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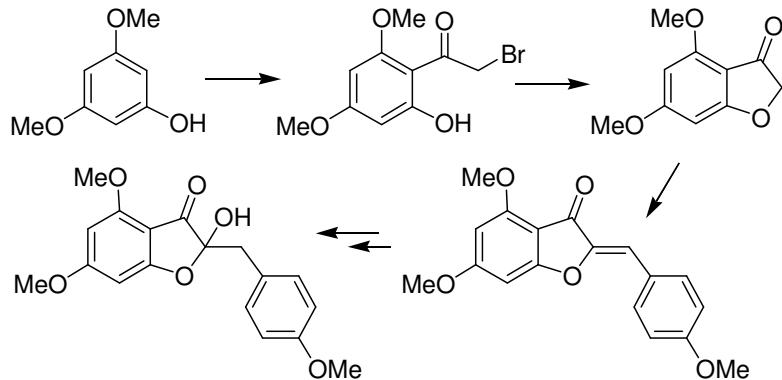
March 2009

CONTENTS

Rapid Communication

383 **Synthesis of dimethyl ether of marsupsin**

Synthesis of dimethyl ether of marsupsin is reported.



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Papers

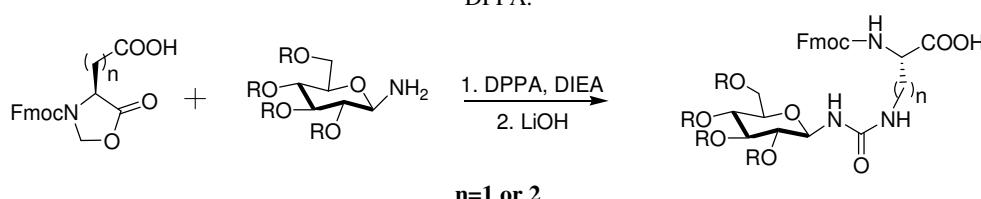
386 **N and N+1 cap effects of Gly, Ala, Leu, Val, Pro and Aib in Boc-(D)Glu₁-Xxx₂-Yyy₃-Lys₄-NHMe, a 3₁₀ type protohelix endlocked by Boc-(D)Glu**

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.

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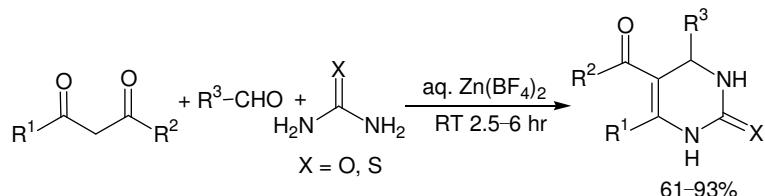
397 **Synthesis of urea tethered glycosylated amino acids and glycopeptides mediated by DPPA employing *N*^α-Fmoc-Asp/Glu-5-oxazolidinones** The synthesis of urea linked glycosylated amino acids and glycopeptides has been described by reacting *N*^α-Fmoc-Asp/Glu-5-oxazolidinone and sugar amine in presence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



G Nagendra , H P Hemantha & Vommina V Sureshbabu*

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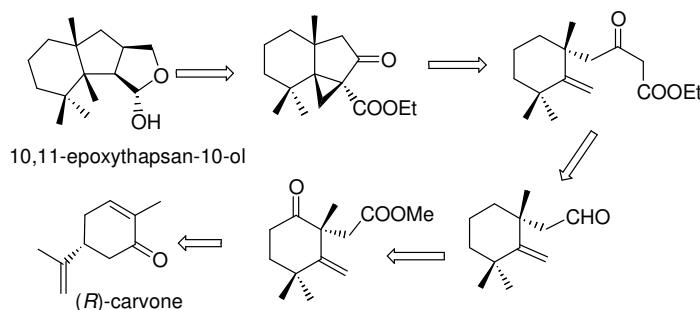
408 **Environmentally benign aqueous zinc tetrafluoroborate-catalyzed one-pot Biginelli condensation at room temperature** Three component condensation to afford 3,4-dihydro-pyrimidin-2 (1*H*)-ones (DHPMs) and thiones has been reported using an aqueous solution of zinc tetrafluoroborate.



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.

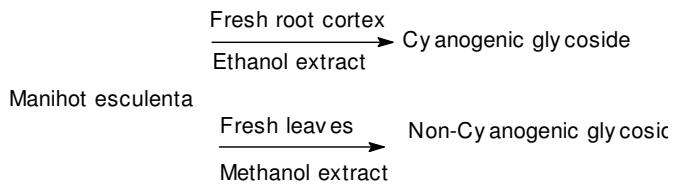


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Notes

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

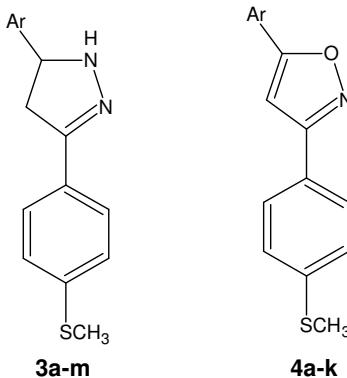


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430 Synthesis of some new pyrazolines and isoxazoles carrying 4-methylthiophenyl moiety as potential analgesic and anti-inflammatory agents

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.



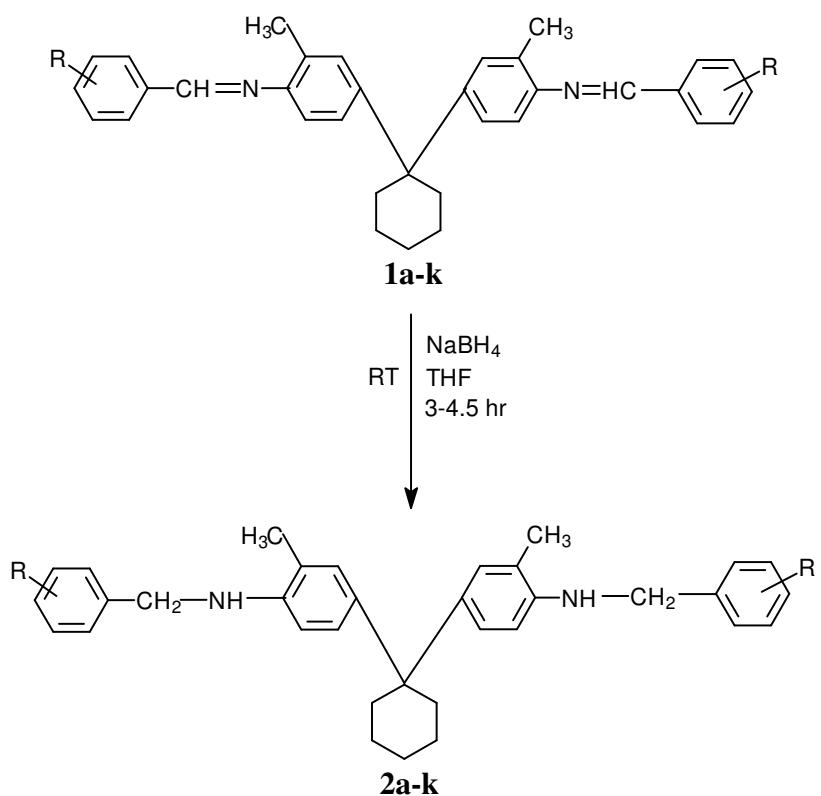
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438 A cleaner approach for reduction of some symmetric diimines using NaBH_4



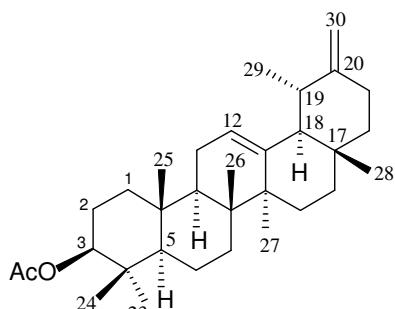
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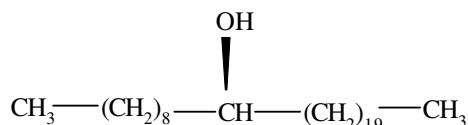
443

Phytochemical investigation of *Calotropis procera* Ait roots

Phytochemical investigation of the roots of *Calotropis procera* Ait. (Asclepiadaceae) yields two new phytoconstituents procerusenyl acetate and proceranol together with the known compounds N-dotriacont-6-ene, glyceryl mono-oleolyl 2-phosphate, methyl myrisate, methyl behenate and glyceryl-1, 2-dicapriate-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: Procerusenyl acetate 2 (urs-18 α -H-12, 20(30)-diene-3 β -yl acetate)
Structure-2: Proceranol 6 (*n*-triacontan-10 β -ol)

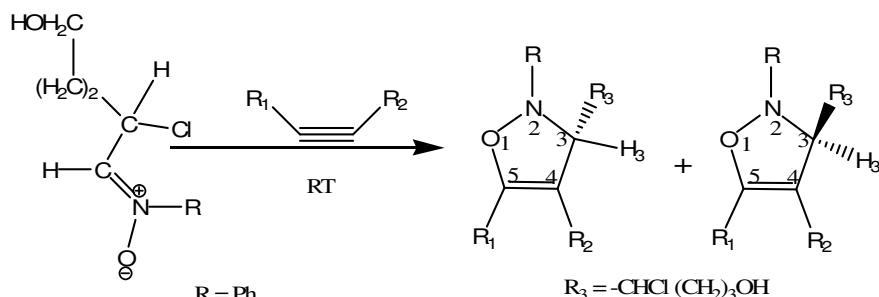
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One pot stereoselective synthesis of isoxazolines from *N*-phenyl- α -chloro nitrone

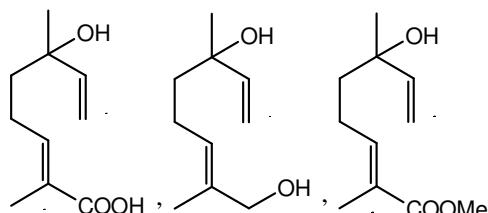
Isoxazolines have been synthesized from *N*-phenyl- α -chloro nitrone using 1,3 dipolar cycloaddition reaction with alkynes and the reactions are found to be highly stereoselective in nature.



Bhaskar Chakraborty*, Saurav Kafley & Manjit Singh Chhetri

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452 **Synthesis of (\pm)- (E)-2,6-dimethyl-6-hydroxy-2,7-Octadienoic acid, its methyl ester and (\pm)- (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 (\pm)-(E)-2,6-dimethyl-6-hydroxy-2,7-octadienoic acid, its methyl ester and (\pm)-(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*

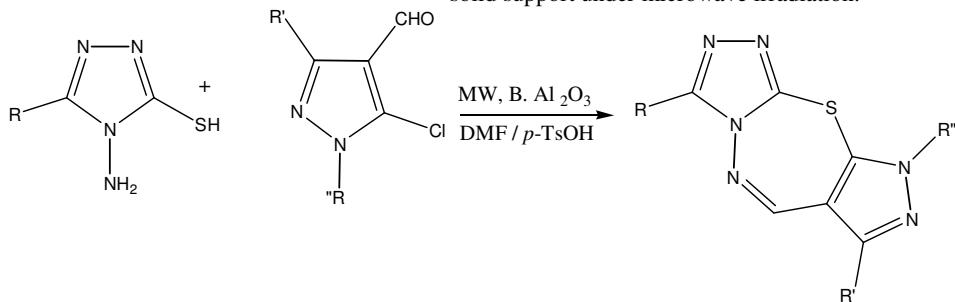
Department of Chemistry and Centre for Advanced studies in Chemistry, Panjab University, Chandigarh, 160 014, India

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*

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460 **Microwave-assisted one-pot synthesis of anti-fungal active 1-substituted-3,7-dialkyl/aryl-4H-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-substituted-3,7-dialkyl/aryl-4H-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.



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