Graphical Abstracts

Heterocycl. Commun. **11** (2005) 117-120

SYNTHESIS AND BIOLOGICAL EVALUATION OF *CIS*-COMBRETASTATIN ANALOGS AND THEIR NOVEL 1,2,3-TRIAZOLE DERIVATIVES

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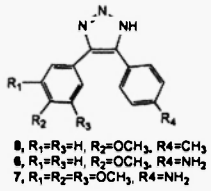

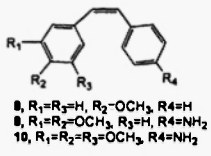

Heterocycl. Commun. **11** (2005) 121-128

SYNTHESIS AND ANTI-INFLAMMATORY ACTIVITY OF NEW THIAZOLIDINE-2,4-DIONES, 4-THIOXOTHIAZOLIDINONES AND 2-THIOXOIMIDAZOLIDINONES

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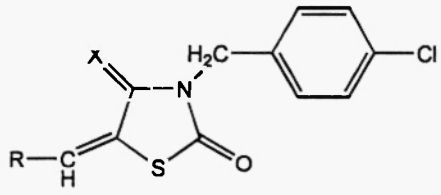

X = O, S

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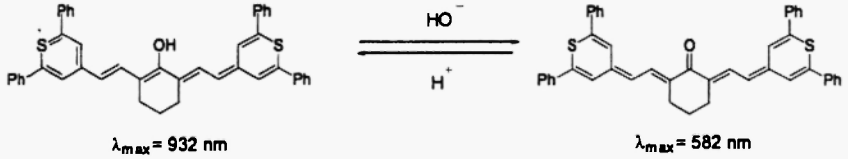
NOVEL SYNTHETIC ROUTE TO pH-SENSITIVE 2,6-BIS(SUBSTITUTED ETHYLIDENE)CYCLOHEXANONE/HYDROXYCYANINE DYES THAT ABSORB IN THE VISIBLE/NEAR-INFRARED REGIONS

L. Strekowski,* J. C. Mason, M. Say, H. Lee, R. Gupta and M. Hojjat
Department of Chemistry, Georgia State University, Atlanta, GA 30303, USA



λ_{max} = 932 nm

λ_{max} = 582 nm

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SYNTHESIS OF SOME NEW 6-ARYL-2-(3-OXO-1,4-BENZOXAZIN-6-YL)PYRIDINES.

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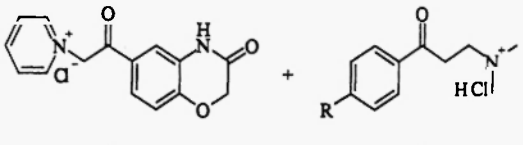
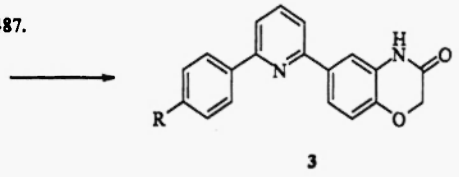


1 2



3

A series of some new 6-aryl-2-(3-oxo-1,4-benzoxazin-6-yl)pyridines (3a-g) have been accepted

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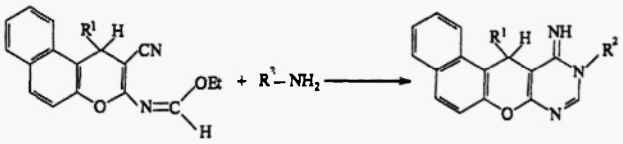
ACTION OF PRIMARY AMINES AND HYDROXYLAMINE ON ETHOXYMETHYLENEAMINONAPHTOPYRANE: SYNTHESIS OF NEW NAPHTOPYRANO[2,3-D] PYRIMIDINE DERIVATIVES

Mehdi Messaâd, Fakher Chabchoub and Mansour Salem
Laboratoire de Chimie Appliquée : Hétérocycles, Corps Gras et Polymères, Faculté des Sciences de Sfax, 3038 Sfax, Tunisie



The reaction of the naphtopyrans with triethylorthoformiate and then with primary amines and hydroxylamine, leads to new naphtopyrano [2, 3-d] pyrimidines **3** and **4**, whose structures were confirmed by IR and NMR spectroscopy.

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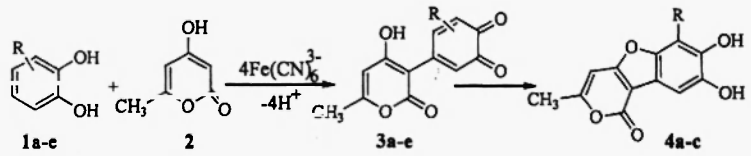
OXIDATIVE COUPLING OF IN-SITU GENERATED *o*-BENZOQUINONES WITH 4-HYDROXY-6-METHYL-2-PYRONE

Davood Habibi, Davood Nematollahi,* Abdolhamid Alizadeh and Mahdi Hesari
Department of Chemistry, Faculty of Sciences, University of Bu-Ali Sina, Hamadan, Iran.



1a-e 2 3a-e 4a-c

R = H, **1a, 3a, 4a**
R = Me, (at C-3) **1b, 3b, 4b**
R = OMe, (at C-3) **1c, 3c, 4c**
R = COOH, (at C-4) **1d, 3d, 4d**
R = tert-Bu (at C-4) **1e, 3e**

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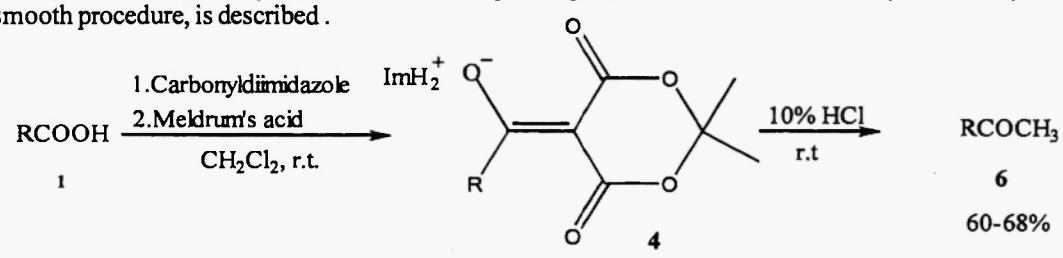
ONE-POT CONVERSION OF A REPRESENTATIVE SERIES OF CARBOXYLIC ACIDS TO THE CORRESPONDING METHYL KETONES

Stylianos Hamilakis and Athanase Tsolomitis*
The Laboratory of Organic Chemistry, The School of Chemical Engineering,
The National Technical University of Athens, Athens 157 80, Greece

The conversion of carboxylic acids via the corresponding acyl Meldrum's acids to methyl ketones by a simple and smooth procedure, is described.



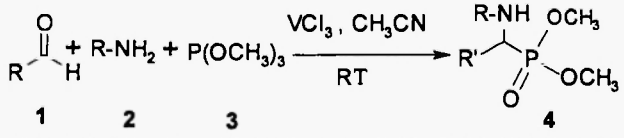
Heterocycl. Commun. **11** (2005) 153-156

VCL_3 CATALYZED EFFICIENT ONE-POT SYNTHESIS OF Á–AMINO PHOSPHONATES

Y. Thirupathi Reddy, P. Narsimha Reddy, B. Sunil Kumar, N. Sreenivasulu and
B. Rajitha*

Department of Chemistry, National Institute of Technology, Warangal, India.

VC_3 is a highly efficient catalyst for the one-pot synthesis of á-amino phosphonates.



Heterocycl. Commun. **11** (2005) 157-162

SYNTHESIS OF *N,N'*-DIGLUCOSYLATED BENZIMIDAZOL-2-ONE VIA AN UNEXPECTED REARRANGEMENT OF BENZODIAZEPINE DERIVATIVE

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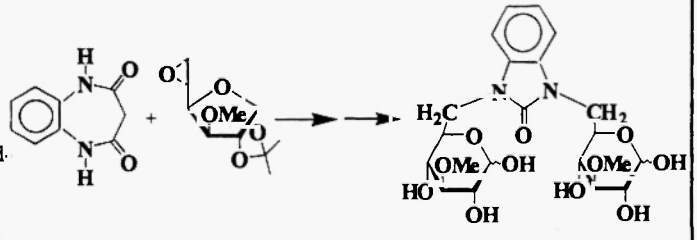
Nicolas Joly, Gérard Goethals, Patrick Martin*

* Laboratoire de la Barrière Hémato Encéphalique,
Antenne de Béthune, IUT de Béthune, Université d'Artois,
France.

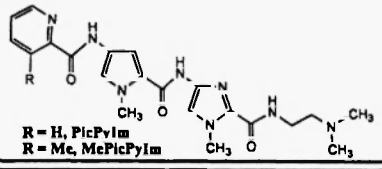
Reaction of 1,5-benzodiazepin-2,4-dione with 3-O-substituted-5,6-anhydro-1,2-isopropylidene-α-D-glucofuranose gave the unexpected N,N'-di-glucofuranosyl benzimidazol-2-one by a novel rearrangement and ring closure reaction. A mechanism is proposed.



Heterocycl. Commun. **11** (2005) 163-166

NOVEL PICOLINIC ACID-CONTAINING PYRROLE-IMIDAZOLE POLYAMIDES: SYNTHESIS AND T•G MISMATCHED BASE PAIR RECOGNITION

Peter B. Uthe, Andrew M. Staples, Mark Turlington,
Justin B. Jones, Kevin N. Blackmon, Suzanna L. Bailey,
Karen L. Buchmueller, Moses Lee*
Department of Chemistry, Furman University, Greenville, SC 29613

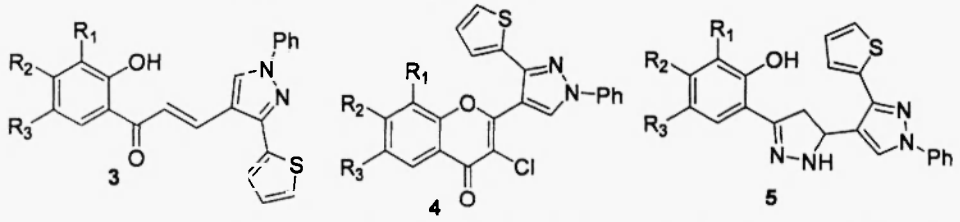


Heterocycl. Commun. **11** (2005) 167-172

SYNTHESIS, CHARACTERIZATION OF SOME 1-(2-HYDROXY-PHENYL)-3-(1-PHENYL-3-THIOPHEN-2-YL-1H-PYRAZOL-4-YL)-PROPENONE, 3-CHLORO-2-(1-PHENYL-3-THIOPHEN-2-YL-1H-PYRAZOL-4-YL)-CHROMON-4-ONE AND 2-(1'-PHENYL-3'-THIOPHEN-2-YL-3,4-DIHYDRO-2H,1H'-[3,4]BIPYRAZOL-5-YL)-PHENOL

V.B. Halnor, N.S. Joshi, B.K. Karale and C.H. Gill* ,P.G. Dept. of chemistry, S.S.G.M. College, Kopargaon, Dist. Ahmednagar

Base catalyzed condensation of **1** with **2** gives compound **3** [1-(2-hydroxy-phenyl)-3-(1-phenyl-3-thiophen-2-yl-1H-pyrazol-4-yl)-propenone]. **3** on oxidative cyclization with DMSO-$CuCl_2$ gives 3-chloro-2-(1-phenyl-3-thiophen-2-yl-1H-pyrazol-4-yl)-chromon-4-one **4**. **3** on condensation with hydrazine hydrate gives 2-(1'-phenyl-3'-thiophen-2-yl-3,4-dihydro-2H,1H'-[3,4]bipyrazol-5-yl)-phenol **5**. The products **3**, **4** and **5** were characterized by IR, ^{1}H NMR and mass spectroscopy.



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SYNTHESIS OF SOME NOVEL TRICYCLIC a- AMINOACID ESTERS AND POTENTIAL BIOACTIVE COMPOUNDS *VIA* 1,2-PROTOTROPY AND 1,3-APT CASCADE REACTIONS

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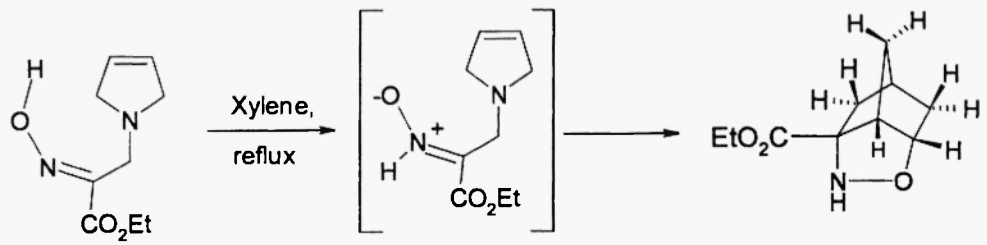
a. Mersin University, Faculty of Pharmacy, Department of Chemistry, Mersin, 33342, Turkey
b. Çukurova University, Faculty of Medical, Department of Pharmacology, 01330, Adana-Turkey

Some novel cyclic a –aminoacid esters and potential bioactive compounds were prepared *via* thermal 1,2-prototropy- and 1,3-APT oxime nitrone-1,3-dipolar cycloaddition cascades reactions. This substrate allows the influence of the new stereocentres on the cascade to be assessed with respect to the configuration of the nitrone that is generated and the facial selectivity of the subsequent cycloaddition.



1,4-ADDITION OF N,N-DIALKYLPHENYL ACETAMIDES TO METHYLENE SUBSTITUTED 1,3-DIHYDRO-3-METHYLENE-2H-INDOL-2-ONES

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S. Simova
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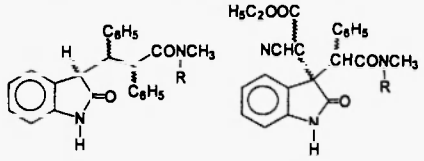

7 9

Two 3-methylene-2H-indol-2-ones substituted in the methylene group by either a phenyl or two electron withdrawing groups react with the lithium enolates of N,N-disubstituted phenylacetamides and 2H-indol-2-one giving the corresponding products of conjugate 1,4-addition – the 1,3-dihydro-indol-2-ones 7 and 9.

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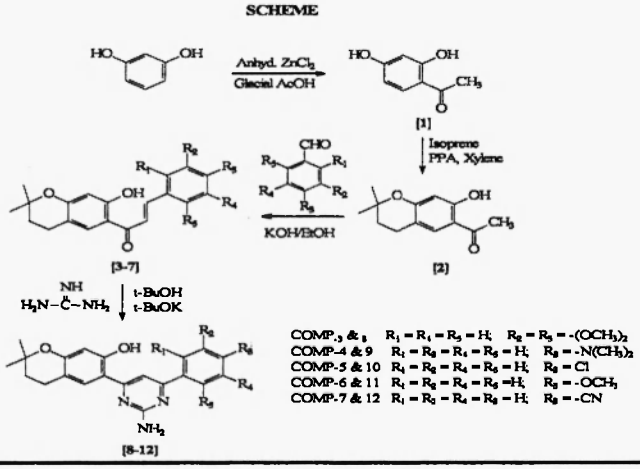
SYNTHESIS AND CHARACTERISATION OF NEW CHROMANO PYRIMIDINES AND STUDY OF ANTIMICROBIAL ACTIVITY

**Y.L.N.Murthy, *Rani Nanda, #P.Ellaiah and #R.Bhavani Devi.

SCHEME



[1] [2] [3-7] [8-12]

COMP-3 & 8 $R_1 = R_4 = R_5 = H$; $R_6 = R_7 = -(OCH_3)_2$
COMP-4 & 9 $R_1 = R_6 = R_4 = R_5 = H$; $R_6 = -N(CH_3)_2$
COMP-5 & 10 $R_4 = R_6 = R_4 = R_5 = H$; $R_6 = Cl$
COMP-6 & 11 $R_1 = R_6 = R_4 = R_5 = H$; $R_6 = -OCH_3$
COMP-7 & 12 $R_1 = R_6 = R_4 = R_5 = H$; $R_6 = -CN$

SYNTHESIS OF 9-ARYL[3',2' : 4,3]PYRIMIDO [2,1-C][1,4] BENZOXA/THIAZINES UNDER MICROWAVE IRRADIATION CONDITIONS

G. Jagath Reddy * and K. Srinivasa Rao
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and

Md. Khalilullah, D. Latha and C. Thirupathaiah
Department of Chemistry, Jawaharlal Nehru Technological University, Hyderabad-500 072, India.

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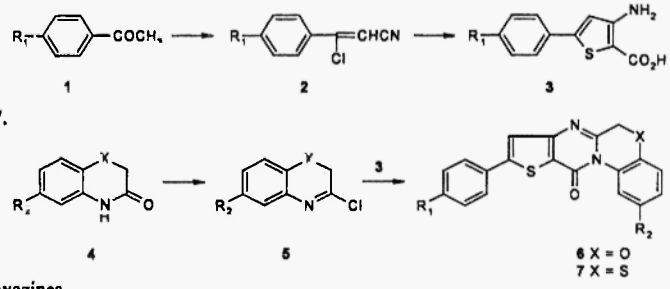

1 2 3 4 5 6 X = O 7 X = S

A series of new 9-Arylthieno[3',2': 4,3]pyrimido [2,1-c] [1,4]benzoxazines (6a-f) and benzothiazines [7a-e] have been synthesized under microwave irradiation conditions.