Advances in Contemporary Research

453 Natural camptothecins

Camptothecins have been reported from different botanical species. The literature concerning the chemistry and bioactivity of these compounds have been briefly reviewed.

Biswanath Das*, P Madhusudhan, P Veena Reddy & Y Anitha

Papers

465 Reaction of indanocyclone with 3,4,3',4'-tetradehydrobiphenyl (bisbenzyne)

The reaction of bisbenzyne 5 with indanocyclone 2 gives three structural isomers of novel polycyclic aromatic hydrocarbons (PAHs) 6 in good yield. These compounds are very valuable, since their availability would facilitate analytical studies of their possible presence in combustion pollutants.

Shadpour E Mallakpour* & Ramin G Gharahdaghi

470 anti-Markovnikov acetoxyphenylselenation of terminal alkenes

Acetoxyphenylselenation of some alkenes has been achieved by reaction of these substrates with diphenyl diselenide and lead tetracetate in benzene, under thermal conditions. Unexpected anti-Markovnikov products, accompanied with some amount of their isomers, are obtained.

R D Vukičević* & M Randović

INdian j chem, 40B (6) 2001
475  Synthesis of some new biologically active triazinothiadiazinones

A series of $4H,8H[1,2,4$-triazino$[3,4-b]$]1,4-thiadiazin-4-ones 3a-i have been synthesized by the reaction of 4-amino-6-substituted-3-mercapto-$1,2,4$-triazin-5$(4H)$-ones with substituted phenacyl bromides. These compounds have been tested for antimicrobial activities.

B Shivarama Holla*, Richard Gonsalves, B K Sarojini, Shalini Sheno

479  Synthesis of 2,3-diphenyl-5-methyl-6-arylanbenzo$[1,2-b:5,4-b']$difurans under PTC conditions and their antimicrobial activity

Synthesis of 2,3-diphenyl-5-methyl-6-arylanbenzo$[1,2-b:5,4-b']$difurans and their basic ethers has been reported under conventional and microwave irradiation.


484  Structure and synthesis of glycoborine, a new carbazole alkaloid from the roots of Glycosmis arborea: A note on the structure of glycozoline

The structure of glycoborine has been elucidated as 5-methoxy-3-methylcarbazole by detailed analyses of 2D NMR spectra and confirmed by synthesis. The structure of glycozoline has been proved to be erroneous.

A K Chakravarty*, T Sarkar, K Masuda, T Takeya, H Doi, E Kotani & K Shiojima

490  Two new carbazole alkaloids from Murraya koenigii

Two new carbazole alkaloids, 1 and 2, have been isolated from Murraya Koenigii and their structures confirmed by spectral, chemical and synthetic evidences. The two compounds have been screened for antimicrobial activity.

B K Chowdhury*, S Jha, P Bhattacharyya & J Mukherjee
Notes

495 Synthesis of gingerenone – A and hirsutenone

Total synthesis of gingerenone – A has been accomplished from vanillin in 4 steps with an overall yield of 15%. Demethylation of 5 gives hirsutenone 6 in 36% yield.

S Venkateswarlu, M S Ramachandra, M Rambabu & G V Subbaraju*

500 Synthesis of substituted 2,2’ and 4,4’-bithiazoles in various solvents

Some new condensed heterocycles have been synthesized via condensation of 1,4-dichlorophthalazine 1 with thiosemicarbazide followed by ring closure reactions. All the products 3-9 have been evaluated for their in vitro inhibitory activity.

R Mostaghim* & Yousef A Beni

504 A rapid and convenient synthesis of amides from aromatic acids and aliphatic amines in dry media under microwave irradiation

The synthesis of amides 2 from the corresponding aromatic acids 1 and aliphatic amines in the presence of catalytic amount of p-toluenesulfonic acid has been reported.

Abdol Reza Hajipour* & Majid Ghasemi

508 Photochemistry of some 1,4-dihydropyridine derivatives: Part III—Photosensitized oxidation

Indirect photooxidations of 1,4-dihydropyridine derivatives using triplet sensitizers have been investigated.

H R Memarian*, M M Sadeghi & A R Momeni
510 Preparation and molecular rearrangement of 2α, 3α-epoxy lupan-1-one catalysed by boron trifluoride and by ultraviolet irradiation

2α, 3α-Epoxy lupan-1-one 11 has been synthesised from lupenol 2 by a sequence of reactions. Molecular rearrangement of 11 induced by boron trifluoride affords 2-formyl-A-nor-lupan-1-one 15 (enolized). Compound 15 is also formed on photolysis.

S N Bose* & S K Chanda

515 Cu-exchanged Y-zeolite : A heterogeneous catalyst for the synthesis of α-aminoketones

A semiempirical (AM1) computational study on the modelling of a number of heteroacyl-1,4-benzoquinones with electron-rich dienes like isoprene and 2,3-dimethyl-1,3-butadiene and electron deficient diene like perchloro-1,3-butadiene is reported.

R T Pardasani*, P Pardasani, M M Agrawal & G Mathur

522 Synthesis of O-geranylconiferyl alcohol, a metabolite of Fagara rhetza

O-Geranylconiferyl alcohol 1 has been obtained starting from vanillin in four steps with an overall yield of 36%.

Jakka Kavitha, Mulabagal Vanisree & Gottumukkala V Subbaraju*
CONTENTS

524 Synthesis of N-[2-and 3-(substituted aryloxy)]
acetyl and propanoyl proline/morfoline/
piperidine/piperazines and their bio-
evaluation

Deepa Chauhan*, J S Chauhan*, J Singh*,
P P Gupta & M P Dubey

527 Synthesis of some new quinolinylimidazoles
for their antiviral and antifungal activities

The reaction of 5-oxo-2-phenyl-3-styryl-1,3-oxazole
with 7-hydroxy-4-methylquinolinyl[1,5-c]-2-mercapto-
imidazole in dioxan affords 2-[5'-oxo-2'-phenyl-sulpho-
arylideno-1,3-oxazolo]-7-hydroxy-4-methylquinolinyl-
[1,5-c]imidazdes 4a which are again treated with differ-
ent aldehydes.

V K Pandey* & Meenal Tandon

530 Prodrugs of nalidixic acid and norfloxacin

Prodrugs of nalidixic acid and norfloxacin using three
different amino alcohols namely (i) monoethanolamine
(ii) 1-amino-2-propanol and (iii) 3-amino-1-propanol
have been prepared and tested against four different or-
ganisms.

M S Y Khan* & Poonam Raghuvanshi

533 A novel flavone from polygonum capitatum
Ham ex D. Don

A new flavone has been isolated from polygonum capitatum
Ham, and characterised as 3',4'-methylenedioxy-
3,5,6,7,8,5'-hexamethoxyflavone 2 on the basis of spec-
troscopy.

Liming Gao*, Xiaomei Wei &
Shangzhen Zheng

INDIAN J CHEM, 40B (6) 2001
A new limonoid from *Aphananumixis polystachya* has been characterised as dihydro amoorinin 2 by physico-chemical studies.

Santosh K Agarwal*, Sushma Verma, Sudhir S Singh & Sushil Kumar

---

Screening of natural products for new leads as inhibitors of β-amyloid production: Latifolia 1 has been isolated from the methylene chloride extract of the heartwood of *Dalbergia sissoo* and is found to exhibit the inhibition of β-amyloid synthesis with an IC₅₀ of 180 μM.

N V S Ramakrishna*, E K S Vijaya Kumar, A S Kulkarni, A K Jain, R G Bhat, S Parikh, A Quadros, N Deuskar & B S Kalakoti

Authors for correspondence are indicated by (*)