

Indian Journal of Chemistry

Sect. B: Organic Chemistry including Medicinal Chemistry

VOL. 48B

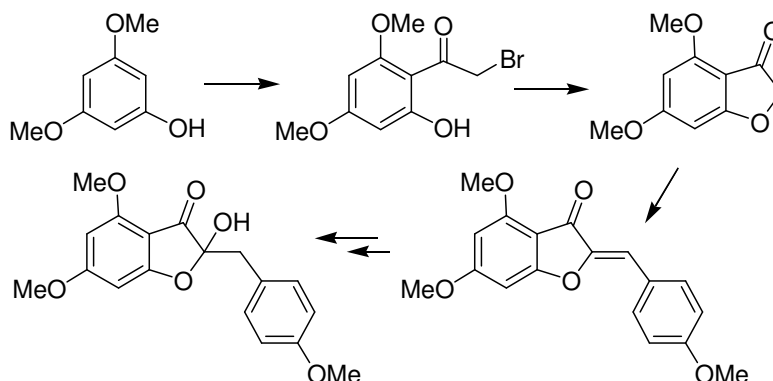
NUMBER 3

March 2009

CONTENTS

Rapid Communication

- 383 **Synthesis of dimethyl ether of marsupsin** Synthesis of dimethyl ether of marsupsin is reported.



A Srikrishna* & M Mathews

Department of Organic Chemistry, Indian Institute of Science, Bangalore 560 012, India

Papers

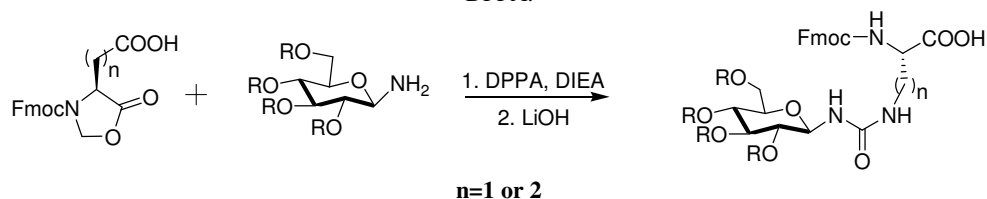
- 386 **N and N+1 cap effects of Gly, Ala, Leu, Val, Pro and Aib in Boc-(D)Glu₁-Xxx₂-Yyy₃-Lys₄-NHMe, a 3₁₀ type protohelix endlocked by Boc-(D)Glu** The N cap (Xxx₂) and N+1 cap (Yyy₃) position in the 3₁₀ helical model peptide Boc-(D)Glu₁-Ala₂-Gly₃-Lys₄-NHMe **1a** is substituted with Gly, Ala, Leu, Val, Pro and Aib. An NMR enquiry confirms that all variants are distorted 3₁₀ type protohelices, differing appreciably in degree of ordering and overall stability in a manner that is strongly reminiscent of the presumed effects in helix nucleation.

V D Bobade*, N D Gaikwad & P C Mhaske

Department of Chemistry, HPT Arts & RYK Science College, Nashik 422 005, India

397 **Synthesis of urea tethered glycosylated amino acids and glycopeptides mediated by DPPA employing *N*^α-Fmoc-Asp/Glu-5-oxazolidinones**

The synthesis of urea linked glycosylated amino acids and glycopeptides has been described by reacting *N*^α-Fmoc-Asp/Glu-5-oxazolidinone and sugar amine in presence of DPPA.

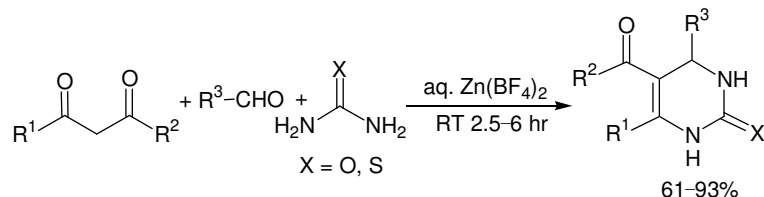


G Nagendra , H P Hemantha & Vommina V Sureshbabu*

Peptide Research Laboratory, Department of Studies in Chemistry, Central College Campus, Bangalore University, Dr B. R. Ambedkar Veedhi, Bangalore 560 001, India

408 **Environmentally benign aqueous zinc tetrafluoroborate-catalyzed one-pot Biginelli condensation at room temperature**

Three component condensation to afford 3,4-dihydropyrimidin-2 (1*H*)-ones (DHPMs) and thiones has been reported using an aqueous solution of zinc tetrafluoroborate.

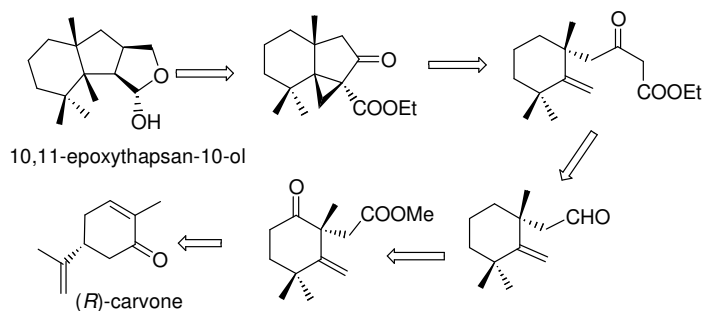


S K Kundu, A Majee* & A Hajra

Department of Chemistry, Visva Bharati University, Santiniketan 731 235, India

413 **Enantiospecific total synthesis of *ent*-10,11-thapsan-10-ol**

Enantiospecific synthesis of the optical antipode of the natural sesquiterpene 10,11-epoxythapsan-10-ol has been reported.

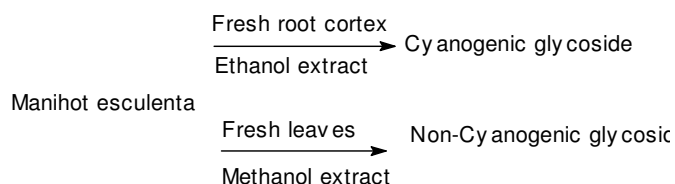


A Srikrishna* & K Anebouselvy

Department of Organic Chemistry, Indian Institute of Science, Bangalore 560 012, India

Notes

423 Cyanogenic and non-cyanogenic glycosides from *Manihot esculenta* (Euphorbiaceae)

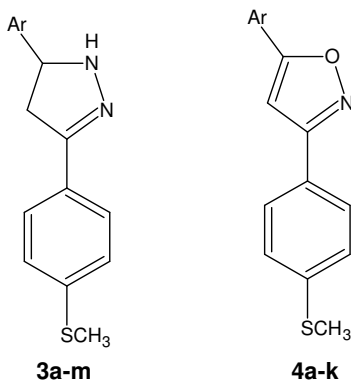


Edet M Anam

Department of Chemical Sciences, Cross River
University of Technology, CRUTECH, PMB 1123,
Calabar, CRS, Nigeria

430 Synthesis of some new pyrazolines and isoxazoles carrying 4-methylthiophenyl moiety as potential analgesic and anti-inflammatory agents

Condensation of 4-acetylthioanisole with different aryl aldehydes under aldol conditions affords α,β -unsaturated ketones (propenones) which undergo facile and clean cyclization with hydrazine hydrate to yield pyrazolines **3a-m** and cyclization with hydroxylamine hydrochloride affords isoxazoles **4a-k** in quantitative yields. The structures of the newly synthesized compounds have been confirmed on the basis of spectral studies. Some of the selected compounds have been tested for their analgesic and anti-inflammatory activity.



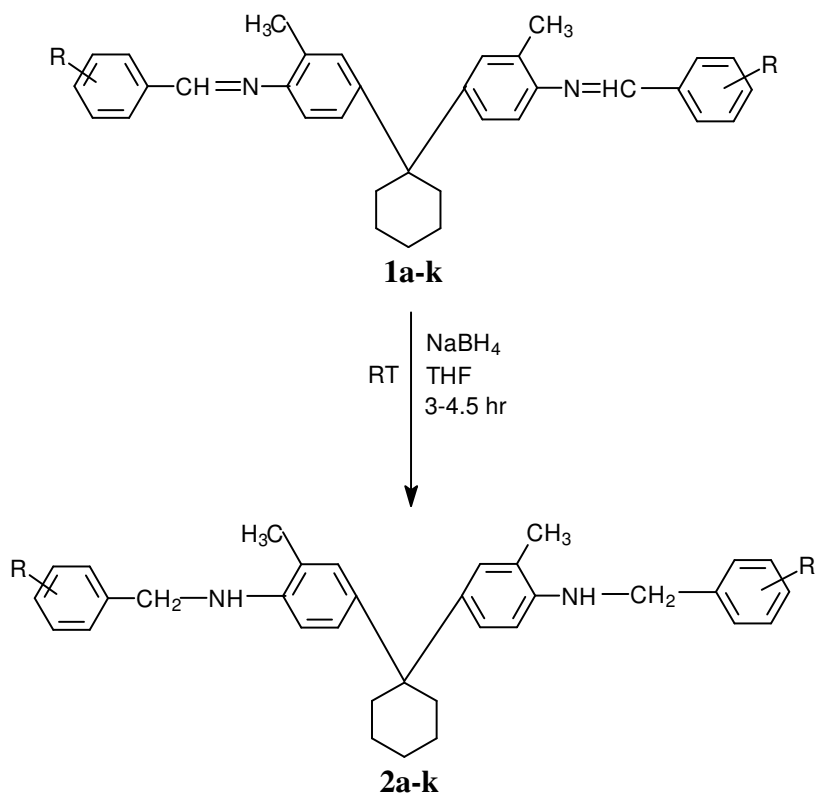
Karabasanagouda T^a, Airody Vasudeva Adhikari^{*b} & Girisha M^c

^aSeQuent Scientific Ltd., New Mangalore 575 011, India

^bDepartment of Chemistry, National Institute of Technology Karnataka, Surathkal 575 025, India

^cDepartment of Pharmaceutical Chemistry, Gulbarga University, Gulbarga 585 106, India

-
- 438 A cleaner approach for reduction of some symmetric diimines using NaBH_4



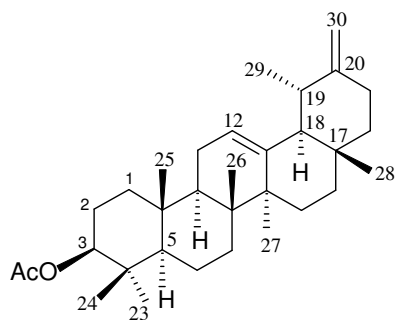
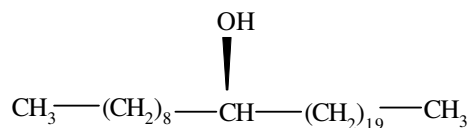
V K Aghera & P H Parsania*

Department of Chemistry, Saurashtra University, Rajkot 360 005, India

443

Phytochemical investigation of *Calotropis procera* Ait roots

Phytochemical investigation of the roots of *Calotropis procera* Ait. (Asclepiadaceae) yields two new phytoconstituents procerursenyl acetate and proceranol together with the known compounds N-dotriacont-6-ene, glyceryl mono-oleolyl -2-phosphate, methyl myristate, methyl behenate and glyceryl - 1, 2 -dicaprate -3- phosphate. The structures of the new compounds have been identified as urs - 18 α -H- 12, 20 (30) - diene - 3 β -yl acetate and *n*-triacontan -10 β -ol on the basis of spectral data analysis and chemical reactions.

**Structure 1****Structure 2**

Structure 1: Procerursenyl acetate 2 (urs - 18 α -H- 12, 20 (30) - diene - 3 β -yl acetate)

Structure-2: Proceranol 6 (*n*-triacontan -10 β -ol)

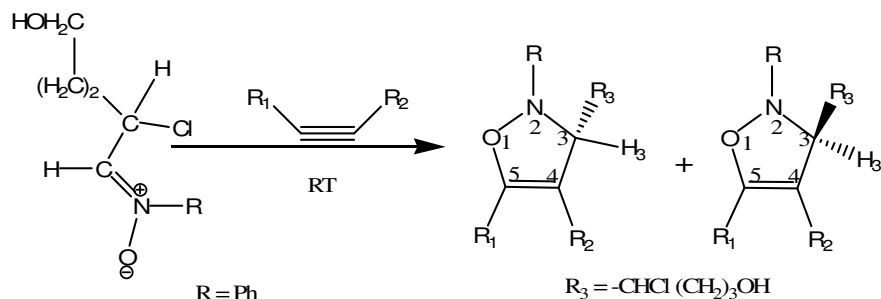
Perwez Alam & Mohd Ali*

Department of Pharmacognosy and Phytochemistry,
Faculty of Pharmacy, Jamia Hamdard (Hamdard University), Hamdard Nagar, New Delhi 110 062, India

447

One pot stereoselective synthesis of isoxazolines from *N*-phenyl- α -chloro nitron

Isoxazolines have been synthesized from *N*-phenyl- α -chloro nitron using 1,3 dipolar cycloaddition reaction with alkynes and the reactions are found to be highly stereoselective in nature.

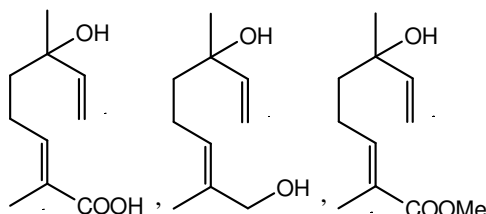


Bhaskar Chakraborty*, Saurav Kafley & Manjit Singh Chhetri

Organic Chemistry Laboratory, Sikkim Govt. College, Gangtok, Sikkim 737 102, India

- 452** **Synthesis of (±)- (*E*)-2,6-dimethyl-6-hydroxy-2,7-Octadienoic acid, its methyl ester and (±)- (*E*)-2,6-dimethyl-octa-2,7-diene-1,6-diol over solid support using microwave**

A simple, exceedingly mild, ecofriendly and an efficient methodology for the synthesis of (±)-(*E*)-2,6-dimethyl-6-hydroxy-2,7-octadienoic acid, its methyl ester and (±)-(*E*)-2,6-dimethyl-octa-2,7-diene-1,6-diol by utilization of microwave energy has been achieved.



Ashima Singh, M L Sharma & Jasvinder Singh*

Department of Chemistry and Centre for Advanced studies in Chemistry, Panjab University, Chandigarh, 160 014, India

- 455** **A facile indium-mediated synthesis of protected and unprotected [1-(hydroxymethyl)vinyl]-alkanols**

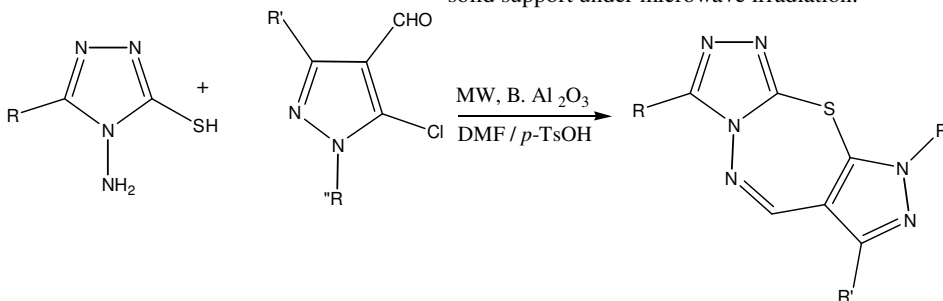
Protected and unprotected [1-(hydroxymethyl)vinyl]alkanols have been synthesized from the homologated γ -hydroxy esters which have been prepared by indium-mediated allylation of the rearranged bromides derived from hydroxyl esters in water medium.

Nimalini D Moirangthem, Bhavna Thingom & Warjeet S Laitonjam*

Department of Chemistry, Manipur University, Canchipur 795 003, India

- 460** **Microwave-assisted one-pot synthesis of anti-fungal active 1-substitued-3,7-dialkyl/aryl-4*H*-pyrazolo[4,5-*f*][1,2,4]triazolo[3,4-*b*][1,3,4]thiadiazepines using solid support**

A simple, efficient and environment-friendly procedure is developed for the synthesis of 1-substitued-3,7-dialkyl/aryl-4*H*-pyrazolo[4,5-*f*][1,2,4]triazolo[3,4-*b*][1,3,4]thiadiazepines in the presence of *N,N*-dimethylformamide as an energy transfer medium, *p*-TsOH as catalyst and basic alumina as solid support under microwave irradiation.



Monika Gupta*, Satya Paul & Rajive Gupta

Department of Chemistry, University of Jammu, Jammu 180 006, India

Authors for correspondence are indicated by (*)