

Indian Journal of Chemistry

Sect. B: Organic Chemistry including Medicinal Chemistry

VOL. 53B

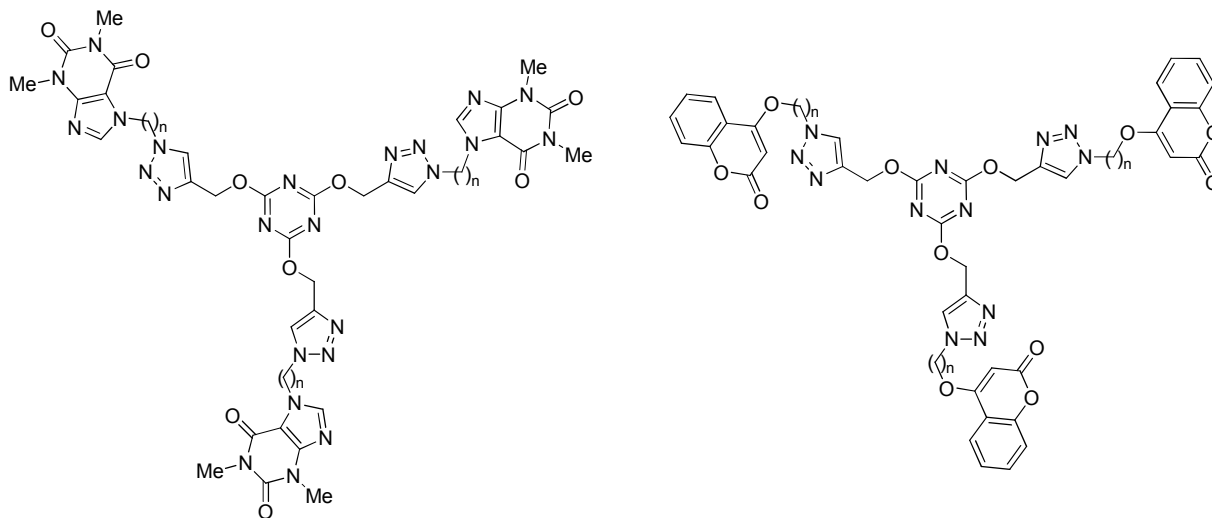
NUMBER 3

March 2014

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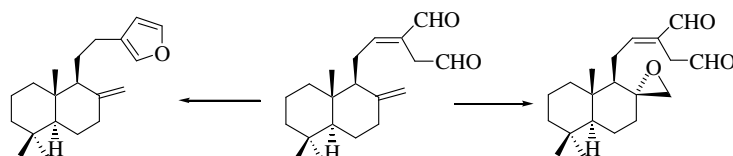
- 311** **Synthesis and characterization of novel 1,2,3-triazole-linked theophylline and coumarin *s*-triazines**
- Theophylline and coumarin moieties have been linked to *s*-triazine nucleus *via* regioselective Cu(I)-catalyzed click-reaction and sixteen novel 1,2,3-triazole linked coumarin and theophylline *s*-triazine based macromolecules have been synthesised and characterized by FT-IR, ^1H and ^{13}C NMR and mass-spectral methods. Selected compounds have been evaluated for antibacterial, antifungal and anti-cancer activities.



Penny Joshi, Mohit Tripathi & Diwan S Rawat*

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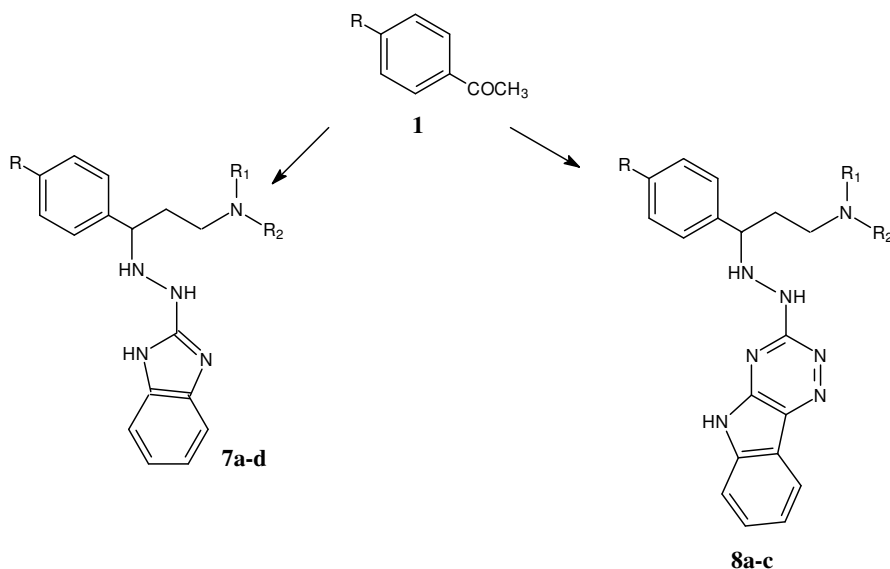
- 319 Facile isolation of (*E*)-labda-8(17),12-diene-15,16-dial from *Curcuma amada* and its conversion to other biologically active compounds** (*E*)-Labda-8(17),12-diene-15,16-dial from the rhizomes of *Curcuma amada* Roxb. (*Zingiberaceae*) has been chemically transformed to the biologically active compounds aframodial and zerumin A as well as other natural products.



Alan Sheeja D B & Mangalam S Nair*

Organic Chemistry Section, Chemical Sciences and Technology Division, CSIR-National Institute for Interdisciplinary Science and Technology, Thiruvananthapuram 695 019, India

- 325 Synthesis and antimicrobial activity of some new 1,2,4-triazine and benzimidazole derivatives** Synthesis of some new 1,2,4-triazine and benzimidazole derivatives have been reported along with their antimicrobial activity against a series of plant and animal pathogens.



Abha Bishnoi*, Suruchi Singh, Anil K Tiwari, Archana Rani, Sapna Jain & C K M Tripathi

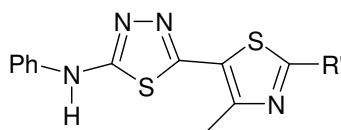
Department of Chemistry, Lucknow University, Lucknow 226 007, India

- 332** **Generation and characterization of complex bioactive oligosaccharides from flax meal by a combination of enzyme hydrolysis, HPAEC and MALDI-TOF-MS** Generation of neutral (XGGG through XLFG) and acidic ($\text{XyI}_n\text{MeGlcA}_1$ through $\text{XyI}_n\text{GlcA}_1$) oligosaccharides from *Linum usitatissimum* meal by enzyme hydrolysis and their characterisation by sugar compositional and linkage analysis, HPAE-PAD-chromatography and MALDI-TOF-mass spectrometry has been described.

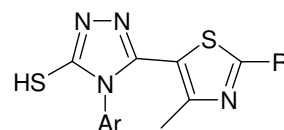
Sayani Ray, Utpal Adhikari & Bimalendu Ray*

Natural Products Laboratory, Department of Chemistry, The University of Burdwan, Burdwan 713 104, India

- 339** **Synthesis and biological screening of novel thiazolyl triazoles and thiadiazoles** Reaction of acid hydrazide **1** with various aryl isothiocyanates yields thiosemicarbazides **2**. Compounds **2** gives 1,3,4-thiadiazoles **3** and 1,2,4-triazoles **4** in acidic and basic medium respectively. Newly synthesized compounds have been characterized by spectral methods like IR, ^1H NMR and mass spectrometry. These novel compounds have been screened for their antimicrobial activity.



3a-e

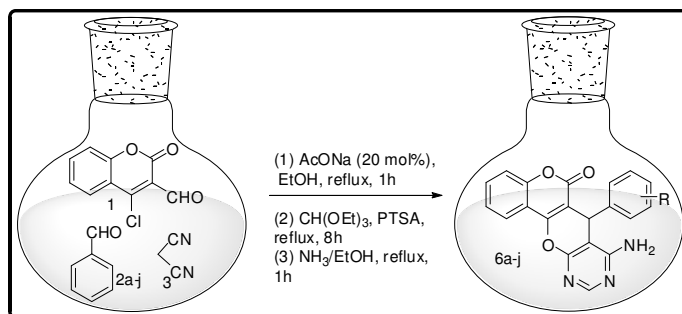


4a-e

B K Karale*, S J Takate, S P Salve, B H Zaware & S S Jadhav

Department of Chemistry, Radhabai Kale Mahila Mahavidyalya, Ahmednagar 414 001, India

- 345** **One pot synthesis of fused chromeno-pyrano-pyrimidines and evaluation of their antimicrobial activity** An efficient one pot sequential protocol has been developed for the synthesis of fused tetracyclic chromeno-pyrano-pyrimidines **6a-j**. All the products have been isolated as pure precipitates in good yields and further evaluated for antimicrobial activity.

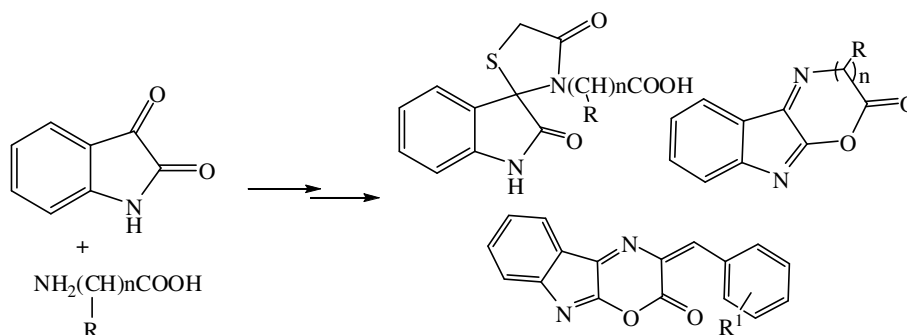


J Venkata Prasad, N Ravi Kumar, K Anand Solomon, K R S Sudar Nilaventhana, Rene Christene Lowrence, N Saisubramanian & G Gopikrishna*

Sankar Foundation Research Institute, Visakhapatnam 530 047, India

- 352 **Synthesis of some 2-[2,4'-dioxo-spiroindole-3,2'-thiazolidin-3'-yl] alkanolic acid/3-substituted indolo[2,3-*b*]oxazin-2-ones and 3-substituted arylidene indolo[2,3-*b*]oxazin-2-ones as fungicides**

Several 2-[2,4'-dioxo-spiro indole-3,2'-thiazolidin-3'-yl] alkanolic acids, 3-substituted indolo [2,3-*b*]-oxazin-2-ones and 3-substituted arylidene indolo[2,3-*b*]-oxazin-2-ones have been synthesised from a common intermediate, in good yield. These compounds have been screened for their fungicidal activity against *Pyricularia oryzae*, *Pseudoperonospora cubensis*, *Sphaerotheca fuliginea* and *Phytophthora infestans*. Some of the synthesized compounds have been found to have activity which is comparable with the standard drug carbendazim.



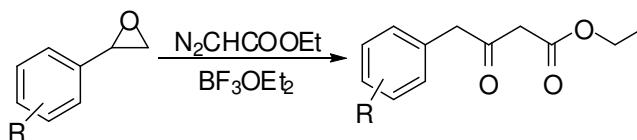
Shailendra Tiwari*, Akeel Ahamad & Shafqat Alauddin

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Notes

- 356 **Synthesis of aryl β -ketoesters by opening of aryl epoxides with ethyl diazoacetate catalyzed by BF_3OEt_2**

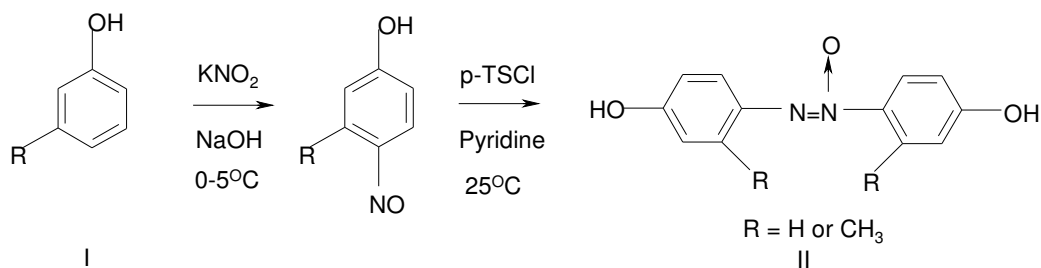
A facile synthesis of 4-aryl substituted β -ketoesters from the reaction aryl epoxides with ethyl diazoacetate, in presence of BF_3OEt_2 has been described with excellent yields.



D Chandra Rao, D Kumar Reddy, V Shekhar, B Chinababu, Ch Bhujanga Rao & Y Venkateswarlu*

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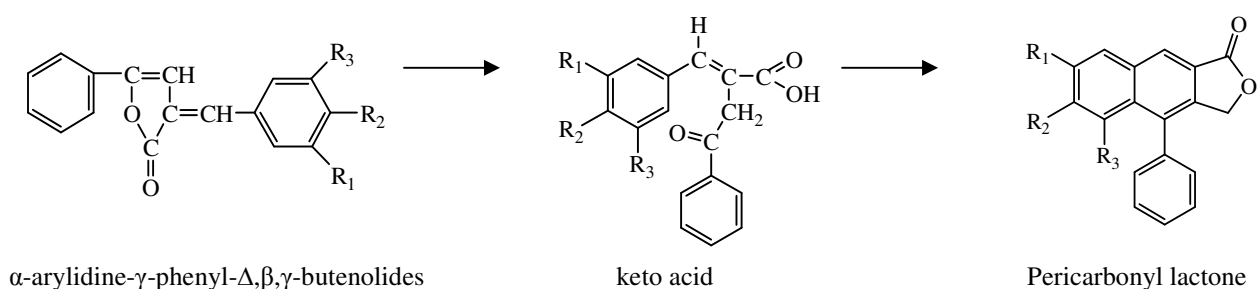
- 359** **Synthesis and characterization of azoxy based mesogenic diols** Azoxy based rigid mesogenic diols have been synthesized using two steps using phenol/cresol as starting material. The studies reveal that phenol based rigid mesogenic diols have higher thermal stability and degree of crystallinity than methyl substituted rigid mesogenic diols.



Khudbudin B Mulani, Nitin V Ganjave & Nayaku N Chavan*

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- 363** **Microwave assisted Perkin reaction for the synthesis of α -arylidine- γ -phenyl- Δ , β , γ -butenolides** Perkin condensation with subsequent intramolecular lactonisation as one pot synthesis of α -arylidine- γ -phenyl- Δ , β , γ -butenolides have been studied under microwave irradiation. The butenolides are cleaved to give keto acids, which are the precursors of pericarbonyl lactone lignans possessing variety of biological activities. Syntheses of butenolides have been carried out using pyridine as a catalyst under microwave conditions. The generality of this protocol has been demonstrated by synthesizing a variety of substituted butenolides in excellent yields, short reaction time and with good purity compared to those under classical thermal conditions. All the products have been characterized by their IR, 1H NMR and UV spectral values.



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