



**Synthesis of novel N<sup>1</sup>-(4-amino benzoyl)-1,3-dimethyl-4  
(N-4- sulfamoylphenylazo)-1, 2-diazole**

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**ABSTRACT**

*Novel N<sup>1</sup>-(4-amino benzoyl)-1,3-dimethyl-4(N-4- sulfamoylphenylazo)-1,2-diazole has been synthesized by two step processes. Synthesis of N<sup>1</sup>-4-sulphamoylphenyl hydrazono-1,3-dimethylpropane-1, 3-dione by the interaction of 1,3-dimethylpropane-1,3-dione and diazonium salt solution of Diethyl sulphanilamide. Which interacting with 4-amino benzoic acid hydrazide to form the final compound. We have synthesized the sulfamalamide derivatives. Then all sulfamalamide derivatives (1a-1e) diazotization with NaNO<sub>2</sub> and HCl at 0.5°C. Then the newly synthesized compound N<sup>1</sup>-(4-amino benzoyl)-1,3-dimethyl-4(N-4- sulfamoylphenylazo)-1, 2-diazoles were screened for diuretic activity. The anti-inflammatory activity for the newly synthesized sulpha/substituted 1,2-diazole compound were carried out by the carrageenan induced rat hind paw edema method by taking Diclofenac sodium as standard.*

**Keywords:** Synthesis, Kofler Hot stage apparatus using determination m.p., Diuretic activity, Sulphanilamide, Diazotization, 4-amino benzoic acid hydrazide.

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