



ChemTech

International Journal of ChemTech Research

CODEN (USA): IJCRGG, ISSN: 0974-4290, ISSN(Online):2455-9555
Vol.13 No.01, pp 227-231, 2020

Microwave assisted Synthesis and Antimicrobial Activity of Substituted Pyrrolidinone derivatives

Marapala Kumara Swamy, N. Venkatesh, M. Swapna and
P. Venkateswar Rao*

Department of Chemistry, University College of Science, Osmania University,
Hyderabad-500 007, India.

Abstract : A microwave assisted green synthetic methodology was developed for the synthesis various substituted pyrrolidinones derivatives by the one-pot three component reaction of aromatic aldehydes, aniline with dialkylbut-2-ynedioate in the presence of *p*-TsOH in water medium. The compounds were screened for their *in vitro* antimicrobial activity against four bacterial organism and two fungal organisms, resulted moderate to good activity with compared to their standard drug.

Keywords: Pyrrolidinone, One-pot three component synthesis, Microwave irradiation, *p*-TsOH.

P. Venkateswar Rao *et al* /International Journal of ChemTech Research, 2020,13(1): 227-231.

DOI= <http://dx.doi.org/10.20902/IJCTR.2019.130128>
