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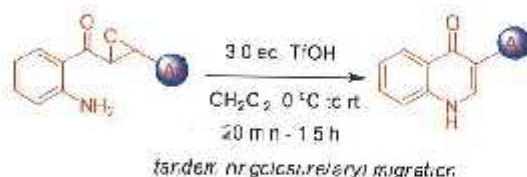
March 2015

CONTENTS

Papers

373 **Azaisoflavones: Synthesis, antimicrobial evaluation and binding affinity with DNA gyrase**

Antimicrobial potency of azaisoflavones has been evaluated *in vitro* against nine bacterial and two fungal strains, respectively. The requisite azaisoflavones have been conveniently synthesized in three steps, with the key step being the super acid catalyzed tandem reaction. The biological results reveal that out of twelve compounds screened, three compounds (**5a**, **5j** and **5l**) exhibit comparable activities against the standard drugs and demonstrated activities at μM concentration. In addition, molecular docking reveal compound **5a** as the most potent by showing a least binding energy of -5.99 kcal/mol with DNA gyrase receptor compared to other compounds.



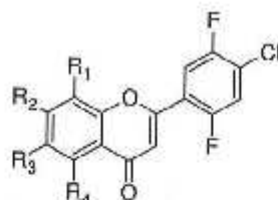
5a docked in DNA gyrase (-5.99 kcal/mol)

C Praveen, K Parthasarathy, P Senthil Kumar & P T Perumal*

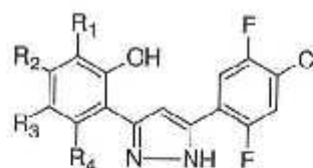
Organic Chemistry Division, CSIR-Central Leather Research Institute, Adyar, Chennai 600 020, India

383 **Synthesis and antimicrobial evaluations of some novel fluorinated chromones and pyrazoles**

A series of novel fluorinated chromones and pyrazoles have been synthesized and screened for their antimicrobial activity (MIC).



5a-h



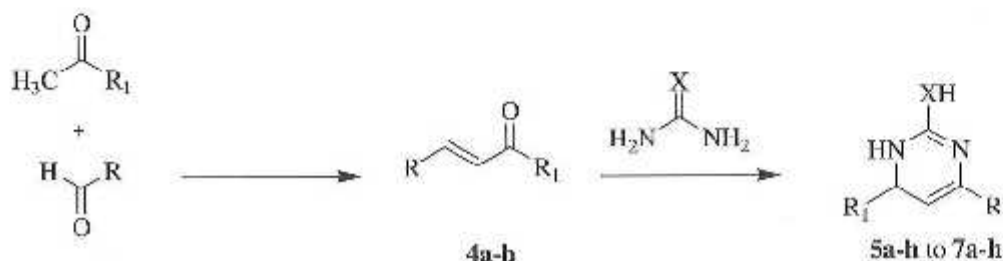
6a-h

Anil Gadhave, Rajendra Gaikar, Shashikant Kuchekar & Bhausaheb Karale*

Department of Chemistry, Radhabai Kale Mahila Mahavidyalaya, Ahmednagar 414 001, India

- 391 **Characterization and antitubercular activity of synthesized pyrimidine derivatives via chalcones** of

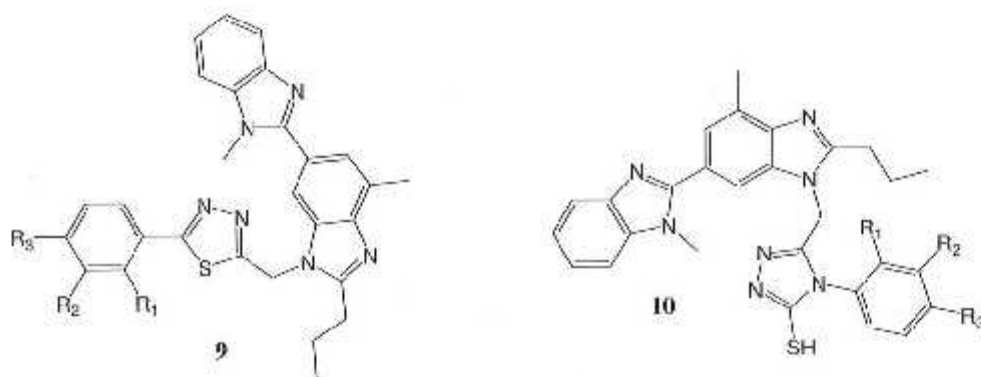
Synthesis and biological evaluation of pyrimidine derivatives containing 2-amino, 2-thio, 2-ol substituted derivatives are described. Biginelli type three component reaction between chalcone of an aldehydes and acetophenone react with guanidine, thiourea and urea to give a rapid facile pyrimidine ring.



Viral J Faldu, Vrajilal K Gothalia & Viresh H Shah*

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

- 399 **Synthesis and *in vitro* biological screening of some benzimidazolyl anchored azoles** A series of novel thiazoles and triazoles anchored with benzimidazole have been synthesized and evaluated for their biological activities.



B K Karale*, P R Nirmal & H N Akolkar

P.G. Department of Chemistry, Radhabai Kale Mahila Mahavidyalaya, Ahmednagar 414 001, India

- 406 **An efficient synthesis, characterization and anti-bacterial activity of pyrimidine bearing 1,3,4-thiadiazole derivatives**

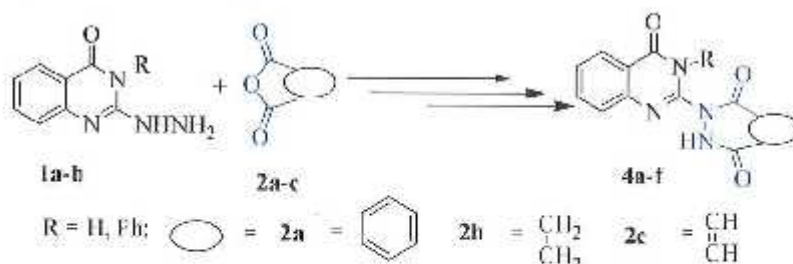
Andrews B* & Mansur Ahmed

PG and Research Department of Chemistry, Islamiah College, Vaniyambadi 635 752, India

A series of pyrimidine bearing 1,3,4-thiadiazole derivatives have been synthesized and evaluated for antibacterial activity. Most of the synthesized compounds have shown promising antibacterial activity.

- 412 **Green and efficient synthesis of 2-(4-oxo-3,4-dihydroquinazolin-2-yl)-2,3-dihydrophthalazine-1,4-dione**

Synthesis of 2-(4-oxo-3,4-dihydroquinazolin-2-yl)-2,3-dihydrophthalazine-1,4-dione have been carried out by two different methods in green solvent PEG-600.

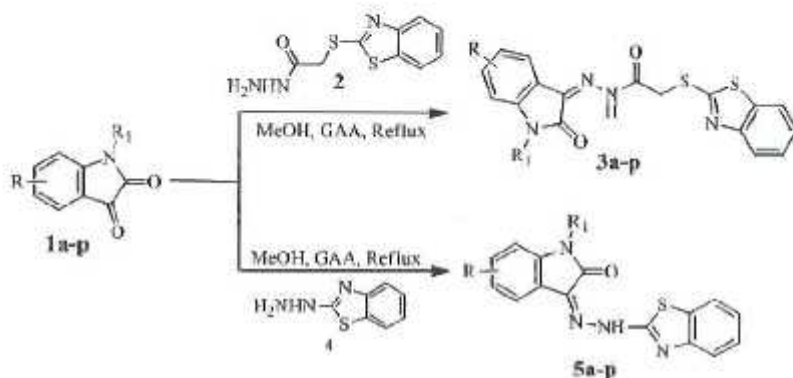


Md Rafeeq*, B Srinivasa Reddy, Ch Venkata Ramana Reddy, A Naidu & P K Dubey

Department of Chemistry, Jawaharlal Nehru Technological University, Hyderabad College of Engineering, Kukatpally, Hyderabad 500 085, India

- 418 **Rational design and synthesis of benzothiazolo-isatinis for antimicrobial and cytotoxic activities**

Benzothiazolo-isatinis **3a-p** and **5a-p** have been synthesized and evaluated for antimicrobial and cytotoxic activities. Some of the compounds **3k**, **5j** and **5o** show significant antibacterial and antifungal activities when compared with standard. The compound **3g** is found to be most significant with IC_{50} values of 154.59 μM and 261.99 μM against HeLa and HBL-100 cell lines, respectively.

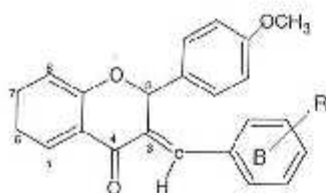


Sanjay Bari*, Sarangapani Manda, Vinod Ugale, Venkateshwar Rao Jupally & Venkatesham Akena

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Notes

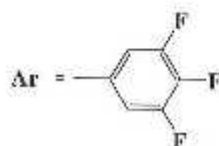
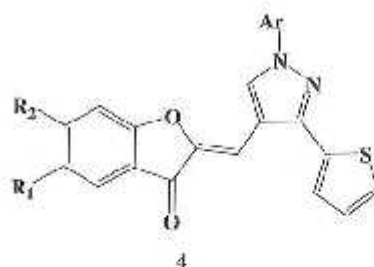
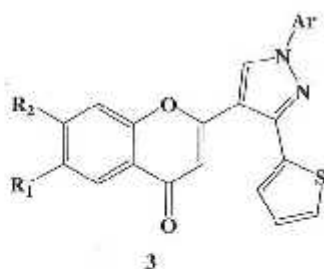
- 430 Synthesis of some active and new *E*-2-(4-anisyl)-3-arylidene chromanone



Ved Prakash Bairwa, Prerna Jain & B S Sharma*

Department of Chemistry, Govt. R. R. Autonomous College, Alwar, India

- 434 Synthesis and biological screening of some novel fluorinated chromones and aurones. Novel trifluoro pyrazolyl chromones and aurones containing thiophene moiety have been synthesized, characterized and screened for their antibacterial, antifungal, antiviral and antioxidant activities.



B K Karale*, P R Nirmal & H N Akolkar

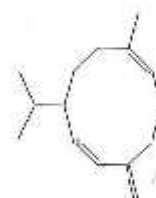
P.G. Department of Chemistry, Radhubai Kale Mahila Mahavidyalaya, Ahmednagar 414 001, India

439 Constituents of the leaves extracts of *Crassocephalum*
cepridioides (Benth.) Moore



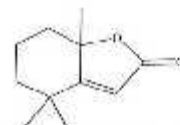
Crassocephalum cepridioides (Benth.)
Moore

GC-MS



1-Ethyltrideca-2,4,6-triene-9-yl acetate (100%)

Linolenic acid ethyl ester
caryophyllene oxide



5,6,7,7a-tetrahydro-4,4,7a-trimethylbenzofuran-2(1H)-one

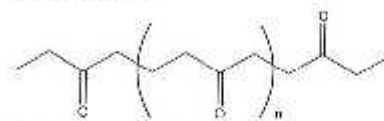


1-(10,12-hexadecadienyl) acetate

COLUMN CHROMATOGRAPHY



1. Unknown



2. β -Sitosterol

3. β -Sitosterol- α -D-glucoside

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