

Indian Journal of Chemistry

Sect. B: Organic Chemistry including Medicinal Chemistry

VOL. 54B

NUMBER 12

December 2015

CONTENTS

Papers

- 1483 A general synthetic approach to *para*-cyclophanes via ring-closing metathesis** A new methodology for the synthesis *para*-cyclophanes and longithorone C frameworks has been demonstrated via alkylidation, ceric ammonium nitrate (CAN) oxidation and ring-closing metathesis as key steps.

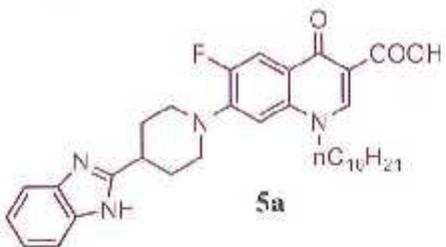


Sambasivarao Kotha* & Mukesh E Shirbhate

Department of Chemistry, Indian Institute of Technology, Bombay, Powai, Mumbai 400 076, India

- 1495 Synthesis and biological evaluation of novel N1-decyl and C7-*sec* amine substituted fluoroquinolones as antitubercular and anticancer agents**

A series of novel *N*1-decyl and C7-*sec* amine substituted fluoroquinolone derivatives have been synthesized and evaluated for *in vitro* antitubercular activity against *Mycobacterium tuberculosis H37Rv* strain and anticancer activity have been studied against four human cancer cell lines (HeLa, MDA-MB-231, MIA PaCa and IMR32). Compounds **4** and **5a** exhibit significant antitubercular and antiproliferative activity. The results are encouraging and indicate towards a lead molecule in a combination therapy.



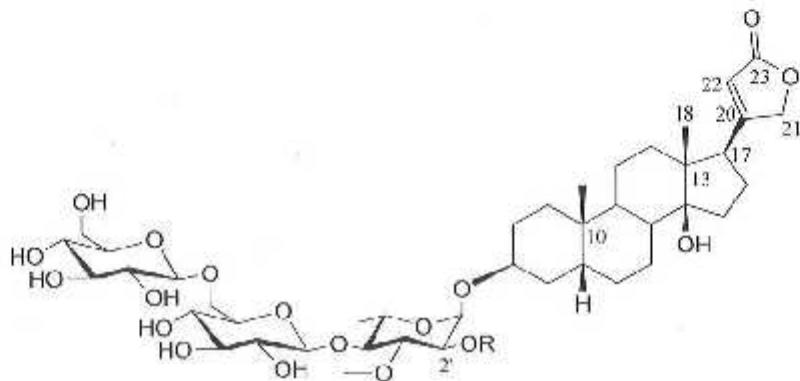
Potent compound $GI_{50} = < 0.01 \mu\text{g/mL}$
against IMR 32 neuroblastoma cancer cell line

A Ravi Kumar, B P Venkat Lingaiah, P Shanthan Rao*, B Narsaiah, D Sriram & P Sowjanya

Fluoroorganic Division, CSIR-Indian Institute of Chemical Technology, Tarnaka, Hyderabad 500 007, India

- 1502 Isolation and quantification of six cardiac glycosides from the seeds of *Thevetia peruviana***

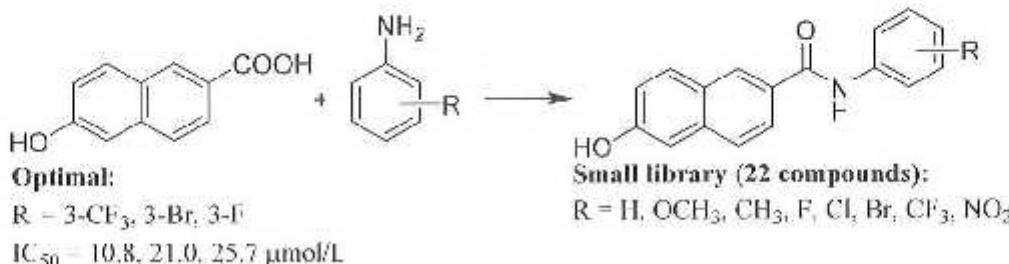
To support toxicological assessment of poisoning with thevetia cardiac glycosides, a new isolation method has been developed from the seeds of the Yellow Oleander (*Thevetia peruviana*) using accelerated solvent extraction.



Sarah Kohls, Barbara M Scholz-Böttcher, Jörg Teske & Jürgen Rullkötter*

Institute for Chemistry and Biology of the Marine Environment (ICBM), Carl von Ossietzky University of Oldenburg, Carl-von-Ossietzky-Str. 9-11, D-26129 Oldenburg, Germany

- 1511 Inhibition of photosynthetic electron transport by 6-hydroxynaphthalene-2-carboxanilides**



Matus Pesko, Jiri Kos, Katarina Kralova & Josef Jampilek*

Department of Chemical Drugs, Faculty of Pharmacy, University of Veterinary and Pharmaceutical Sciences, Palackeho 1/3, 612 42 Brno, Czech Republic

- 1518 NMR studies of some 4-hydroxy-2-methylaceto-phenone thiosemicarbazones in solutions**

Molecular dynamics of (*E*)-4-hydroxy-2-methylaceto-phenone thiosemicarbazone and (*E,E*)-3-(5-bromo-2-hydroxyphenyl)-1-(4-hydroxy-2-methylphenyl) prop-2-en-1-one thiosemicarbazone have been investigated in solution using NMR. The results confirm the presence of conformational transitions in the investigated molecules. The rotational barrier energy for the conformational transitions has been calculated.

I G Mamedov*, M R Bayramov, A E Salanova & A M Maharramov

Baku State University, Chemical Faculty, NMR Laboratory, Z. Khalilov 23, Baku, Azerbaijan

-
- 1528 The hindered internal rotations in isomerism forms
of a particular phosphorane involving 2-chloro-
phenothiazine: Dynamic ^1H NMR study

Eideh Mofarrah, Sayyed Mostafa Habibi-Khorassani*, Malek Taher Maghsoodlou & Mehdi Shahraki

Department of Chemistry, University of Sistan and Baluchestan, P. O. Box 98135-674, Zahedan, Iran

-
- 1535 Annual Index

Authors for correspondence are indicated by (*)
