marie-Geneviève Dijoux, Peter C. Schnabel, Yali F. Hallock, Jamie L. Boswell,  
Tanya R. Johnson, Jennifer A. Wilson, Chris M. Ireland, Rob van Soest,  
Michael R. Boyd, Louis R. Barrows\* and John H. Cardellina, II\*

Comparative testing in the NCI 60 cell line screen of sponge-derived pyrroloiminoquinones revealed varying potency and differential cytotoxicity, apparently related to the unsaturation levels in and substitution patterns on the core ring system. Mechanistic studies of DNA intercalation included reductive activation leading to DNA damage, studies of half wave reduction potential and reversibility, and intercalation measured by fluorescence displacement. Makaluvamine H (**5**) emerged as the most potent and differential compound.

**Synthesis, antiproliferative, and antiplatelet activities of oxime- and methyloxime-containing flavone and isoflavone derivatives**

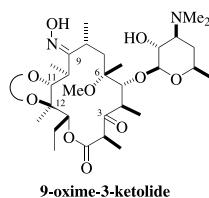
pp 6045–6053

Tai-Chi Wang, I.-Li Chen, Pei-Jung Lu, Chui-Hei Wong, Chang-Hui Liao,  
Kuei-Ching Tsiao, Ken-Ming Chang, Yeh-Long Chen and Cherng-Chyi Tzeng\*

**9-Oxime-3-ketolides: Modification at the C-11,12-diol moiety and antibacterial activities against key respiratory pathogens**

pp 6054–6063

Takashi Nomura,\* Tatsuro Yasukata, Yukitoshi Narukawa and Kouichi Uotani

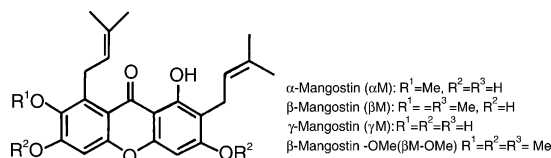


In the search for new types of ketolide antibiotics active against key respiratory pathogens including erythromycin-resistant strains, we conducted an extensive study on the modification at the C-11,12-diol moiety of 9-oxime-3-ketolide derivatives.

**Xanthenes induce cell-cycle arrest and apoptosis in human colon cancer DLD-1 cells**

pp 6064–6069

Kenji Matsumoto,\* Yukihiro Akao, Kenji Ohguchi, Tetsuro Ito, Toshiyuki Tanaka, Munekazu Iinuma and Yoshinori Nozawa



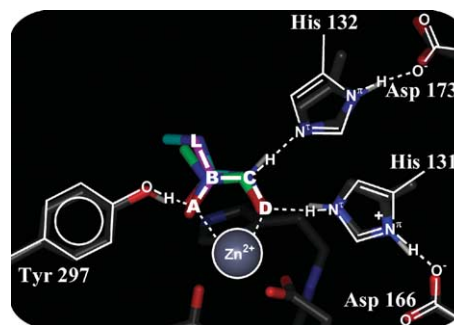
We investigated the antiproliferative effects of four structurally similar prenylated xanthenes,  $\alpha$ -mangostin,  $\beta$ -mangostin,  $\gamma$ -mangostin, and methoxy- $\beta$ -mangostin, in human colon cancer DLD-1 cells.

**DFT-based ranking of zinc-binding groups in histone deacetylase inhibitors**

pp 6070–6082

K. Vanommeslaeghe,\* S. Loverix, P. Geerlings and D. Tourwé

A series of zinc-binding groups were ranked by their HDAC inhibitory potential, calculated at a high level of theory. The estimated binding energies were qualitatively validated with experimental results from the literature, and were shown to be meaningful for the purpose of ranking. Also, several criteria for binding were identified.

**OTHER CONTENTS**

Contributors to this issue

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\*Corresponding author

i+ Supplementary data available via ScienceDirect

**COVER**

2005: Human liver glycogen phosphorylase A (HLGPa) is an attractive target enzyme for discovering anti-type 2 diabetes drugs. This picture shows the interaction model for a series of indole-2-carboxamides to HLGPa derived from molecular docking simulations [Liu, G.; Zhang, Z.; Luo, X.; Shen, J.; Liu, H.; Shen, X.; Chen, K.; Jiang, H. *Bioorg. Med. Chem.* **2004**, *12*, 4147–4157].

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