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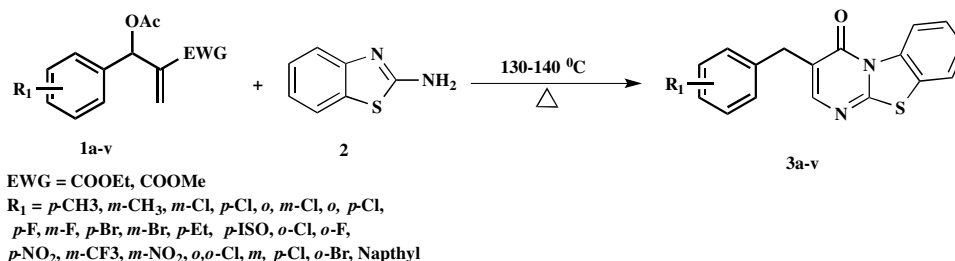
February 2015

CONTENTS

Papers

- 217 **Synthesis, characterization and antimicrobial activity of some new Baylis-Hillman derived benzothiazolo pyrimidinone derivatives**

A series of Baylis-Hillman derived 22 new benzothiazolopyrimidinone derivatives have been synthesized from Baylis-Hillman acetates and 2-amino benzothiazole under neat conditions with high yields. All the newly synthesized compounds have been characterized by their spectral data and evaluated for their antibacterial and antifungal activity.

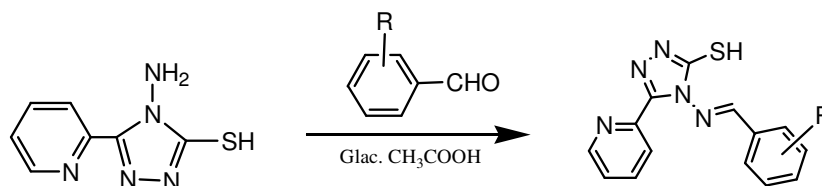


Raghavachary Gampa, Lavanya Devi Chebrolu, Ravi Jarapula, Jayathirtha Rao Vaidya*, Venkateshwar Rao Ghanakota & Sarangapani Manda

Crop Protection Chemicals Division, CSIR-Indian Institute of Chemical Technology,
 Uppal Road, Tarnaka, Hyderabad 500 607, India

- 228 **Microwave-induced synthesis and anti-nemic activity of 4-amino-3-mercapto-5-pyridin-2-yl-4H-1,2,4-triazole Schiff bases**

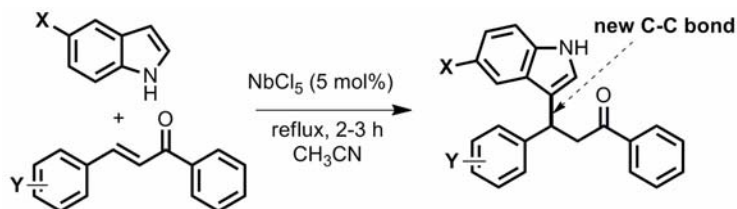
A series of twenty Schiff bases, 4-(benzylideneamino)-3-mercapto-5-pyridin-2-yl-4H-1,2,4-triazoles **6** (**6a-t**) have been synthesized in MW-induced conditions. They exhibit promising nematocidal and nematode repelling activity against *M. incognita* and *R. reniformis*.



Abhishek Mandal, T K Dutta & R L Gupta*

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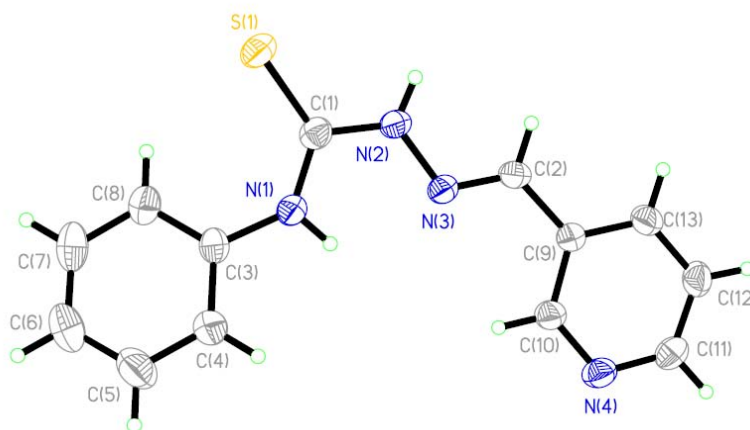
- 240** **A facile method for the synthesis of various 3-substituted indoles *via* Michael addition reaction using NbCl₅** A mild and efficient method for the synthesis of various 3-substituted indoles is described *via* a Michael addition reaction using NbCl₅ as a Lewis acid catalyst. Simple reaction conditions, short reaction times, less amount of catalyst loading, high yields and substrate diversity are the advantages of this methodology.



Srinivasarao Yaragorla* & G Srikanth Kumar

Department of Chemistry, School of Chemical Sciences and Pharmacy, Central University of Rajasthan, NH-8, Bandarsindri 305 817, India

- 245** **Comprehensive investigations on an amphiphilic molecule containing Schiff base group** For the title compound, single crystal structure, experimental and theoretical UV-Vis spectra along with its self-assembly process in saturated ethanol solution being *in situ* monitored with optical microscopy are reported.



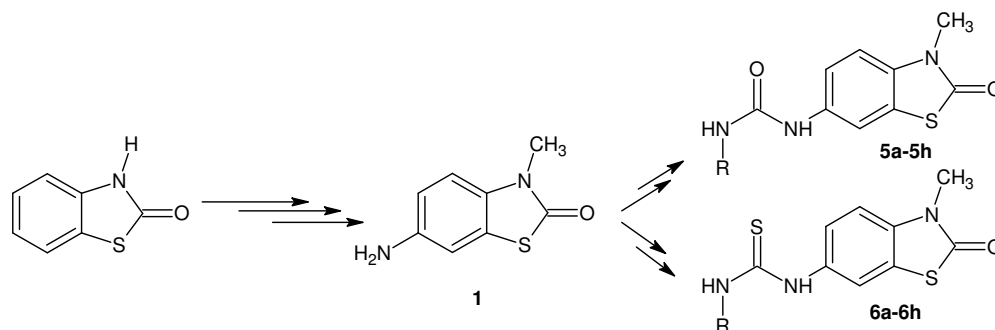
Pu Su Zhao*, Hong Yan Wang, Xiao Jun Sun & Jie Song

Jiangsu Key Laboratory for Chemistry of Low-Dimensional Materials, Huaiyin Normal University, Huaian, Jiangsu 223300, P. R. China

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Studies on the synthesis of 3-methyl-6-(substituted-urea/-thioourea)-2(3*H*)-benzothiazolone derivatives and antimicrobial activities

Some 3-methyl-6-(substituted-urea)-2(3*H*)-benzothiazolone derivatives **5a-h** and 3-methyl-6-(substituted-thiourea)-2(3*H*)-benzothiazolone derivatives **6a-h** have been synthesised from **1**. Antimicrobial and antitubercular activities of the compounds are examined.



Ayşe Sibel Unal, Fatma Kaynak Onurdag, Selda Ozgen, Deniz Dogruer & Tijen Onkol*

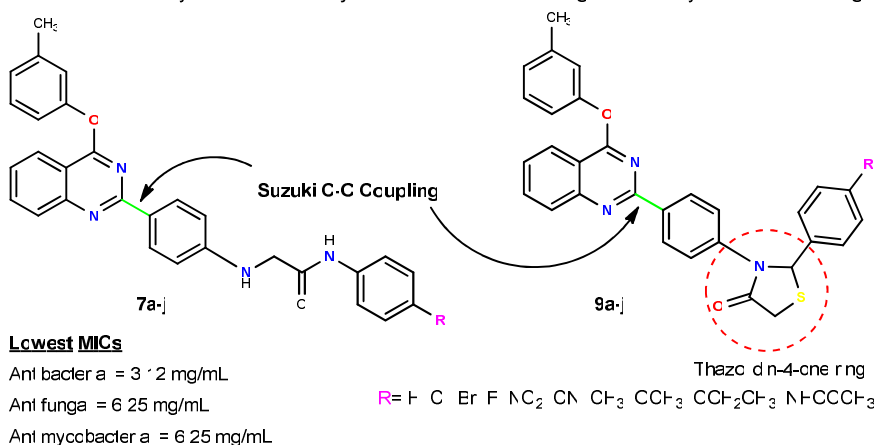
Gazi University, Faculty of Pharmacy, Department of Pharmaceutical Chemistry, 06330-Ankara, Turkey

260

Exploring antimicrobial and antimycobacterial potential of novel quinazoline based thiazolidin-4-ones

Thiazolidin-4-one and *N*-phenyl acetamide based quinazoline derivatives have been synthesized using an efficient palladium-catalyzed C–C Suzuki coupling. The synthesized analogs have been screened for *in vitro* bioactivities. Some analogs have shown remarkable antimicrobial (MICs: 3.12-25 µg/mL) and antimycobacterial activity (MICs: 6.25-25 µg/mL).

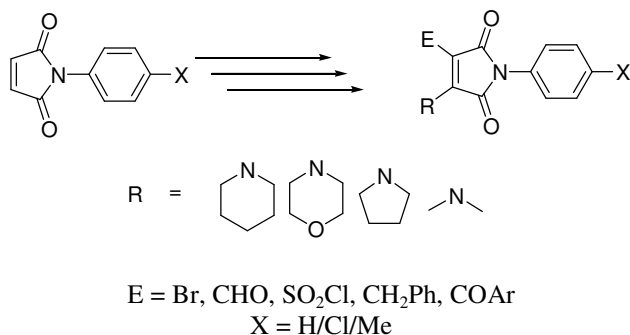
Antimicrobial/Antimycobacterial activity = Thiazolidin-4-one analogs > *N*-Phenyl acetamide analogs



Amit B Patel, Premlata Kumari & Kishor H Chikhalia*

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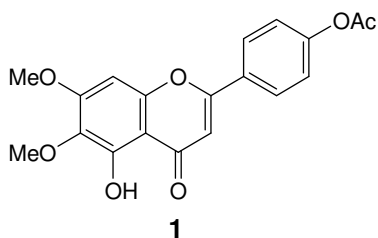
- 272** **Synthesis of novel N-aryl-3-dialkylamino-4-substituted maleimides** Synthesis of several novel N-aryl-3-dialkylamino-4-substituted maleimides have been described *via* conjugate elimination-addition-elimination followed by electrophilic substitution pathway.



Nilesh S Patil, Ganesh B Deshmukh, Keshao A Mahale, Kirankumar S Gosavi & Sambhaji V Patil*

Organic Chemistry Research Center, Department of Chemistry, K.T.H.M. College, Affiliated to University of Pune, Gangapur Road, Nashik 422 002, India

- 279** **Flavones and triterpenes from the leaves of *Vitex peduncularis*** A new flavone **1** together with four known compounds *viz.* cirsimaritin, genkwanin, 3 α - and 3 β -friedelinols have been isolated from the leaves of *Vitex peduncularis* Wall. (Verbenaceae). Structures of the isolates have been elucidated on the basis of spectral (including 2D-NMR) studies.

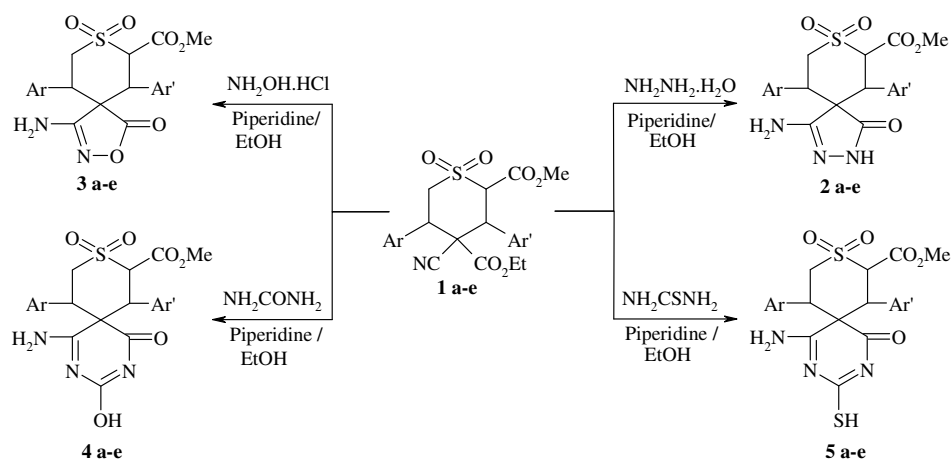


Prasenjit Rudrapaul, Margit Gruner, Hans-Joachim Knölker & Biswanath Dinda*

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283 Double Michael adducts: Source for spiro heterocycles

The gem cyano ester functionality in double Michael adduct, 4-carboethoxy-2-carbomethoxy-4-cyano-3,5-diaryltetrahydro [2H] thio-pyran-1,1-dioxide **1** has been exploited to develop three different types of spiro heterocycles viz., spiro pyrimidine, pyrazole and isoxazole derivatives in the presence of appropriate nucleophiles.

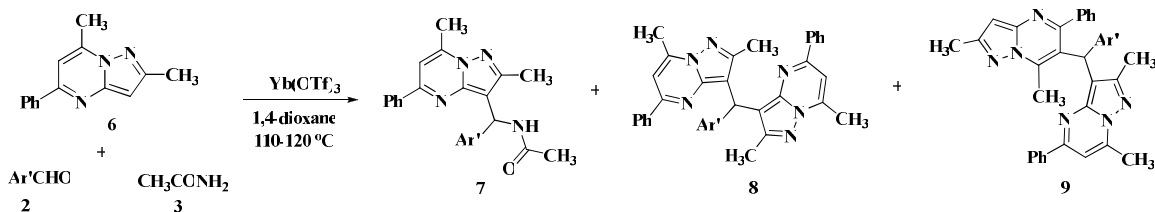


V Padmavathi*, K Sudheer, A Muralikrishna & A Padmaja

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290 Yb(OTf)₃-catalyzed Mannich reaction of imidazo[1,2-*a*]pyridine and pyrazolo[1,5-*a*]pyrimidines

An efficient one-pot condensation reaction of imidazo[1,2-*a*]pyridine/pyrazolo[1,5-*a*] pyrimidines, aldehydes and acetamide has been investigated using Yb(OTf)₃ as catalyst in 1,4-dioxane. The reaction furnishes good to excellent yield of 1-amidomethyl-imidazo[1,2-*a*]pyridines and 1-amidomethyl-pyrazolo[1,5-*a*]pyrimidines along with small quantities of bis(imidazo[1,2-*a*]pyridyl)methanes and bis(pyrazolo[1,5-*a*]pyrimidinyl)methanes. The product distribution is found to be dependent on the nature of imidazo[1,2-*a*]pyridine/ pyrazolo[1,5-*a*]pyrimidines and aldehydes.



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