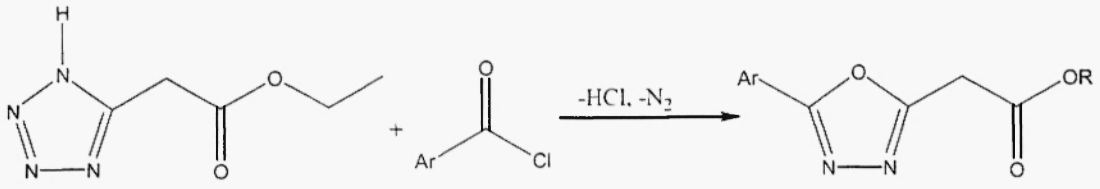
Graphical Abstracts

Heterocycl. Commun. 7 (2001) 411-416

Synthesis of 5-Aryl-1,3,4-Oxadiazolyl-2-Acetic Acids

Lubomir Janda, Aldrich Chemical Co., Inc.,
940 West Saint Paul Avenue, Milwaukee, WI, USA



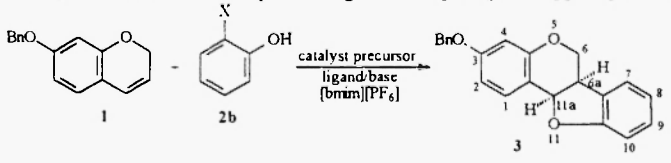
R = C_2H_5, H

Heterocycl. Commun. 7 (2001) 417-420

EFFICIENT SYNTHESIS OF PTEROCARPANS
BY HECK-OXYARYLATION IN IONIC LIQUIDS

Loránd Kiss,[a] Gábor Papp.[b] Ferenc Joó,*[b c] Sándor Antus*[a]
[a]Department of Organic Chemistry, University of Debrecen, P.O.B. 20, H-4010 Debrecen, Hungary,
[b]Research Group of Homogeneous Catalysis, Hungarian Academy of Sciences, P.O.B. 7, H-4010 Debrecen, Hungary
[c]Institute of Physical Chemistry, University of Debrecen, P.O.B. 7, H-4010 Debrecen, Hungary,

An efficient synthesis of (±)-3 has been developed using ionic liquid [bmim][PF_6] as solvent, as well as catalyst.

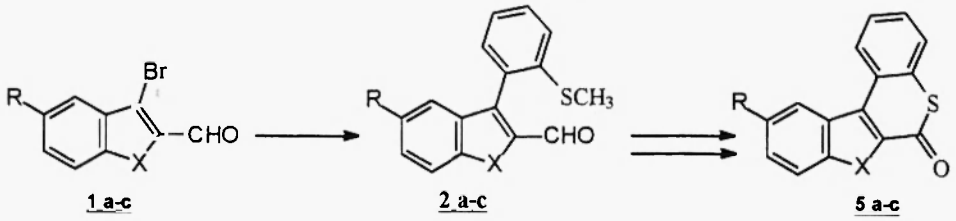


Heterocycl. Commun. 7 (2001) 421-426

A First Synthesis Of Isothiocoumestanes And Heterocyclic Analogues

Stephanie Deprets and Gilbert Kirsch*
Groupe de Synthèse Organique et Hétérocyclique, Laboratoire de Chimie Organique, Université de Metz, Ile du Saulcy, 57012 Metz Cedex 01, France

The synthesis of Isothiocoumestan 5a and heterocyclic analogues 5b-c in three steps from bicyclic aldehydes 2 a-c is reported.

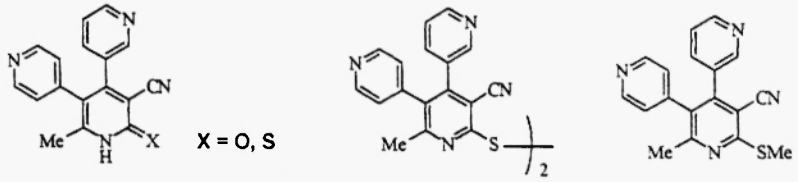


Heterocycl. Commun. 7 (2001) 427-432

SYNTHESIS OF 4,5-DIPYRIDYLPYRIDIN-2(1H)-ONES, PYRIDINE-2(1H)-THIONES AND RELATED DERIVATIVES AS ANALOGES OF CARDIOTONIC DRUG MILRINONE

A.Krauze*[a], V.Garalene[b], R.Vītoliņa[a], G.Duburs[a]
[a]Latvian Institute of Organic Synthesis, Riga, Latvia LV-1006
[b]Lithuanian Institute of Cardiology, Kaunas, Lithuania LT-3007

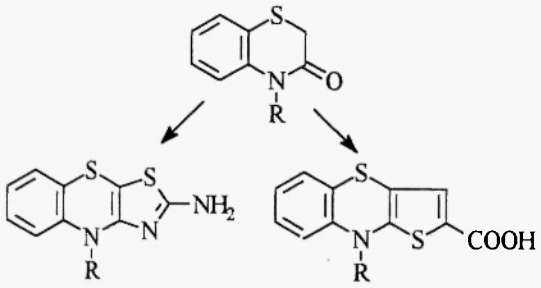
4,5-Dipyridyl substituted pyridine-2(1H)-one and pyridine-2(1H)-thione have been prepared by Michael reaction of 4-pyridylacetone and 2-cyano-3-(3-pyridyl)acrylamides (thioacrylamides) with subsequent heterocyclization, dehydration and dehydrogenation. Oxidation of thione yielded 2,2-bispyridyldisulfide, but alkylation - 2-methylthiopyridine. Their cardiovascular activity in vitro was screened.



Heterocycl. Commun. 7 (2001) 433-438

New 1,4-benzothiazine fused heterocycles-V : Synthesis of 9H-thieno[3,2-*b*]benzothiazine and 4H-thiazolo[2,3-*b*][1,4]benzothiazine derivatives

Thieno and thiazolo benzothiazines have been synthesized with ethyl mercaptoacetate and thiourea respectively, in good yields.



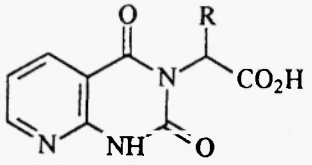
Lingaiah Nagarapu* and Narender Ravirala

Heterocycl. Commun. 7 (2001) 439-444

CONVENIENT SYNTHESIS OF 3-(1-CARBOXYALKYL)PYRIDO[2,3-*d*]PYRIMIDINE-2,4-DIONES

M. Saoul, F.B. Benabdelouahab, F. El Guemmout
University Adbelmalek Essaadi, Faculty of Sciences-Tetouan, B.P. 2121, Tetouan, Morroco

A.M. Romerosa
Area de Quimica Inorganica, Facultad de Ciencias, Universidad de Almeria, 04071, Almeria, Spain



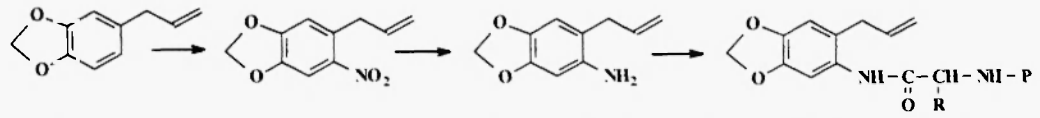
R = H; CH_3; CH_2Ph; Ph; $CH_2(C_3H_3N_2)$; $(CH_2)_2CO_2H$; CH_2CO_2H.

SYNTHESIS OF PEPTIDYL BENZODIOXOLE DERIVATIVES FROM SAFROLE, A POTENTIAL CLASS OF ANTITUMOR DRUGS

Heterocycl. Commun. 7 (2001) 445-448

Kezia Peixoto da Silva, Ivone A. de Souza, Antonio Rodolfo de Faria, Dalci Jose Brondani & Ana Cristina Lima Leite* - LABSINFA - Departamento de Ciências Farmaceuticas - Universidade Federal de Pernambuco. Rua Prof. Artur Sa S/N, CDU, 50740-520, Recife, Pernambuco - Brasil
acllb@npd.ufpe.br

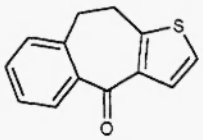
A series of peptidyl benzodioxole from safrol was synthesized. Structure of these compounds was studied by IR and ^{1}H NMR.



Facile Synthesis of 9,10-Dihydro-4H-Benzo [4,5] Cyclohepta [1,2-b] Thiophene-4-One: A Crucial Drug Intermediate-Application of Wittig-Horner Reaction

Heterocycl. Commun. 7 (2001) 449-454

M.S.R. Murty*, T. Ramalingam, G. Sabitha and J.S. Yadav
Organic Chemistry Division-I, Indian Institute of Chemical technology, Hyderabad-500007, India.



(1)

Synthesis of 9,10-dihydro-4H-benzo [4,5] cyclohepta[1,2-b] thiophene-4-one (**1**), a key pharmaceutical intermediate was described by two different routes. The formation of Cannizzaro reaction proeducts was observed in the first route. Wittig-Horner reaction conditions were utilized in the second route to obtain the title compound in good yield.

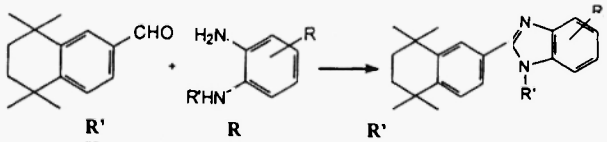
SYNTHESIS OF SOME NOVEL TETRAHYDRONAPHTHALENE BENZIMIDAZOLE DERIVATIVES

Heterocycl. Commun. 7 (2001) 455-460

Zeynep Ates-Alagoz and Erdem Buyukbingol

Department of Pharmaceutical Chemistry, University of Ankara, Faculty of Pharmacy, Ankara, Turkey

Synthesis of 2-[(5,6,7,8-tetrahydro-5,5,8,8-tetramethyl-2-naphthalene)]-5- benzimidazole derivatives (**6a-h**) and synthesis of 1-alkyl-2-[(5,6,7,8-tetrahydro-5,5,8,8-tetramethyl-2-naphthalene)]-5- benzimidazole derivatives (**11a-c**) and (**12a-b**).

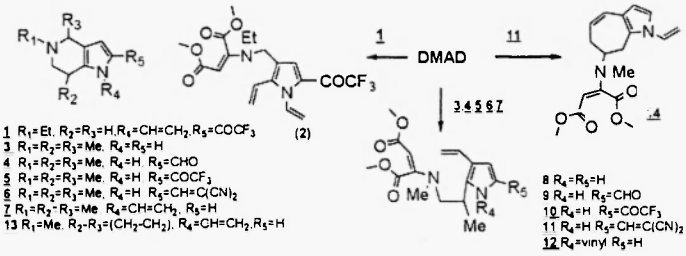


	R	R'		R	R'
6a	5-H	H	**11a**	Me	Me
6b	5-Cl	H	**11b**	Et	Et
6c	4-NO_2	H	**11c**	Me	p-Cl-Bz
6d	5-NO_2	H	**12a**	H	Me
6e	5-Me	H	**12b**	H	Et
6f	5-COOH	H			
6g	5-COOMe	H			
6h	5-COOEt	H			

Heterocycl. Commun. 7 (2001) 461-466

TANDEM MICHAEL ADDITION – HOFFMAN ELIMINATION SEQUENCE OF DMAD ON TETRAHYDROPYRROLO[3,2-C]PYRIDINES. NEW ROUTE TO VINYLPYRROLES .

Alexey V. Varlamov*, Tatiana N. Borisova, Leonid G. Voskressensky, Bonifas Nsabimana, Alexey I. Chernyshev
Organic Chemistry Department of the Russian Peoples Friendship University, 6, Mikluho-Maklaia St., Moscow, Russia, 117198 e-mail: rpfu@orc.ru



1 R_1=Et, R_2=R_3=H, R_4=CH=CH_2, R_5=$COCF_3$
3 R_1=R_2=R_3=Me, R_4=R_5=H
4 R_1=R_2=R_3=Me, R_4=H, R_5=CHO
5 R_1=R_2=R_3=Me, R_4=H, R_5=$COCF_3$
6 R_1=R_2=R_3=Me, R_4=H, R_5=CH=$C(CN)_2$
7 R_1=R_2-R_3=Me, R_4=CH=CH_2, R_5=H
13 R_1=Me, R_2-R_3=$(CH_2$-$CH_2)$, R_4=CH=CH_2, R_5=H

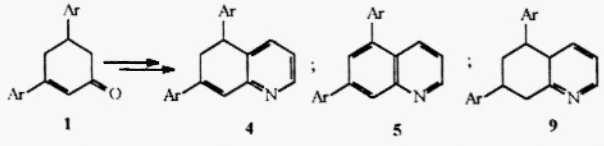
8 R_4=R_5=H
9 R_4=H, R_5=CHO
10 R_4=H, R_5=$COCF_3$
11 R_4=H, R_5=CH=$C(CN)_2$
12 R_4=vinyl, R_5=H

Heterocycl. Commun. 7 (2001) 467-472

Cyclohexanone derivatives : Synthons for susbtituted quinolines

V Padmvathi*, B Jagan Mohan Reddy, M Rajagopala Sarma, A Padmaja & D Bhaskar Reddy
Department of Chemistry, Sri Venkateswara University, Tirupati - 517 502, India

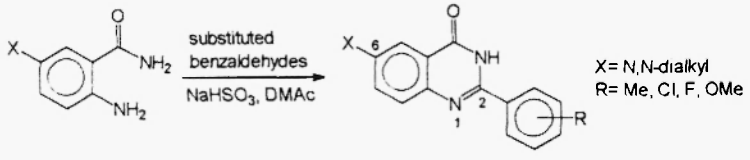
Substituted quinolines **4, 5** and **9** were reported from *o*-allyl ethers of cyclohexanone derivatives by [2,3] sigmatropic rearrangements followed by cyclization. All the new compounds were established by IR and ^{1}H NMR spectra.



Heterocycl. Commun. 7 (2001) 473-480

Synthesis and preliminary cytotoxic and antifungal evaluation of some 6-N,N-dialkyl 2-aryl-4(3*H*)-quinazolinone derivatives

Simon E. Lopez,[1]* Mónica E. Rosales,[1] Carlos E. Canelon,[1] Edgar A. Valverde,[1] Rosa C. Narváez,[1] Jaime E. Charris,[2] Fernando A. Giannini,[3] Ricardo D.Enriz,[3] Mirta Carrasco[3] and Susana Zacchino[4]
Departamento de Química,[1] Universidad Simón Bolívar, Caracas 1080-A, Apartado 89000, Venezuela. Facultad de Farmacia,[2] Universidad Central de Venezuela, Caracas, Venezuela. Facultad de Química, Bioquímica y Farmacia,[3] Universidad Nacional de San Luis, Chabuco y Pedernera (57000) San Luis, Argentina. Area Farmacognosia [4], Facultad de Ciencias Bioquímicas y Farmaceuticas, Universidad Nacional de Rosario, Suipacha 531, 2000 Rosario, Argentina



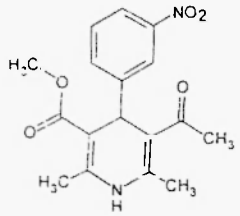
SYNTHESIS OF SOME NEW UNSYMMETRICAL 1,4-DIHYDRO-PYRIDINE DERIVATIVES AS POTENT ANTITUBERCULAR AGENTS

Heterocycl. Commun. 7 (2001) 481-484

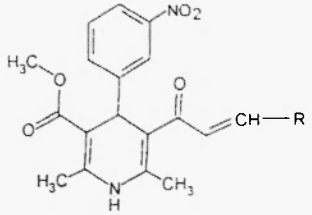
Harsukh Gevariya, Bhavik Desai, Vipul Vora and Anamik Shah*

Department of Chemistry, Saurashtra University, Rajkot-360 005, Gujarat (India)

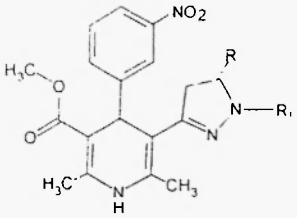
Few novel unsymmetrical 1,4-dihydropyridines 3a-h, 4a-h and 5a-h were prepared from 2,6-dimethyl-3-acetyl-5-carbmethoxy-4-(3'-nitro phenyl)-1,4-dihydropyridine 1 via chalcones 2a-h formation in two steps. All compounds were tested for antitubercular activity against $H_{37}Rv$ strain.



1



2a-h



3a-h 4a-h 5a-h

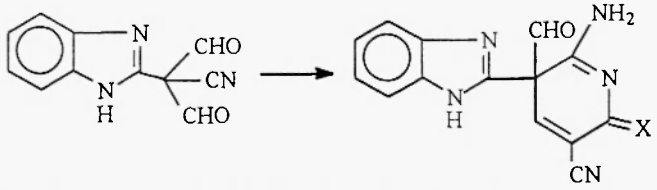
Heterocycl. Commun. 7 (2001) 485-492

A MILD AND EFFICIEN SYNTHESIS OF NEW BENZIMIDAZOLE DERIVATIVES VIA A ONE-POT REACTION. AN ADDITION VERSUS CONDENSATION REACTION

Fawi M. Abd El Latif, Mohamed A. Kahlil, Islam Helmy and Haussien A. Solieman

Chemistry Department, Aswan faculty of Science, South valley University, Aswan, Egypt

New benzimidazolo-pyrazole; pyridine; pyrimidine and triazole derivatives were obtained starting from 2-cyanomethyl-benzimidazole-2,2-dicarboxaldehyde



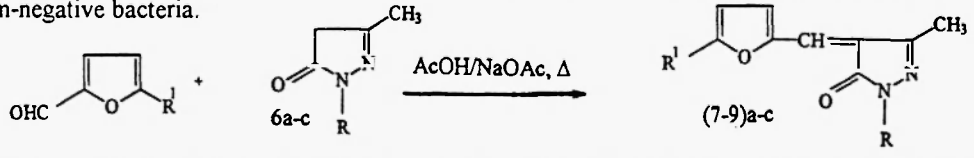
Heterocycl. Commun. 7 (2001) 493-500

SYNTHESIS AND BIOLOGICAL ACTIVITY OF SOME 4-(5-ALKYL- OR 5-ARYL-2-FURFURYLIDENE-1,3-DISUBSTITUTED-2-PYRAZOLIN-5-ONES.

A.A.F.Wasfy, A.I.El-Shenawy and S.A. Nassar

Chemistry Department, Faculty of Science, Benha University, Benha – Egypt .

A series of N-substituted-3-methyl-4-(5-alkyl- or 5-aryl-2-furfurylidene)-2-pyrazolin-5-ones(7-9)a-c have been synthesised by the reaction of N-substituted-3-methyl-2-pyrazolin-5-ones 6a-c with 5-alkyl-or 5-aryl-2-furfuraldehyde. The compounds were evaluated for their antibacterial activity against both Gram-positive and Gram-negative bacteria.



6a-c (7-9)a-c

AN EFFICIENT FACILE AND SELECTIVE HYDROXYLATION OF NITROGEN HETEROCYCLES

Heterocycl. Commun. 7 (2001) 501-506

Aayesha Nasreen and Srinivas R. Adapa*

Inorganic Division, Indian Institute of Chemical Technology, Hyderabad – 500 007, India.