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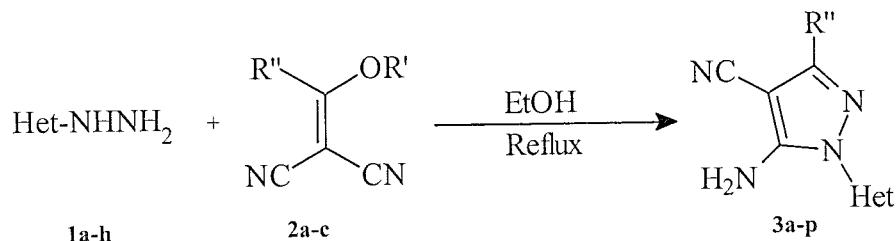
NUMBER 6

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CONTENTS

Papers

1426 Synthesis and NMR spectral studies of some new 1-heteroaryl-5-amino-3-alkyl/aryl-4-cyanopyrazoles

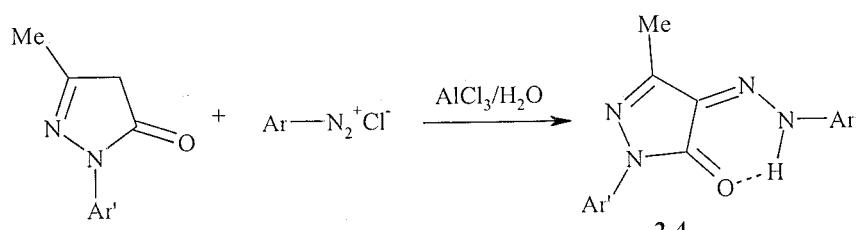
IPC: Int.Cl.⁸ C07D

Ranjana Aggarwal*, Vinod Kumar & Shiv P Singh

1431 Novel synthesis of heteroarylazopyrazolones and their application as disperse dyes *via* AlCl₃-catalyzed diazocoupling of 1-aryl/heteroaryl-3-methyl-1*H*-pyrazol-2-in-5-ones in aqueous medium

IPC: Int.Cl.⁸ C07D

AlCl₃-catalyzed diazocoupling of 1- aryl/heteroaryl-3-methyl-1*H*-pyrazol-2- in-5-ones 1 in water with different aryl/heteroaryldiazonium salts affords the corresponding azopyrazolones 2. Different fabrics have been dyed and their photostability and colour fastness identified



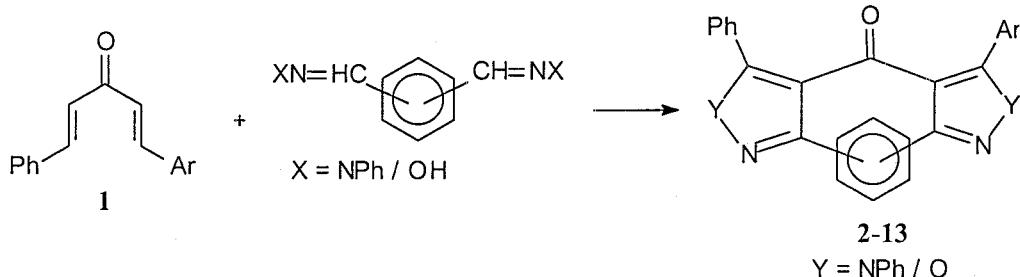
a: Ar' = pyrid-2-yl, b: Ar' = chlorophenyl, 4-, c: Ar' = methoxyphenyl, 4-

Salem A Basaif, Mohamed A Hassan* & Adil A Gobouri

1437 Application of dipolar reagents towards complex heterocycles

IPC: Int.Cl.⁸ C07D

Novel complex heterocycles 2-13 have been obtained by the reaction of 1,2/1,3 and 1,4-benzenedicarboxaldehydehydrazones and dicarboxaldoximes with 1,5-diaryl-1,4-pentadien-3-ones 1 in the presence of chloramine-T.

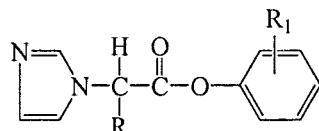


V Padmavathi*, K Venugopal Reddy,
B Jagan Mohan Reddy, A Padmaja & D Bhaskar Reddy

1443 Identification of pharmacophores for anti-inflammatory and analgesic activity on aryl-(imidazol-1-yl) acetates

IPC: Int.Cl.⁸ C07D

Pharmacophores for anti-inflammatory and analgesic activity have been identified based on aryl-(imidazol-1-yl) acetates in order to optimize physicochemical and structural features for potent biological activity.

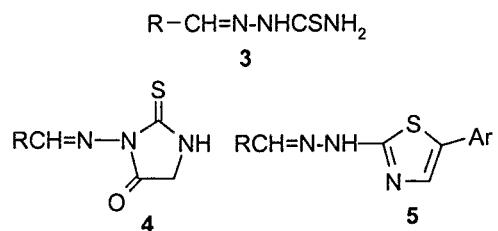


R Sharma*, P S Shantanu Rao & S C Chaturvedi

1453 Synthesis and mass spectral fragmentation patterns of some thiazole and imidazolidine derivatives

IPC: Int.Cl.⁸ C07D

3-Substituted-4-oxoimidazolidine-2-thione 4 and 5-aryl-2-substituted thiazole 5 have been prepared *via* cyclization of compound 3 with ethyl chloroacetate and 4-substituted phenacyl bromide. The mass spectral fragmentation patterns of thiazole and imidazolidine are described.

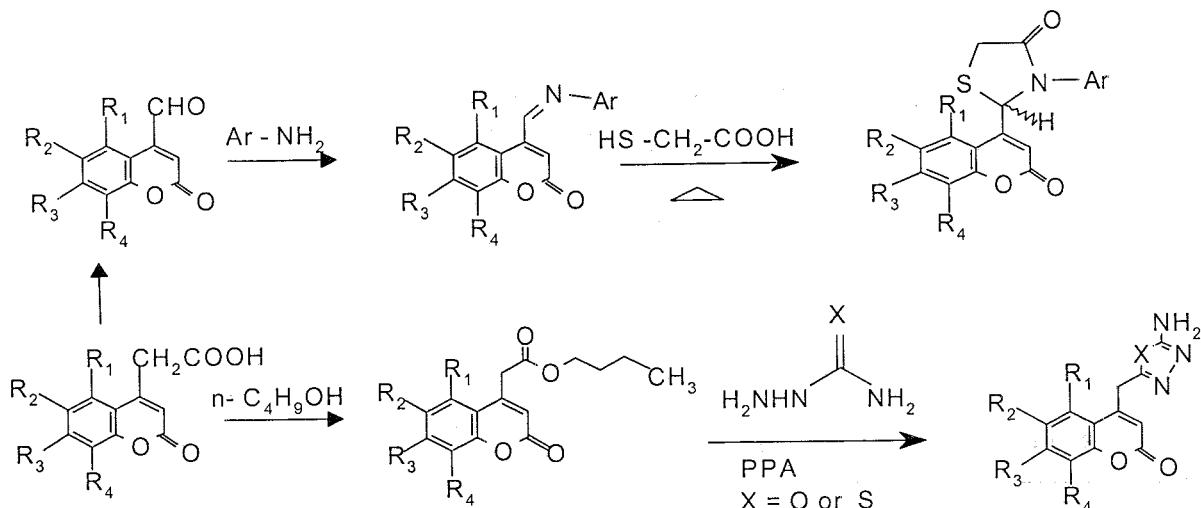


S M Mohamed*, M Unis & H Abd El-Hady

1463 Synthesis of some novel 4-substituted coumarins having potential biological activity (Part III)

IPC: Int.Cl.⁸ C07D

The Schiff bases obtained by condensation of various substituted formyl coumarins with aromatic amines have been reacted with thioglycolic acid to give five membered cyclised product, 4-thiazolidinone substituted at 4-position of coumarins. 4-Alkyl coumarin-acetates have been successfully condensed with semicarbazide or thiosemicarbazide in polyphosphoric acid to yield amino substituted oxadiazoles and thiadiazoles. The intermediates and the title compounds have been characterized by their analysis and spectral data.

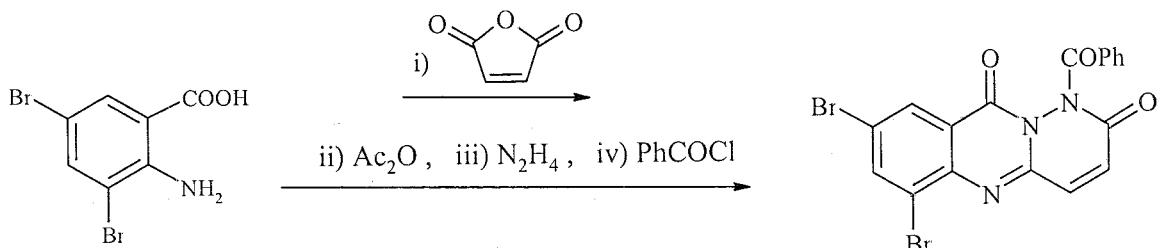


U C Mashelkar* & A A Audi

1470 Synthesis and behaviour of 2-carboxyvinyl-6,8-dibromo-4H-3,1-benzoxazin-4-one towards nitrogen, carbon and sulphur nucleophiles

IPC: Int.Cl.⁸ C07D

Interaction of 6,8-dibromoanthranilic acid with maleic anhydride in boiling *n*-butanol yields the malanilic acid derivative, which undergoes ring closure by heating with acetic anhydride and gives the 4H-3,1-benzoxazin-4-one derivative. Hetero-ring opening of the oxazinone nucleus by hydrazine hydrate in boiling ethanol followed by cyclisation affords the pyridazinoquinazolinone derivative. Benzoylation of the latter gives compound 21.



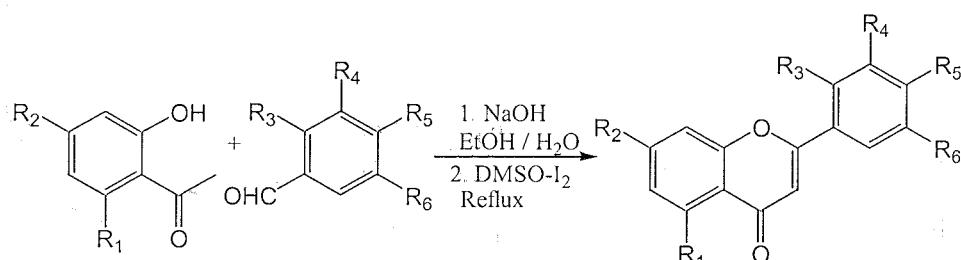
21

M A El-Hashash*, T M Abdel-Rahman &
Y A El-Badry

1478 Cytotoxic and antimicrobial activities of some synthetic flavones

IPC: Int.Cl.⁸ C07D

A number of flavones have been synthesized and the biocidal activity of these flavones along with their corresponding chalcones have been investigated against some bacterial and fungal strains as well as brine shrimp nauplii. Some flavones showed good antibacterial, antifungal and cytotoxic activity against some selected bacterial and fungal strains as well as brine shrimp nauplii.



1 R₁, R₂ = -OCH₃

2 R₁, R₂ = -H

3 R₁ = -H, R₂ = -OH

4 R₃, R₄, R₆ = -H, R₅ = -CH₃

5 R₄ = -H, R₃, R₅, R₆ = -OCH₃

6 R₃, R₆ = -H, R₄ = -OH, R₅ = -OCH₃

11 R₁, R₂ = -OCH₃, R₃, R₄, R₆ = -H, R₅ = -CH₃

12 R₁, R₂, R₄ = -H, R₃, R₅, R₆ = -OCH₃

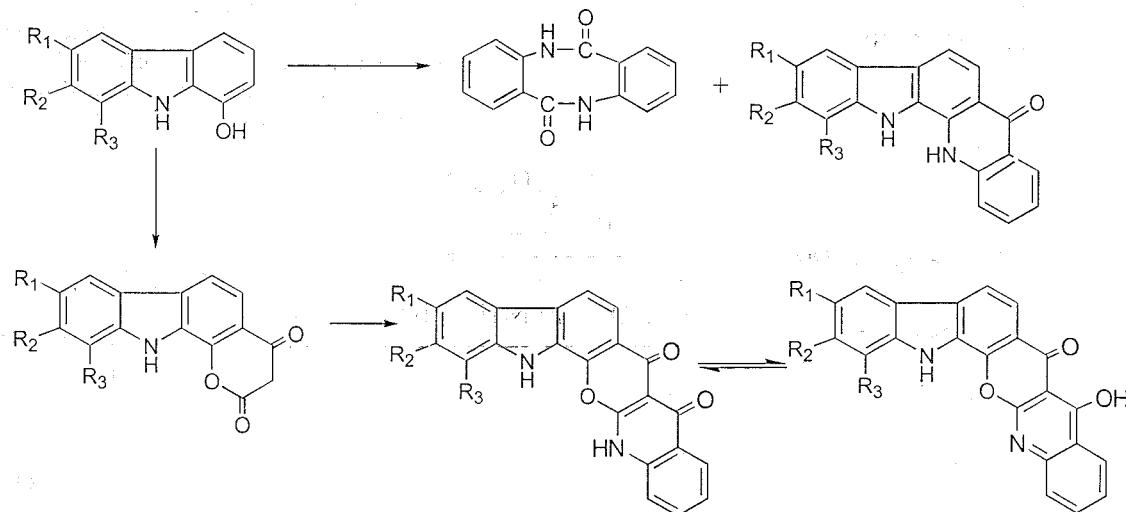
13 R₁, R₃, R₆ = -H, R₂, R₄ = -OH, R₅ = -OCH₃

14 R₁, R₂, R₃, R₄, R₆ = -H, R₅ = -CH₃

Sohel Mostahar, Sayed Alam* & Azizul Islam

1487 Synthesis of 12,13-dihydro-5-oxoquinolino[2,3-*a*]carbazoles, 3,11-dihydro-2,4-dioxopyrano[2,3-*a*]carbazoles and quinolino[2,3-*b*]carbazolo[6,5-*a*]pyran-7,8-diones

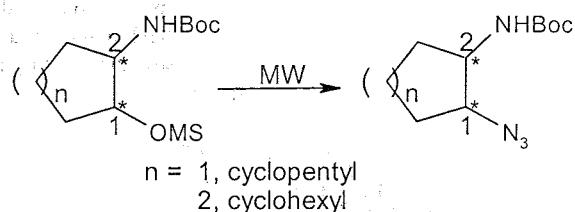
IPC: Int.Cl.⁸ C07D



V Sangeetha & K J Rajendra Prasad*

1492 Microwave assisted fast and clean conversion of mesylate to azide: Synthesis of (1*S*,2*R*)/*1R*,2*S*)-1-azido-2-carbocyclic amines as immediate precursors to versatile 1,2-*cis*-diamines Efficient and rapid conversion of mesylate to azide under microwave irradiation has been demonstrated. It proceeds through inversion of configuration.

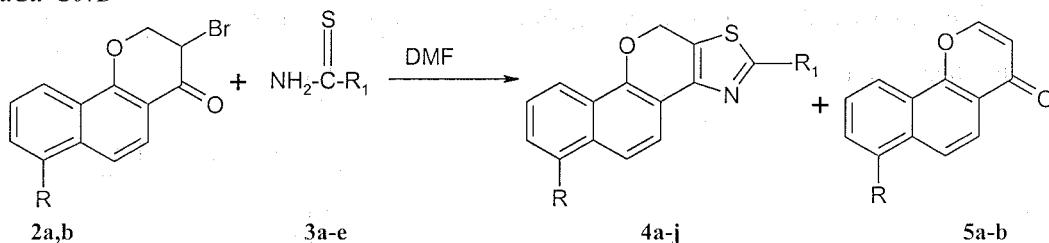
IPC: Int.Cl.⁸ C07D



T Govindaraju

1499 Chemoselective synthesis of heterocyclic derivatives of 18-nor equilenine, 16-substituted-12*H*-11-oxa-15-aza-17-thia-cyclopenta[*a*]phenanthrenene and their *in vitro* evaluation of antibacterial and antifungal activity

IPC: Int.Cl.⁸ C07D



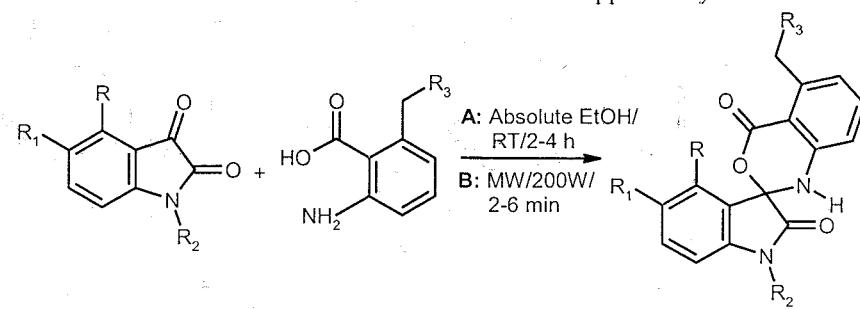
N J Malviya, A M Kulkarni, D Jaimini, B L Jadhav & A V Karnik*

1504 One pot facile synthesis of 5-alkyl-1,2-dihydro-spiro[4H-3,1-benzoxazine-2,3'[3H]indol]-4,2'-diones under microwave irradiation

IPC: Int.Cl.⁸ C07D

Chemoselective synthesis of heterocyclic derivatives of 18-norequilenine, 16-substituted-12*H*-11-oxa-15-aza-17-thiacyclo-penta[*a*]phenanthrene **4a-j** is presented. These molecules **4a-j** have exhibited moderate to good antibacterial activity against some gram-positive and gram-negative bacteria.

A facile synthesis of some novel 5-alkyl-1,2-dihydro-spiro[4H-3,1-benzoxazine-2,3'[3H]indol]-4,2'-diones, in high yields, has been carried out classically as well as under microwave irradiation in solvent free conditions. Besides this, some novel 6-alkylanthranilic acids required for the synthesis of new spiro compounds have also been synthesized. The importance of alkyl substituent at C-6 position in anthranilic acid has been recognized again in such a cyclocondensation reaction, even when it is carried out under microwave irradiation. This is also supported by molecular modelling.

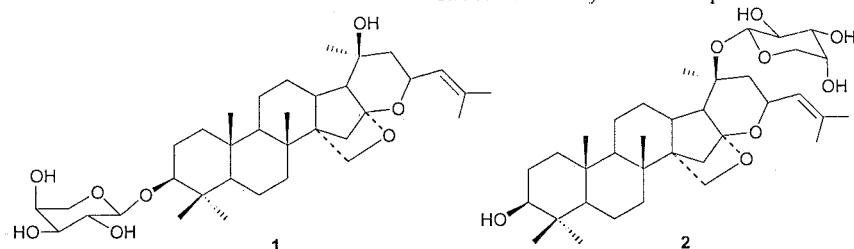


Anjali Saxena, Pankaj Khanna, Sunita Bhagat,
Archana Gupta & Subhash C Jain*

1511 New dammarane triterpenoidal saponins from *Bacopa monniera*

IPC: Int.Cl.⁸ C07C

Two new dammarane triterpenoidal saponins, designated as Bacoside A₄ and A₅, have been isolated from aqueous extract of *Bacopa monniera* Wettst. The structures have been elucidated as 3-*O*- α -L-arabinopyranosyl jujubogenin 1 and 20-*O*- α -L-arabinopyranosyl jujubogenin 2 on elaborate spectroscopy and have been biologically tested *in vitro* in NBT reduction and chemiluminescence assays to draw useful structure activity relationship.

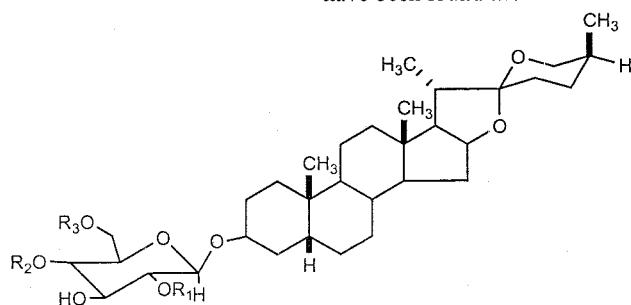


R S Pawar & K K Bhutani*

1515 Steroidal saponins from the roots of *Asparagus adscendens* Roxb and *Asparagus racemosus* Willd

IPC: Int.Cl.⁸ A61K

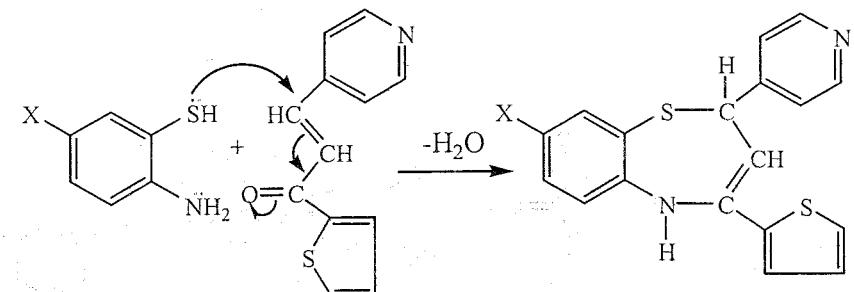
Two new sarsasapogenin glycosides 1 and 10, one each from *Asparagus adscendens* Roxb. and *Asparagus racemosus* Willd. have been isolated and structure elucidation accomplished using NMR studies. Two compounds 6 and 9 have been found in *A. racemosus* for the first time



A N Jadhav & K K Bhutani*

1525 Synthesis of 1,5-benzothiazepines: Part XXXII-Synthesis and antimicrobial studies of 8-substituted-2,5-dihydro-2-(4-pyridyl)-4-(2-thienyl)-1,5-benzothiazepines

IPC: Int.Cl.⁸ C07D



Compd	5a	5b	5c	5d	5e	5f
X	F	Cl	Br	CH ₃	OCH ₃	OC ₂ H ₅

Seema Pant, Hem Chandra, Priyanka Sharma & Umesh C Pant*

1531 Stereochemistry of N_5 -acyltetrahydro-1,5-benzodiazepines - NMR spectra and semiempirical MO calculations

IPC: Int.Cl.⁸ C07D

M Venkatraj, R Jeyaraman & S Ponnuswamy*

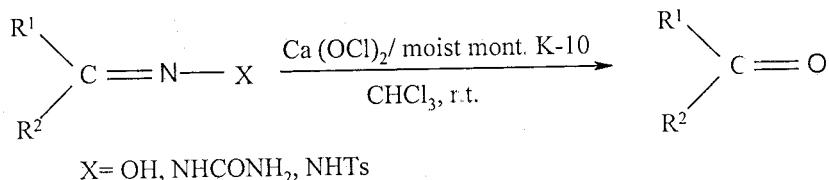
The three N_5 -acyltetrahydro-1,5-benzodiazepines prefer boat conformations BE on the basis of observations made from NMR spectra and semiempirical MO calculations

Notes

1541 Regeneration of carbonyl compounds from oximes, semicarbazones and tosylhydrazones with calcium hypochlorite and moist montmorillonite K-10

Oximes, semicarbazones and tosylhydrazones, are converted into the corresponding carbonyl compounds in the presence of calcium hypochlorite and moist montmorillonite K-10 under mild and heterogeneous conditions.

IPC: Int.Cl.⁸ C07C

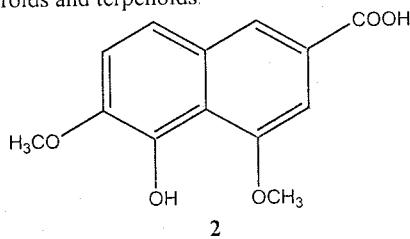
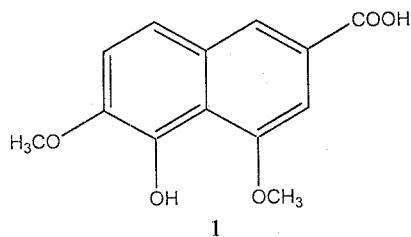


Barahman Movassagh* & Ebrahim Dahaghih

1544 Two 2-naphthoic acids from *Diospyros paniculata*

IPC: Int.Cl.⁸ C07C

Phytochemical investigation of the heartwood, root and stem of *Diospyros paniculata* results in the isolation of 2-naphthoic acids **1** and **2**, 2-naphthaldehydes, naphthoquinones, steroids and terpenoids.

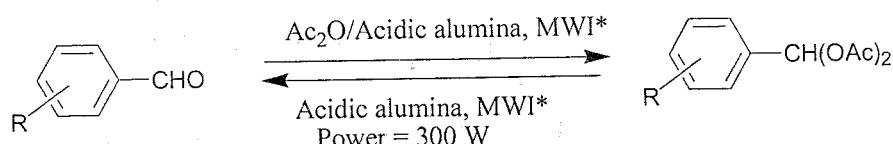


S A Noor Mohamed, R Gandhidasan* & J A Charles

1547 Protection of aldehydes as 1,1-diacetates and deprotection of 1,1-diacetates to aldehydes

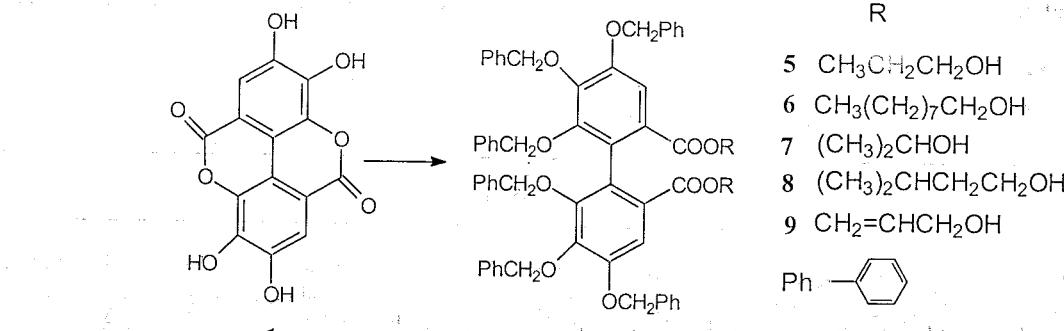
IPC: Int.Cl.⁸ C07C

A safe and convenient method is reported for the protection of aldehydes as 1,1-diacetates using Ac_2O /acidic alumina and deprotection of 1,1-diacetates to aldehydes using acidic alumina under MW irradiation.



Puja Nanda, Satya Paul & Rajive Gupta*

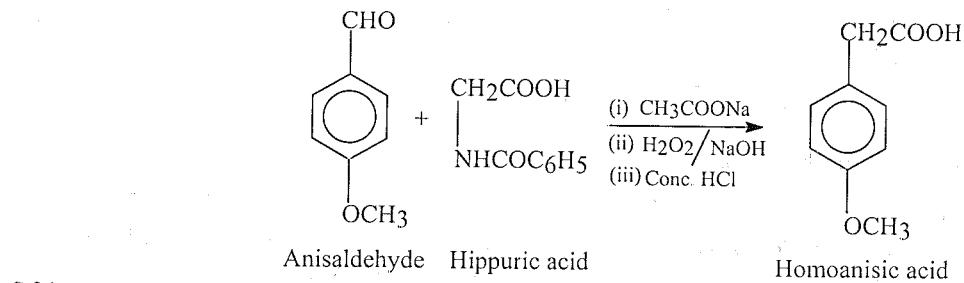
1551 Synthesis of new ellagic acid derivatives

IPC: Int.Cl.⁸ C07C

P D Jadhav & K S Laddha*

Ellagic acid has been isolated from *Punica granatum*. A series of hexahydroxydiphenyl derivatives of ellagic acid have been synthesized and characterized by spectroscopic analysis.

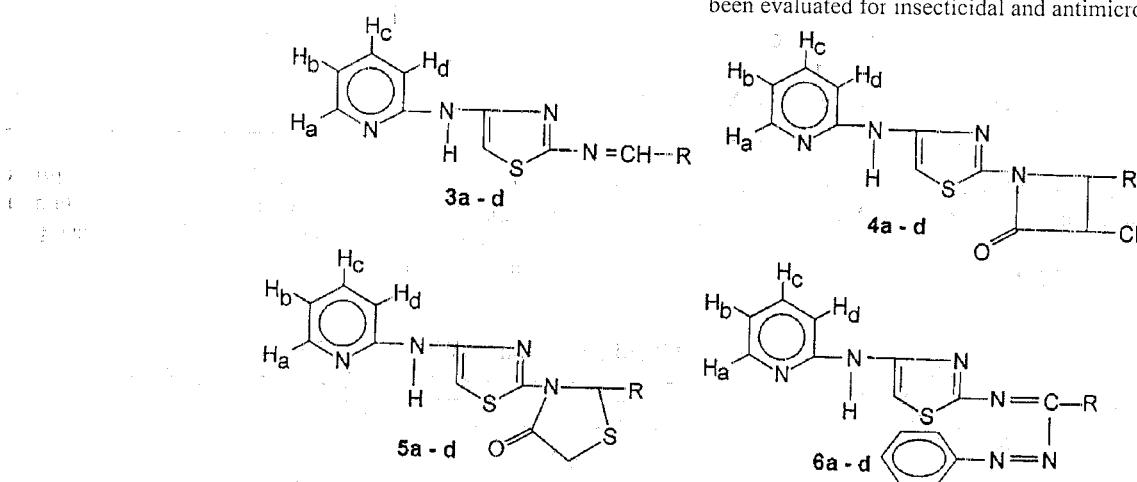
1554 Synthesis of homoanisic acid

IPC: Int.Cl.⁸ C07C

S S Mahajan* & R P Piske

Synthesis of homoanisic acid by Erlenmeyer condensation via the formation of azalactone is discussed.

1557 Synthesis and pesticidal activities of some substituted pyridine derivatives

IPC: Int.Cl.⁸ C07D

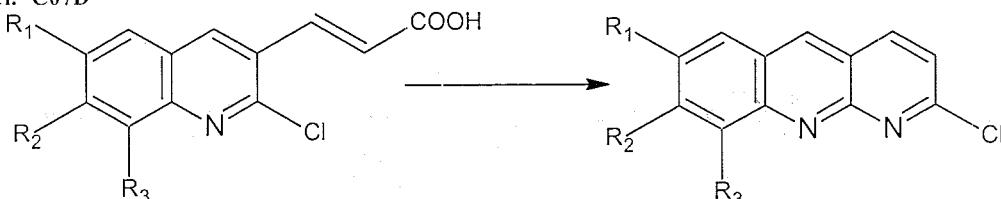
Tripti Singh, Shalabh Sharma, VK Srivastava & Ashok Kumar*

Some pyridinylthiazolylazetidinones, pyridinylthiazolylthiazolidinones and pyridinylthiazolylformazans have been synthesized. Their structural assignments are based on structure and elemental analysis. These compounds have also been evaluated for insecticidal and antimicrobial activities.

1564 A convenient synthesis of 2-chlorobenzo[*b*][1,8]naphthyridines

2-Chlorobenzo[*b*][1,8]naphthyridines **4a-f** have been synthesised in good yields utilizing 3-(2-chloro-3-quinolyl) acrylic acids **2a-f** as the starting compounds,

IPC: Int.Cl.⁸ C07D

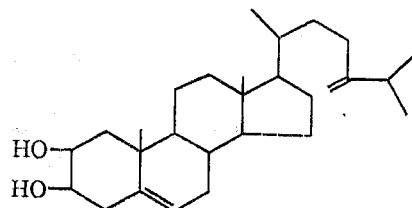


J Christobel Vandana, L Ragunath & S P Rajendran*

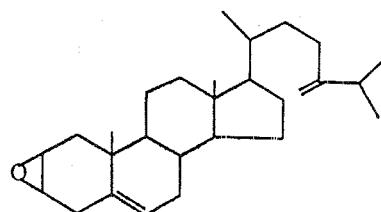
1567 Steroid and aliphatic esters from the seeds of *Nigella sativa*

Three novel compounds, one steroid and two esters have been isolated and identified as ergosta-5,24(28)-dien-2,3-cis-diol **1**, pentyl undecanoate **2**, and methyloctadeca 14,16-dienoate **3**.

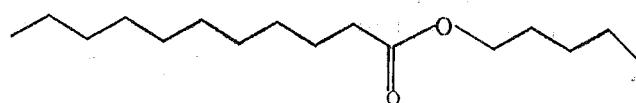
IPC: Int.Cl.⁸ C07C



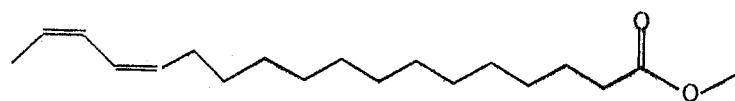
1



Cyclic ether of **1**



2



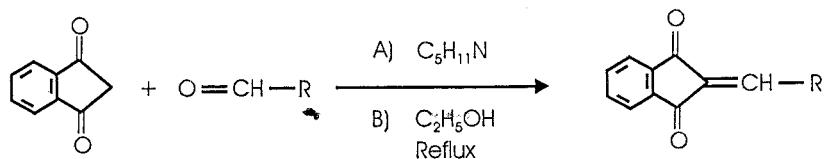
3

B K Mehta*, Meenal Gupta & Manjul Verma

1572 Synthesis of 2-(aryl methylene)-(1H)- indane-1,3-(2H)-diones as potential fungicidal and bactericidal agents

IPC: Int.Cl⁸, C07C

Reaction between indane-1,3-dione **3** and different aromatic aldehydes **4** in the presence of piperidine and ethanol affords the compounds **5a-h**. All the derivatives are evaluated for their antifungal and antibacterial activity against different strains.

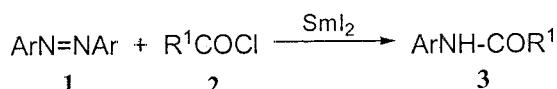


S Meena*, D Shankar, K V Ramseshu, D Giles,
M S Prakash & S Venkataraman

1576 Facile preparation of amides from azo compounds by SmI_3

IPC: Int.Cl.⁸ C07C

Azo compounds are conveniently reduced by SmI_2/THF system and successively acylated smoothly with aromatic or aliphatic acyl chlorides or acid anhydrides to afford corresponding amides in one pot under mild and neutral conditions.



Xue Li & Yongmin Zhang*

1579 Reaction and antimicrobial activity of 1-arylethylene benzofuranyl ketone derivatives

IPC: Int.Cl.⁸ C07D

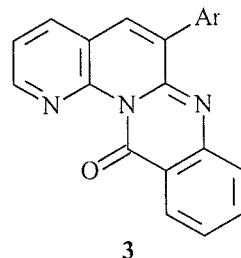
Interaction of benzalvisnaginone or khellinone derivatives with thiourea gives the tetrahydropyrimidin-2-thione derivatives which are condensed with dichloroacetic acid in acetic anhydride to form thiazolo[3,2-*a*]pyrimidin-3-one. Reaction with quinidine, 2,3-dichloro-1,4-naphthoquinone and 2-aminothiazole chloroacetamide is investigated. The compounds are tested for antibacterial activity.

J A A Micky*, N M Saleh, S M Mohamed,
S A Mohamed & M M Salem

1584 Microwave induced eco-friendly solvent-free synthesis of 6-arylquinazolino[3,2-*a*] +[1,8]naphthyridin-13-ones

IPC: Int.Cl.⁸ C07D

An efficient and rapid synthesis of 6-aryl-quinazolino[3,2-*a*][1,8]naphthyridin-13-ones **3** under microwave irradiation in a solvent-free condition is reported.

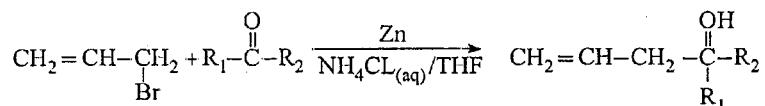


K Mogilaiah*, J Uma Rani & B Sakrami

1587 Zinc-mediated allylation reactions of aldehydes and ketones in aqueous media under ultrasonic irradiation

The allylation reaction between aromatic aldehydes or ketones and allyl bromide are carried out in 83-100% yield with Zn-THF-NH₄Cl under ultrasound irradiation at r.t. for 10 min.

IPC: Cl.⁸ C07C

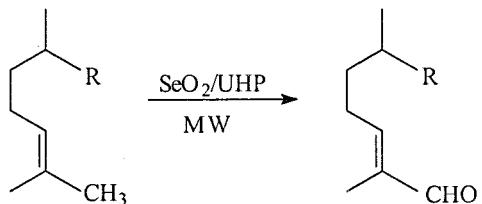


Yan-Jiang Bian*, Chun-Ran Fan, Xiao-Hong Hu,
Ji-Tai Li

1591 Urea-hydrogen peroxide and microwave: An eco-friendly blend for allylic oxidation of alkenes with catalytic selenium dioxide

Urea-hydrogen peroxide (UHP), in the presence of catalytic quantities of SeO₂, under microwave irradiation led to the allylic oxidation of vinyl methyls while keeping the other chemical functionalities intact.

IPC: Int.Cl.⁸ C07C,C07D



R Manktala*, R S Dhillon & B R Chhabra

Authors for correspondence are indicated by (*)

IPC: International Patent Classification

Int.Cl.⁸: International Classification, 8th Edition, 2006