



A Convenient and Efficient One-Pot Three Component Synthesis of 1, 3-Bis (2-Substituted Aryl)-4, 5-Diphenyl Oxazol-3(2H-Yl) Thiourea as Potential Antimicrobial Agents

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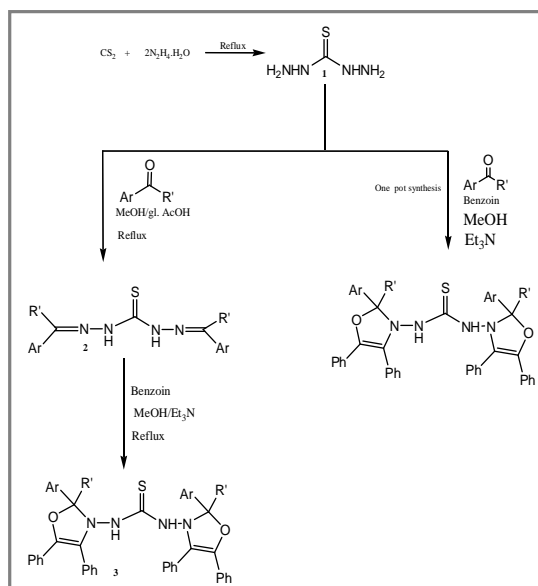
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ABSTRACT

A series of 1,3-bis (2-substituted aryl)-4,5-diphenyl oxazol-3(2H-yl) thioureas (3) were synthesized in a single step with a three-component protocol, using dihydraziniumthiocarbazine, substituted araldehyde / ketone and benzoin in methanol. The structure of these compounds based on spectral (IR, ¹HNMR) as well as elemental analysis. These compounds have been screened for their antibacterial and antifungal activities. Some of them showed promising antimicrobial activity.

Graphical Abstract



Schematic diagram indicating the synthesis of compounds

Keywords: Dihydraziniumthiocarbazine, 4, 5-diphenyl oxazol, Schiff's base, Thiourea, Pesticidal activity