Graphical Abstract

Heterocycl. Commun.1(2010) 9-12

Synthesis and cholesterol level lowering activity of macrocyclic silicon containing benzimidazole sulfides

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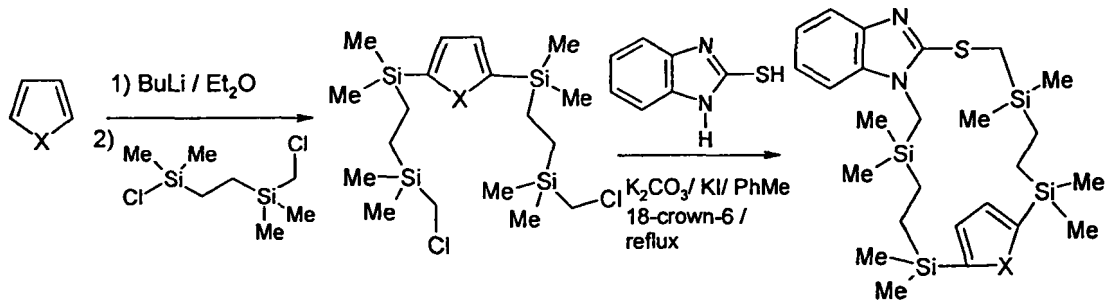
New silicon containing macrocyclic benzimidazole sulfides were synthesized using organometallic and phase transfer catalytic methods. T compounds were tested for cholesterol level lowering activity. It has been founded that macrocycle **4** produced a high antiatherosclerotic activ protected against increase LDL cholesterol level. This compound has excellent atherosclerotic coefficient (0.074 ± 0.026).



1,2 **3, 4**

1, 3; X = O
2, 4; X = S

Heterocycl. Commun.1(2010) 13-20

Efficient Synthesis Of Dihydrochromeno[4,3-*b*]Chromenone Derivatives In Aqueous Media

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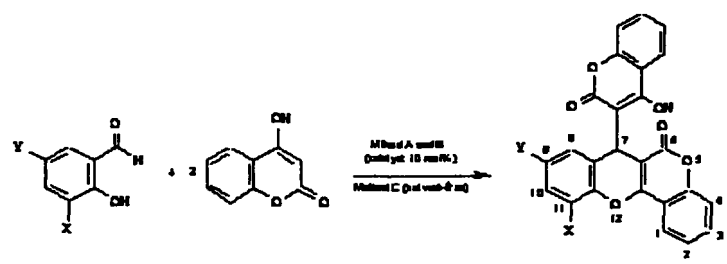

Heterocycl. Commun.1(2010) 21-24

Selective Protection of Hydroxy Group at C6 Position of Glucose Derivatives

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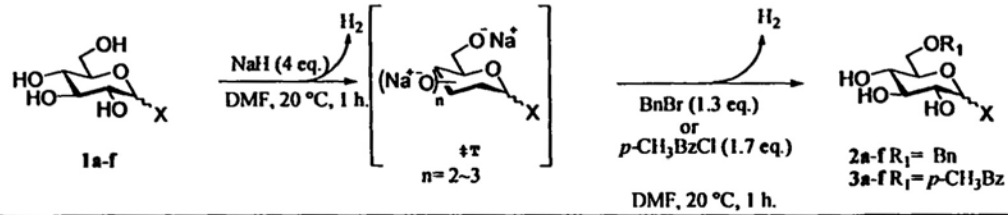
6-*O*-Benzyl derivatives and 6-*O*-toluoyl derivatives, **2a–f** and **3a–f**, were prepared in high yields from glucose derivatives **1a–f** through multi-level anion formation using an excess of sodium hydride (4 eq.).



Heterocycl. Commun.1(2010) 25-32

Synthesis and novel crystal structure of(*E*,*Z*) 3-aminomethylene-1-ethyl -indol-2-one

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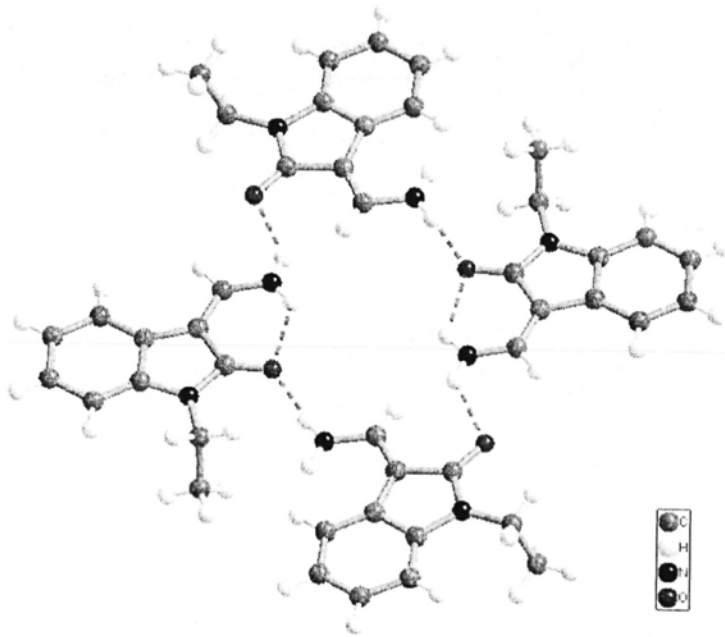
[3]*State Key Laboratory of Phytochemistry and Plant Resources in West China, Kunming Institute of Botany, Chinese Academy of Sciences, Kunming, 650204, China*

Abstract: The title compounds, (*E*,*Z*)3-aminomethylene-1-ethyl-indol-2-one, were synthesized firstly by the reduction of 3-nitromethylene-1-ethyl-indol-2-one. The crystal structure was determined from single-crystal X-ray diffraction data. It crystallizes in the monoclinic space group, $P2_1/c$, with unit cell dimensions a = 8.7193 (5) Å, b =9.2507 (5) Å, and c = 23.6462 (15) Å. It was found that the novel crystal was consisted with centrosymmetric tetramer units, and the tetramer units were built up by the molecules linking as **ABAB** in a cycle, governed by intermolecular hydrogen bonds.



Heterocycl. Commun.1(2010) 33-34

Synthesis And Antifungal Activity Of Some New 1, 2-Benzisoxazole

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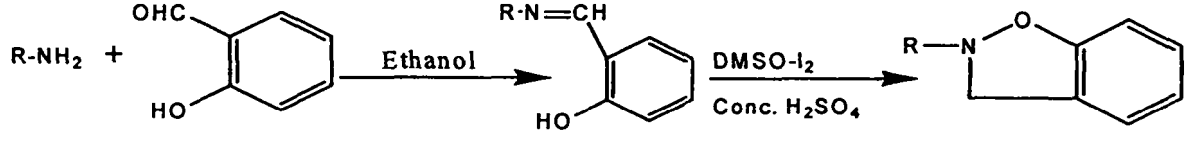
Various 3H-N-substituted phenyl / thiazolyl 1,2-benzisoxazole have been synthesized by the reaction of schiffs base with DMSO-I_2 in presence of H_2SO_4 and characterized by IR and NMR spectral studies. These compounds showed significant activities against plant pathogenic fungi viz. *Alterneria burnsii* and *Macrophomina phasiolina*.



1 2a-j

R = 2-Cl.C_6H_4, 3-Cl.C_6H_4, 4-Cl.C_6H_4, 5-Cl.C_6H_3NS, 2,4-F.C_6H_3
4-Br.C_6H_4, 4-Cl.C_6H_3NS 2,3-CH_3.C_6H_3 4,6 -CH_3.C_6H_2NS 6-F.C_6H_3NS

Heterocycl. Commun.1(2010) 35-37

A Simple Synthesis of New Pyrimidinyl Purine Diones

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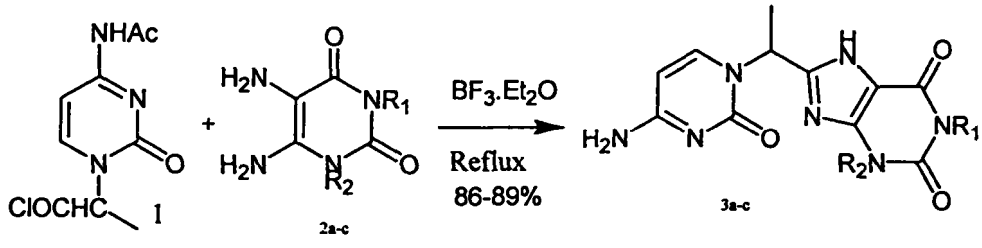
In this paper we report one-pot synthesis of three novel pyrimidinyl purine-2,6- diones using $BF_3.Et_2O$ for cyclodehydration of N- acyl derivatives.



Heterocycl. Commun.1(2010) 39-42

Synthesis and bioefficacy test of some novel Halogenated -4-[(substituted-benzothiazol-2-yl)-hydrazono] -2- (substituted phenyl)-5-methyl -2, 4-dihydro-pyrazol-3-one

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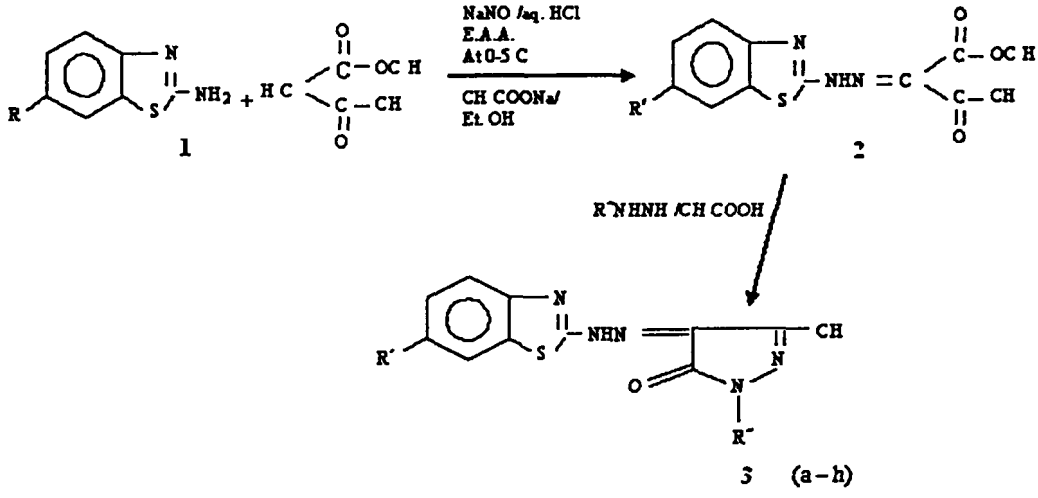
Reaction of substituted benzothiazol-2-yl amine (1) with acetoacetic ester gives 2-[substituted benzothiazol -2-yl)-hydrazono]-3-oxo-butyric acid ethyl ester (2) which on react with different hydrazines to give the title compound (3).



1 2 3 (a-h)

Heterocycl. Commun.1(2010) 43-46

Synthesis and Biological of N-Dichloroacetyl -1,3-Oxazolidine Derivatives

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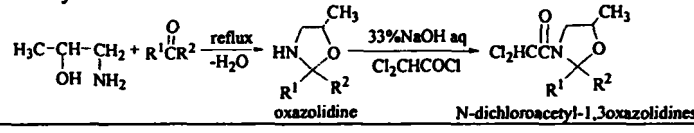
[2]Academy of Agricultural Sciences of Heilongjiang, Harbin 150086, P.R. China

A series of novel N-dichloroacetyl-1,3-oxazolidine derivatives were synthesized by a convenient one-pot synthesis involving cycloaddition reaction of β-amino alcohol with aldehyde or ketone in benzene.



Heterocycl. Commun.1(2010) 47-52

Synthesis of 4-[2-(methyl-2-pyridin-2yl-amino)-ethoxy] –benzaldehyde derivatives

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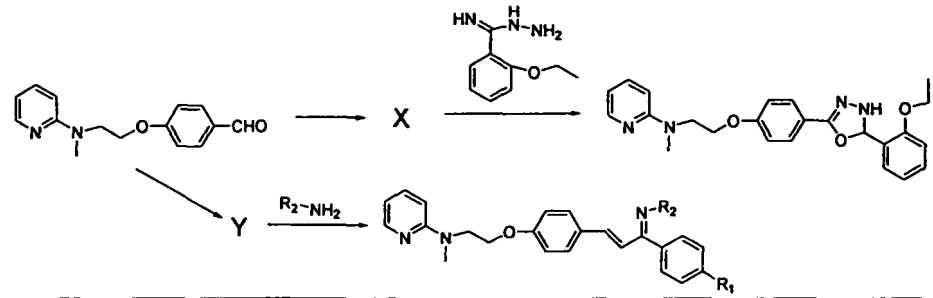
Author to whom correspondence should be addressed -lkravindranath@gmail.com



Heterocycl. Commun.1(2010) 53-63

Preparation of new nitrogen-bridged heterocycles. 69. Synthesis and Reaction of 1-(α-Hydroxybenzyl)thieno[3,4-*b*]indolizine Derivatives

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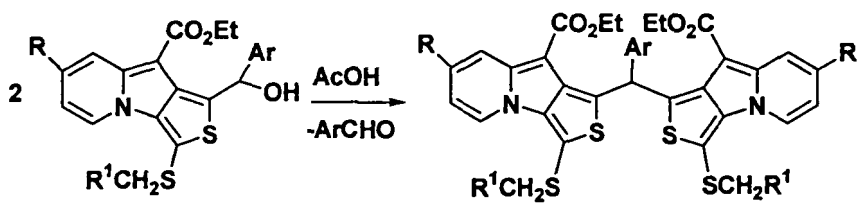
Wakasato, Nagano 380–8553, Japan

The title compounds, 1-(α-hydroxybenzyl)thieno[3,4-*b*]indolizine derivatives, were obtained in good yields by the reduction of the corresponding 1-benzoylthieno[3,4-*b*]indolizines with sodium borohydride in refluxing ethanol. These compounds were considerably unstable and decomposed gradually even at room temperature, but, on exposure to acetic acid, unexpected condensation took place to afford α,α-bis(thieno[3,4-*b*]indolizin-1-yl)toluenes in low to moderate yields.



Heterocycl. Commun.1(2010) 65-71

Synthesis and Spectral studies of Nitrosourea derivatives of 3-Methyl – 5/7- Substituted –2- (3,4-dichloro) benzoyl-4H-1,4-Benzothiazines as Bifunctional Anticancer Agents.

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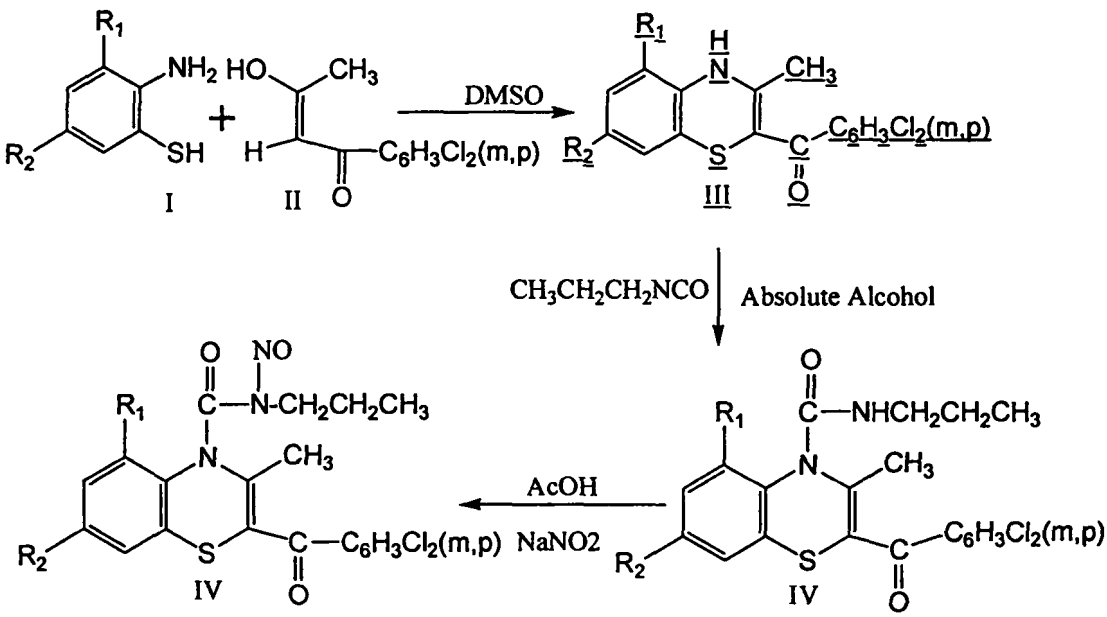
The synthesis of nitrosourea derivatives of substituted 4H-1,4-benzothiazines by the isocyanation and successive nitrosation have been reported. The synthesized compounds have been characterized by their elemental analyses and spectral characteristics.



R_1 / R_2 = CH_3/H, OC_2H_5/H, H/CH_3, H/OC_2H_5, H/OCH_3, H/Cl, CH_3/CH_3