



Synthesis and Antibacterial Activity of 2,3-dihydro-1H-benzo[f]chromen-1-one and 2,3-dihydro-1H-benzo[f]chromen-1-ol Derivatives

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Received on 31st October and finalized on 04th November 2013

ABSTRACT

New 2,3-dihydro-1H-benzo[f]chromen-1-one and 2,3-dihydro-1H-benzo[f]chromen-1-ol derivatives (**7-14**) were prepared from commercially available 2-Hydroxy-acetonaphthone. These compounds were screened for their antibacterial activity against *Escherichia coli* (MTCC-443), *Staphylococcus aureus* (MTCC-96), *Pseudomonas aeruginosa* (MTCC-424) and *Streptococcus pyogenes* (MTCC-442) bacterial strains by agar well disc diffusion method. It is observed that among the 2,3-dihydro-1H-benzo[f]chromen-1-ol derivatives, compounds **13** and **14** (bearing R_3 = pyrrolidine and morpholine) exhibited excellent activity (zone of inhibition: >20 mm) while the compounds **11** and **12** (bearing R_3 = ethyl and propyl) displayed good activity (zone of inhibition: 16-18 mm).

Keywords: 2,3-dihydro-1H-benzo[f]chromen-1-ol, Aldehydes, Antibacterial activity, Synthesis, *E.coli*, Ampicillin.
