

Graphical Abstracts

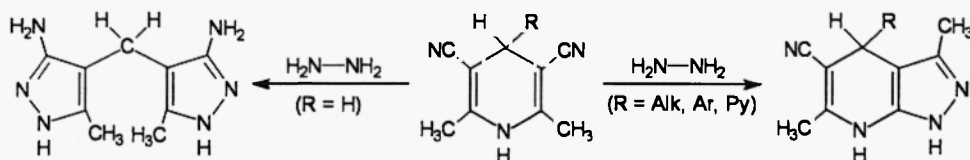
Heterocycl. Commun. 11 (2005) 9 - 12

3,5-DICYANO-1,4-DIHYDROPYRIDINES AS A SOURCE FOR PREPARATION PYRAZOLE AND PYRAZOLO[3,4-b]PYRIDINE DERIVATIVES

E. Bisenieks, J. Uldriķis and G. Duburs*

Latvian Institute of Organic Synthesis, 21 Aizkraukles Str., Riga, Latvia LV1006

The addition of hydrazine to 3,5-dicyano-1,4-dihydropyridine derivatives proceeds with heterocycle cleavage and leads to 4,4'-methylenebispyrazole or pyrazolo[3,4-b]pyridine derivatives.



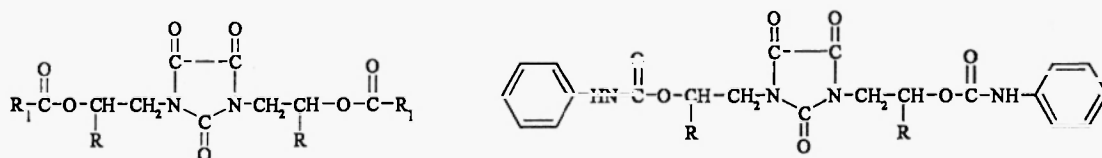
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ESTERS AND URETHANES WITH TRIOXOIMIDAZOLIDINE RING

Iwona Zarzyka-Niemiec and Jacek Lubczak

Faculty of Chemistry, Rzeszów University of Technology, 6 Powstańców Warszawy Ave., 35-959 Rzeszów, Poland

Hydroxyalkyl derivatives of parabanic acid obtained from the acid and oxiranes, react with carboxylic acid or isocyanates to give esters and urethanes with trioxoimidazolidine ring. The optimized conditions for their synthesis avoiding the linear products formed due to ring-opening reactions were established.



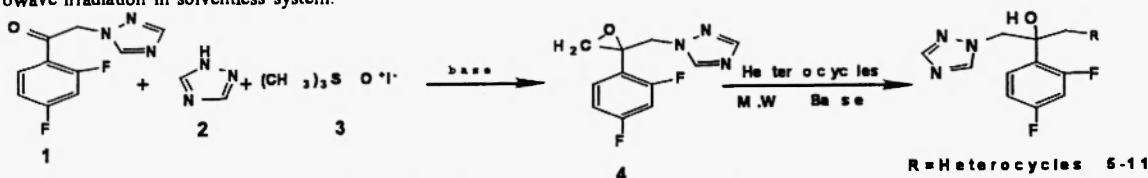
Heterocycl. Commun. 11 (2005) 19 - 22

Rapid Synthesis of some new Propanol Derivatives Analogous to Fluconazole under microwave irradiation in solventless system

Majid M. Heravi*, Radineh Motamedi

Department of Chemistry, School of Sciences, Azzahra University, Vanak, Tehran, Iran

Fluconazole and a series of 2-(2,4-difluorophenyl)-1-(1H-1,2,4 triazol-1-yl-methyl)-3-(substituted heterocycl)-propan-2-ol which are analogous to fluconazole, were synthesized via the reaction of 2-(2,4-difluorophenyl)-2-[1-(1,2,4-triazolmethide)]oxiran with various heterocyclic system under microwave irradiation in solventless system.



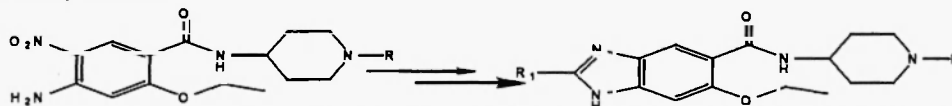
SYNTHESIS AND BIOLOGICAL ACTIVITY STUDY OF CINTIAPRIDE RELATED COMPOUNDS AS ANTI-ULCERATIVE DRUG CANDIDATES

G Srinivasulu *, P Pratap Reddy*, Pragathi Hegde[#] and Ranjan Chakrabart[#]

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Integrated Product Development, Dr. Reddy's Laboratories Limited, Unit III, Bollaram, Jinnaram, Medak Dist 502325, Andhra Pradesh, India Email :
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Hyderabad- 500050, Andhra Pradesh, India

New Cintiaprime related benzimidazole derivatives are prepared from the condensation of corresponding diamines with carboxylic acids. Their anti-ulcerative activity is studied.



SYNTHESIS, BIOLOGICAL EVALUATION, AND STRUCTURAL STUDIES OF 3-PHENYL[1,2,4]-OXADIAZOLE-5-CARBOXYLIC ACID BENZO[1,3]DIOXOL-5-YLMETHYLENE-HYDRAZIDE

J. M. Santos-Filho¹*, J. G. de Lima², L. F. C. C. Leite³,
E. A. Ximenes¹, J. B. P. da Silva¹, P. C. Lima², I. R. Pitta¹

¹Departamentos de Engenharia Química, Antibióticos, Farmácia e Química
Fundamental Universidade Federal de Pernambuco, Recife, PE, 50740-521, Brasil

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Universidade Católica de Pernambuco, PE, 50.005-090, Brasil

Synthesis and biological activities are reported for a series of
1,2,4-oxadiazole combined with carbohydrazides residues.

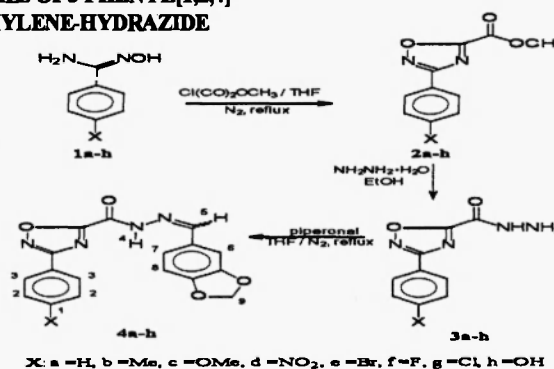
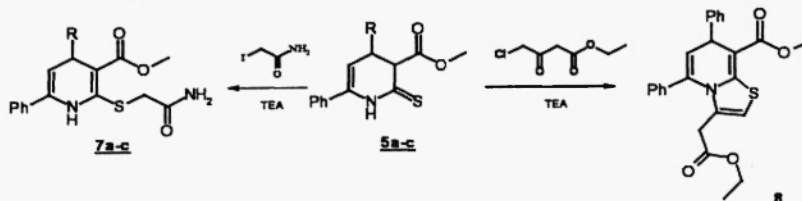


Figure 1. Synthetic pathways

SYNTHESIS AND PROPERTIES OF 4,6-DIARYL-3-METHOXY-CARBONYL-1,4-DIHYDROPYRIDINE-2(3H)-THIONES

A.Krauze*, I. Šturms, J.Popelis, L.Sīle and G.Duburs
Latvian Institute of Organic Synthesis, Riga, Latvia LV-1006

4,6-Diaryl-3-methoxycarbonyl-1,4-dihydropyridine-2(3H)-thiones (**5**) were obtained by Michael reaction of arylmethylideneacetophenones **1** with 2-methoxycarbonylthioacetamide **2** in the presence of piperidine with subsequent acidification. Methyl 2-carbamoylmethylthio-1,4-dihydropyridine-3-carboxylates **7** were prepared by alkylation of thiones **5** with iodoacetamide, but methyl 3-ethoxycarbonylmethyl-4,7-dihydrothiazolo[3,2-a]pyridine-8-carboxylate **8** - by treatment of thione **5a** with ethyl 4-chloroacetoacetate in the presence of equimolar amount of triethylamine.



Tetraazamacrocyclic Complexes of Bivalent Iron

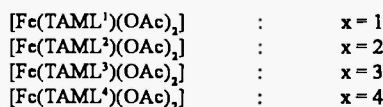
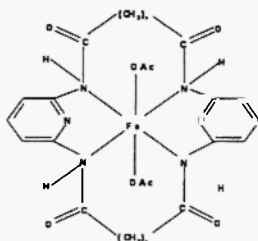
Heterocycl. Commun. 11 (2005) 43 - 48

Ashu Chaudhary*, G.K. Agarwal^b and R. V. Singh**

*Department of Chemistry, University of Rajasthan, Jaipur-302 004, India

^bDepartment of Chemistry, D.J. College, Baraut - 250 611, Meerut, India

Synthesis and spectroscopic studies of tetraazamacrocyclic complexes of bivalent iron have been reported. The *in vitro* activity of the synthesized compounds has also been examined against a number of pathogenic fungi and bacteria.



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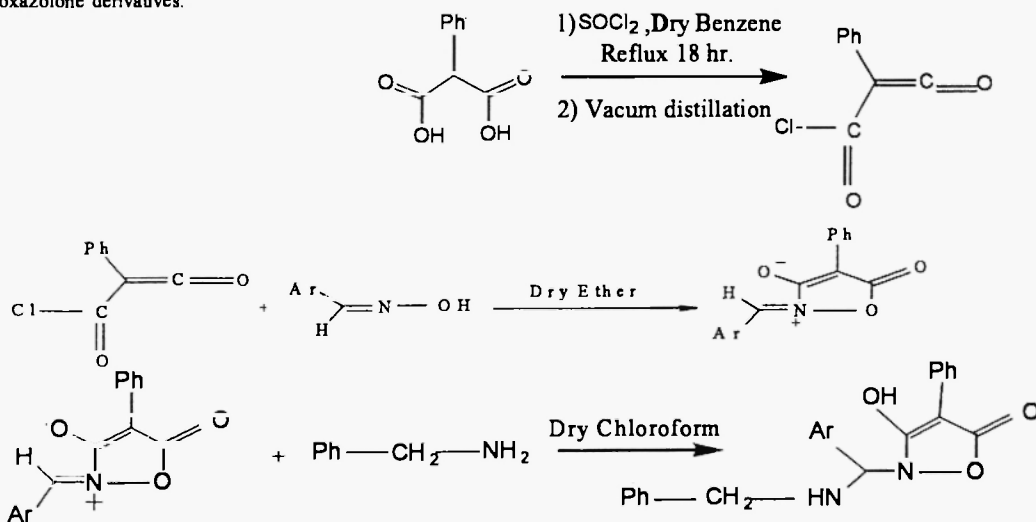
A TYPICAL PROCEDURE FOR SYNTHESIS OF 3-HYDROXY-5(2H)-ISOXAZOLONE DERIVATIVES FROM MESOIONIC HETEROCYCLES AND REACTS WITH NUCLEOPHILES GIVING SOME NEW COMPOUNDS.

Hooshang Hamidian, Ahmad Momeni Tikdari*, Ali Shokrani and Hojatollah Khabazzadeh

Department of chemistry, Shahid Bahonar University of Kerman Kerman, 76175-133, Iran.

e-mail: amomeni@mail.uk.ac.ir

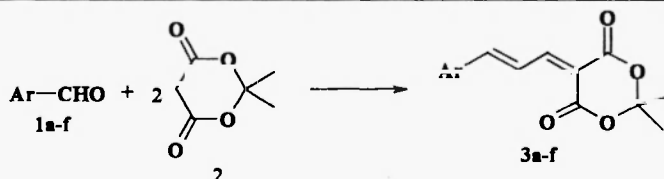
MESOIONIC HETEROCYCLES have been prepared from phenylmalonic acid and oxime. These products on treatments with nucleophiles results isoxazalone derivatives.



Unexpected synthesis of 4-R-phenylallylidene derivatives of Meldrum's acid.

Braulio Insuasty,^{1*} Harlem Torres,^{1,2} Rodrigo Abonia,¹ Jairo Quiroga,^{1*} J. Low,³ Adolfo Sanchez,⁴ Justo Cobo⁴ and Manuel Nogueras⁴

¹Grupo de Investigación de Compuestos Heterocíclicos, Department of Chemistry, Universidad del Valle, A. A. 25360, Cali, Colombia; ²Universidad Nacional de Colombia, Sede Palmira, Chapinero via Candelaria, Palmira, Colombia; ³Department of Chemistry, University of Aberdeen, Meston Walk, Old Aberdeen AB24 3UE, Scotland; ⁴Department of Inorganic and Organic Chemistry, Universidad de Jaén, 23071 Jaén, Spain.

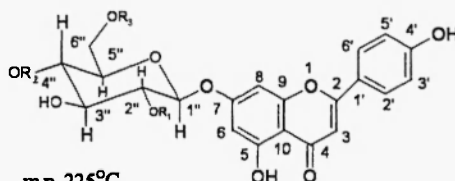
**Two apigenin glucosides from stem parts of *Anisomeles malabarica* R.Br.**

Shubashini K. Sripathi, S. Sivakamasundari and C. Dulcy Evangelin

Department of Chemistry, Avinashilingam Deemed University, Coimbatore – 641 043, Tamil Nadu, India.

Fax. # 0422 2450285

¹H and ¹³CNMR data



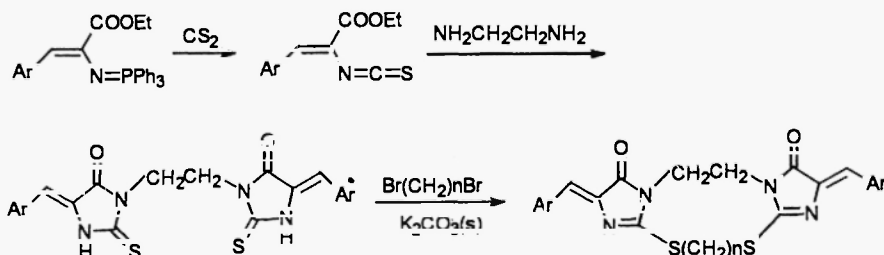
1: $R_1 = H$; $R_2 = R_3 = p$ -coumaroyl group; m.p. 225°C

2: $R_2 = H$; $R_1 = R_3 = p$ -coumaroyl group; m.p. 245°C

SYNTHESIS OF BIS-IMIDAZOLONE CONDENSED RING DERIVATIVES BEARING POTENTIAL FUNGICIDAL ACTIVITIES

YONG SUN^{*A}, LI-PING GAO^A AND MING-WU DING^B

Department of Chemistry, Yungang Teachers College, Danjiangkou, 442700, P.R. China ^A and College of Chemistry, Central China Normal University, Wuhan, 430079, P.R. China ^B



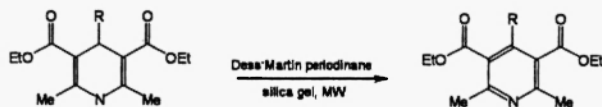
AROMATIZATION OF HANTZSCH 1,4-DIHYDROPYRIDINES WITH DESS-MARTIN PERIODINANE UNDER CLASSICAL HEATING AND MICROWAVE IRRADIATION IN SOLVENTLESS SYSTEM

Majid M. Heravi,^{a,*} Fatemeh Dirkwand,^a Hossein A. Oskooie^a and Mitra Ghassemzadeh^b

^aDepartment of Chemistry, School of Sciences, Azzahra University, Vanak, Tehran, Iran

^bChemistry & Chemical Engineering Research Center of Iran, Tehran, Iran

Hantzsch dihydropyridines were readily oxidized by Dess-Martin periodinane supported onto HNO₃/ silica gel under classical heating in dichloromethane and microwave irradiation in solventless system.

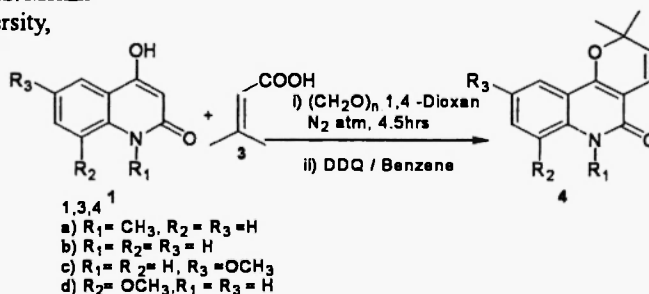


An easy route to synthesize of pyranoquinoline based alkaloids were prepared from *o*-quinone methide intermediates, and performing (4+2) cycloaddition.

T. Suresh, T. Dhanabal, R. Nandha Kumar and P.S. Mohan

Department of Chemistry, Bharathiar University,

Coimbatore – 641 046, Tamil Nadu, India

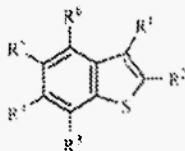


DETERMINATION OF PARTITION COEFFICIENT OF BENZO[b]THIOPHENES BY REVERSED-PHASE HIGH-PERFORMANCE LIQUID CHROMATOGRAPHY

Jaime A. Valderrama,^{*} Ludys Cardenas, Verónica Arancibia and Claudio Valderrama.

Facultad de Química, Pontificia Universidad Católica de Chile, Casilla 306, Santiago-22, Chile.

The experimental partition coefficients of a range of benzo[*b*]thiophenes and their correlation with the lipophilicity predicted by the methods of Ghose-Crippen and Dixon, is reported.



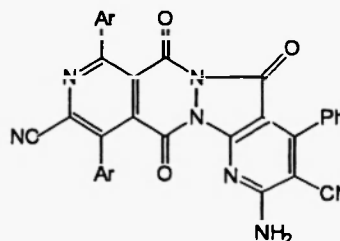
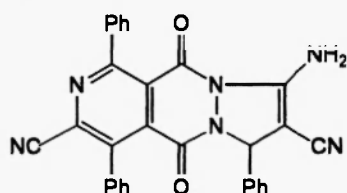
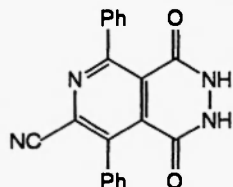
R¹ = H, Br, NH₂; R² = CO₂Me, CH₂OH, CHO, CH=N₂Me;
R³ = H, OMe; R⁴ = H, NO₂; R⁵ = H, Cl; R⁶ = H, OMe

Synthesis and antimicrobial activity of new polyfunctionally substituted pyridazines and their fused derivatives

Yehya M. Elkholy

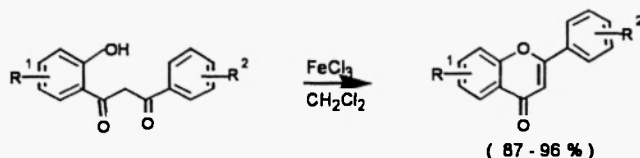
Chemistry Department, Faculty of Science, Helwan University, Ain Helwan ,

Cairo, Egypt .E-mail: y_elkholy@yahoo.com

**FeCl₃ in catalytic amount effects dehydrative cyclisation of 1, 3 - (diaryl propanediones) to the corresponding flavones in excellent yields.**

P. K. Zubaidha*, A. M. Hashmi, R. S. Bhosale.

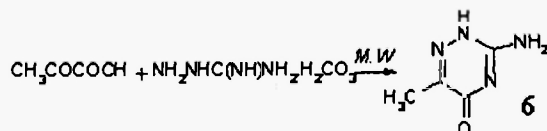
School of Chemical Sciences, S. R. T. M. University, Nanded - 431606, India. Fax No: 011-91-2462-229245.

FeCl₃ in catalytic amount effects smooth conversion of substituted 1- (2- hydroxy phenyl) - 3 - phenyl - 1, 3 - propanediones to the corresponding flavones in high yields.**Synthesis of some nitrogen heterocycles under microwave irradiation in solventless system**

Hossein.A.Oskooie*, Majid.M.Heravi, Navvabeh Nami And Azadeh Nazari.

Department of Chemistry, School of Sciences, Azzahra university, Vanak Tehran, Iran.

A Superior and fast method of synthesis of some nitrogen heterocycles under microwave irradiation in solventless system is described.



Synthesis of 2-(1,3-Diarylpirazol-5-ylamino)-4-(3-oxo-2H-1,4-benzoxa/thiazin-6-yl)-thiazoles

K. N. Jayaveera and S. Sailaja

Oil Technological Research Institute, Jawaharlal Nehru Technological University, Anantpur - 515001
and

G. Jagath Reddy and K. Srinivasa Rao

R & D Laboratories, Dr. Jagath Reddy's Heterocyclics, 81, S.V.Co-op Industrial Estate, Balanagar, Hyderabad – 500 037, India. e-mail-jagathreddy@usa.net;
Fax # 91-40-23773487.

A number of 2-(1,3-Diarylpirazol-5-ylamino)-4-(3-oxo-2H-1,4-benzoxa/thiazin-6-yl)-thiazoles (5a-k & 6a-d) have been prepared

