Available online at www.joac.info



Journal of Applicable Chemistry

2013, 2 (6): 1484-1488 (International Peer Reviewed Journal)



ISSN: 2278-1862

Green Chemical Approach to Synthesize 1-(N-Substituted Aniline Malonyl)-3,5-Dimethyl-4-(3,4-Difluoro Phenyl Azo) Pyrazoles and Their Antimicrobial Evaluation

Manisha Shukla*, D.S. Seth and Hemant Kulshreshtha

*Department of Chemistry, School of Chemical Sciences, St. John's College, Agra-282002, INDIA

Email: maneeshashukla17@gmail.com

Received on 20th October and finalized on 26th October 2013

ABSTRACT

Green synthesis of 1-(N-substituted aniline malonyl)-3,5-dimethyl-4-(3,4-difluoro phenyl azo) pyrazole by condensing 2,4-diketo-3-(3,4-difluoro phenyl azo) pentane with a number of N-(substituted) phenyl malonamic acid hydrazides under microwave irradiation conditions compared to the classical heating. Anti-microbial studies of synthesize pyrazoles were also carried out.

Keywords: Green chemistry, Microwave irradiation, Classical heating, Substituted pyrazoles, Substituted malonamic acid hydrazides, Anti-microbial activity.